UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-Q

(Mark One)

☒ **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the quarterly period ended December 25, 2022

or

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from _____ to _____

Commission file number 0-12933

LAM RESEARCH CORPORATION
(Exact name of registrant as specified in its charter)

Delaware	**94-2634797**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**
4650 Cushing Parkway, Fremont, California	**94538**
(Address of principal executive offices)	**(Zip Code)**

Registrant's telephone number, including area code: (510) 572-0200

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, Par Value $0.001 Per Share	LRCX	The Nasdaq Stock Market (Nasdaq Global Select Market)

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	☒	Accelerated filer	☐
Non-accelerated filer	☐	Smaller reporting company	☐
		Emerging growth company	☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

As of January 26, 2023, the Registrant had 134,936,209 shares of Common Stock outstanding.

LAM RESEARCH CORPORATION

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PART I. FINANCIAL INFORMATION

ITEM 1. *Financial Statements*

LAM RESEARCH CORPORATION
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(in thousands, except per share data)
(unaudited)

	Three Months Ended		Six Months Ended	
	December 25, 2022	December 26, 2021	December 25, 2022	December 26, 2021
Revenue	$ 5,277,569	$ 4,226,604	$ 10,351,690	$ 8,531,069
Cost of goods sold	2,901,220	2,248,688	5,638,506	4,576,399
Gross margin	2,376,349	1,977,916	4,713,184	3,954,670
Research and development	462,385	403,644	895,760	785,971
Selling, general, and administrative	233,802	236,133	439,422	458,327
Total operating expenses	696,187	639,777	1,335,182	1,244,298
Operating income	1,680,162	1,338,139	3,378,002	2,710,372
Other income (expense), net	(28,234)	17,999	(71,329)	(10,858)
Income before income taxes	1,651,928	1,356,138	3,306,673	2,699,514
Income tax expense	(183,421)	(161,308)	(412,287)	(324,940)
Net income	$ 1,468,507	$ 1,194,830	$ 2,894,386	$ 2,374,574
Net income per share:				
Basic	$ 10.80	$ 8.50	$ 21.21	$ 16.82
Diluted	$ 10.77	$ 8.44	$ 21.16	$ 16.71
Number of shares used in per share calculations:				
Basic	136,018	140,630	136,455	141,187
Diluted	136,339	141,530	136,774	142,071

See Notes to Condensed Consolidated Financial Statements

LAM RESEARCH CORPORATION
CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(in thousands)
(unaudited)

	Three Months Ended		Six Months Ended	
	December 25, 2022	December 26, 2021	December 25, 2022	December 26, 2021
Net income	$ 1,468,507	$ 1,194,830	$ 2,894,386	$ 2,374,574
Other comprehensive income (loss), net of tax:				
Foreign currency translation adjustment	41,470	(9,820)	7,861	(13,852)
Cash flow hedges:				
Net unrealized (losses) gains during the period	(18,618)	12,792	185	3,787
Net losses (gains) reclassified into net income	1,273	(7,904)	(8,024)	(11,446)
	(17,345)	4,888	(7,839)	(7,659)
Available-for-sale investments:				
Net unrealized gains (losses) during the period	490	(785)	570	(3,190)
Net losses (gains) reclassified into net income	—	345	(53)	1,490
	490	(440)	517	(1,700)
Defined benefit plans, net change in unrealized component	279	(1,006)	572	(807)
Other comprehensive income (loss), net of tax	24,894	(6,378)	1,111	(24,018)
Comprehensive income	$ 1,493,401	$ 1,188,452	$ 2,895,497	$ 2,350,556

See Notes to Condensed Consolidated Financial Statements

LAM RESEARCH CORPORATION
CONDENSED CONSOLIDATED BALANCE SHEETS
(in thousands, except per share data)

	December 25, 2022 (unaudited)	June 26, 2022 (1)
ASSETS		
Cash and cash equivalents	$ 4,484,716	$ 3,522,001
Investments	103,130	135,731
Accounts receivable, less allowance of $5,411 as of December 25, 2022, and $5,606 as of June 26, 2022	4,070,088	4,313,818
Inventories	4,819,966	3,966,294
Prepaid expenses and other current assets	230,888	347,391
Total current assets	13,708,788	12,285,235
Property and equipment, net	1,863,155	1,647,587
Restricted cash and investments	251,344	251,534
Goodwill	1,620,437	1,515,113
Intangible assets, net	184,781	101,850
Other assets	1,577,876	1,394,313
Total assets	$ 19,206,381	$ 17,195,632
LIABILITIES AND STOCKHOLDERS' EQUITY		
Trade accounts payable	$ 919,408	$ 1,011,208
Accrued expenses and other current liabilities	2,068,370	1,974,272
Deferred profit	1,551,918	1,571,898
Current portion of long-term debt and finance lease obligations	7,226	7,381
Total current liabilities	4,546,922	4,564,759
Long-term debt and finance lease obligations, less current portion	4,996,057	4,998,449
Income taxes payable	862,405	931,117
Other long-term liabilities	496,362	422,941
Total liabilities	10,901,746	10,917,266
Commitments and contingencies		
Stockholders' equity:		
Preferred stock, at par value of $0.001 per share; authorized, 5,000 shares, none outstanding	—	—
Common stock, at par value of $0.001 per share; authorized, 400,000 shares as of December 25, 2022 and June 26, 2022; issued and outstanding, 135,403 shares as of December 25, 2022, and 136,975 shares as of June 26, 2022	135	137
Additional paid-in capital	7,606,149	7,414,916
Treasury stock, at cost; 158,775 shares as of December 25, 2022, and 157,087 shares as of June 26, 2022	(20,071,931)	(19,481,429)
Accumulated other comprehensive loss	(108,871)	(109,982)
Retained earnings	20,879,153	18,454,724
Total stockholders' equity	8,304,635	6,278,366
Total liabilities and stockholders' equity	$ 19,206,381	$ 17,195,632

(1) Derived from audited financial statements

See Notes to Condensed Consolidated Financial Statements

LAM RESEARCH CORPORATION
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands) (unaudited)

	Six Months Ended	
	December 25, 2022	December 26, 2021
CASH FLOWS FROM OPERATING ACTIVITIES:		
Net income	$ 2,894,386	$ 2,374,574
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	161,165	161,579
Deferred income taxes	(140,296)	(26,573)
Equity-based compensation expense	144,194	120,933
Other, net	9,978	(75,204)
Changes in operating assets and liabilities	(739,652)	(657,279)
Net cash provided by operating activities	2,329,775	1,898,030
CASH FLOWS FROM INVESTING ACTIVITIES:		
Capital expenditures and intangible assets	(303,441)	(274,920)
Business acquisitions, net of cash acquired	(119,955)	—
Purchases of available-for-sale securities	—	(268,457)
Proceeds from maturities of available-for-sales securities	32,438	134,096
Proceeds from sales of available-for-sale securities	—	1,197,575
Other, net	(4,092)	(5,518)
Net cash (used for) provided by investing activities	(395,050)	782,776
CASH FLOWS FROM FINANCING ACTIVITIES:		
Principal payments on debt	(18,936)	(8,036)
Treasury stock purchases	(566,055)	(1,651,568)
Dividends paid	(441,595)	(396,647)
Reissuance of treasury stock related to employee stock purchase plan	44,996	46,380
Proceeds from issuance of common stock	7,673	4,193
Other, net	764	(17)
Net cash used for financing activities	(973,153)	(2,005,695)
Effect of exchange rate changes on cash, cash equivalents, and restricted cash	953	(8,454)
Net increase in cash, cash equivalents, and restricted cash	962,525	666,657
Cash, cash equivalents, and restricted cash at beginning of period	3,773,535	4,670,750
Cash, cash equivalents, and restricted cash at end of period	$ 4,736,060	$ 5,337,407
Schedule of non-cash transactions:		
Accrued payables for stock repurchases	$ 30,125	$ 20,103
Accrued payables for capital expenditures	94,494	96,425
Dividends payable	233,977	210,587
Transfers of finished goods inventory to property and equipment	56,932	55,322

Reconciliation of cash, cash equivalents, and restricted cash	December 25, 2022	December 26, 2021
Cash and cash equivalents	$ 4,484,716	$ 5,086,544
Restricted cash and cash equivalents	251,344	250,863
Total cash, cash equivalents, and restricted cash	$ 4,736,060	$ 5,337,407

See Notes to Condensed Consolidated Financial Statements

LAM RESEARCH CORPORATION
CONDENSED CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(in thousands)
(unaudited)

	Three Months Ended December 25, 2022						
	Common Stock Shares	Common Stock	Additional Paid-in Capital	Treasury Stock	Accumulated Other Comprehensive Loss	Retained Earnings	Total
Balance at September 25, 2022	136,374	$ 136	$ 7,492,822	$ (19,591,249)	$ (133,765)	$ 19,644,623	$ 7,412,567
Issuance of common stock	31	—	877	—	—	—	877
Purchase of treasury stock	(1,133)	(1)	—	(486,312)	—	—	(486,313)
Reissuance of treasury stock	131	—	39,366	5,630	—	—	44,996
Equity-based compensation expense	—	—	73,084	—	—	—	73,084
Net income	—	—	—	—	—	1,468,507	1,468,507
Other comprehensive income	—	—	—	—	24,894	—	24,894
Cash dividends declared ($1.725 per common share)	—	—	—	—	—	(233,977)	(233,977)
Balance at December 25, 2022	135,403	$ 135	$ 7,606,149	$ (20,071,931)	$ (108,871)	$ 20,879,153	$ 8,304,635

	Six Months Ended December 25, 2022						
	Common Stock Shares	Common Stock	Additional Paid-in Capital	Treasury Stock	Accumulated Other Comprehensive Loss	Retained Earnings	Total
Balance at June 26, 2022	136,975	$ 137	$ 7,414,916	$ (19,481,429)	$ (109,982)	$ 18,454,724	$ 6,278,366
Issuance of common stock	116	—	7,673	—	—	—	7,673
Purchase of treasury stock	(1,819)	(2)	—	(596,132)	—	—	(596,134)
Reissuance of treasury stock	131	—	39,366	5,630	—	—	44,996
Equity-based compensation expense	—	—	144,194	—	—	—	144,194
Net income	—	—	—	—	—	2,894,386	2,894,386
Other comprehensive income	—	—	—	—	1,111	—	1,111
Cash dividends declared ($3.450 per common share)	—	—	—	—	—	(469,957)	(469,957)
Balance at December 25, 2022	135,403	$ 135	$ 7,606,149	$ (20,071,931)	$ (108,871)	$ 20,879,153	$ 8,304,635

See Notes to Condensed Consolidated Financial Statements

	Three Months Ended December 26, 2021						
	Common Stock Shares	Common Stock	Additional Paid-in Capital	Treasury Stock	Accumulated Other Comprehensive Loss	Retained Earnings	Total
Balance at September 26, 2021	140,811	$ 141	$ 7,111,803	$ (16,863,573)	$ (81,768)	$ 15,653,440	$ 5,820,043
Issuance of common stock	52	—	3,451	—	—	—	3,451
Purchase of treasury stock	(685)	(1)	—	(434,791)	—	—	(434,792)
Reissuance of treasury stock	97	—	42,271	4,109	—	—	46,380
Equity-based compensation expense	—	—	62,834	—	—	—	62,834
Net income	—	—	—	—	—	1,194,830	1,194,830
Other comprehensive loss	—	—	—	—	(6,378)	—	(6,378)
Cash dividends declared ($1.50 per common share)	—	—	—	—	—	(210,587)	(210,587)
Balance at December 26, 2021	140,275	$ 140	$ 7,220,359	$ (17,294,255)	$ (88,146)	$ 16,637,683	$ 6,475,781

	Six Months Ended December 26, 2021						
	Common Stock Shares	Common Stock	Additional Paid-in Capital	Treasury Stock	Accumulated Other Comprehensive Loss	Retained Earnings	Total
Balance at June 27, 2021	142,501	$ 143	$ 7,052,962	$ (15,646,701)	$ (64,128)	$ 14,684,912	$ 6,027,188
Issuance of common stock	99	—	4,193	—	—	—	4,193
Purchase of treasury stock	(2,422)	(3)	—	(1,651,663)	—	—	(1,651,666)
Reissuance of treasury stock	97	—	42,271	4,109	—	—	46,380
Equity-based compensation expense	—	—	120,933	—	—	—	120,933
Net income	—	—	—	—	—	2,374,574	2,374,574
Other comprehensive loss	—	—	—	—	(24,018)	—	(24,018)
Cash dividends declared ($3.00 per common share)	—	—	—	—	—	(421,803)	(421,803)
Balance at December 26, 2021	140,275	$ 140	$ 7,220,359	$ (17,294,255)	$ (88,146)	$ 16,637,683	$ 6,475,781

See Notes to Condensed Consolidated Financial Statements

LAM RESEARCH CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
December 25, 2022
(Unaudited)

NOTE 1 — BASIS OF PRESENTATION

The accompanying unaudited Condensed Consolidated Financial Statements have been prepared in accordance with U.S. generally accepted accounting principles ("GAAP") for interim financial information and the instructions to Article 10 of Regulation S-X. Accordingly, they do not include all of the information and footnotes required by GAAP for complete financial statements. In the opinion of management, all adjustments (consisting only of normal recurring adjustments) considered necessary for a fair presentation have been included. The accompanying unaudited Condensed Consolidated Financial Statements should be read in conjunction with the audited Consolidated Financial Statements of Lam Research Corporation ("Lam Research" or the "Company") for the fiscal year ended June 26, 2022, which are included in the Company's Annual Report on Form 10-K as of and for the year ended June 26, 2022 (the "2022 Form 10-K"). The Company's reports on Form 10-K, Form 10-Q and Form 8-K are available online at the Securities and Exchange Commission website on the Internet. The address of that site is *www.sec.gov*. The Company also posts its reports on Form 10-K, Form 10-Q and Form 8-K on its corporate website at *https://investor.lamresearch.com*. The content on any website referred to in this Form 10-Q is not a part of or incorporated by reference in this Form 10-Q unless expressly noted.

The condensed consolidated financial statements include the accounts of Lam Research and its wholly-owned subsidiaries. All intercompany accounts and transactions have been eliminated in consolidation. The Company's reporting period is a 52/53-week fiscal year. The Company's current fiscal year will end June 25, 2023 and includes 52 weeks. The quarters ended December 25, 2022 (the "December 2022 quarter") and December 26, 2021 included 13 weeks.

NOTE 2 — RECENT ACCOUNTING PRONOUNCEMENTS

Recently Adopted or Effective

In March 2020, the Financial Accounting Standards Board (the "FASB") issued Accounting Standards Update ("ASU") 2020-04, "Reference Rate Reform (Topic 848): Facilitation of the Effects of Reference Rate Reform on Financial Reporting." The ASU provides temporary optional expedients and exceptions for applying generally accepted accounting principles to contract modifications and hedging relationships, subject to meeting certain criteria, that reference the London Interbank Offered Rate ("LIBOR") or another reference rate expected to be discontinued. In January 2021, the FASB issued ASU 2021-01, " Reference Rate Reform (Topic 848)," which permits entities to apply optional expedients in Topic 848 to derivative instruments modified because of discounting transition resulting from reference rate reform. In December 2022, the FASB issued ASU 2022-06, "Reference Rate Reform (Topic 848): Deferral of the Sunset Date of Topic 848," extending the relief offered in this series of ASUs through December 31, 2024.

In December 2022, the Company executed Amendment No. 1 To Second Amended and Restated Credit Agreement, the primary purpose of which was to change the reference rate for borrowings under the Credit Agreement by replacing LIBOR with the Secured Overnight Financing Rate ("SOFR"). The Company applied practical expedients provided in Topic 848 allowing for the changes in contractual terms to be accounted for prospectively. These modifications had no significant impact on our financial statements. Refer to Note 12 - Long-term debt and other borrowings for further information regarding the terms of the Credit Agreement.

In October 2021, the FASB issued ASU No. 2021-08, "Business Combinations (Topic 805), Accounting for Contract Assets and Contract Liabilities from Contracts with Customers," which requires contract assets and contract liabilities (e.g., deferred revenue) acquired in a business combination to be recognized and measured by the acquirer on the acquisition date in accordance with ASC 606, "Revenue from Contracts with Customers" as if the acquirer had originated the contracts. The guidance is applied prospectively to acquisitions occurring on or after the effective date. The Company early adopted ASU No. 2021-08 during the quarter ended December 25, 2022. The adoption of the new standard did not have a material impact on the Company's Condensed Consolidated financial statements.

Updates Not Yet Effective

There are no new accounting pronouncements not yet adopted or effective that are expected to have a material impact on the Company's Condensed Consolidated Financial Statements.

NOTE 3 — REVENUE

Deferred Revenue

Revenue of $190.2 million and $1,732.7 million included in deferred profit at June 26, 2022 was recognized during the three and six months ended December 25, 2022, respectively.

The following table summarizes the transaction price for contracts that have not yet been recognized as revenue as of December 25, 2022 and when the Company expects to recognize the amounts as revenue:

	Less than 1 Year	1-3 Years	More than 3 Years	Total
		(In thousands)		
Deferred revenue	$ 1,753,188	$ 228,288 (1)	$ 2,557 (1)	$ 1,984,033

(1) This amount is reported in Deferred profit on the Company's Condensed Consolidated Balance Sheets as the customers can demand the liability to be performed at any time.

Disaggregation of Revenue

The Company operates in one reportable business segment: manufacturing and servicing of wafer processing semiconductor manufacturing equipment. The Company's material operating segments qualify for aggregation due to their customer base and similarities in economic characteristics, nature of products and services, and processes for procurement, manufacturing, and distribution.

The Company operates in seven geographic regions: United States, China, Europe, Japan, Korea, Southeast Asia, and Taiwan. For geographical reporting, revenue is attributed to the geographic location in which the customers' facilities are located. The Company serves three primary markets: memory, foundry, and logic/integrated device manufacturing.

The following table presents the Company's revenues disaggregated between system and its customer support-related revenue:

	Three Months Ended		Six Months Ended	
	December 25, 2022	December 26, 2021	December 25, 2022	December 26, 2021
		(In thousands)		
System revenue	$ 3,547,518	$ 2,740,173	$ 6,729,505	$ 5,665,056
Customer support-related revenue and other	1,730,051	1,486,431	3,622,185	2,866,013
	$ 5,277,569	$ 4,226,604	$ 10,351,690	$ 8,531,069

System revenue includes sales of new leading-edge equipment in deposition, etch and clean markets.

Customer support-related revenue includes sales of customer service, spares, upgrades, and non-leading-edge equipment from the Company's Reliant product line.

The following table presents the Company's revenues disaggregated by geographic region:

	Three Months Ended		Six Months Ended	
	December 25, 2022	December 26, 2021	December 25, 2022	December 26, 2021
		(In thousands)		
China	$ 1,263,507	$ 1,080,973	$ 2,793,982	$ 2,688,683
Korea	1,077,052	1,068,220	1,932,430	1,986,357
Taiwan	991,173	773,121	2,112,119	1,411,187
Japan	575,945	513,936	1,034,638	982,667
Southeast Asia	528,836	364,382	1,069,900	729,630
United States	503,238	244,798	808,215	473,009
Europe	337,818	181,174	600,406	259,536
	$ 5,277,569	$ 4,226,604	$ 10,351,690	$ 8,531,069

The following table presents the percentages of leading- and non-leading-edge equipment and upgrade revenue to each of the primary markets the Company serves:

	Three Months Ended		Six Months Ended	
	December 25, 2022	December 26, 2021	December 25, 2022	December 26, 2021
Memory	50 %	58 %	50 %	61 %
Foundry	31 %	31 %	33 %	28 %
Logic/integrated device manufacturing	19 %	11 %	17 %	11 %

NOTE 4 — EQUITY-BASED COMPENSATION PLANS

The Lam Research Corporation 2015 Stock Incentive Plan, as amended, provides for the grant of non-qualified equity-based awards of the Company's Common Stock to eligible employees and non-employee directors, including stock options, restricted stock units ("RSUs"), and market-based performance RSUs ("market-based PRSUs"). An option is a right to purchase Common Stock at a set price. An RSU award is an agreement to issue a set number of shares of Common Stock at the time of vesting. The Company's market-based PRSUs contain both a market condition and a service condition. The Company's option, RSU, and market-based PRSU awards typically vest over a period of three years. The Company also has an employee stock purchase plan that allows employees to purchase its Common Stock at a discount through payroll deductions.

The Company recognized the following equity-based compensation expense (including expense related to the employee stock purchase plan) and related income tax benefit in the Condensed Consolidated Statements of Operations:

	Three Months Ended		Six Months Ended	
	December 25, 2022	December 26, 2021	December 25, 2022	December 26, 2021
	(in thousands)			
Equity-based compensation expense	$ 73,084	$ 62,834	$ 144,194	$ 120,933
Income tax benefit recognized related to equity-based compensation expense	$ 8,676	$ 9,014	$ 20,204	$ 17,222

NOTE 5 — OTHER INCOME (EXPENSE), NET

The significant components of other income (expense), net, are as follows:

	Three Months Ended		Six Months Ended	
	December 25, 2022	December 26, 2021	December 25, 2022	December 26, 2021
	(in thousands)			
Interest income	$ 26,125	$ 2,372	$ 41,181	$ 7,050
Interest expense	(46,661)	(46,765)	(92,713)	(91,821)
Gains (losses) on deferred compensation plan-related assets, net	10,871	(56)	(1,855)	7,381
Foreign exchange (losses) gains, net	(10,114)	731	(3,293)	714
Other, net	(8,455)	61,717	(14,649)	65,818
	$ (28,234)	$ 17,999	$ (71,329)	$ (10,858)

Other, net includes an unrealized gain totaling $46.6 million associated with an equity investee that became publicly traded during the three and six months ended December 26, 2021. Refer to Note 8 - Financial Instruments for additional information regarding the Company's investments.

NOTE 6 — INCOME TAX EXPENSE

The Company's provision for income taxes and effective tax rate are as follows:

	Three Months Ended		Six Months Ended	
	December 25, 2022	December 26, 2021	December 25, 2022	December 26, 2021
	(in thousands, except percentages)			
Income tax expense	$ 183,421	$ 161,308	$ 412,287	$ 324,940
Effective tax rate	11.1 %	11.9 %	12.5 %	12.0 %

The difference between the U.S. federal statutory tax rate of 21% and the Company's effective tax rate for the three and six months ended December 25, 2022 and December 26, 2021 was primarily due to income in lower tax jurisdictions.

The Internal Revenue Service ("IRS") has examined the Company's U.S. federal income tax return for the fiscal year ended June 24, 2018. As of September 25, 2022, the IRS has proposed adjustments resulting in a tax liability increase of approximately $50.0 million, which was previously reserved. The Company has agreed to pay the amount and has made a partial cash settlement in the September quarter with the remaining settlement expected to be paid based on the IRS requirements.

The IRS is examining the Company's U.S. federal income tax returns for the fiscal years ended June 30, 2019, and June 28, 2020. As of December 25, 2022, no significant adjustments have been proposed by the IRS. The Company is unable to make a reasonable estimate as to when cash settlements, if any, with the IRS will occur.

The Company is in various stages of examinations in connection with all of its tax audits worldwide, and it is difficult to determine when these examinations will be settled. It is reasonably possible that over the next 12-month period the Company may experience an increase or decrease in its uncertain tax positions as a result of tax examinations or lapses of statutes of limitation. The change in uncertain tax positions as a result of lapses of statutes of limitation may range up to $18.4 million.

NOTE 7 — NET INCOME PER SHARE

Basic net income per share is computed by dividing net income by the weighted-average number of common shares outstanding during the period. Diluted net income per share is computed using the treasury stock method, for dilutive stock options, restricted stock units, and convertible notes. The following table reconciles the inputs to the basic and diluted computations for net income per share.

	Three Months Ended		Six Months Ended	
	December 25, 2022	December 26, 2021	December 25, 2022	December 26, 2021
	(in thousands, except per share data)			
Numerator:				
Net income	$ 1,468,507	$ 1,194,830	$ 2,894,386	$ 2,374,574
Denominator:				
Basic average shares outstanding	136,018	140,630	136,455	141,187
Effect of potential dilutive securities:				
Employee stock plans	321	900	319	884
Diluted average shares outstanding	136,339	141,530	136,774	142,071
Net income per share - basic	$ 10.80	$ 8.50	$ 21.21	$ 16.82
Net income per share - diluted	$ 10.77	$ 8.44	$ 21.16	$ 16.71

For purposes of computing diluted net income per share, weighted-average common shares do not include potentially dilutive securities that are anti-dilutive under the treasury stock method. The impact from potentially dilutive securities, including options and RSUs, was not material for the three and six months ended December 25, 2022 and December 26, 2021.

NOTE 8 — FINANCIAL INSTRUMENTS

The Company maintains an investment portfolio of various holdings, types, and maturities. The Company's mutual funds, which are related to the Company's obligations under the deferred compensation plan, are classified as trading securities. Investments classified as trading securities are recorded at fair value based upon quoted market prices. Differences between the cost and fair value of trading securities are recognized as other income (expense), net in the Condensed Consolidated Statements of Operations. All of the Company's debt securities are classified as available-for-sale and consequently are recorded in the Condensed Consolidated Balance Sheets at fair value with unrealized gains or losses associated with market valuation changes, unrelated to credit losses, reported as a separate component of accumulated other comprehensive income (loss), net of tax; and credit losses, if any, recognized as other income (expense), net in the Condensed Consolidated Statements of Operations.

The Company periodically invests in equity securities. For equity investments that do not have a readily determinable fair value, the Company records them using either 1) the measurement alternative which measures the equity investments at cost minus impairment, if any, plus or minus changes resulting from qualifying observable price changes; or 2) the equity method whereby the Company recognizes its proportional share of the income or loss from the equity method investment on a one-quarter lag. The equity method is utilized when the Company does not have the ability to control the investee but is deemed to have the ability to exercise significant influence over the investee's operating or financial policies. For equity investments that have a readily determinable fair value, the Company records them at fair market value on a recurring basis based upon quoted market prices. Realized and unrealized gains and losses resulting from application of the measurement alternative, the impact of the application of the equity method to the Company's equity investments, and recognition of changes in fair market value, as applicable, are recognized as other income (expense), net in the Condensed Consolidated Statements of Operations.

Fair Value

The Company defines fair value as the price that would be received from selling an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. When determining the fair value measurements for assets and liabilities required or permitted to be recorded at fair value, the Company considers the principal or most advantageous market in which it would transact, and it considers assumptions that market participants would use when pricing the asset or liability.

A fair value hierarchy has been established that prioritizes the inputs to valuation techniques used to measure fair value. The level of an asset or liability in the hierarchy is based on the lowest level of input that is significant to the fair value measurement. Assets and liabilities carried at fair value are classified and disclosed in one of the following three categories:

Level 1: Valuations based on quoted prices in active markets for identical assets or liabilities with sufficient volume and frequency of transactions.

Level 2: Valuations based on observable inputs other than Level 1 prices such as quoted prices for similar assets or liabilities, quoted prices in markets that are not active for identical assets or liabilities, or model-derived valuations techniques for which all significant inputs are observable in the market or can be corroborated by observable market data for substantially the full term of the assets or liabilities.

Level 3: Valuations based on unobservable inputs to the valuation methodology that are significant to the measurement of fair value of assets or liabilities and based on non-binding, broker-provided price quotes and may not have been corroborated by observable market data.

The Company engages with pricing vendors to provide fair values for a majority of its Level 1 and Level 2 investments. The vendors provide either a quoted market price or use observable inputs without applying significant adjustments in their pricing. Significant observable inputs include interest rates and yield curves observable at commonly quoted intervals, volatility and credit risks. The fair value of derivative contracts is determined using observable market inputs such as the foreign currency rates, forward rate curves, currency volatility and interest rates and considers nonperformance risk of the Company and its counterparties.

The Company's primary financial instruments include its cash, cash equivalents, investments, restricted cash and investments, long-term investments, accounts receivable, accounts payable, long-term debt and leases, and foreign currency related derivative instruments. The estimated fair value of cash, time deposits, accounts receivable, and accounts payable approximates their carrying value due to the short period of time to their maturities. The estimated fair values of lease obligations approximate their carrying value as the majority of these obligations have interest rates that adjust to market rates on a periodic basis. The fair value of the Company's senior notes is based on the quoted price (level 2); the fair value of the Company's senior notes have not changed materially to that disclosed in Note 14, "Long Term Debt and Other Borrowings," to the Company's Consolidated Financial Statements in Part II, Item 8 of our 2022 Form 10-K.

Equity Investments measured at fair value on a non-recurring basis

As of December 25, 2022, and June 26, 2022, equity investments of $121.3 million and $125.2 million, respectively, were reported in other assets in the Condensed Consolidated Balance Sheets.

With the exception of one equity investee that became publicly traded during the three and six months ended December 26, 2021, net gains resulting from the application of the measurement alternative to the Company's equity investments were immaterial for the three and six months ended December 25, 2022, and December 26, 2021. Refer to Note 5 - Other Income (Expense), net for additional information regarding the gain associated with an equity investee that became publicly traded in the three and six months ended December 26, 2021.

Debt and Equity Investments measured at fair value on a recurring basis

The following tables set forth the Company's cash, cash equivalents, investments, restricted cash and investments, and other assets measured at fair value on a recurring basis as of December 25, 2022, and June 26, 2022:

	December 25, 2022							
					(Reported Within)			
	Cost	Unrealized Gain	Unrealized (Loss)	Fair Value	Cash and Cash Equivalents	Investments	Restricted Cash & Investments	Other Assets
	(in thousands)							
Level 1:								
Money market funds	$ 1,034,870	$ —	$ —	$ 1,034,870	$ 1,033,219	$ —	$ —	$ 1,651
Mutual funds	81,889	12,051	(2,801)	91,139	—	—	—	91,139
Level 1 Total	1,116,759	12,051	(2,801)	1,126,009	1,033,219	—	—	92,790
Level 2:								
Corporate notes and bonds	104,585	4	(1,459)	103,130	—	103,130	—	—
Level 2 Total	104,585	4	(1,459)	103,130	—	103,130	—	—
Total subject to fair value hierarchy	$ 1,221,344	$ 12,055	$ (4,260)	$ 1,229,139				
Cash				$ 2,022,649	$ 2,021,333	$ —	$ 1,316	$ —
Time deposits				1,680,192	1,430,164	—	250,028	—
Total				$ 4,931,980	$ 4,484,716	$ 103,130	$ 251,344	$ 92,790

	June 26, 2022							
					(Reported Within)			
	Cost	Unrealized Gain	Unrealized (Loss)	Fair Value	Cash and Cash Equivalents	Investments	Restricted Cash & Investments	Other Assets
	(in thousands)							
Level 1:								
Money market funds	$ 712,076	$ —	$ —	$ 712,076	$ 712,076	$ —	$ —	$ —
Mutual funds	84,851	12,027	(1,659)	95,219	—	—	—	95,219
Level 1 Total	796,927	12,027	(1,659)	807,295	712,076	—	—	95,219
Level 2:								
Corporate notes and bonds	137,859	—	(2,128)	135,731	—	135,731	—	—
Level 2 Total	137,859	—	(2,128)	135,731	—	135,731	—	—
Total subject to fair value hierarchy	$ 934,786	$ 12,027	$ (3,787)	$ 943,026				
Cash				$ 1,017,253	$ 1,015,747	$ —	$ 1,506	$ —
Time deposits				2,044,206	1,794,178	—	250,028	—
Total				$ 4,004,485	$ 3,522,001	$ 135,731	$ 251,534	$ 95,219

The Company accounts for its investment portfolio at fair value. Realized gains (losses) for investment sales are specifically identified. Management assesses the fair value of investments in debt securities that are not actively traded through consideration of interest rates and their impact on the present value of the cash flows to be received from the investments.

The Company evaluates its investments with fair value less than amortized cost by first considering whether the Company has the intent to sell the security or whether it is more likely than not that the Company will be required to sell the security before recovery of its amortized cost basis. In either such situation, the difference between fair value and amortized cost is recognized as a loss in the income statement. Where such sales are not likely to occur, the Company considers whether a portion of the loss is the result of a credit loss. To the extent such losses are the result of credit losses, those amounts are recognized in the income statement. All other differences between fair value and amortized cost are recognized in other comprehensive income. No such losses were recognized through the income statement during the three and six months ended December 25, 2022 and December 26, 2021.

Gross realized gains/(losses) from sales of investments were insignificant in the three and six months ended December 25, 2022 and December 26, 2021.

The following is an analysis of the Company's investments in unrealized loss positions:

	December 25, 2022					
	Unrealized Losses Less than 12 Months		Unrealized Losses 12 Months or Greater		Total	
	Fair Value	Gross Unrealized Loss	Fair Value	Gross Unrealized Loss	Fair Value	Gross Unrealized Loss
	(in thousands)					
Mutual funds	$ 29,021	$ (2,526)	$ 1,468	$ (275)	$ 30,489	$ (2,801)
Corporate notes and bonds	80,426	(1,215)	18,526	(244)	98,952	(1,459)
	$ 109,447	$ (3,741)	$ 19,994	$ (519)	$ 129,441	$ (4,260)

The amortized cost and fair value of cash equivalents, investments, and restricted investments with contractual maturities are as follows as of December 25, 2022:

	Cost	Fair Value
	(in thousands)	
Due in one year or less	$ 2,790,470	$ 2,789,635
Due after one year through five years	27,526	26,906
	$ 2,817,996	$ 2,816,541

The Company has the ability, if necessary, to liquidate its investments in order to meet the Company's liquidity needs in the next 12 months. Accordingly, those investments with contractual maturities greater than 12 months from the date of purchase nonetheless are classified as short-term on the accompanying Condensed Consolidated Balance Sheets.

Derivative Instruments and Hedging

The Company's hedging strategies and policies are unchanged from those disclosed in Note 9, "Financial Instruments," to our Consolidated Financial Statements in Part II, Item 8 of our 2022 Form 10-K. The financial statement impacts from derivative instruments and hedging activities were not material as of and for the three and six months ended December 25, 2022 and December 26, 2021.

Concentrations of Credit Risk

Financial instruments that potentially subject the Company to concentrations of credit risk consist principally of cash and cash equivalents, investments, restricted cash and investments, trade accounts receivable, and derivative financial instruments used in hedging activities. Cash is placed on deposit at large, global financial institutions. Such deposits may be in excess of insured limits. Management believes that the financial institutions that hold the Company's cash are creditworthy and, accordingly, minimal credit risk exists with respect to these balances.

The Company's overall portfolio of available-for-sale securities must maintain an average minimum rating of "AA-" or "Aa3" as rated by Standard and Poor's, Fitch Ratings, or Moody's Investor Services. To ensure diversification and minimize concentration, the Company's policy limits the amount of credit exposure with any one financial institution or commercial issuer.

The Company is exposed to credit losses in the event of nonperformance by counterparties on foreign currency and interest rate hedge contracts that are used to mitigate the effect of exchange rate and interest rate fluctuations, and on contracts related to structured share repurchase arrangements. These counterparties are large global financial institutions, and, to date, no such counterparty has failed to meet its financial obligations to the Company.

Credit risk evaluations, including trade references, bank references, and Dun & Bradstreet ratings, are performed on all new customers and the Company monitors its customers' financial condition and payment performance. In general, the Company does not require collateral on sales.

NOTE 9 — INVENTORIES

Inventories are stated at the lower of cost (first-in, first-out method) or net realizable value. System shipments to customers in Japan, for which title does not transfer until customer acceptance, are classified as finished goods inventory and carried at cost until title transfers. Inventories consist of the following:

	December 25, 2022	June 26, 2022
	(in thousands)	
Raw materials	$ 3,156,162	$ 2,401,490
Work-in-process	384,390	471,348
Finished goods	1,279,414	1,093,456
	$ 4,819,966	$ 3,966,294

NOTE 10 — GOODWILL AND INTANGIBLE ASSETS

Goodwill

The balance of goodwill is approximately $1.6 billion and $1.5 billion as of December 25, 2022 and June 26, 2022, respectively. As of December 25, 2022 and June 26, 2022, $62.0 million of the goodwill balance is tax deductible and the remaining balance is not tax deductible due to purchase accounting and applicable foreign law. Refer to Note 17 - Business Combinations for additional information regarding the Company's goodwill balance.

Intangible Assets

The following table provides the Company's intangible assets, other than goodwill:

	December 25, 2022			June 26, 2022		
	Gross	Accumulated Amortization	Net	Gross	Accumulated Amortization	Net
			(in thousands)			
Customer relationships	$ 644,102	$ (629,176)	$ 14,926	$ 633,252	$ (627,376)	$ 5,876
Existing technology	717,247	(668,279)	48,968	676,924	(664,278)	12,646
Patents and other intangible assets	191,676	(100,870)	90,806	167,821	(84,493)	83,328
Intangible assets subject to amortization	1,553,025	(1,398,325)	154,700	1,477,997	(1,376,147)	101,850
In process research and development	30,081	—	30,081	—	—	—
Total intangible assets	$ 1,583,106	$ (1,398,325)	$ 184,781	$ 1,477,997	$ (1,376,147)	$ 101,850

The Company recognized $12.2 million and $19.5 million in intangible asset amortization expense during the three months ended December 25, 2022 and December 26, 2021, respectively. The Company recognized $23.8 million and $38.6 million in intangible asset amortization expense during the six months ended December 25, 2022 and December 26, 2021, respectively.

The estimated future amortization expense of intangible assets as of December 25, 2022, is reflected in the table below. The table excludes $27.7 million of capitalized costs for internal-use software that have not been placed into service.

Fiscal Year	Amount
	(in thousands)
2023 (remaining 6 months)	$ 23,642
2024	35,098
2025	23,094
2026	14,289
2027	11,657
Thereafter	19,237
	$ 127,017

Refer to Note 17 - Business Combinations for additional information regarding the Company's intangible assets.

NOTE 11 — ACCRUED EXPENSES AND OTHER CURRENT LIABILITIES

Accrued expenses and other current liabilities consist of the following:

	December 25, 2022	June 26, 2022
	(in thousands)	
Accrued compensation	$ 551,639	$ 481,070
Warranty reserves	284,150	232,248
Income and other taxes payable	310,656	465,601
Dividend payable	233,977	205,615
Other	687,948	589,738
	$ 2,068,370	$ 1,974,272

NOTE 12 — LONG-TERM DEBT AND OTHER BORROWINGS

Revolving Credit Facility

On March 12, 2014, the Company established an unsecured Credit Agreement. This agreement was amended on November 10, 2015 (the "Amended and Restated Credit Agreement"), October 13, 2017 (the "2nd Amendment"), February 25, 2019 (the "3rd Amendment"), June 17, 2021 (the "Second Amended and Restated Credit Agreement"), and December 7, 2022 ("Amendment No.1 to Second Amended and Restated Credit Agreement"). The Amendment No.1 To Second Amended and Restated Credit Agreement replaces the benchmark reference rate, LIBOR, with term SOFR equal to the term rate determined by the CME term SOFR administrator plus 0.10% ("adjusted term SOFR"), with no change to the amount or timing of contractual cash flows.

Interest on amounts borrowed under the credit facility is, at the Company's option, based on (1) a base rate, defined as the greatest of (a) prime rate, (b) Federal Funds rate plus 0.5%, or (c) adjusted term SOFR plus 1.0%, plus a spread of 0.00% to 0.30%, or (2) adjusted term SOFR, plus a spread of 0.805% to 1.30%, in each case plus a facility fee, with such spread and facility fee determined based on the rating of the Company's non-credit enhanced, senior unsecured long-term debt. Such spreads and such facility fees are further subject to sustainability adjustments as described in the Amendment No.1 To Second Amended and Restated Credit Agreement, in each case based on the Company's performance of certain energy savings and health and safety standards metrics. As of December 25, 2022, the Company had no borrowings outstanding under the credit facility and was in compliance with all financial covenants.

NOTE 13 — LEASES

The Company leases certain office spaces, manufacturing and warehouse spaces, equipment, and vehicles. While the majority of the Company's lease arrangements are operating leases, the Company has certain leases that qualify as finance leases.

Selected Leases and Related Guarantees

The Company leases the majority of its administrative, research and development and manufacturing facilities, regional sales/service offices, and certain equipment under non-cancelable leases. Certain of the Company's facility leases for buildings located at its Fremont, California headquarters, Tualatin, Oregon campus, and certain other facility leases provide the Company with options to extend the leases for additional periods or to purchase the facilities. Certain of the Company's facility leases provide for periodic rent increases based on the general rate of inflation.

The Company has finance leases for certain improved properties in Fremont and Livermore, California (the "California Facility Leases"). The Company is required to maintain cash collateral in an aggregate of approximately $250.0 million in separate interest-bearing accounts as security for the Company's obligations. These amounts are recorded with other restricted cash and investments in the Company's Condensed Consolidated Balance Sheet as of December 25, 2022.

During the seven-year term of the California Facility Leases and when the terms of the California Facility Leases expire, the property subject to the California Facility Leases may be re-marketed. The Company has guaranteed to the lessor that each property will have a certain minimum residual value. The aggregate maximum guarantee made by the Company under the California Facility Leases is $298.4 million.

NOTE 14 — COMMITMENTS AND CONTINGENCIES

Refer to Note 13 - Leases for details regarding guarantees surrounding selected leases.

Other Guarantees

The Company has issued certain indemnifications to its lessors for taxes and general liability under some of its agreements. The Company has entered into insurance contracts that are intended to limit its exposure to such indemnifications. As of December 25, 2022, the Company had not recorded any liability on its Condensed Consolidated Financial Statements in connection with these indemnifications, as it does not believe that it is probable that any material amounts will be paid under these guarantees.

Generally, the Company indemnifies, under pre-determined conditions and limitations, its customers for infringement of third-party intellectual property rights by the Company's products or services. The Company seeks to limit its liability for such indemnity to an amount not to exceed the sales price of the products or services subject to its indemnification obligations. The Company does not believe that it is probable that any material amounts will be paid under these guarantees.

The Company provides guarantees and standby letters of credit to certain parties as required for certain transactions initiated during the ordinary course of business. As of December 25, 2022, the maximum potential amount of future payments that the Company could be required to make under these arrangements and letters of credit was $98.6 million. The Company does not believe, based on historical experience and information currently available, that it is probable that any material amounts will be required to be paid.

In addition, the Company has entered into indemnification agreements with its directors, officers, and certain other employees, consistent with its Bylaws and Certificate of Incorporation; and under local law, the Company may be required to provide indemnification to its employees for actions within the scope of their employment. Although the Company maintains insurance contracts that cover some of the potential liability associated with these indemnification agreements, there is no guarantee that all such liabilities will be covered. The Company does not believe, based on historical experience and information currently available, that it is probable that any material amounts will be required to be paid under such indemnification agreements or statutory obligations.

Warranties

The Company provides standard warranties on its systems. The liability amount is based on actual historical warranty spending activity by type of system, customer, and geographic region, modified for any known differences such as the impact of system reliability improvements. As of December 25, 2022, warranty reserves totaling $34.8 million were recognized in other long-term liabilities, the remainder were included in accrued expenses and other current liabilities in the Company's Condensed Consolidated Balance Sheets.

Changes in the Company's product warranty reserves were as follows:

	Three Months Ended		Six Months Ended	
	December 25, 2022	December 26, 2021	December 25, 2022	December 26, 2021
	(in thousands)			
Balance at beginning of period	$ 283,514	$ 214,244	$ 256,258	$ 191,758
Warranties issued during the period	83,364	71,437	171,577	142,109
Settlements made during the period	(61,838)	(68,126)	(126,734)	(128,418)
Changes in liability for warranties issued during the period	3,210	—	1,941	—
Changes in liability for pre-existing warranties	10,719	10,833	15,927	22,939
Balance at end of period	$ 318,969	$ 228,388	$ 318,969	$ 228,388

Legal Proceedings

While the Company is not currently a party to any legal proceedings that it believes material, the Company is either a defendant or plaintiff in various actions that have arisen from time to time in the normal course of business, including intellectual property claims. The Company accrues for a liability when it is both probable that a liability has been incurred and the amount of the loss can be reasonably estimated. Significant judgment is required in both the determination of probability and the determination as to whether a loss is reasonably estimable. Based on current information, the Company does not believe that a material loss from known matters is probable and therefore has not recorded an accrual of any material amount for litigation or other contingencies related to existing legal proceedings.

NOTE 15 — STOCK REPURCHASE PROGRAM

In May 2022, the Board of Directors authorized the Company to repurchase up to an additional $5.0 billion of Common Stock; this authorization supplements the remaining balances from any prior authorizations. These repurchases can be conducted on the open market or as private purchases and may include the use of derivative contracts with large financial institutions, in all cases subject to compliance with applicable law. This repurchase program has no termination date and may be suspended or discontinued at any time.

Repurchases under the repurchase program were as follows during the periods indicated:

Period	Total Number of Shares Repurchased		Total Cost of Repurchase	Average Price Paid Per Share [1]	Amount Available Under Repurchase Program
			(in thousands, except per share data)		
Available balance as of June 26, 2022					$ 5,514,636
Quarter ended September 25, 2022	675	[2]	$ 104,982	$ 432.74	$ 5,409,654
Quarter ended December 25, 2022	1,125		$ 483,226	$ 429.42	$ 4,926,428

(1) Average price paid per share excludes the effect of accelerated share repurchase activities. See additional disclosure below regarding the Company's accelerated share repurchase activity during the six months ended December 25, 2022.
(2) Includes shares received at final settlement of accelerated share repurchase agreements; see additional disclosures below regarding the Company's accelerated share repurchase activity during the six months ended December 25, 2022.

In addition to the shares repurchased under the Board-authorized repurchase program shown above, during the three and six months ended December 25, 2022, the Company acquired 8 thousand shares at a total cost of $3.1 million and 19 thousand shares at a total cost of $7.9 million, respectively, which the Company withheld through net settlements to cover minimum tax withholding obligations upon the vesting of restricted stock unit awards granted under the Company's equity compensation plans. The shares retained by the Company through these net share settlements are not a part of the Board-authorized repurchase program but instead are authorized under the Company's equity compensation plan.

Accelerated Share Repurchase Agreements

On June 2, 2022, the Company entered into an accelerated share repurchase agreement (the "June 2022 ASR") with two financial institutions to repurchase a total of $500 million of Common Stock. The Company took an initial delivery of approximately 717 thousand shares, which represented 75% of the prepayment amount divided by our closing stock price on June 2, 2022. The total number of shares received under the June 2022 ASR was based upon the average daily volume weighted average price of the Company's Common Stock during the repurchase period, less an agreed upon discount. Final settlement of the June 2022 ASR occurred in September 2022, resulting in the receipt of approximately 433 thousand additional shares, which yielded a weighted-average share price of $435.20 for the transaction period.

NOTE 16 — ACCUMULATED OTHER COMPREHENSIVE LOSS

The components of accumulated other comprehensive loss, net of tax at December 25, 2022, as well as the activity for the six months ending December 25, 2022, were as follows:

	Accumulated Foreign Currency Translation Adjustment	Accumulated Unrealized Gain or Loss on Cash flow hedges	Accumulated Unrealized Holding Gain or Loss on Available-For-Sale Investments	Accumulated Unrealized Components of Defined Benefit Plans	Total
			(in thousands)		
Balance at June 26, 2022	$ (81,755)	$ (12,330)	$ (1,637)	$ (14,260)	$ (109,982)
Other comprehensive income before reclassifications	7,861	185	570	572	9,188
Gains reclassified from accumulated other comprehensive loss to net income [1]	—	(8,024)	(53)	—	(8,077)
Net current-period other comprehensive income (loss)	7,861	(7,839)	517	572	1,111
Balance at December 25, 2022	$ (73,894)	$ (20,169)	$ (1,120)	$ (13,688)	$ (108,871)

(1) Amount of after-tax gains reclassified from AOCI into net income is not material in the aggregate, or to any individual location in our Condensed Consolidated Statements of Operations.

NOTE 17 — BUSINESS COMBINATIONS

In November 2022, the Company completed two business combination transactions acquiring the outstanding shares of two separate private companies in cash transactions valued at $153.8 million as of the respective purchase dates. The Company's preliminary assessment of acquisition date fair value of the assets acquired and liabilities assumed resulted in the recognition of $100.4 million of goodwill and $81.2 million of intangible assets; all other assets acquired and all liabilities assumed were immaterial. The preliminary fair value of net tangible liabilities assumed and intangible assets acquired was based on preliminary valuations, estimates, and assumptions which are subject to change within the measurement period (up to one year from the acquisition date). The Company expensed all associated costs, as incurred, in selling, general, and administrative expense in the Condensed Consolidated Statement of Operations for the three and six months ended December 25, 2022.

The following table is a summary of the preliminary fair value estimates of the identifiable intangible assets and their useful lives:

	Weighted-Average Useful Life	Estimated Purchase Date Fair Value
		(in thousands)
Existing technology	7 years	$ 40,294
Customer relationships	8 years	10,835
In process research and development	Indefinite	30,081
		$ 81,210

NOTE 18 — SUBSEQUENT EVENT

In January 2023, the Company announced its plan to reduce headcount by approximately 1,300 employees as part of restructuring activity that will commence in the three months ended March 26, 2023. The Company estimates it will incur approximately $80.0 million in connection with this activity.

ITEM 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

With the exception of historical facts, the statements contained in this discussion are forward-looking statements, which are subject to the safe harbor provisions created by the Private Securities Litigation Reform Act of 1995. Certain, but not all, of the forward-looking statements in this report are specifically identified as forward-looking, by use of phrases and words such as "believe," "estimated," "anticipate," "expect," "probable," "intend," "plan," "aim," "may," "should," "could," "would," "will," "continue," and other future-oriented terms. The identification of certain statements as "forward-looking" does not mean that other statements not specifically identified are not forward-looking. Forward-looking statements include but are not limited to statements that relate to: trends and opportunities in the global economic environment; trends and opportunities in the semiconductor industry, including in the end markets and applications for semiconductors, and in device complexity; growth or decline in the industry and the market for, and spending on, wafer fabrication equipment; the anticipated levels of, and rates of change in, margins, market share, served addressable market, capital expenditures, research and development expenditures, international sales, revenue (actual and/or deferred), operating expenses and earnings generally; management's plans and objectives for our current and future operations and business focus; volatility in our quarterly results; the makeup of our customer base; customer and end user requirements and our ability to satisfy those requirements; customer spending and demand for our products and services, and the reliability of indicators of change in customer spending and demand; the effect of variability in our customers' business plans or demand for our products and services; our competition, and our ability to defend our market share and to gain new market share; the success of joint development and collaboration relationships with customers, suppliers, or others; outsourced activities; our supply chain and the role of suppliers in our business, including the impacts of supply chain constraints and material costs; our leadership and competency, and our ability to facilitate innovation; our research and development programs; our ability to create sustainable differentiation; technology inflections in the industry and our ability to identify those inflections and to invest in research and development programs to meet them; our ability to deliver multi-product solutions; the resources invested to comply with evolving standards and the impact of such efforts; changes in state, federal and international tax laws, our estimated annual tax rate and the factors that affect our tax rates; legal and regulatory compliance; the estimates we make, and the accruals we record, in order to implement our critical accounting policies (including but not limited to the adequacy of prior tax payments, future tax benefits or liabilities, and the adequacy of our accruals relating to them); hedging transactions; debt or financing arrangements; our investment portfolio; our access to capital markets; uses of, payments of, and impact of interest rate fluctuations on, our debt; our intention to pay quarterly dividends and the amounts thereof, if any; our ability and intention to repurchase our shares; credit risks; controls and procedures; recognition or amortization of expenses; our ability to manage and grow our cash position; our strategic relevance with our customers; our ability to scale our operations to respond to changes in our business; the value of our patents; the materiality of potential losses arising from legal proceedings; the probability of making payments under our guarantees; the impact of the COVID-19 pandemic; and the sufficiency of our financial resources or liquidity to support future business activities (including but not limited to operations, investments, debt service requirements, dividends, and capital expenditures). Such statements are based on current expectations and are subject to risks, uncertainties, and changes in condition, significance, value, and effect, including without limitation those discussed below under the heading "Risk Factors" within Part II Item 1A and elsewhere in this report and other documents we file from time to time with the Securities and Exchange Commission ("SEC"), such as our annual report on Form 10-K for the year ended June 26, 2022 (our "2022 Form 10-K"), our quarterly report on Form 10-Q for the fiscal quarter ended September 25, 2022, and our current reports on Form 8-K. Such risks, uncertainties, and changes in condition, significance, value, and effect could cause our actual results to differ materially from those expressed in this report and in ways not readily foreseeable. Readers are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date hereof and are based on information currently and reasonably known to us. We do not undertake any obligation to release the results of any revisions to these forward-looking statements, which may be made to reflect events or circumstances that occur after the date of this report or to reflect the occurrence or effect of anticipated or unanticipated events.

Documents To Review In Connection With Management's Discussion and Analysis Of Financial Condition and Results Of Operations

For a full understanding of our financial position and results of operations for the three and six months ended December 25, 2022, and the related Management's Discussion and Analysis of Financial Condition and Results of Operations below, you should also read the Condensed Consolidated Financial Statements and notes presented in this Form 10-Q and the financial statements and notes in our 2022 Form 10-K.

EXECUTIVE SUMMARY

Lam Research Corporation is a global supplier of innovative wafer fabrication equipment and services to the semiconductor industry. We have built a strong global presence with core competencies in areas like nanoscale applications enablement, chemistry, plasma and fluidics, advanced systems engineering and a broad range of operational disciplines. Our products and services are designed to help our customers build smaller and better performing devices that are used in a variety of electronic products, including mobile phones, personal computers, servers, wearables, automotive vehicles, and data storage devices.

Our customer base includes leading semiconductor memory, foundry, and integrated device manufacturers that make products such as non-volatile memory, dynamic random-access memory, and logic devices. Their continued success is part of our commitment to driving semiconductor breakthroughs that define the next generation. Our core technical competency is integrating hardware, process, materials, software, and process control, enabling results on the wafer.

Semiconductor manufacturing, our customers' business, involves the complete fabrication of multiple dies or integrated circuits on a wafer. This involves the repetition of a set of core processes and can require hundreds of individual steps. Fabricating these devices requires highly sophisticated process technologies to integrate an increasing array of new materials with precise control at the atomic scale. Along with meeting technical requirements, wafer processing equipment must deliver high productivity and be cost-effective.

Demand from cloud computing, 5G, the Internet of Things, and other markets is driving the need for increasingly powerful and cost-efficient semiconductors. At the same time, there are growing technical challenges with traditional two-dimensional scaling. These trends are driving significant inflections in semiconductor manufacturing, such as the increasing importance of vertical scaling strategies like three-dimensional architecture as well as multiple patterning to enable shrinks.

We believe we are in a strong position with our leadership and expertise in deposition, etch, and clean to facilitate some of the most significant innovations in semiconductor device manufacturing. Our Customer Support Business Group provides products and services to maximize installed equipment performance, predictability, and operational efficiency. Several factors create opportunity for sustainable differentiation for us: (i) our focus on research and development, with several on-going programs relating to sustaining engineering, product and process development, and concept and feasibility; (ii) our ability to effectively leverage cycles of learning from our broad installed base; (iii) our collaborative focus with semi-ecosystem partners; (iv) our ability to identify and invest in the breadth of our product portfolio to meet technology inflections; and (v) our focus on delivering our multi-product solutions with a goal to enhance the value of Lam's solutions to our customers.

Calendar year 2022 was a solid investment year in wafer fabrication equipment spending driven by robust secular demand for semiconductors and increasing complexity in manufacturing NAND, DRAM, and foundry logic devices. However, the demand environment, particularly in memory, has weakened, and as a result, we expect a reduction in wafer fabrication equipment spending in calendar year 2023. Additionally, the United States government imposed new controls which significantly impact trade with China for the shipment of wafer fabrication equipment and related parts and services. We expect these regulatory conditions, and the slowing economic environment, to negatively impact our financial results in calendar year 2023. As a result of the expected reduced business levels, we announced a plan for the March 2023 quarter to reduce headcount by 1,300 employees, and we expect to incur charges of approximately $80.0 million in connection with the plan. Over the course of calendar year 2023, we are projecting expenditures in the range of $150.0 million to $250.0 million associated with various business process improvements and initiatives, inclusive of the March 2023 quarter restructuring activity. Over the longer term, we believe that secular demand for semiconductors combined with technology inflections in our industry, including 3D device scaling, multiple patterning, process flow, and advanced packaging chip integration, will drive sustainable growth and lead to an increase in the served addressable market for our products and services in the deposition, etch, and clean businesses.

In the quarter-ended December 25, 2022, customer demand was strong and with improvement in supply chain constraints we were able to fulfill shipments of many critical parts required for revenue recognition. Although we have seen improvements in both our operations and those of our suppliers, we may continue to experience supply shortages as well as inflationary cost pressures in at least the near term. Risks and uncertainties related to the COVID-19 pandemic, supply chain challenges, and inflationary pressures may continue to negatively impact our revenue and gross margin.

The following table summarizes certain key financial information for the periods indicated below:

	Three Months Ended	
	December 25, 2022	September 25, 2022
	(in thousands, except per share data and percentages)	
Revenue	$ 5,277,569	$ 5,074,121
Gross margin	$ 2,376,349	$ 2,336,835
Gross margin as a percent of total revenue	45.0 %	46.1 %
Total operating expenses	$ 696,187	$ 638,995
Net income	$ 1,468,507	$ 1,425,879
Diluted net income per share	$ 10.77	$ 10.39

In the December 2022 quarter, revenue increased 4.0% compared to the September 2022 quarter, driven by an increase in systems revenue as a result of the improving supply chain environment. We were able to fulfill shipments of critical parts which drove down our deferred revenue balance to $1,984 million at the end of the December 2022 quarter compared to $2,755 million as of the end of the September 2022 quarter. We aim to balance the requirements of our customers with the availability of resources, as well as performance to our operational and financial objectives. As a result, from time to time, we exercise discretion and judgment as to the timing and prioritization of manufacturing and deliveries of products, which has impacted, including in the current fiscal year, and may in the future impact, the timing of revenue recognition with respect to such products.

The decrease in gross margin as a percentage of revenue in the December 2022 quarter compared to the September 2022 quarter was primarily a result of unfavorable customer and product mix. The increase in operating expenses in the December 2022 quarter compared to the September 2022 quarter was primarily driven by an increase in deferred compensation plan-related costs, outside service spending and supplies expense.

Our cash and cash equivalents, investments, and restricted cash and investments balances increased to $4.8 billion at the end of the December 2022 quarter compared to $4.6 billion at the end of the September 2022 quarter. This increase was primarily the result of $1,140.2 million of cash generated from operating activities, partially offset by $456.3 million of share repurchases, including net share settlement of employee stock-based compensation, $236.0 million of dividends paid to stockholders; and $163.4 million of capital expenditures. Employee headcount as of December 25, 2022 was approximately 19,200.

RESULTS OF OPERATIONS

Revenue

	Three Months Ended		Six Months Ended	
	December 25, 2022	September 25, 2022	December 25, 2022	December 26, 2021
Revenue (in millions)	$ 5,278	$ 5,074	$ 10,352	$ 8,531
China	24 %	30 %	27 %	31 %
Korea	20 %	17 %	19 %	23 %
Taiwan	19 %	22 %	20 %	17 %
Japan	11 %	9 %	10 %	11 %
Southeast Asia	10 %	11 %	10 %	9 %
United States	10 %	6 %	8 %	6 %
Europe	6 %	5 %	6 %	3 %

Revenue for the December 2022 quarter increased 4.0% from the September 2022 quarter primarily due to improving supply chain conditions which allowed us to fulfill shipments of critical parts.

The following table presents our revenue disaggregated between system and customer support-related revenue:

	Three Months Ended		Six Months Ended	
	December 25, 2022	September 25, 2022	December 25, 2022	December 26, 2021
	(In thousands)			
System revenue	$ 3,547,518	$ 3,181,987	$ 6,729,505	$ 5,665,056
Customer support-related revenue and other	1,730,051	1,892,134	3,622,185	2,866,013
	$ 5,277,569	$ 5,074,121	$ 10,351,690	$ 8,531,069

Please refer to Note 3, “Revenue,” to the Condensed Consolidated Financial Statements of this Form 10-Q for additional information regarding the composition of the two categories into which revenue has been disaggregated.

The following table presents the percentages of leading- and non-leading-edge equipment and upgrade revenue to each of the primary markets we serve:

	Three Months Ended		Six Months Ended	
	December 25, 2022	September 25, 2022	December 25, 2022	December 26, 2021
Memory	50 %	52 %	50 %	61 %
Foundry	31 %	34 %	33 %	28 %
Logic/integrated device manufacturing	19 %	14 %	17 %	11 %

The decrease in the memory market for the six months ended December 25, 2022 as compared to the same period in 2021, is primarily due to decreases in DRAM investments by our customers during this time period.

Gross Margin

	Three Months Ended		Six Months Ended	
	December 25, 2022	September 25, 2022	December 25, 2022	December 26, 2021
	(in thousands, except percentages)			
Gross margin	$ 2,376,349	$ 2,336,835	$ 4,713,184	$ 3,954,670
Percent of revenue	45.0 %	46.1 %	45.5 %	46.4 %

Gross margin as a percentage of revenue was lower in the December 2022 quarter compared to the September 2022 quarter primarily as a result of unfavorable customer and product mix.

The decrease in gross margin as a percentage of revenue in the six months ended December 25, 2022 compared to the same period in the prior year was primarily driven by higher levels of manufacturing-related spending as a result of increased inflationary pressures, partially offset by favorable customer and product mix.

Research and Development

	Three Months Ended		Six Months Ended	
	December 25, 2022	September 25, 2022	December 25, 2022	December 26, 2021
	(in thousands, except percentages)			
Research & development (“R&D”)	$ 462,385	$ 433,375	$ 895,760	$ 785,971
Percent of revenue	8.8 %	8.5 %	8.7 %	9.2 %

We continued to make significant R&D investments in the December 2022 quarter focused on leading-edge deposition, etch, clean and other semiconductor manufacturing processes. The increase in R&D expense in the December 2022 quarter compared to the September 2022 quarter was primarily driven by an increase of $14 million in spending for supplies and $11 million in deferred compensation plan-related costs.

The increase in R&D expense in the six months ended December 25, 2022 compared to the same period in the prior year was primarily driven by increases in employee-related expenses mainly as a result of increased headcount as well as for $32 million in spending for supplies.

Selling, General, and Administrative

	Three Months Ended		Six Months Ended	
	December 25, 2022	September 25, 2022	December 25, 2022	December 26, 2021
	(in thousands, except percentages)			
Selling, general, and administrative ("SG&A")	$ 233,802	$ 205,620	$ 439,422	$ 458,327
Percent of revenue	4.4 %	4.1 %	4.2 %	5.4 %

SG&A expense during the December 2022 quarter increased in comparison to the September 2022 quarter, primarily driven by an increase of $14 million in outside service spending.

SG&A expense during the six months ended December 25, 2022 decreased compared to the same period in the prior year, primarily driven by a decrease of $23 million in amortization for intangible assets, as the intangible assets associated with our Novellus Systems, Inc. transactions have fully amortized.

Other Income (Expense), Net

Other income (expense), net consisted of the following:

	Three Months Ended		Six Months Ended	
	December 25, 2022	September 25, 2022	December 25, 2022	December 26, 2021
	(in thousands)			
Interest income	$ 26,125	$ 15,056	$ 41,181	$ 7,050
Interest expense	(46,661)	(46,052)	(92,713)	(91,821)
Gains (losses) on deferred compensation plan-related assets, net	10,871	(12,726)	(1,855)	7,381
Foreign exchange (losses) gains, net	(10,114)	6,821	(3,293)	714
Other, net	(8,455)	(6,194)	(14,649)	65,818
	$ (28,234)	$ (43,095)	$ (71,329)	$ (10,858)

Interest income increased for the three months ended December 25, 2022 compared to the September 2022 quarter, and the six months ended December 25, 2022, compared to the same period in 2021, primarily because of higher yields partially offset by lower average balances.

Interest expense is consistent across all periods presented.

The gains and losses on deferred compensation plan-related assets were driven by fluctuations in the fair market value of the underlying funds for all periods presented.

Foreign exchange fluctuations were primarily due to currency movements against portions of our unhedged balance sheet exposures for all periods presented.

The losses in other, net for the three and six months ended December 25, 2022, were driven by fluctuations in fair value of equity investments. For the six months ended December 26, 2021, other, net includes an unrealized gain totaling $46.6 million associated with an equity investment that completed a business combination and public offering during that period.

Income Tax Expense

Our provision for income taxes and effective tax rate for the periods indicated were as follows:

	Three Months Ended		Six Months Ended	
	December 25, 2022	September 25, 2022	December 25, 2022	December 26, 2021
	(in thousands, except percentages)			
Income tax expense	$ 183,421	$ 228,866	$ 412,287	$ 324,940
Effective tax rate	11.1 %	13.8 %	12.5 %	12.0 %

The decrease in the effective tax rate for the December 2022 quarter compared to the September 2022 quarter was primarily due to the change in level and proportion of income in higher and lower tax jurisdictions in this quarter, recognition of previously unrecognized tax benefits from lapses of statutes of limitation, and a net tax benefit associated with legal entity restructuring.

The increase in the effective tax rate for the six months ended December 25, 2022 compared to the same period in the prior year was primarily due to the change in level and proportion of income in higher and lower tax jurisdictions.

International revenues account for a significant portion of our total revenues, such that a material portion of our pre-tax income is earned and taxed outside the United States. International pre-tax income is taxable in the United States at a lower effective tax rate than the federal statutory tax rate. Please refer to Note 7, “Income Taxes,” to our Consolidated Financial Statements in Part II, Item 8 of our 2022 Form 10-K for additional information.

We re-evaluate uncertain tax positions on a quarterly basis. This evaluation is based on factors including, but not limited to, changes in facts or circumstances, changes in tax law, effectively settled issues under audit, and new audit activity. Any change in recognition or measurement would result in the recognition of a tax benefit or an additional charge to the tax provision.

CRITICAL ACCOUNTING POLICIES AND ESTIMATES

Refer to our “Critical Accounting Policies and Estimates” included in Part II, Item 7 of our 2022 Form 10-K for a discussion of our critical accounting policies and estimates.

Recent Accounting Pronouncements

For a description of recent accounting pronouncements, including the expected dates of adoption and estimated effects, if any, on our Condensed Consolidated Financial Statements, see Note 2 - Recent Accounting Pronouncements, of our Condensed Consolidated Financial Statements, included in Part 1 of this Form 10-Q.

LIQUIDITY AND CAPITAL RESOURCES

Total gross cash, cash equivalents, investments, and restricted cash and investments balances were $4.8 billion at December 25, 2022 compared to $3.9 billion as of June 26, 2022. This increase was primarily driven by $2,329.8 million of cash generated from operating activities, partially offset by $566.1 million of share repurchases, including net share settlement on employee stock-based compensation; $441.6 million in dividends paid; and $303.4 million of capital expenditures.

Net cash provided by operating activities of $2,329.8 million during the six months ended December 25, 2022, consisted of (in thousands):

Net income	$	2,894,386
Non-cash charges:		
Depreciation and amortization		161,165
Equity-based compensation expense		144,194
Deferred income taxes		(140,296)
Changes in operating asset and liability accounts		(739,652)
Other		9,978
	$	2,329,775

Significant changes in operating asset and liability accounts, net of foreign exchange impact, included the following uses of cash: increases in inventory of $894.5 million, along with a decrease in trade accounts payable of $116.3 million, accrued expenses and other liabilities of $92.3 million, and deferred profit of $19.9 million. The uses of cash are offset by the following sources of cash: decreases in accounts receivable of $249.1 million, and prepaid expense and other assets of $134.2 million.

Cash Flow from Investing Activities

Net cash used for investing activities during the six months ended December 25, 2022, was $395.1 million, primarily consisting of $303.4 million in capital expenditures and $120.0 million of net cash disbursed for business acquisitions, partially offset by proceeds from maturities of available-for-sale securities of $32.4 million.

Cash Flow from Financing Activities

Net cash used for financing activities during the six months ended December 25, 2022, was $973.2 million, primarily consisting of $566.1 million in treasury stock repurchases, including net share settlement on employee stock-based compensation, and $441.6 million in dividends paid, partially offset by $52.7 million combined proceeds from issuance of common stock.

Liquidity

Given that the semiconductor industry is highly competitive and has historically experienced rapid changes in demand, we believe that maintaining sufficient liquidity reserves is important to support sustaining levels of investment in R&D and capital infrastructure. Anticipated cash flows from operations based on our current business outlook, combined with our current levels of cash, cash equivalents, and short-term investments as of December 25, 2022, are expected to be sufficient to support our anticipated levels of operations, investments, debt service requirements, capital expenditures, capital redistributions, and dividends through at least the next twelve months. However, uncertainty in the global economy and the semiconductor industry, as well as disruptions in credit markets, have in the past, and could in the future, impact customer demand for our products, as well as our ability to manage normal commercial relationships with our customers, suppliers, and creditors.

In the longer term, liquidity will depend to a great extent on our future revenues and our ability to appropriately manage our costs based on demand for our products and services. While we have substantial cash balances, we may require additional funding and need or choose to raise the required funds through borrowings or public or private sales of debt or equity securities. We believe that, if necessary, we will be able to access the capital markets on terms and in amounts adequate to meet our objectives. However, domestic and global macroeconomic and political conditions, or the ongoing COVID-19 pandemic, could cause disruptions to the capital markets and otherwise make any financing more challenging, and there can be no assurance that we will be able to obtain such financing on commercially reasonable terms or at all.

ITEM 3. Quantitative and Qualitative Disclosures about Market Risk

For financial market risks related to changes in interest rates, marketable equity security prices, and foreign currency exchange rates, refer to Part II, Item 7A, “Quantitative and Qualitative Disclosures About Market Risk”, in our 2022 Form 10-K. Our exposure related to market risk has not changed materially since June 26, 2022.

ITEM 4. Controls and Procedures

Design of Disclosure Controls and Procedures and Internal Control over Financial Reporting

We maintain disclosure controls and procedures and internal control over financial reporting that are designed to comply with Rule 13a-15 of the Exchange Act. In designing and evaluating the controls and procedures associated with each, management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives, and that the effectiveness of controls cannot be absolute because the cost to design and implement a control to identify errors or mitigate the risk of errors occurring should not outweigh the potential loss caused by the errors that would likely be detected by the control. Moreover, we believe that a control system cannot be guaranteed to be 100% effective all of the time. Accordingly, a control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the control system’s objectives will be met.

Disclosure Controls and Procedures

As required by Exchange Act Rule 13a-15(b), as of December 25, 2022, we carried out an evaluation, under the supervision and with the participation of our management, including our Chief Executive Officer and our Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures as defined in Rule 13a-15(e). Based upon that evaluation, our Chief Executive Officer, along with our Chief Financial Officer, concluded that our disclosure controls and procedures are effective at the reasonable assurance level.

We intend to review and evaluate the design and effectiveness of our disclosure controls and procedures on an ongoing basis and to correct any material deficiencies that we may discover. Our goal is to ensure that our senior management has timely access to material information that could affect our business.

Changes in Internal Control over Financial Reporting

There has been no change in our internal control over financial reporting during our most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Effectiveness of Controls

While we believe the present design of our disclosure controls and procedures and internal control over financial reporting is effective, future events affecting our business may cause us to modify our disclosure controls and procedures or internal control over financial reporting.

PART II. OTHER INFORMATION

ITEM 1. Legal Proceedings

Please refer to the subsection entitled “Legal Proceedings” within Note 14 “Commitments and Contingencies," to our Condensed Consolidated Financial Statements in this quarterly report on Form 10-Q.

ITEM 1A. Risk Factors

In addition to the other information in this Form 10-Q, the following risk factors should be carefully considered in evaluating us and our business because such factors may significantly impact our business, operating results, and financial condition. Many of the following risk factors have been, and could be further, exacerbated by the COVID-19 pandemic and any worsening of the global business and economic environment as a result. As a result of these risk factors, as well as other risks discussed in our other SEC filings, our actual results could differ materially from those projected in any forward-looking statements. No priority or significance is intended by, nor should be attached to, the order in which the risk factors appear.

INDUSTRY AND CUSTOMER RISKS

The Semiconductor Capital Equipment Industry Is Subject to Variability and Periods of Rapid Growth or Decline; We Therefore Face Risks Related to Our Strategic Resource Allocation Decisions

The semiconductor capital equipment industry has historically been characterized by rapid changes in demand. The industry environment has moved toward being more characterized by variability across segments and customers, accentuated by consolidation within the industry. Variability in our customers’ business plans may lead to changes in demand for our equipment and services, which could negatively impact our results. The variability in our customers’ investments during any particular period is dependent on several factors, including but not limited to electronics demand, economic conditions (both general and in the semiconductor and electronics industries), industry supply and demand, prices for semiconductors, and our customers’ ability to develop and manufacture increasingly complex and costly semiconductor devices. The changes in demand may require our management to adjust spending and other resources allocated to operating activities.

During periods of rapid growth or decline in demand for our products and services, we face significant challenges in maintaining adequate financial and business controls, management processes, information systems, and procedures for training, assimilating, and managing our workforce, and in appropriately sizing our supply chain infrastructure and facilities, work force, and other components of our business on a timely basis. If we do not adequately meet these challenges during periods of increasing or declining demand, our gross margins and earnings may be negatively impacted. For example, the COVID-19 pandemic has impacted and could in the future impact our ability to meet the demand for our products due to production, sourcing, logistics and other challenges resulting from quarantines, shelter in place or “stay at home” orders, facility closures, workforce challenges, and travel and logistics restrictions in connection with the pandemic.

We continuously reassess our strategic resource allocation choices in response to the changing business environment. If we do not adequately adapt to the changing business environment, we may lack the infrastructure and resources to scale up our business to meet customer expectations and compete successfully during a period of growth, or we may expand our capacity and resources too rapidly and/or beyond what is appropriate for the actual demand environment, resulting in excess fixed costs.

Especially during transitional periods, resource allocation decisions can have a significant impact on our future performance, particularly if we have not accurately anticipated industry changes. Our success will depend, to a significant extent, on the ability of our executive officers and other members of our senior management to identify and respond to these challenges effectively.

Future Declines in the Semiconductor Industry, and the Overall World Economic Conditions on Which It Is Significantly Dependent, Could Have a Material Adverse Impact on Our Results of Operations and Financial Condition

Our business depends on the capital equipment expenditures of semiconductor manufacturers, which in turn depend on the current and anticipated market demand for integrated circuits. With the consolidation of customers within the industry, the semiconductor capital equipment market may experience rapid changes in demand driven both by changes in the market generally and the plans and requirements of particular customers. The economic, political, and business conditions occurring nationally, globally, or in any of our key sales regions, which are often unpredictable, have historically impacted customer demand for our products and normal commercial relationships with our customers, suppliers, and creditors. Additionally, in times of economic uncertainty, our customers’ budgets for our products, or their ability to access credit to purchase them, could be adversely affected. This would limit their ability to purchase our products and services. As a result, changing economic, political or business conditions can cause material adverse changes to our results of operations and financial condition, including but not limited to:

- a decline in demand for our products or services;

- an increase in reserves on accounts receivable due to our customers' inability to pay us;
- an increase in reserves on inventory balances due to excess or obsolete inventory as a result of our inability to sell such inventory;
- valuation allowances on deferred tax assets;
- restructuring charges;
- asset impairments including the potential impairment of goodwill and other intangible assets;
- a decline in the value of our investments;
- exposure to claims from our suppliers for payment on inventory that is ordered in anticipation of customer purchases that do not come to fruition;
- a decline in the value of certain facilities we lease to less than our residual value guarantee with the lessor; and
- challenges maintaining reliable and uninterrupted sources of supply.

Fluctuating levels of investment by semiconductor manufacturers may materially affect our aggregate shipments, revenues, operating results, and earnings. Where appropriate, we will attempt to respond to these fluctuations with cost management programs aimed at aligning our expenditures with anticipated revenue streams, which sometimes result in restructuring charges. Even during periods of reduced revenues, we must continue to invest in R&D and maintain extensive ongoing worldwide customer service and support capabilities to remain competitive, which may temporarily harm our profitability and other financial results.

We Have a Limited Number of Key Customers

Sales to a limited number of large customers constitute a significant portion of our overall revenue, shipments, cash flows, collections, and profitability. As a result, the actions of even one customer may subject us to variability in those areas that is difficult to predict. In addition, large customers may be able to negotiate requirements that result in decreased pricing, increased costs, and/or lower margins for us; compliance with specific environmental, social, and corporate governance standards; and limitations on our ability to share technology with others. Similarly, significant portions of our credit risk may, at any given time, be concentrated among a limited number of customers so that the failure of even one of these key customers to pay its obligations to us could significantly impact our financial results.

We Face a Challenging and Complex Competitive Environment

We face significant competition from multiple competitors, and with increased consolidation efforts in our industry, as well as the emergence and strengthening of new, regional competitors, we may face increasing competitive pressures. Other companies continue to develop systems and/or acquire businesses and products that are competitive to ours and may introduce new products and product capabilities that may affect our ability to sell and support our existing products. We face a greater risk if our competitors enter into strategic relationships with leading semiconductor manufacturers covering products similar to those we sell or may develop, as this could adversely affect our ability to sell products to those manufacturers.

We believe that to remain competitive we must devote significant financial resources to offer products that meet our customers' needs, to maintain customer service and support centers worldwide, and to invest in product and process R&D. Technological changes and developing technologies, have required, and are expected to continue to require, new and costly investments. Certain of our competitors, including those that are created and financially backed by foreign governments, have substantially greater financial resources and more extensive engineering, manufacturing, marketing, and customer service and support resources than we do and therefore have the potential to offer customers a more comprehensive array of products and/or product capabilities and to therefore achieve additional relative success in the semiconductor equipment industry. These competitors may deeply discount or give away products similar to those that we sell, challenging or even exceeding our ability to make similar accommodations and threatening our ability to sell those products. We also face competition from our own customers, who in some instances have established affiliated entities that manufacture equipment similar to ours. In addition, we face competition from companies that exist in a more favorable legal or regulatory environment than we do, allowing the freedom of action in ways that we may be unable to match. In many cases speed to solution is necessary for customer satisfaction and our competitors may be better positioned to achieve these objectives. For these reasons, we may fail to continue to compete successfully worldwide.

In addition, our competitors may be able to develop products comparable or superior to those we offer or may adapt more quickly to new technologies or evolving customer requirements. In particular, while we continue to develop product enhancements that we believe will address future customer requirements, we may fail in a timely manner to complete the development or introduction of these additional product enhancements successfully, or these product enhancements may not achieve market acceptance or be competitive. Accordingly, competition may intensify, and we may be unable to continue to compete successfully in our markets, which could have a material adverse effect on our revenues, operating results, financial condition, and/or cash flows.

Once a Semiconductor Manufacturer Commits to Purchase a Competitor's Semiconductor Manufacturing Equipment, the Manufacturer Typically Continues to Purchase That Competitor's Equipment, Making It More Difficult for Us to Sell Our Equipment to That Customer

Semiconductor manufacturers must make a substantial investment to qualify and integrate wafer processing equipment into a semiconductor production line. We believe that once a semiconductor manufacturer selects a particular supplier's processing equipment, the manufacturer generally relies upon that equipment for that specific production line application for an extended period of time, especially for customers that are more focused on tool reuse. Accordingly, we expect it to be more difficult to sell our products to a given customer for a product line application if that customer initially selects a competitor's equipment for the same product line application.

We Depend on Creating New Products and Processes and Enhancing Existing Products and Processes for Our Success; Consequently, We Are Subject to Risks Associated with Rapid Technological Change

Rapid technological changes in semiconductor manufacturing processes subject us to increased pressure to develop technological advances that enable those processes. We believe that our future success depends in part upon our ability to develop and offer new products with improved capabilities and to continue to enhance our existing products. If new products or existing products have reliability, quality, design, or safety problems, our performance may be impacted by reduced orders, higher manufacturing costs, delays in acceptance of and payment for new products, and additional service and warranty expenses. We may be unable to develop and manufacture products successfully, or products that we introduce may fail in the marketplace. For more than 25 years, the primary driver of technology advancement in the semiconductor industry has been to shrink the lithography that prints the circuit design on semiconductor chips. That driver could be approaching its technological limit, leading semiconductor manufacturers to investigate more complex changes in multiple technologies in an effort to continue technology development. In addition, the emergence of "big data" and new tools such as machine learning and artificial intelligence that capitalize on the availability of large data sets is leading semiconductor manufacturers and equipment manufacturers to pursue new products and approaches that exploit those tools to advance technology development. In the face of uncertainty on which technology solutions will become successful, we will need to focus our efforts on developing the technology changes that are ultimately successful in supporting our customer requirements. Our failure to develop and offer the correct technology solutions in a timely manner with productive and cost-effective products could adversely affect our business in a material way. Our failure to commercialize new products in a timely manner could result in loss of market share, unanticipated costs, and inventory obsolescence, which would adversely affect our financial results.

In order to develop new products and processes and enhance existing products and processes, we expect to continue to make significant investments in R&D, to investigate the acquisition of new products and technologies, to invest in or acquire such business or technologies, and to pursue joint development relationships with customers, suppliers, or other members of the industry. Our investments and acquisitions may not be as successful as we may expect, particularly in the event that we invest in or acquire product lines and technologies that are new to us. We may find that acquisitions are not available to us, for regulatory or other reasons, and that we must therefore limit ourselves to collaboration and joint venture development activities, which do not have the same benefits as acquisitions. Pursuing development through collaboration and/or joint development activities rather than through an acquisition poses substantial challenges for management, including those related to aligning business objectives; sharing confidential information, intellectual property and data; sharing value with third parties; and realizing synergies that might have been available in an acquisition but are not available through a joint development project. We must manage product transitions and joint development relationships successfully, as the introduction of new products could adversely affect our sales of existing products and certain jointly developed technologies may be subject to restrictions on our ability to share that technology with other customers, which could limit our market for products incorporating those technologies. Future technologies, processes, or product developments may render our current product offerings obsolete, leaving us with non-competitive products, obsolete inventory, or both. Moreover, customers may adopt new technologies or processes to address the complex challenges associated with next-generation devices. This shift may result in a reduction in the size of our addressable markets or could increase the relative size of markets in which we either do not compete or have relatively low market share.

Strategic Alliances and Customer Consolidation May Have Negative Effects on Our Business

Increasingly, semiconductor manufacturing companies are entering into strategic alliances or consolidating with one another to expedite the development of processes and other manufacturing technologies and/or achieve economies of scale. The outcomes of such an alliance can be the definition of a particular tool set for a certain function and/or the standardization of a series of process steps that use a specific set of manufacturing equipment, while the outcomes of consolidation can lead to an overall reduction in the market for semiconductor manufacturing equipment as customers' operations achieve economies of scale and/or increased purchasing power based on their higher volumes. In certain instances, this could work to our disadvantage if a competitor's tools or equipment become the standard equipment for such functions or processes. Additional outcomes of such consolidation may include our customers re-evaluating their future supplier relationships to consider our competitors' products and/or gaining additional influence over the pricing of products and the control of intellectual property or data.

Similarly, our customers may partner with, or follow the lead of, educational or research institutions that establish processes for accomplishing various tasks or manufacturing steps. If those institutions utilize a competitor's equipment when they establish those processes, it is likely that customers will tend to use the same equipment in setting up their own manufacturing lines. Even

if they select our equipment, the institutions and the customers that follow their lead could impose conditions on acceptance of that equipment, such as adherence to standards and requirements or limitations on how we license our proprietary rights, that increase our costs or require us to take on greater risk. These actions could adversely impact our market share and financial results.

BUSINESS AND OPERATIONAL RISKS

Our Revenues and Operating Results Are Variable

Our revenues and operating results may fluctuate significantly from quarter to quarter or year to year due to a number of factors, not all of which are in our control. We manage our expense levels based in part on our expectations of future revenues. Because our operating expenses are based in part on anticipated future revenues, and a certain amount of those expenses are relatively fixed, a change in the timing of recognition of revenue and/or the level of gross profit from a small number of transactions can unfavorably affect operating results in a particular quarter or year. Factors that may cause our financial results to fluctuate unpredictably include but are not limited to:

- legal, tax, accounting, or regulatory changes (including but not limited to changes in import/export regulations and tariffs, such as regulations imposed by the U.S. government restricting exports to China) or changes in the interpretation or enforcement of existing requirements;
- macroeconomic conditions, increased risk of recession, and geopolitical issues;
- changes in average selling prices, customer mix, and product mix;
- foreign currency exchange rate fluctuations;
- economic conditions in the electronics and semiconductor industries in general and specifically the semiconductor equipment industry;
- the size and timing of orders from customers;
- changes in our deferred revenue balance, including as a result of factors such as volume purchase agreements, multi-year service contracts, back orders, and down payments toward purchases;
- consolidation of the customer base, which may result in the investment decisions of one customer or market having a significant effect on demand for our products or services;
- procurement shortages;
- the failure of our suppliers or outsource providers to perform their obligations in a manner consistent with our expectations;
- manufacturing difficulties;
- customer cancellations or delays in shipments, installations, customer payments, and/or customer acceptances;
- the extent that customers continue to purchase and use our products and services in their business;
- our customers' reuse of existing and installed products, to the extent that such reuse decreases their need to purchase new products or services;
- our ability to develop, introduce, and market new, enhanced, and competitive products in a timely manner;
- our competitors' introduction of new products;
- legal or technical challenges to our products and technologies;
- transportation, communication, demand, information technology, or supply disruptions based on factors outside our control, such as strikes, acts of God, wars, terrorist activities, widespread outbreak of illness, natural or man-made disasters, or climate change;
- rising inflation or interest rates; and
- changes in our estimated effective tax rate.

For example, the COVID-19 pandemic has impacted and could in the future impact our ability to meet the demand for our products due to production, sourcing, logistics and other challenges resulting from quarantines, shelter in place or stay at home orders, facility closures, workforce challenges, and travel and logistics restrictions in connection with the pandemic.

Our Future Success Depends Heavily on International Sales and the Management of Global Operations

Non-U.S. sales, as reflected in Part I Item 2. Results of Operations of this quarterly report on Form 10-Q, accounted for approximately 92%, 92%, and 94% of total revenue in the six months ended December 25, 2022 and fiscal years 2022, and 2021, respectively. We expect that international sales will continue to account for a substantial majority of our total revenue in future years.

We are subject to various challenges related to international sales and the management of global operations including, but not limited to:

- domestic and international trade regulations, policies, practices, relations, disputes and issues;
- domestic and international tariffs, export controls and other barriers;
- developing customers and/or suppliers, who may have limited access to capital resources;
- global or national economic and political conditions;
- changes in currency controls;
- differences in the enforcement of intellectual property and contract rights in varying jurisdictions;

- our ability to respond to customer and foreign government demands for locally sourced systems, spare parts, and services and develop the necessary relationships with local suppliers;
- changes in and compliance with U.S. and international laws and regulations affecting foreign operations, including U.S. and international trade restrictions and sanctions, anti-bribery, anti-corruption, anti-boycott, environmental, tax, and labor laws;
- fluctuations in interest and foreign currency exchange rates;
- the need for technical support resources in different locations; and
- our ability to secure and retain qualified people, and effectively manage people, in all necessary locations for the successful operation of our business.

For example, the COVID-19 pandemic has impacted and could in the future impact our manufacturing operations, supply chain, and customer support due to production, sourcing, logistics and other challenges resulting from quarantines, stay at home orders, facility closures, workforce challenges, and travel and logistics restrictions in connection with the pandemic.

There is inherent risk, based on the complex relationships among China, Japan, Korea, Taiwan, and the United States, that political, diplomatic and national security influences can lead to trade disputes, impacts and/or disruptions, in particular those affecting the semiconductor industry. This can adversely affect our business with China, Japan, Korea, and/or Taiwan and perhaps the entire Asia Pacific region or global economy. A significant trade dispute, impact and/or disruption in any area where we do business could have a materially adverse impact on our future revenue and profits.

Tariffs, export controls, additional taxes, trade barriers, sanctions, the termination or modification of trade agreements, trade zones, and other duty mitigation initiatives, and any reciprocal retaliatory actions, can increase our manufacturing costs, decrease margins, reduce the competitiveness of our products, disrupt our supply chain operations, or inhibit our ability to sell products or provide services, which has had and in the future could have a material adverse effect on our business, results of operations, or financial conditions. Certain of our international sales depend on our ability to obtain export licenses from the U.S. or foreign governments, and our inability to obtain such licenses, or an expansion of the number or kinds of sales for which export licenses are required, has limited and could in the future further limit the market for our products and has had and could in the future have an adverse impact on our revenues. As is discussed below under the heading “Our Sales to Customers in China, a Significant Region for Us, Have Been Impacted, and are Likely to Be Materially and Adversely Affected by Export License Requirements and Other Regulatory Changes, or Other Governmental Actions in the Course of the Trade Relationship Between the U.S. and China,” the U.S. government has recently imposed new controls, including expanded export license requirements, that significantly impact trade with China. In addition, the U.S. government has an ongoing process of assessing technologies that may be subject to new or additional export controls, and it is possible that such additional controls, if and when imposed, could further adversely impact our ability to sell our products outside the U.S. The implementation by the U.S. government of broad export controls restricting access to our technology (such as recent controls limiting exports to China) may cause customers with international operations to reconsider their use of and reliance on our products, which could adversely impact our future revenue and profits. Furthermore, there are risks that foreign governments may, among other things, take retaliatory actions; insist on the use of local suppliers; compel companies to partner with local companies to design and supply equipment on a local basis, requiring the transfer of intellectual property rights and/or local manufacturing; utilize their influence over their judicial systems to respond to intellectual property disputes or issues; and provide special incentives to government-backed local customers to buy from local competitors, even if their products are inferior to ours; all of which could adversely impact our revenues and margins.

We are exposed to potentially adverse movements in foreign currency exchange rates. The majority of our sales and expenses are denominated in U.S. dollars. However, we are exposed to foreign currency exchange rate fluctuations primarily related to revenues denominated in Japanese yen and expenses denominated in euro, Korean won, Malaysian ringgit, and Indian rupee. Further, in periods in which the U.S. dollar is strong relative to the local currencies of our international customers can potentially reduce demand for our products, which may compound the adverse effect of foreign exchange translation on our revenue. Currently, we hedge certain anticipated foreign currency cash flows, primarily anticipated revenues denominated in Japanese yen and expenses dominated in euro, Korean won, Malaysian ringgit, and Indian rupee. In addition, we enter into foreign currency hedge contracts to minimize the short-term impact of the foreign currency exchange rate fluctuations on certain foreign currency denominated monetary assets and liabilities, primarily third-party accounts receivables, accounts payables, and intercompany receivables and payables. We believe these are our primary exposures to currency rate fluctuation. We expect to continue to enter into hedging transactions, for the purposes outlined, for the foreseeable future. However, these hedging transactions may not achieve their desired effect because differences between the actual timing of the underlying exposures and our forecasts of those exposures may leave us either over or under hedged on any given transaction. Moreover, by hedging these foreign currency denominated revenues, expenses, monetary assets, and liabilities, we may miss favorable currency trends that would have been advantageous to us but for the hedges. Additionally, we are exposed to short-term foreign currency exchange rate fluctuations on non-U.S. dollar-denominated monetary assets and liabilities (other than those currency exposures previously discussed), and currently we do not enter into foreign currency hedge contracts against these exposures. In addition, our currency hedges do not necessarily mitigate the potential negative impact of a strong U.S. dollar on demand for our products. Therefore, we are subject to potential unfavorable foreign currency exchange rate fluctuations to the extent that we transact business (including intercompany transactions) in these currencies.

The magnitude of our overseas business also affects where our cash is generated. Certain uses of cash, such as share repurchases, payment of dividends, or the repayment of our notes, can usually only be made with onshore cash balances. Since the majority of our cash is generated outside of the United States, this may impact certain business decisions and outcomes.

Our Business Relies on Technology, Data, Intellectual Property and Other Sensitive Information That is Susceptible to Cybersecurity and Other Threats or Incidents

Our business is dependent upon the use and protection of technology, data, intellectual property and other sensitive information, which may be owned by, or licensed to, us or third parties, such as our customers and vendors. We maintain and rely upon certain critical information systems for the creation, transmission, use and storage of much of this information, and for the effective operation of our business. These information systems include but are not limited to, telecommunications, the Internet, our corporate intranet, various computer hardware and software applications, (some of which may be integrated into the products that we sell or be required in order to provide the services that we offer), network communications, and email. These information systems may be owned and maintained by us, our outsourced providers, or third parties such as vendors, contractors, customers and Cloud providers. In addition, we make use of Software-as-a-Service (SaaS) products for certain important business functions that are provided by third parties and hosted on their own networks and servers, or third-party networks and servers, all of which rely on networks, email and/or the Internet for their function.

The technology, data, intellectual property and other sensitive information we seek to protect are subject to loss, release, misappropriation or misuse, and the information systems containing or transmitting such technology, data, intellectual property and other sensitive information are subject to disruption, breach or failure, in each case as a result of various possible causes. Such causes may include mistakes or unauthorized actions by our employees or contractors, phishing schemes and other third-party attacks, and degradation or loss of service or access to data due to viruses, malware, denial of service attacks, destructive or inadequate code, power failures, or physical damage to computers, hard drives, communication lines, or networking equipment. Such causes may also include the use of techniques that change frequently or may be disguised or difficult to detect, or designed to remain dormant until a triggering event, or that may continue undetected for an extended period of time.

We have experienced cybersecurity and other threats and incidents in the past. Although past threats and incidents have not resulted in a material adverse effect, we may incur material losses related to cybersecurity and other threats or incidents in the future. If we were subject to a cybersecurity or other incident, it could have a material adverse effect on our business. Such adverse effects might include:

- loss of (or inability to access, e.g. through ransomware) confidential and/or sensitive information stored on these critical information systems or transmitted to or from those systems;
- the disruption of the proper function of our products, services and/or operations;
- the failure of our or our customers' manufacturing processes;
- errors in the output of our work or our customers' work;
- the loss or public exposure of the personal or other confidential information of our employees, customers or other parties;
- the public release of customer financial and business plans, customer orders and operational results;
- exposure to claims from our employees or third parties who are adversely impacted by such incidents;
- misappropriation or theft of our or a customer's, supplier's or other party's assets or resources, including technology data, intellectual property or other sensitive information and costs associated therewith;
- reputational damage;
- diminution in the value of our investment in research, development and engineering; or
- our failure to meet, or violation of, regulatory or other legal obligations, such as the timely publication or filing of financial statements, tax information and other required communications.

While we have implemented ISO 27001 compliant security procedures and virus protection software, intrusion prevention systems, identity and access control, and emergency recovery processes, and we carefully select our third-party providers of information systems, to mitigate risks to the information systems that we rely on and to the technology, data, intellectual property and other sensitive information we seek to protect, those security procedures and mitigation and protection systems cannot be guaranteed to be fail-safe, and we may still suffer cybersecurity and other incidents. It has been difficult and may continue to be difficult to hire and retain employees with substantial cybersecurity acumen. In addition, there have been and may continue to be instances of our policies and procedures not being effective in enabling us to identify risks, threats and incidents in a timely manner, or at all, or to respond expediently, appropriately and effectively when incidents occur and repair any damage caused by such incidents, and such occurrences could have a material adverse effect on our business.

We May Not Achieve the Expected Benefits of Our Restructuring Plans and Business Transformation Initiatives, and These Efforts Could Have a Material Adverse Effect on Our Business, Operations, Financial Condition, Results of Operations and Competitive Position

In January 2023 we announced that we are implementing a restructuring plan consisting of a workforce reduction, and that we anticipate undertaking, and may in the future undertake, additional business restructuring, realignment and transformation initiatives. We expect to incur material costs and charges in connection with these plans and initiatives. While the restructuring plan is intended to better align our cost structure with the current economic environment and future business opportunities, and

our anticipated transformation initiatives have the goal of strengthening our operations and achieving operational efficiencies, there can be no assurance that we will be successful in these plans and initiatives. Implementation of these plans and initiatives may be costly and disruptive to our business, we may not be able to complete them at the cost or within the time frame contemplated, and we may not be able to obtain the anticipated benefits within the projected timing or at all. Restructuring and transformation may adversely affect our internal programs and our ability to recruit and retain skilled and motivated personnel, may result in a loss of continuity, loss of accumulated knowledge and/or inefficiency during transitional periods, may require a significant amount of management and other employees' time and focus, and may be distracting to employees and management, which may divert attention from operating and growing our business. If we fail to achieve some or all of the expected benefits, it could have a material adverse effect on our business, operations, financial condition, results of operations and competitive position. For more information about our restructuring plan, see Note 18 to our Condensed Consolidated Financial Statements in Part I.

Disruptions to Our Supply Chain and Outsource Providers Could Impact Our Ability to Meet Demand, Increase Our Costs, and Adversely Impact Our Revenue and Operating Results

Our supply chain has played and will continue to play a key role in our product development, manufacturing operations, field installation and support. Our business depends on our timely supply of products and services to meet the demand from our customers, which depends in significant part on the timely delivery of parts, materials and services, including components and subassemblies, from our direct suppliers to us, and to our direct suppliers by other companies. In addition, outsource providers have played and will continue to play a key role both in the manufacturing and customer-focused operations described above, and in many of our transactional and administrative functions, such as information technology, facilities management, and certain elements of our finance organization. These providers and suppliers might suffer financial setbacks, be acquired by third parties, become subject to exclusivity arrangements that preclude further business with us, or be unable to meet our requirements or expectation due to their independent business decisions or force majeure events that could interrupt or impair their continued ability to perform as we expect. We may also experience significant interruptions of our manufacturing operations, delays in our ability to deliver or install products or perform services or to recognize revenue, increased costs or customer order cancellations as a result of:

- the failure or inability to accurately forecast demand and obtain sufficient quantities of quality parts on a cost-effective basis;
- volatility in the availability and cost of parts, materials or services, including increased costs due to rising inflation or interest rates or other market conditions;
- difficulties or delays in obtaining required import or export approvals;
- shipment delays and increased costs of shipment due to transportation interruptions, capacity constraints, or fuel shortages;
- shortages of semiconductor or other components or materials as a result of increases in demand;
- information technology or infrastructure failures, including those of a third-party supplier or service provider; and
- transportation or supply disruptions based on factors outside our control, such as strikes, acts of God, wars, terrorist activities, widespread outbreak of illness, natural or man-made disasters, or climate change.

Demand for electronic products and other factors, such as the COVID-19 pandemic and the conflict in Ukraine, have resulted in, and may continue to result in, a shortage of parts, materials and services needed to manufacture, deliver and install our products, as well as delays in and unpredictability of shipments due to transportation interruptions. Such shortages, delays and unpredictability have adversely impacted, and may continue to adversely impact, our suppliers’ ability to meet our demand requirements. Difficulties in obtaining sufficient and timely supply of parts, materials or services, and delays in and unpredictability of shipments due to transportation interruptions, have adversely impacted, and may continue to adversely impact, our manufacturing operations and our ability to meet customer demand. In addition, difficulties in obtaining parts, materials or services necessary to deliver or install products or perform services have adversely impacted, and may continue to adversely impact, our ability to recognize revenue, our gross margins on the revenue we recognize, and our other operating results. Although we are endeavoring to pass along some of the impact of increased costs to our customers to counteract adverse impacts to our gross margins and other operating results, such measures could be unsuccessful, or could have the effect of reducing demand, which would adversely impact our revenue.

Although we attempt to select reputable providers and suppliers and we attempt to secure their performance on terms documented in written contracts, it is possible that one or more of these providers or suppliers could fail to perform as we expect, or fail to secure or protect intellectual property rights, and such failure could have an adverse impact on our business. In some cases, the requirements of our business mandate that we obtain certain components and sub-assemblies included in our products from a single supplier or a limited group of suppliers. Where practical, we endeavor to establish alternative sources to mitigate the risk that the failure of any single provider or supplier will adversely affect our business, but this is not feasible in all circumstances. Some key parts are subject to long lead-times or available only from a single supplier or limited group of suppliers, and some sourcing or subassembly is provided by suppliers located in countries other than the countries where we conduct our manufacturing. There is therefore a risk that a prolonged inability to obtain certain components or secure key services could impair our ability to manage operations, ship products, and generate revenues, which could adversely affect our operating results and damage our customer relationships. For example, the COVID–19 pandemic has impacted and could in the future impact our manufacturing operations, supply chain, and customer support due to production, sourcing, logistics and other

challenges resulting from quarantines, stay at home orders, facility closures, workforce challenges, and travel and logistics restrictions in connection with the pandemic.

The COVID-19 Pandemic Has Adversely Impacted, and May in the Future Adversely Impact, Our Business, Operations, and Financial Results

The COVID-19 pandemic and efforts by national, state and local governments worldwide to control its spread have resulted in measures aimed at containing the disease such as quarantines, travel bans, shutdowns, and shelter in place or "stay at home" orders, which collectively have significantly restricted the movement of people and goods and the ability of businesses to operate. These restrictions and measures, incidents of confirmed or suspected infections within our workforce or those of our suppliers or other business partners, and our efforts to act in the best interests of our employees, customers, and suppliers, have affected and in the future may affect our business and operations by, among other things, causing facility closures, production delays and capacity limitations; disrupting production by our supply chain; disrupting the transport of goods from our supply chain to us and from us to our customers; requiring modifications to our business processes; requiring the implementation of business continuity plans; requiring the development and qualification of alternative sources of supply; requiring the implementation of social distancing measures that impede manufacturing processes; disrupting business travel; disrupting our ability to staff our on-site manufacturing and research and development facilities; delaying capital expansion projects; and necessitating teleworking by portions of our workforce. These impacts have caused and in the future may cause delays in product shipments and product development, increases in costs, and decreases in revenue, profitability and cash from operations, which have caused and in the future may cause an adverse effect on our results of operations that may be material. The potential duration and impact of the pandemic on the global economy and on our business are difficult to predict and cannot be estimated with any degree of certainty, but the pandemic has resulted at various times in significant disruption of global financial markets, increases in levels of unemployment, and economic uncertainty, which has adversely impacted our business and may do so in the future, and may lead to significant negative impacts on customer spending, demand for our products, the ability of our customers to pay, our financial condition and the financial condition of our suppliers, and our access to external sources of financing to fund our operations and capital expenditures.

We Face Risks Related to the Disruption of Our Primary Manufacturing and R&D Facilities

While we maintain business continuity plans, our manufacturing and R&D facilities are concentrated in a limited number of locations. These locations are subject to disruption for a variety of reasons, such as natural or man-made disasters, widespread outbreaks of illness, terrorist activities, political or governmental unrest or instability, disruptions of our information technology resources, utility interruptions, the effects of climate change, or other events beyond our control. Such disruptions may cause delays in developing or shipping our products, in engaging with customers on new product applications, or in supporting customers, which could result in the loss of business or customer trust, adversely affecting our business and operating results. For example, the COVID-19 pandemic has impacted and could in the future impact our manufacturing operations, supply chain, R&D and customer support due to production, sourcing, logistics and other challenges resulting from quarantines, "stay at home" orders, facility closures, workforce challenges, and travel and logistics restrictions in connection with the pandemic.

We Are Subject to Risks Relating to Product Concentration and Lack of Product Revenue Diversification

We derive a substantial percentage of our revenues from a limited number of products. Our products are priced up to the tens of millions of dollars per system. As a result, the inability to recognize revenue on even a few systems can cause a significantly adverse impact on our revenues for a given quarter, and, in the longer term, the continued market acceptance of these products is critical to our future success. Our business, operating results, financial condition, and cash flows could therefore be adversely affected by:

- a decline in demand for even a limited number of our products;
- a failure to achieve continued market acceptance of our key products;
- export restrictions or other regulatory or legislative actions that could limit our ability to sell those products to key customers or customers within certain markets;
- an improved version of products being offered by a competitor in the markets in which we participate;
- increased pressure from competitors that offer broader product lines;
- increased pressure from regional competitors;
- technological changes that we are unable to address with our products; or
- a failure to release new or enhanced versions of our products on a timely basis.

In addition, the fact that we offer limited product lines creates the risk that our customers may view us as less important to their business than our competitors that offer additional products and/or product capabilities, including new products that take advantage of "big data" or other new technologies such as machine learning and artificial intelligence. This may impact our ability to maintain or expand our business with certain customers. Such product concentration may also subject us to additional risks associated with technology changes. Our business is affected by our customers' use of our products in certain steps in their wafer fabrication processes. Should technologies change so that the manufacture of semiconductors requires fewer steps using our products, this could have a larger impact on our business than it would on the business of our less concentrated competitors.

We May Fail to Protect Our Critical Proprietary Technology Rights, Which Could Affect Our Business

Our success depends in part on our proprietary technology and our ability to protect key components of that technology through patents, copyrights, trade secrets and other forms of protection. Protecting our key proprietary technology helps us achieve our goals of developing technological expertise and new products and systems that give us a competitive advantage; increasing market penetration and growth of our installed base; and providing comprehensive support and service to our customers. As part of our strategy to protect our technology, we currently hold a number of U.S. and foreign patents and pending patent applications, and we keep certain information, processes, and techniques confidential and/or as trade secrets. However, other parties may challenge or attempt to invalidate or circumvent any patents the U.S. or foreign governments issue to us; these governments may fail to issue patents for pending applications; or we may lose trade secret protection over valuable information due to our or third parties' intentional or unintentional actions or omissions or even those of our own employees. Additionally, intellectual property litigation can be expensive and time-consuming and even when patents are issued, or trade secret processes are followed, the legal systems in certain of the countries in which we do business might not enforce patents and other intellectual property rights as rigorously or effectively as the United States or may favor local entities in their intellectual property enforcement. The rights granted or anticipated under any of our patents, pending patent applications, or trade secrets may be narrower than we expect or, in fact, provide no competitive advantages. Moreover, because we selectively file for patent protection in different jurisdictions, we may not have adequate protection in all jurisdictions based on such filing decisions. Any of these circumstances could have a material adverse impact on our business.

Our Ability to Attract, Retain, and Motivate Key Employees Is Critical to Our Success

Our ability to compete successfully depends in large part on our ability to attract, retain, and motivate key employees with the appropriate skills, experiences and competencies. This is an ongoing challenge due to intense competition for top talent, fluctuations in industry or business economic conditions, as well as increasing geographic expansion, and these factors in combination may result in cycles of hiring activity and workforce reductions. Our success in hiring depends on a variety of factors, including the attractiveness of our compensation and benefit programs, global economic or political and industry conditions, our organizational structure, global competition for talent and the availability of qualified employees, the availability of career development opportunities, the ability to obtain necessary authorizations for workers to provide services outside their home countries, and our ability to offer a challenging and rewarding work environment. We periodically evaluate our overall compensation and benefit programs and make adjustments, as appropriate, to maintain or enhance their competitiveness. If we are not able to successfully attract, retain, and motivate key employees, we may be unable to capitalize on market opportunities and our operating results may be materially and adversely affected.

If We Choose to Acquire or Dispose of Businesses, Product Lines, and Technologies, We May Encounter Unforeseen Costs and Difficulties That Could Impair Our Financial Performance

An important element of our management strategy is to review acquisition prospects that would complement our existing products, augment our market coverage and distribution ability, enhance our technological capabilities, or accomplish other strategic objectives. As a result, we may seek to make acquisitions of complementary companies, products, or technologies, or we may reduce or dispose of certain product lines or technologies that no longer fit our long-term strategies. For regulatory or other reasons, we may not be successful in our attempts to acquire or dispose of businesses, products, or technologies, resulting in significant financial costs, reduced or lost opportunities, and diversion of management's attention. Managing an acquired business, disposing of product technologies, or reducing personnel entails numerous operational and financial risks, including difficulties in assimilating acquired operations and new personnel or separating existing business or product groups, diversion of management's attention away from other business concerns, amortization of acquired intangible assets, adverse customer reaction to our decision to cease support for a product, and potential loss of key employees or customers of acquired or disposed operations. There can be no assurance that we will be able to achieve and manage successfully any such integration of potential acquisitions, disposition of product lines or technologies, or reduction in personnel, or that our management, personnel, or systems will be adequate to support continued operations. Any such inabilities or inadequacies could have a material adverse effect on our business, operating results, financial condition, and/or cash flows.

In addition, any acquisition could result in changes such as potentially dilutive issuances of equity securities, the incurrence of debt and contingent liabilities, the amortization of related intangible assets, and goodwill impairment charges, any of which could materially adversely affect our business, financial condition, results of operations, cash flows, and/or the price of our Common Stock.

LEGAL, REGULATORY AND TAX RISKS

Our Sales to Customers in China, a Significant Region for Us, Have Been Impacted, and are Likely to Be Materially and Adversely Affected by Export License Requirements and Other Regulatory Changes, or Other Governmental Actions in the Course of the Trade Relationship Between the U.S. and China

China represents a large and fast-developing market for the semiconductor equipment industry and therefore is important to our business. Revenue in China, which includes global customers and domestic Chinese customers with manufacturing facilities in China, represented approximately 27%, 31%, and 35% of our total revenue for the six months ended December 25, 2022 and fiscal years 2022 and 2021, respectively. The U.S. and China have historically had a complex relationship that has included

actions that have impacted trade between the two countries. Recently, these actions have included an expansion of export license requirements imposed by the U.S. government, which have limited the market for our products, adversely impacted our revenues, and increased our exposure to foreign competition, and could potentially do so to an even greater extent in the future. Most recently, the U.S. government has enacted new rules aimed at restricting China's ability to manufacture advanced semiconductors, which include restrictions on exports, reexports or transfers to, or shipping, transmitting, transferring, or facilitating such movement to, or performing services at, customer facilities in China engaged in certain technology end-uses, without appropriate authorizations obtained from U.S. authorities. In addition, the U.S. Department of Commerce has enacted new rules that have expanded export license requirements for U.S. companies to sell certain items to companies and other end-users in China that are designated as military end-users or have operations that could support military end uses; has added additional Chinese companies to its restricted entity list and unverified list under suspicion of military-civil fusion, support of Russia, or other factors associated with a broadening scope of national security concerns (including Semiconductor Manufacturing International Corporation, or SMIC, and related entities, and Yangtze Memory Technologies Co., Ltd., or YMTC, and related entities); and has expanded an existing rule (referred to as the foreign direct product rule) in a manner that could cause foreign-made wafers, chipsets, and certain related items produced with many of our products to be subject to U.S. licensing requirements if Huawei Technologies Co. Ltd ("Huawei") or its affiliates are parties to a transaction involving the items. These rules have required and may require us to apply for and obtain additional export licenses to supply certain of our products to customers in China, such as SMIC, YMTC and ChangXin Memory Technologies, Inc., and there is no assurance that we will be issued licenses that we apply for on a timely basis or at all. In addition, our customers (including but not limited to Chinese customers) may require U.S. export licenses for the use of our products in order to manufacture products, including semiconductor wafers and integrated circuits, for those of their customers (i.e. Huawei and its affiliates) that are subject to the expanded foreign direct product rule, which may adversely impact the demand for our products. The U.S. Department of Commerce could in the future add additional Chinese companies to its restricted entity list or unverified list or take other actions that could expand licensing requirements or otherwise impact the market for our products and our revenue. The implementation, interpretation and impact on our business of these rules and other regulatory actions taken by the U.S. government is uncertain and evolving, and these rules, other regulatory actions or changes, and other actions taken by the governments of either the U.S. or China, or both, that have occurred and may occur in the future could materially and adversely affect our results of operations.

We Are Exposed to Various Risks from Our Regulatory Environment

We are subject to various risks related to (1) new, different, inconsistent, or even conflicting laws, rules, and regulations that may be enacted by legislative or executive bodies and/or regulatory agencies in the countries that we operate; (2) disagreements or disputes related to international trade; and (3) the interpretation and application of laws, rules, and regulations. As a public company with global operations, we are subject to the laws of multiple jurisdictions and the rules and regulations of various governing bodies, including those related to export controls, financial and other disclosures, corporate governance, privacy, anti-corruption, such as the Foreign Corrupt Practices Act and other local laws prohibiting corrupt payments to governmental officials, anti-boycott compliance, conflict minerals or other social responsibility legislation, immigration or travel regulations, antitrust regulations, and laws or regulations relating to carbon emissions, as well as other laws or regulations imposed in response to climate change concerns, among others. Each of these laws, rules, and regulations imposes costs on our business, including financial costs and potential diversion of our management's attention associated with compliance, and may present risks to our business, including potential fines, restrictions on our actions, and reputational damage if we do not fully comply.

To maintain high standards of corporate governance and public disclosure, we intend to invest appropriate resources to comply with evolving standards. Changes in or ambiguous interpretations of laws, regulations, and standards may create uncertainty regarding compliance matters. Efforts to comply with new and changing regulations have resulted in, and are likely to continue to result in, reduced operating income, and a diversion of management's time and attention from revenue-generating activities to compliance activities. If we are found by a court or regulatory agency not to be in compliance with the laws and regulations, our business, financial condition, and/or results of operations could be adversely affected.

Intellectual Property, Indemnity, and Other Claims Against Us Can Be Costly and We Could Lose Significant Rights That Are Necessary to Our Continued Business and Profitability

Third parties may assert infringement, misappropriation, unfair competition, product liability, breach of contract, or other claims against us. From time to time, other persons send us notices alleging that our products infringe or misappropriate their patent or other intellectual property rights. In addition, law enforcement authorities may seek criminal charges relating to intellectual property or other issues. We also face risks of claims arising from commercial and other relationships. In addition, our bylaws and other indemnity obligations provide that we will indemnify officers and members of our Board of Directors against losses that they may incur in legal proceedings resulting from their service to us. From time to time, in the normal course of business, we indemnify third parties with whom we enter into contractual relationships, including customers and suppliers, with respect to certain matters. We have agreed, under certain conditions, to hold these third parties harmless against specified losses, such as those arising from a breach of representations or covenants, other third-party claims that our products when used for their intended purposes infringe the intellectual property rights of such other third parties, or other claims made against certain parties. In such cases, it is our policy either to defend the claims or to negotiate licenses or other settlements on commercially reasonable terms. However, we may be unable in the future to negotiate necessary licenses or reach agreement on other settlements on commercially reasonable terms, or at all, and any litigation resulting from these claims by other parties may materially and adversely affect our business and financial results, and we may be subject to substantial damage awards and

penalties. Moreover, although we have insurance to protect us from certain claims and cover certain losses to our property, such insurance may not cover us for the full amount of any losses, or at all, and may be subject to substantial exclusions and deductibles.

Our Financial Results May Be Adversely Impacted by Higher than Expected Tax Rates or Exposure to Additional Tax Liabilities

We are subject to income, transaction, and other taxes in the United States and various foreign jurisdictions, and significant judgment is required to determine worldwide tax liabilities. The amount of taxes we pay is subject to ongoing audits in various jurisdictions, and a material assessment by a governing tax authority could affect our profitability. As a global company, our effective tax rate is highly dependent upon the geographic composition of worldwide earnings and tax regulations governing each region. Our effective tax rate could be adversely affected by changes in the split of earnings between countries with differing statutory tax rates, in the valuation allowance of deferred tax assets, in tax laws, by material audit assessments, or by changes in or expirations of agreements with tax authorities. These factors could affect our profitability. In particular, the carrying value of deferred tax assets, which are predominantly in the United States, is dependent on our ability to generate future taxable income in the United States.

On August 16, 2022, the Inflation Reduction Act (the “IRA”) was signed into law. In general, the provisions of the IRA will be effective beginning with our fiscal year 2024, with certain exceptions. The IRA includes a new 15% corporate minimum tax as well as a 1% excise tax on corporate stock repurchases applicable to repurchases after December 31, 2022. We have evaluated the potential impacts of the IRA and do not expect it to have a material impact on our effective tax rate. However we expect future guidance from the Treasury Department and will further analyze when the guidance is issued.

Recommendations made by the Organization for Economic Co-operation and Development’s Base Erosion and Profit Shifting project have the potential to lead to changes in the tax laws in numerous countries. In addition, President Joseph Biden has made several corporate income tax proposals, including changes in the taxation of non-U.S. income. If enacted, such changes could have a material impact on our effective tax rate.

A Failure to Comply with Environmental Regulations May Adversely Affect Our Operating Results

We are subject to a variety of domestic and international governmental regulations related to the handling, discharge, and disposal of toxic, volatile, or otherwise hazardous chemicals. Failure to comply with present or future environmental regulations could result in fines being imposed on us, require us to undertake remediation activities, suspend production, and/or cease operations, or cause our customers to not accept our products. These regulations could require us to alter our current operations, acquire significant additional equipment, incur substantial other expenses to comply with environmental regulations, or take other actions. Any failure to comply with regulations governing the use, handling, sale, transport, or disposal of hazardous substances could subject us to future liabilities that may adversely affect our operating results, financial condition, and ability to operate our business.

Our Bylaws Designate the Court of Chancery of the State of Delaware as the Sole and Exclusive Judicial Forum for Certain Legal Actions Between the Company and its Stockholders, Which May Discourage Lawsuits with Respect to Such Claims

Our bylaws provide that, unless we consent otherwise, the Court of Chancery of the State of Delaware will be the sole and exclusive forum for lawsuits asserting certain stockholder claims (including claims asserted derivatively for our benefit), such as claims against directors and officers for breach of a fiduciary duty, claims arising under any provision of the General Corporation Law of Delaware or our certificate of incorporation or our bylaws, or claims governed by the internal affairs doctrine. This is a general summary of the bylaw provision; you should refer to the language of the bylaws for details. While the forum provision does not generally apply to direct claims arising under the Securities Exchange Act of 1934 or the Securities Act of 1933, derivative lawsuits that assert legal claims arising under these statutes could fall within the provision, as recent court decisions have held.

As a Delaware corporation, Delaware law controls issues of our internal affairs, including duties that our directors, officers, employees, and others owe to the Company and its stockholders. We believe that our exclusive forum provision benefits us, and our stockholders, by permitting relatively prompt resolution of lawsuits concerning our internal affairs, promoting consistent application of Delaware law in these lawsuits, and reducing the possibility of duplicative, costly, multi-jurisdictional litigation with the potential for inconsistent outcomes. However, the forum provision limits a stockholder’s ability to bring a claim in a judicial forum that it believes may be more favorable than Delaware, and this could discourage the filing of such lawsuits.

FINANCIAL, ACCOUNTING AND CAPITAL MARKETS RISKS

The Market for Our Common Stock Is Volatile, Which May Affect Our Ability to Raise Capital or Make Acquisitions or May Subject Our Business to Additional Costs

The market price for our Common Stock is volatile and has fluctuated significantly over the past years. The trading price of our Common Stock could continue to be highly volatile and fluctuate widely in response to a variety of factors, many of which are not within our control or influence. These factors include but are not limited to the following:

- general market, semiconductor, or semiconductor equipment industry conditions;
- economic or political events, trends, and unexpected developments occurring nationally, globally, or in any of our key sales regions;
- changes in macroeconomic conditions, increased risk of recession, and geopolitical issues;
- variations in our quarterly operating results and financial condition, including our liquidity;
- variations in our revenues, earnings, or other business and financial metrics from forecasts by us or securities analysts or from those experienced by other companies in our industry;
- announcements of restructurings, reductions in force, departure of key employees, and/or consolidations of operations;
- margin trading, short sales, hedging and derivative transactions involving our Common Stock;
- government regulations;
- developments in, or claims relating to, patent or other proprietary rights;
- technological innovations and the introduction of new products by us or our competitors;
- commercial success or failure of our new and existing products; or
- disruptions of relationships with key customers or suppliers.

In addition, the stock market experiences significant price and volume fluctuations. Historically, we have witnessed significant volatility in the price of our Common Stock due in part to the price of and markets for semiconductors. These and other factors have adversely affected and may again adversely affect the price of our Common Stock, regardless of our actual operating performance. In the past, following volatile periods in the price of their stock, many companies became the object of securities class action litigation. If we are sued in a securities class action, we could incur substantial costs, and it could divert management's attention and resources and have an unfavorable impact on our financial performance and the price for our Common Stock.

We May Incur Impairments to Goodwill or Long-lived Assets

We review our goodwill identified in business combinations for impairment annually or whenever events or changes in circumstances indicate that the carrying amount of these assets may exceed the fair value. We review all other long-lived assets, including finite-lived intangible assets, whenever events or changes in circumstance indicate that these assets may not be recoverable. The process of evaluating the potential impairment of goodwill and other long-lived assets requires significant judgement. Negative industry or economic trends, including reduced market prices of our Common Stock, reduced estimates of future cash flows, disruptions to our business, slower growth rates, or lack of growth in our relevant business units, could lead to impairment charges against our long-lived assets, including goodwill and other intangible assets.

When evaluating goodwill, if we conclude that it is more likely than not that the fair value of a reporting unit is less than its carrying amount, then a quantitative impairment test is performed and we may be required to record an impairment charge in that period, which could adversely affect our result of operations.

When evaluating other long-lived assets, if we conclude that the estimated undiscounted cash flows attributable to the assets are less than their carrying value, we recognize an impairment loss based on the excess of the carrying amount of the assets over their respective fair values, which could adversely affect our results of operations.

Our valuation methodology for assessing impairment requires management to make judgments and assumptions based on historical experience and to rely heavily on projections of future operating performance. We operate in a highly competitive environment and projections of future operating results and cash flows may vary significantly from actual results. Additionally, if our analysis indicates potential impairment, we may be required to record additional charges to earnings in our financial statements, which could negatively affect our results of operations.

Our Leverage and Debt Service Obligations May Adversely Affect Our Financial Condition, Results of Operations, and Earnings per Share

We have $5.0 billion in aggregate principal amount of senior unsecured notes outstanding. Additionally, we have funding available to us under our $1.5 billion commercial paper program and our $1.5 billion revolving credit facility, which serves as a backstop to our commercial paper program. Our revolving credit facility also includes an option to increase the amount up to an additional $600.0 million, for a potential total commitment of $2.1 billion. We may, in the future, decide to enter into additional debt arrangements.

In addition, we have entered, and in the future may enter, into derivative instrument arrangements to hedge against the variability of cash flows due to changes in the benchmark interest rate of fixed rate debt. We could be exposed to losses in the event of nonperformance by the counterparties to our derivative instruments.

Our indebtedness could have adverse consequences, including:

- risk associated with the alternative reference rate reform (e.g. LIBOR transition);
- risk associated with any inability to satisfy our obligations;
- a portion of our cash flows that may have to be dedicated to interest and principal payments and may not be available for operations, working capital, capital expenditures, expansion, acquisitions, or general corporate or other purposes; and
- impairment of our ability to obtain additional financing in the future.

Our ability to meet our expenses and debt obligations will depend on our future performance, which will be affected by financial, business, economic, regulatory, and other factors. Furthermore, our operations may not generate sufficient cash flows, to enable us to meet our expenses and service our debt. As a result, we may need to enter into new financing arrangements to obtain the necessary funds. If we determine it is necessary to seek additional funding for any reason, we may not be able to obtain such funding or, if funding is available, obtain it on acceptable terms. If we fail to make a payment on our debt, we could be in default on such debt, and this default could cause us to be in default on our other outstanding indebtedness.

Our Credit Agreements Contain Covenant Restrictions That May Limit Our Ability to Operate Our Business

We may be unable to respond to changes in business and economic conditions, engage in transactions that might otherwise be beneficial to us, or obtain additional financing because our debt agreements contain, and any of our other future similar agreements may contain, covenant restrictions that limit our ability to, among other things:

- incur additional debt, assume obligations in connection with letters of credit, or issue guarantees;
- create liens;
- enter into transactions with our affiliates;
- sell certain assets; and
- merge or consolidate with any person.

Our ability to comply with these covenants is dependent on our future performance, which will be subject to many factors, some of which are beyond our control, including prevailing economic conditions. In addition, our failure to comply with these covenants could result in a default under the Senior Notes, or our other debt, which could permit the holders to accelerate such debt. If any of our debt is accelerated, we may not have sufficient funds available to repay such debt, which could materially and negatively affect our financial condition and results of operation.

There Can Be No Assurance That We Will Continue to Declare Cash Dividends or Repurchase Our Shares at All or in Any Particular Amounts

Our Board of Directors has declared quarterly dividends since April 2014. Our intent to continue to pay quarterly dividends and to repurchase our shares is subject to capital availability and periodic determinations by our Board of Directors that cash dividends and share repurchases are in the best interest of our stockholders and are in compliance with all laws and agreements applicable to the declaration and payment of cash dividends or the repurchasing of shares by us. Future dividends and share repurchases may also be affected by, among other factors, our views on potential future capital requirements for investments in acquisitions and the funding of our research and development; legal risks; changes in federal, state, and international tax laws or corporate laws; contractual restrictions, such as financial or operating covenants in our debt arrangements; availability of onshore cash flow; and changes to our business model. Our dividend payments and share repurchases may change from time to time, and we cannot provide assurance that we will continue to declare dividends or repurchase shares at all or in any particular amounts. A reduction or suspension in our dividend payments or share repurchases could have a negative effect on the price of our Common Stock.

ITEM 2. Unregistered Sales of Equity Securities and Use of Proceeds

Repurchases of Company Shares

In May 2022, the Board of Directors authorized management to repurchase up to an additional $5.0 billion of Common Stock; this authorization supplements the remaining balance from any prior authorization. These repurchases can be conducted on the open market or as private purchases and may include the use of derivative contracts with large financial institutions, in all cases subject to compliance with applicable law. This repurchase program has no termination date and may be suspended or discontinued at any time.

Share repurchases, including those under the repurchase program, were as follows:

	Total Number of Shares Repurchased [1]	Average Price Paid Per Share [2]	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Amount Available Under Repurchase Program
		(in thousands, except per share data)		
Available balance as of June 26, 2022				$ 5,514,636
Quarter ended September 25, 2022	686	$ 433.47	675	5,409,654
September 26, 2022 - October 23, 2022	51	$ 363.11	48	5,392,224
October 24, 2022 - November 20, 2022	540	$ 420.65	537	5,166,419
November 21, 2022 - December 25, 2022	542	$ 444.02	540	4,926,428
Quarter ended December 25, 2022	1,133	$ 429.27 (3)	1,125	$ 4,926,428

(1) During the three and six months ended December 25, 2022, we acquired 8 thousand shares at a total cost of $3.1 million, and 19 thousand shares at a total cost of $7.9 million, respectively, which we withheld through net share settlements to cover minimum tax withholding obligations upon the vesting of restricted stock unit awards granted under our equity compensation plans. The shares retained by us through these net share settlements are not a part of the Board-authorized repurchase program but instead are authorized under our equity compensation plan.

(2) Average price paid per share excludes the effect of accelerated share repurchase activities. See additional disclosure below regarding our accelerated share repurchase activity during the six months ended December 25, 2022.

(3) Average price paid per share presented is for the quarter ended December 25, 2022.

Accelerated Share Repurchase Agreements

On June 2, 2022, we entered into an accelerated share repurchase agreement (the "June 2022 ASR") with two financial institutions to repurchase a total of $500 million of Common Stock. We took an initial delivery of approximately 717 thousand shares, which represented 75% of the prepayment amount divided by our closing stock price on June 2, 2022. The total number of shares received under the June 2022 ASR was based upon the average daily volume weighted average price of our Common Stock during the repurchase period, less an agreed upon discount. Final settlement of the June 2022 ASR occurred in September 2022, resulting in the receipt of approximately 433 thousand additional shares, which yielded a weighted-average share price of $435.20 for the transaction period.

ITEM 3. Defaults Upon Senior Securities

None.

ITEM 4. Mine Safety Disclosures

Not applicable.

ITEM 5. Other Information

None.

ITEM 6. Exhibits

Exhibit Number	Description
10.1*	Form of Restricted Stock Unit Agreement (U.S Participants) - 2015 Stock Incentive Plan
10.2	Amendment No. 1 to Second Amended and Restated Credit Agreement, dated December 7, 2022, among Lam Research Corporation, as borrower, the lenders party thereto and JPMorgan Chase Bank, N.A., as administrative agent
31.1	Rule 13a-14(a)/15d-14(a) Certification (Principal Executive Officer)
31.2	Rule 13a-14(a)/15d-14(a) Certification (Principal Financial Officer)
32.1	Section 1350 Certification (Principal Executive Officer)
32.2	Section 1350 Certification (Principal Financial Officer)
101.INS	Inline XBRL Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.
101.SCH	Inline XBRL Taxonomy Extension Schema Document
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101)

* Indicates management contract or compensatory plan or arrangement.

LAM RESEARCH CORPORATION

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this Report to be signed on its behalf by the undersigned thereunto duly authorized.

Date: January 30, 2023

LAM RESEARCH CORPORATION
(Registrant)

/s/ Douglas R. Bettinger

Douglas R. Bettinger

Executive Vice President, Chief Financial Officer
(Principal Financial Officer and Principal Accounting Officer)

Exhibit 10.1

LAM RESEARCH CORPORATION
2015 Stock Incentive Plan Restricted Stock Unit Award Agreement
(U.S. Participants)

Pursuant to the terms of the 2015 Stock Incentive Plan (the "Plan") Lam Research Corporation, a Delaware corporation (the "Company"), hereby awards restricted stock units ("RSUs") to the Grantee (the "Participant) on the terms and conditions as set forth in this Restricted Stock Unit Award Agreement (including the attached Appendix A and Exhibit A) (the "Agreement") and the Plan. Capitalized terms used but not defined in this Agreement shall have the meaning specified in the Plan. This Agreement is effective as of the Grant Date.

NOW, THEREFORE, it is hereby agreed as follows:

1. Award of RSUs. Subject to the terms and conditions of this Agreement and the Plan (the terms of which are incorporated herein by reference) and effective as of the date set forth above, the Company hereby grants to the Participant a Number of RSUs as set forth in Exhibit A. The RSUs represent an unfunded, unsecured promise by the Company to deliver Shares subject to the terms and conditions of this Agreement.

2. Vesting.

(a) Subject to the terms and conditions of this Agreement and provided that the Participant continues to provide Service (as defined in Section 3 below) to the Company (or any Related Entity) through the applicable Vesting Date(s) as set forth in Exhibit A, the RSUs will vest and become payable in Shares pursuant to the applicable Vesting Date(s) as set forth in Exhibit A.

(b) In the event of a Corporate Transaction, the RSUs are governed by Section 11 of the Plan.

3. Effect of Termination of Service or Leave of Absence.

(a) For purposes of this Agreement, Continuous Service shall mean the performance of services for the Company (or any Related Entity) in the capacity of an Employee or Director and shall be considered terminated on the later of the last day the Participant is on payroll or the last day of Continuous Service as a director for a Director ("Service"). In the event of termination of the Participant's Service by the Participant or by the Company or a Related Entity for any reason, excluding Participant's death or Disability before all RSUs have vested, the unvested RSUs shall be cancelled by the Company.

(b) In the event of termination of the Participant's Service due to death, all of the RSUs granted to the Participant shall vest on the date of death (the "Death Vesting Date").

(c) In the event of termination of the Participant's Service due to Disability, a portion of the RSUs granted to the Participant shall vest on the date the Disability is incurred. To determine the applicable number of Shares, the Number of RSUs (as set forth in Exhibit A) shall be multiplied by the greater of (x) 50% or (y) the percentage of full months worked from the

Grant Date until the date the Disability is incurred (the "Disability Vesting Date", and collectively, with the Vesting Date(s) set forth in Exhibit A, and the "Death Vesting Date", the "Vesting Date") over the total number of full months from the Grant Date until the last Vesting Date (as set forth in Exhibit A). Any remaining unvested portion of the RSUs shall be cancelled.

(d) Vesting of the RSUs will be suspended and vesting credit will no longer accrue as of the day of the leave of absence as set forth in Exhibit A, unless otherwise determined by the Administrator or required by contract or statute. If the Participant returns to Service immediately after the end of an approved leave of absence, vesting credit shall continue to accrue from that date of continued Service.

4. Form and Timing of Payment.

(a) Subject to Section 5 of this Agreement and provided that the Participant has satisfied the vesting requirements of Section 2 of this Agreement, on each Vesting Date, as applicable, the RSUs shall automatically be converted into unrestricted Shares. Such Shares will be issued to the Participant (as evidenced by the appropriate entry in the books of the Company or a duly authorized transfer agent of the Company) on the applicable Vesting Date (or as soon as practicable), but in any event, within the period ending on the later to occur of the date that is 2 ½ months after the end of (i) the Participant's tax year that includes the applicable Vesting Date, or (ii) the Company's tax year that includes the applicable Vesting Date.

(b) Shares issued in respect of RSUs shall be deemed to be issued in consideration of past services actually rendered by the Participant to the Company or a Related Entity or for its benefit for which the Participant has not previously been compensated or for future services to be rendered, as the case may be, which the Company deems to have a value at least equal to the aggregate par value of the Shares subject to the RSUs.

5. Tax Withholding Obligations. Regardless of any action the Company or the Participant's employer (the "Employer") takes with respect to any or all income tax (including federal, state and local taxes), social insurance, payroll tax, or other tax-related withholding ("Tax-Related Items"), the Participant acknowledges that the ultimate liability for all Tax-Related Items legally due by the Participant is and remains the Participant's responsibility and that the Company and/or the Employer (i) make no representations or undertakings regarding the treatment of any Tax-Related Items in connection with any aspect of the RSUs, including the grant of the RSUs, the vesting of the RSUs, or the receipt of an equivalent cash payment, the subsequent sale of any Shares acquired at vesting and the receipt of any dividends; and (ii) do not commit to structure the terms of the grant or any aspect of the RSUs to reduce or eliminate the Participant's liability for Tax-Related Items or achieve any particular tax result.

Prior to the issuance of Shares upon vesting of the RSUs (or any other tax or withholding event), the Participant shall pay, or make arrangements satisfactory to the Company (in the Company's sole discretion) to satisfy all withholding obligations. In those cases where a prior arrangement has not been made (or where the amount of money provided under the prior arrangement is insufficient to satisfy the obligations for Tax-Related Items), the Company shall withhold a number of whole Shares otherwise deliverable at vesting having a Fair Market Value sufficient to satisfy the statutory minimum (or such higher amount as is allowable without

adverse accounting consequences) of the Participant's estimated obligations for Tax-Related Items applicable to the RSUs; such withholding will result in the issuance to the participant of a lower number of Shares.

The Company and/or the Employer may also, in lieu of or in addition to the foregoing, at the Company's sole discretion, as authorized herein by the Participant, withhold all applicable Tax-Related Items legally payable by the Participant from the Participant's wages or other cash compensation or to withhold in one of the following ways, as determined by the Company: (i) require the Participant to deposit with the Company an amount of cash sufficient to meet his or her obligation for Tax-Related Items, and/or (ii) sell or arrange for the sale of Shares to be issued on the vesting of the RSUs to satisfy the withholding obligation. If the Participant's obligation for Tax-Related Items is satisfied as described in (ii) of this section, the Company will endeavor to sell only the number of Shares required to satisfy the Participant's obligations for Tax-Related Items; however, the Participant agrees that the Company may sell more Shares than necessary to cover the Tax-Related Items and that in such event, the Company will reimburse the Participant for the excess amount withheld, in cash and without interest. The Participant shall pay to the Employer any amount of Tax-Related Items that the Employer may be required to withhold as a result of the Participant's receipt of the RSUs or the vesting of the RSUs that cannot be satisfied by the means previously described. The Company may refuse to deliver Shares to the Participant if the Participant fails to comply with his or her obligation in connection with the Tax-Related Items as described herein. The Participant hereby consents to any action reasonably taken by the Company and/or the Employer to meet his or her obligation for Tax-Related Items.

Further, in consideration of the grant of the RSUs, no claim or entitlement to compensation or damages arises if, in satisfying the Participant's (and/or the Employer's) obligation for Tax-Related Items, the Company and/or the Employer withholds an amount in excess of the amount legally required to be withheld, the Participant irrevocably releases the Company and the Employer from any such claim that may arise; if, notwithstanding the foregoing, any such claim is found by a court of competent jurisdiction to have arisen, then, by signing this Agreement, the Participant shall be deemed irrevocably to have waived his or her entitlement to pursue such claim or damages.

6. Restriction on Transferability. Prior to vesting and delivery of the Shares, neither the RSUs, nor the Shares or any beneficial interest therein, may be sold, transferred, pledged, assigned, or otherwise alienated at any time. Any attempt to do so contrary to the provisions hereof shall be null and void. Notwithstanding the above, distribution can be made pursuant to will, the laws of descent and distribution, and if provided by the Administrator, intra-family transfer instruments, or to an inter vivos trust, or as otherwise provided by the Administrator. The terms of this Agreement shall be binding upon the executors, administrators, heirs, successors and assigns of the Participant.

7. Requirements of Law. The issuance of Shares upon vesting of the RSUs is subject to Sections 9 and 14(b) of the Plan, which generally provides that any such issuance shall be subject to compliance by the Company and the Participant with all applicable requirements of law relating thereto and with all applicable regulations of any stock exchange on which the Shares may be listed for trading at the time of such issuance. The inability of the Company to obtain approval from any regulatory body having authority deemed by the Company to be

necessary to the lawful issuance of any Shares hereby shall relieve the Company of any liability with respect to the non-issuance of the Shares as to which such approval shall not have been obtained. The Company, however, shall use its reasonable efforts to obtain all such approvals.

8. Rights as Stockholder. The Participant shall not have voting, dividend or any other rights as a stockholder of the Company with respect to the RSUs. Upon settlement of the Participant's RSUs into Shares (as evidenced by the appropriate entry on the books of the Company or of a duly authorized transfer agent of the Company), the Participant will obtain full voting, dividend and other rights as a stockholder of the Company.

9. No Compensation Deferrals. Neither the Plan nor this Agreement is intended to provide for an elective deferral of compensation that would be subject to Section 409A ("Section 409A") of the Internal Revenue Code of 1986, as amended (the "Code"). If, notwithstanding the parties' intent in this regard, at the time of the Participant's termination of Service, he or she is determined to be a "specified employee" as defined in Code Section 409A, and one or more of the payments or benefits received or to be received by the Participant pursuant to the RSUs would constitute deferred compensation subject to Code Section 409A, no such payment or benefit will be provided under the RSUs until the earliest of (A) the date which is six (6) months after the Participant's "separation from service" for any reason, other than death or "disability" (as such terms are used in Section 409A(a)(2) of the Code), (B) the date of the Participant's death or "disability" (as such term is used in Section 409A(a)(2)(C) of the Code), or (C) the effective date of a "change in the ownership or effective control" or a "change in ownership of a substantial portion of the assets" of the Company (as such terms are used in Section 409A(a)(2)(A)(v) of the Code). The provisions of this Section 9 shall only apply to the extent required to avoid the Participant's incurrence of any additional tax or interest under Code Section 409A or any regulations or U.S. Department of the Treasury ("Treasury") guidance promulgated thereunder. In addition, if any provision of the RSUs would cause the Participant to incur any additional tax or interest under Code Section 409A or any regulations or Treasury guidance promulgated thereunder, the Company reserves the right, to the extent the Company deems necessary or advisable in its sole discretion, to unilaterally amend or modify the Plan and/or this Agreement to conform it to the maximum extent practicable to the original intent of the applicable provision without violating the provisions of Code Section 409A, including without limitation to limit payment or distribution of any amount of benefit hereunder in connection with a Corporate Transaction to a transaction meeting the definitions referred to in clause (C) above, or in connection with any disability to a "disability" as referred to in (B) above; provided however that the Company makes no representation that these RSUs are not subject to Section 409A nor makes any undertaking to preclude Section 409A from applying to these RSUs. In addition, to the extent the Company determines it appropriate to accelerate any vesting conditions applicable to this award, then to the extent necessary to avoid the Participant's incurring any additional tax or interest as a result of such vesting acceleration under Code Section 409A or any regulations or Treasury guidance promulgated thereunder, and notwithstanding Section 4 above, the Company may as a condition to extending such acceleration benefits provide for the Shares to be issued upon settlement of the RSUs to be issued on the earliest date (the "Permitted Distribution Date") that would obviate application of such additional tax or interest rather than issuing them upon the date on which such vesting is effective as would otherwise be required under Section 2 (or as soon as practicable after such

Permitted Distribution Date and in no event later than that last day of the grace period following such date permitted under Code Section 409A).

10. Administration. The Administrator shall have the power to interpret the Plan and this Agreement and to adopt such rules for the administration, interpretation, and application of the Plan as are consistent therewith and to interpret or revoke any such rules. All actions taken and all interpretations and determinations made by the Administrator shall be final and binding upon the Participant, the Company, and all other interested persons. No Administrator shall be personally liable for any action, determination, or interpretation made in good faith with respect to the Plan or this Agreement.

11. Effect on Other Employee Benefit Plans. The value of the RSUs granted pursuant to this Agreement shall not be included as compensation, earnings, salaries, or other similar terms used when calculating the Participant's benefits under any employee benefit plan sponsored by the Company or any Related Entity, except as such plan otherwise expressly provides. The Company expressly reserves its rights to amend, modify, or terminate any of the Company's or any Related Entity's employee benefit plans.

12. No Employment Rights. The award of the RSUs pursuant to this Agreement shall not give the Participant any right to continued Service with the Company or a Related Entity and shall not interfere with the ability of the Employer to terminate the Participant's Service with the Company at any time with or without cause.

13. Nature of the Grant. In accepting the RSUs, the Participant acknowledges that:

(a) the Plan is established voluntarily by the Company, it is discretionary in nature and may be modified, amended, suspended or terminated by the Company at any time, unless otherwise provided in the Plan and this Agreement;

(b) the grant of the RSUs is voluntary and occasional and does not create any contractual or other right to receive future awards of RSUs, or benefits in lieu of RSUs even if RSUs have been awarded repeatedly in the past;

(c) all decisions with respect to future grants of RSUs, if any, will be at the sole discretion of the Company;

(d) the Participant's participation in the Plan is voluntary;

(e) the RSUs are outside the scope of the Participant's employment contract, if any;

(f) the RSUs are not part of normal or expected compensation or salary for any purpose, including, but not limited to, calculation of any overtime, severance, resignation, termination, redundancy, end of service payments, bonuses, long-service awards, pension or retirement benefits or similar payments;

(g) in the event that the Participant is not an employee of the Company, the grant of the RSUs will not be interpreted to form an employment contract or relationship with the

Company; and furthermore, the grant of the RSUs will not be interpreted to form an employment contract with the Employer or any Related Entity;

(h) the future value of the underlying Shares is unknown and cannot be predicted with certainty;

(i) if the Participant receives Shares upon vesting of the RSUs, the value of such Shares may increase or decrease in value;

(j) in consideration of the grant of the RSUs, no claim or entitlement to compensation or damages arises from termination of the RSUs or diminution in value of the RSUs or Shares received upon vesting of RSUs resulting from termination of the Participant's Service to the Company or the Employer (for any reason whatsoever and whether or not in breach of local labor laws) and the Participant irrevocably releases the Company and the Employer from any such claim that may arise; if, notwithstanding the foregoing, any such claim is found by a court of competent jurisdiction to have arisen, then, by signing this Agreement, the Participant shall be deemed irrevocably to have waived his or her entitlement to pursue such claim.

14. Amendment of Agreement. This Agreement may be amended only by a writing which specifically states that it amends this Agreement. Notwithstanding the foregoing, this Agreement may be amended unilaterally by the Committee by a writing which specifically states that it is amending this Agreement, so long as a copy of such amendment is delivered to the Participant, and provided that no such amendment adversely affects the rights of the Participant. Limiting the foregoing, the Committee reserves the right to change, by written notice to the Participant, the provisions of the RSUs or this Agreement in any way it may deem necessary or advisable to carry out the purpose of the grant as a result of any change in applicable laws or regulations or any future law, regulation, ruling, or judicial decision, or, to the extent permissible under the Plan (including, but not limited to, Sections 10, 11 and 13 of the Plan).

15. Notices. Any notice to be given under the terms of this Agreement to the Company shall be addressed to the Company in care of its Stock Administrator. Any notice to be given to the Participant shall be addressed to the Participant at the address listed in the Employer's records. By a notice given pursuant to this Section, either party may designate a different address for notices. Any notice shall have been deemed given when actually delivered.

16. Severability. The provisions of this Agreement are severable and if all or any part of this Agreement or the Plan is declared by any court or governmental authority to be unlawful or invalid, such unlawfulness or invalidity shall not invalidate any portion of this Agreement or the Plan not declared to be unlawful or invalid. Any Section of this Agreement (or part of such a Section) so declared to be unlawful or invalid shall, if possible, be construed in a manner which will give effect to the terms of such Section or part of a Section to the fullest extent possible while remaining lawful and valid.

17. Construction. The RSUs are being issued pursuant to the Plan and are subject to the terms of the Plan. A copy of the Plan is available upon request during normal business hours at the principal executive offices of the Company. To the extent that any provision of this

Agreement violates or is inconsistent with a provision of the Plan, the Plan provision shall govern and any inconsistent provision in this Agreement shall be of no force or effect.

18. Electronic Delivery. The Company may, in its sole discretion, decide to deliver any documents related to the RSUs granted under the Plan and participation in the Plan or future RSUs that may be granted under the Plan by electronic means or to request the Participant's consent to participate in the Plan by electronic means. The Participant hereby consents to receive such documents by electronic delivery and, if requested, to agree to participate in the Plan through an on-line or electronic system established and maintained by the Company or another third party designated by the Company.

19. Entire Agreement. The Plan is incorporated herein by reference. The Plan and this Agreement constitute the entire agreement of the Company and the Participant with respect to the subject matter hereof and, unless indicated otherwise herein, supersede in their entirety all prior undertakings and agreements of the Company and the Participant with respect to the subject matter hereof.

20. Company Policies. The RSUs are being issued subject to the terms of the Company's Executive Severance Policy and Executive Change in Control Policy, as in effect at any time and from time to time (each, a "Policy"). If and to the extent that a provision of a Policy is at any time applicable to the Participant and the application of such provision would yield a different result than the application of a provision of this Agreement, the Policy provision shall prevail, and the corresponding provision of this Agreement shall not apply.

21. Confidential Information, Intellectual Property Rights Assignment, and Non-Solicitation. In consideration for and as a condition to the award of the RSUs under this Agreement, the Participant agrees to the terms and conditions set forth in Appendix A to this Agreement.

22. Miscellaneous.

(a) The Company has established the Plan voluntarily, it is discretionary in nature and the Board may terminate, amend, or modify the Plan at any time; provided, however, that no such termination, amendment, or modification of the Plan may in any way adversely affect the Participant's rights under this Agreement, without the Participant's written approval unless such termination, amendment, or modification of the Plan is necessary in order to comply with any change in applicable laws or regulations or any future law, regulation, ruling, or judicial decision or as otherwise permissible under the Plan (including, but not limited to, Sections 10, 11 and 13 of the Plan).

(b) All obligations of the Company under the Plan and this Agreement in a Corporate Transaction shall be governed by the Plan, other than as set forth in Section 2(b) above.

(c) By signing this Agreement, the Participant acknowledges that his or her personal employment or Service information regarding participation in the Plan and

information necessary to determine and pay, if applicable, benefits under the Plan must be shared with other entities, including companies related to the Company and persons responsible for certain acts in the administration of the Plan. By signing this Agreement, the Participant consents to such transmission of personal data as the Company believes is appropriate to administer the Plan.

(d) To the extent not preempted by federal law, this Agreement shall be governed by, and construed in accordance with, the laws of the State of Delaware, without regard to its principles of conflict of laws.

23. Acceptance of Terms and Conditions. The Participant agrees to abide by all of the governing terms and provisions of the Plan and this Agreement unless the Participant declines the award electronically with the Company sponsored broker by the first vest date; provided, however, that in the event of termination of the Participant's Service due to Disability or death on or before the first vest date, if the Participant has not declined the award prior to such time, the Participant shall be deemed to have accepted said terms and conditions. Additionally, the Participant acknowledges having read and understood the terms and conditions of the Plan and this Agreement and has had an opportunity to obtain the advice of counsel prior to accepting this Agreement. **In addition, the transfer or sale of the shares obtained at vesting by the Participant shall be considered an additional acknowledgment of the terms and conditions contained in the Plan and Agreement.**

* * * * *

PARTICIPANT SIGNATURE	
PRINTED NAME	
DATE	

Version 5

APPENDIX A
CONFIDENTIAL INFORMATION, INTELLECTUAL PROPERTY RIGHTS ASSIGNMENT, AND NON-SOLICITATION

This Appendix A, which is part of the Agreement, contains additional terms and conditions of the Agreement. Capitalized terms used but not defined herein shall have the same meanings assigned to them in the Plan and/or the Agreement. In consideration of the receipt of the RSUs detailed in Exhibit A, as well as the receipt by the Participant of the confidential information of Lam Research Corporation and its subsidiaries, affiliates, successors or assigns (collectively referred to as the "Company"), which may include the Company's trade secrets, the Participant agrees to the following:

1. Definitions.

(a) "Confidential Information" means any of the Company's non-public information, technical data, trade secrets or know-how (including, but not limited to, information related to research, product plans, products, services, markets, customer lists and customers including, but not limited to customers of the Company on whom the Participant called or with whom the Participant became acquainted during the term of the Participant's employment), marketing plans, software, developments, inventions, processes, formulas, technology, designs, drawings, engineering, hardware and software configuration information, code listings, flow charts, personnel information (including titles, responsibilities and compensation) finances or other business information which the Participant receives or has received or discovers or has discovered during the course of employment at the Employer, either directly or indirectly in writing, orally, visually, electronically or otherwise; provided, however that Confidential Information does not include any of the forgoing items which have become publicly known and made generally available to the public through no wrongful act of the Participant or of others who were under confidentiality obligations as to the item or items involved.

(b) "Intellectual Property Rights" means all rights in and to United States (US) and non-US (i) patents, patent disclosures, and invention disclosures (whether patentable or not); (ii) trademarks, service marks, trade dress, trade names, logos, corporate names, and domain names, and other similar designations of source or origin, together with the goodwill symbolized by any of the foregoing; (iii) copyrights and works of authorship (whether copyrightable or not), including computer programs, and mask works; (iv) rights in data and databases; (v) Confidential Information; and (vi) all other intellectual property rights, in each case whether registered or unregistered, and including all registrations and applications for, and renewals or extensions of, such rights, and all similar or equivalent rights or forms of protection in any part of the world.

(c) "Work Product" means (i) all writings, technology, inventions, discoveries, processes, techniques, methods, ideas, concepts, research, proposals, materials, and all other work product of any nature whatsoever, that (A) are created, prepared, produced, authored, edited, amended, conceived, or reduced to practice by the Participant solely or jointly with others during the period of their employment by the Employer and (B) relate in any way to the business or contemplated business, products, activities, research, or development of the Company or result

from any work performed by the Participant for the Company (in each case, regardless of when or where the work product is prepared or whose equipment or other resources is used in preparing the same); and (ii) all rights and claims related to the foregoing, and all printed, physical, and electronic copies and other tangible embodiments thereof.

2. Confidential Information.

(a) The Participant hereby agrees, at all times during the term of their employment and thereafter, to hold any Confidential Information in strictest confidence and not to use or disclose it to any person, firm or corporation without written authorization of the Board of Directors of Lam Research Corporation, except for the benefit of the Company.

(b) This Appendix A does not limit the right of the Participant to discuss the Participant's employment or discuss or disclose information about unlawful acts in the workplace, such as harassment or discrimination or any other conduct that the Participant has reason to believe is unlawful, or report possible violations of law or regulation, with or to any federal, state or local government agency, or to discuss the terms and conditions of the Participant's employment with others to the extent expressly permitted by Section 7 of the National Labor Relations Act, or to the extent that such disclosure is protected under the applicable provisions of law or regulation, including but not limited to "whistleblower" statutes or other similar provisions that protect such disclosure, to the extent any such rights are not permitted by applicable law to be the subject of nondisclosure. Furthermore, a disclosure by the Participant of Confidential Information in response to a valid request by a court or governmental body or as otherwise required by law shall not be considered a breach of this Agreement or a waiver of confidentiality for other purposes; provided, however that the Participant agrees to provide prompt prior written notice of any such disclosure to the Company to allow the Company to contest such disclosure, unless such a request is from a law enforcement agency, in which case the Participant shall provide such notice to the extent reasonably practicable. Pursuant to 18 U.S.C. Section 1833(b), the Participant will not be held criminally or civilly liable under any federal or state trade secret law for the disclosure of a trade secret that: (1) is made in confidence to a federal, state, or local government official, either directly or indirectly, or to an attorney, and solely for the purpose of reporting or investigating a suspected violation of law; or (2) is made in a complaint or other document filed in a lawsuit or other proceeding, if such filing is made under seal.

3. Assignment of Intellectual Property Rights.

(a) Assignment of Intellectual Property Rights. The Participant hereby assigns and agrees to assign all the Participant's right, title, and interest in and to all Work Product as well as any and all Intellectual Property Rights therein and all improvements thereto to the Employer. The Company shall have the unrestricted right (but not any obligation), in its sole and absolute discretion, to (i) use, commercialize, or otherwise exploit any Work Product or (ii) protect, file an application for patent or other registration of any other Intellectual Property Rights, and prosecute or abandon such application prior to issuance or registration. No royalty or other consideration shall be due or owing to the Participant now or in the future as a result of such activities.

(b) Limitations on Assignment. The Participant understands and acknowledges that Work Product does not include, and any provision in this Appendix A requiring the Participant to assign (or otherwise providing for ownership by the Company or the Employer of) rights to an invention does not apply to, any invention that the Participant develops entirely on his or her own time without using the Company's equipment, supplies, facilities, or trade secret information, except for those inventions that either (i) relate to the Company's business, or actual or demonstrably anticipated research or development of the Company or (ii) result from any work performed by the Participant for the Company.

(c) Further Assurances; Power of Attorney. During and after employment, the Participant agrees to reasonably cooperate with the Company at the Company's expense to (i) apply for, obtain, perfect, and transfer to the Company the Work Product as well as any and all Intellectual Property Rights in the Work Product in any jurisdiction throughout the world, and (ii) maintain, protect, and enforce the same, including, without limitation, giving testimony, and executing and delivering to the Company any and all applications, oaths, declarations, affidavits, waivers, assignments, and other documents and instruments as may be requested by the Company. The Participant hereby irrevocably grants the Company power of attorney to execute and deliver any such documents on the Participant's behalf in the Participant's name and to do all other lawfully permitted acts to transfer legal ownership of the Work Product to the Company and further the transfer, prosecution, issuance, and maintenance of all Intellectual Property Rights therein, to the full extent permitted by law, if the Participant does not promptly cooperate with the Company's request (without limiting the rights the Company shall have in such circumstances by operation of law). This power of attorney is coupled with an interest and shall not be affected by the Participant's subsequent incapacity.

4. Non-Solicitation Agreement.

(a) Solicitation of Employees. The Participant hereby agrees that for a period of twelve (12) months immediately following the termination of the Participant's employment relationship with the Employer for any reason, whether voluntary or involuntary, and whether with or without cause, the Participant shall neither directly or indirectly solicit, induce, recruit or encourage any of the Company's employees to leave their employment, or take away such employees, nor attempt to solicit, induce, recruit, encourage or take away employees of the Company, either for the Participant or for any other person or entity.

(b) The Participant understand that the obligation not to use Confidential Information in order to solicit the employment of the Company's employees is not limited to the twelve month period described above.

LAM RESEARCH CORPORATION
2015 Stock Incentive Plan
Restricted Stock Unit Award Agreement
EXHIBIT A
([Three/Two/One] Year Vesting)

Participant (Name & Employee Number):

Grant Date:

Number of RSUs:

Vesting Date(s): [Insert Number] RSUs on **[Insert Date]**

[Insert Number] RSUs on **[Insert Date]**

[Insert Number] RSUs on **[Insert Date]**

Leave of Absence: 31st day (or 91st day if reemployment guaranteed by statute or contract)

Exhibit 10.2

EXECUTION VERSION

AMENDMENT NO. 1
TO
SECOND AMENDED AND RESTATED CREDIT AGREEMENT

THIS AMENDMENT NO. 1 TO SECOND AMENDED AND RESTATED CREDIT AGREEMENT (this "Amendment"), dated as of December 7, 2022, is entered into by and among LAM RESEARCH CORPORATION, a Delaware corporation (the "Borrower"), the lending institutions party hereto (each a "Lender" and, collectively, the "Lenders") and JPMorgan Chase Bank, N.A., as Administrative Agent (the "Administrative Agent"). Capitalized terms used herein and not otherwise defined herein shall have the meanings given to them in the Amended Credit Agreement (as defined below).

WITNESSETH

WHEREAS, the Borrower, the Lenders and the Administrative Agent are parties to that certain Second Amended and Restated Credit Agreement dated as of June 17, 2021 (as amended, restated, supplemented or otherwise modified prior to the date hereof, the "Existing Credit Agreement");

WHEREAS, the Borrower has requested that the Lenders and the Administrative Agent make certain amendments to the Existing Credit Agreement; and

WHEREAS, the Lenders and the Administrative Agent are willing to amend the Existing Credit Agreement on the terms and conditions set forth herein.

NOW, THEREFORE, in consideration of the premises set forth above, the terms and conditions contained herein, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Borrower, the Administrative Agent and the Lenders hereby agree as follows:

Section 1. **Amendments to the Existing Credit Agreement**. Effective as of the date of satisfaction of the conditions of effectiveness set forth in Section 2 below (the "Amendment No. 1 Effective Date"), the parties hereto agree that the Existing Credit Agreement is hereby amended to delete the stricken text (indicated in the same manner as the following example: ~~stricken text~~) and to add the double-underlined text (indicated in the same manner as the following example: double-underlined text) as set forth on Exhibit A hereto (the Existing Credit Agreement as so modified and amended, collectively, the "Amended Credit Agreement"):

Section 2. **Conditions of Effectiveness.** This Amendment shall become effective and be deemed effective as of the date hereof, if, and only if:

(a) The Administrative Agent (or its counsel) shall have received either (i) counterparts of this Amendment duly executed by the Borrower, the Lenders and the Administrative Agent or (ii) written evidence satisfactory to the Administrative Agent (which may include facsimile or electronic transmission of an executed signature page of this Amendment) that such parties have executed counterparts of this Amendment.

(b) To the extent invoiced and due, all of the Lenders' and the Administrative Agent's accrued costs, fees and expenses through the date hereof (including the reasonable fees and expenses of legal counsel) required to be reimbursed or paid by the Borrower pursuant to any Loan Document shall have been fully paid.

Section 3. **Representations and Warranties of the Borrower.** The Borrower hereby represents and warrants as follows:

(a) This Amendment and the Credit Agreement as modified hereby constitute legal, valid and binding obligations of the Borrower, enforceable in accordance with their respective terms, subject to applicable bankruptcy, insolvency, reorganization, moratorium or other laws affecting creditors' rights generally and subject to general principles of equity, regardless of whether considered in a proceeding in equity or at law.

(b) Upon the effectiveness of this Amendment, (i) no Default or Event of Default has occurred and is continuing and (ii) the representations and warranties of the Borrower set forth in the Loan Documents are true and correct in all material respects (or in all respects if such representation or warranty is qualified by Material Adverse Effect or other materiality qualifier) with the same effect as though made on and as of the date hereof, except to the extent that any such representation or warranty specifically refers to an earlier date, in which case such representation or warranty is true and correct in all material respects (or in all respects if such representation or warranty is qualified by Material Adverse Effect or other materiality qualifier) as of such earlier date.

Section 4. Effect on the Existing Credit Agreement.

(a) Upon and after the occurrence of the Amendment No. 1 Effective Date, each reference in the Amended Credit Agreement, to "this Agreement," "hereunder," "hereof," "herein" or words of like import shall mean and be a reference to the Amended Credit Agreement.

(b) Except as specifically amended and modified above, the Amended Credit Agreement and all other documents, instruments and agreements executed and/or delivered in connection therewith shall remain in full force and effect, and are hereby ratified and confirmed.

(c) The execution, delivery and effectiveness of this Amendment shall neither, except as expressly provided herein, operate as a waiver of any right, power or remedy of the Lenders or the Administrative Agent, nor constitute a waiver of any provision of the Amended Credit Agreement or any other documents, instruments and agreements executed and/or delivered in connection therewith. The Administrative Agent and the Lenders expressly reserve all of their rights and remedies, including the right to institute enforcement actions in consequence of any existing Defaults or Events of Default, if any, not waived hereunder or otherwise at any time without further notice, under the Amended Credit Agreement, all other documents, instruments and agreements executed in connection therewith, and applicable law.

(d) The Amendment is a Loan Document pursuant to the Amended Credit Agreement.

Section 5. Costs and Expenses. The Borrower hereby affirms its obligations under Section 9.03 of the Credit Agreement to reimburse the Administrative Agent for all reasonable out-of- pocket expenses incurred by the Administrative Agent, including the reasonable fees, charges, and disbursements of counsel for the Administrative Agent, in connection with this Amendment.

Section 6. GOVERNING LAW. THIS AMENDMENT AND THE RIGHTS AND OBLIGATIONS OF THE PARTIES HEREUNDER SHALL BE GOVERNED BY, AND CONSTRUED AND INTERPRETED IN ACCORDANCE WITH, THE LAW OF THE STATE OF NEW YORK.

Section 7. Headings. Section headings in this Amendment are included herein for convenience of reference only and shall not constitute a part of this Amendment for any other purpose.

Section 8. Counterparts. This Amendment may be executed by one or more of the parties hereto on any number of separate counterparts, and all of said counterparts taken together shall be

deemed to constitute one and the same instrument. Section 9.06 of the Amended Credit Agreement shall apply to this Amendment, *mutatis mutandis*.

Section 9. No Novation. Neither the execution, delivery and acceptance of this Amendment nor any of the terms, covenants, conditions or other provisions set forth herein or in the Amended Credit Agreement are intended, nor shall they be deemed or construed, to effect a novation of any liens or indebtedness or other obligations under the Existing Credit Agreement or any other Loan Document (as defined in the Existing Credit Agreement) or to pay, extinguish, release, satisfy or discharge (w) all or any part of the indebtedness or other obligations evidenced by the Existing Credit Agreement, (x) the liability of any Person under the Existing Credit Agreement or the Loan Documents (as defined under the Existing Credit Agreement) executed and delivered in connection therewith, (y) the liability of any Person with respect to the Existing Credit Agreement or any indebtedness or other obligations evidenced thereby, or (z) any deeds of trust, mortgages, liens, security interests or contractual or legal rights securing all or any part of such indebtedness or other obligations.

The remainder of this page intentionally is blank.

IN WITNESS WHEREOF, this Amendment has been duly executed as of the day and year first above written.

LAM RESEARCH CORPORATION, as Borrower

By: /s/ Douglas R. Bettinger

Name: Douglas R. Bettinger

Title: Executive Vice President, Chief Financial Officer, and Chief Accounting Officer

JPMORGAN CHASE BANK, N.A.,
as Administrative Agent and individually as a Lender

By: /s/ Zachary Quan

Name: Zachary Quan

Title: Vice President

BNP PARIBAS,
as a Lender

By: /s/ Gregory R. Paul

Name: Gregory R. Paul
Title: Managing Director

By: /s/ George Ko

Name: George Ko
Title: Director

BANK OF AMERICA, N.A.,
as a Lender

By: /s/ Gloria Lopez Obeso

Name: Gloria Lopez Obeso

Title: Associate, Credit Officer

GOLDMAN SACHS BANK USA,
as a Lender

By: /s/ Keshia Leday

Name: Keshia Leday
Title: Authorized Signatory

CITIBANK, N.A.,
as a Lender

By: /s/ Carmen-Christina Kelleher

Name: Carmen-Christina Kelleher

Title: Vice President

BARCLAYS BANK PLC,
as a Lender

By: /s/ Warren Veech III

Name: Warren Veech III

Title: Vice President

MIZUHO BANK, LTD.,
as a Lender
By: /s/ John Davies
Name: John Davies
Title: Authorized Signatory

MUFG BANK, LTD.,
as a Lender
By: /s/ Lillian Kim
Name: Lillian Kim
Title: Director

DEUTSCHE BANK AG NEW YORK BRANCH,
as a Lender

By: /s/ Ming K. Chu

Name:	Ming K. Chu	ming.k.chu@db.com
Title:	Director	+1-212-250-5451

By: /s/ Marko Lukin

Name:	Marko Lukin	marko.lukin@db.com
Title:	Vice President	+1-212-250-7283

TRUIST BANK,
as a Lender

By: /s/ Carlos Cruz

Name: Carlos Cruz
Title: Director

HSBC BANK USA, NATIONAL ASSOCIATION,
as a Lender

By: /s/ Ilene Hernandez

Name: Ilene Hernandez

Title: Vice President

PNC BANK, NATIONAL ASSOCIATION,
as a Lender

By: /s/ Skyler Zweifel

Name: Skyler Zweifel

Title: Vice President

DBS BANK LTD.,
as a Lender
By: /s/ Kate Khoo

Name: Kate Khoo
Title: Vice President

EXHIBIT A

Amendments to Existing Credit Agreement

[See attached.]

~~EXECUTION COPY~~

SECOND AMENDED AND RESTATED CREDIT AGREEMENT

dated as of

June 17, 2021

among

LAM RESEARCH CORPORATION

the Lenders Party Hereto

JPMORGAN CHASE BANK, N.A.,
as Administrative Agent

GOLDMAN SACHS BANK USA, BARCLAYS BANK PLC, CITIBANK, N.A.,
BNP PARIBAS and BANK OF AMERICA, N.A.,
as Syndication Agents

DEUTSCHE BANK SECURITIES INC.,
MIZUHO BANK, LTD., MUFG BANK, LTD. and TRUIST BANK,
as Documentation Agents

and

BNP PARIBAS,
as Sustainability Structuring Agent

JPMORGAN CHASE BANK, N.A., GOLDMAN SACHS BANK USA, BARCLAYS BANK PLC,
CITIBANK, N.A., BNP PARIBAS SECURITIES CORP. AND BOFA SECURITIES, INC.
as Joint Bookrunners and Joint Lead Arrangers

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SECOND AMENDED AND RESTATED CREDIT AGREEMENT (this "Agreement"), dated as of June 17, 2021 among LAM RESEARCH CORPORATION, the LENDERS from time to time party hereto and JPMORGAN CHASE BANK, N.A., as Administrative Agent.

WHEREAS, the Borrower, the lenders party thereto and JPMorgan Chase Bank, N.A., as administrative agent thereunder, are currently party to the Amended and Restated Credit Agreement, dated as of November 10, 2015 (as amended, supplemented or otherwise modified prior to the Effective Date, the "Existing Credit Agreement");

WHEREAS, the Borrower, the Lenders party hereto and the Administrative Agent have agreed (a) to enter into this Agreement in order to (i) amend and restate the Existing Credit Agreement in its entirety, (ii) extend the maturity date in respect of the existing revolving credit facility under the Existing Credit Agreement, (iii) re-evidence the "Obligations" under, and as defined in, the Existing Credit Agreement, which shall be repayable in accordance with the terms of this Agreement, and (iv) set forth the terms and conditions under which the Lenders will, from time to time, make loans and extend other financial accommodations to or for the benefit of the Borrower and (b) that the Departing Lender shall cease to be a party to the Existing Credit Agreement as more specifically set forth in Section 1.10 of this Agreement;

WHEREAS, it is the intent of the parties hereto that this Agreement not constitute a novation of the obligations and liabilities of the parties under the Existing Credit Agreement or be deemed to evidence or constitute full repayment of such obligations and liabilities, but that this Agreement amend and restate in its entirety the Existing Credit Agreement and re-evidence the obligations and liabilities of the Borrower and the Subsidiaries outstanding thereunder, which shall be payable in accordance with the terms hereof; and

WHEREAS, it is also the intent of the Borrower to confirm that all obligations under the applicable "Loan Documents" (as referred to and defined in the Existing Credit Agreement) shall continue in full force and effect as modified or restated by the Loan Documents (as referred to and defined herein) and that, from and after the Effective Date, all references to the "Credit Agreement" contained in any such existing "Loan Documents" shall be deemed to refer to this Agreement;

NOW, THEREFORE, in consideration of the premises and the mutual covenants contained herein, the parties hereto agree that the Existing Credit Agreement is hereby amended and restated as follows:

ARTICLE I

Definitions

SECTION 1.01. Defined Terms. As used in this Agreement, the following terms have the meanings specified below:

"ABR", when used in reference to any Loan or Borrowing, refers to a Loan, or the Loans comprising such Borrowing, bearing interest at a rate determined by reference to the Alternate Base Rate. All ABR Loans shall be denominated in Dollars.

"Adjusted Daily Simple RFR" means, (i) with respect to any RFR Borrowing denominated in Pounds Sterling, an interest rate per annum equal to (a) the Daily Simple RFR for Pounds Sterling, plus (b) 0.10% and (ii) with respect to any RFR Borrowing denominated in Dollars, an interest rate per annum equal to (a) the Daily Simple RFR for Dollars, plus (b) 0.10%; provided that if the Adjusted Daily Simple RFR as so determined would be less than the Floor, such rate shall be deemed to be equal to the Floor for the purposes of this Agreement.

"Adjusted EURIBOR Rate" means, with respect to any Term Benchmark Borrowing denominated in Euros for any Interest Period, an interest rate per annum equal to (a) the EURIBOR Rate for such Interest Period multiplied by (b) the Statutory Reserve Rate; provided that if the Adjusted EURIBOR Rate as so determined would be less than the Floor, such rate shall be deemed to be equal to the Floor for the purposes of this Agreement.

"Adjusted ~~LIBO~~Term SOFR Rate" means, with respect to any Term Benchmark Borrowing denominated in Dollars for any Interest Period, an interest rate per annum ~~(rounded upwards, if necessary, to the next 1/16 of 1%)~~ equal to (a) the ~~LIBO~~Term SOFR Rate for such Interest Period ~~multiplied by (b) the Statutory Reserve Rate~~, plus (b) 0.10%; provided that if the Adjusted Term SOFR Rate as so determined would be less than the Floor, such rate shall be deemed to be equal to the Floor for the purposes of this Agreement.

"Adjusted TIBOR Rate" means, with respect to any Term Benchmark Borrowing denominated in Japanese Yen for any Interest Period, an interest rate per annum equal to (a) the TIBOR Rate for such Interest Period multiplied by (b) the Statutory Reserve Rate; provided that if the Adjusted TIBOR Rate as so determined would be less than the Floor, such rate shall be deemed to be equal to the Floor for the purposes of this Agreement.

"Administrative Agent" means JPMorgan Chase Bank, N.A. (including its branches and affiliates), in its capacity as administrative agent for the Lenders hereunder.

"Administrative Questionnaire" means an Administrative Questionnaire in a form supplied by the Administrative Agent.

"Affected Financial Institution" means (a) any EEA Financial Institution or (b) any UK Financial Institution.

"Affiliate" means, with respect to a specified Person, another Person that directly, or indirectly through one or more intermediaries, Controls or is Controlled by or is under common Control with the Person specified.

"Aggregate Commitment" means the aggregate of the Commitments of all of the Lenders, as reduced or increased from time to time pursuant to the terms and conditions hereof. As of the Effective Date, the Aggregate Commitment is $1,500,000,000.

"Agreed Currencies" means (i) Dollars, (ii) euro, (iii) Pounds Sterling, (iv) Japanese Yen and (v) any other currency (x) that is a lawful currency (other than Dollars) that is readily available and freely transferable and convertible into Dollars and (y) that is agreed to by the Administrative Agent and each of the Lenders.

"Agreement" has the meaning assigned to such term in the preamble hereto.

"Alternate Base Rate" means, for any day, a rate per annum equal to the greatest of (a) the Prime Rate in effect on such day, (b) the NYFRB Rate in effect on such day plus 1/2 of 1% and (c) the Adjusted ~~LIBO~~Term SOFR Rate for a one month Interest Period ~~in Dollars on~~as published two U.S. Government Securities Business Days prior to such day (or if such day is not a U.S. Government Securities Business Day, the immediately preceding U.S. Government Securities Business Day) plus 1%, provided that~~,~~ for the ~~avoidance of doubt~~purpose of this definition, the Adjusted ~~LIBO~~Term SOFR Rate for any day shall be based on the ~~rate LIBO Screen Rate (or if the LIBO Screen Rate is not available for such one month Interest Period, the LIBO Interpolated Rate)~~Term SOFR Reference Rate at approximately ~~11:00 a.m. London~~5:00 a.m. Chicago time on such day (or any amended publication time for the Term SOFR Reference Rate, as specified by the CME Term SOFR Administrator in the Term SOFR Reference Rate methodology). Any change in the Alternate Base Rate due to a change in the Prime Rate, the NYFRB Rate or the Adjusted ~~LIBO~~Term SOFR Rate shall be effective from and including the effective date of such change in the Prime Rate, the NYFRB Rate or the Adjusted ~~LIBO~~Term SOFR Rate, respectively. If the Alternate Base Rate is being used as an alternate rate of interest pursuant to Section 2.14 (for the avoidance of doubt, only until the Benchmark Replacement has been determined pursuant to Section 2.14(b)), then the Alternate Base Rate shall be the greater of clauses (a) and (b) above and shall be determined without reference to clause (c) above. For the avoidance of doubt, if the Alternate Base Rate ~~shall~~as determined pursuant to the foregoing would be less than zero, such rate shall be deemed to be zero for purposes of this Agreement.

"Amendment No. 1" means that certain Amendment No. 1 to Credit Agreement, dated as of the Amendment No. 1 Effective Date, among the Borrower, the Lenders party thereto and the Administrative Agent.

"Amendment No. 1 Effective Date" means December 7, 2022.

"Anti-Corruption Laws" means all laws, rules, and regulations of any jurisdiction applicable to the Borrower or its Subsidiaries from time to time concerning or relating to bribery or corruption.

"Applicable Percentage" means, with respect to any Lender, the percentage of the Aggregate Commitment represented by such Lender's Commitment; provided that, in the case of Section 2.22 when a Defaulting Lender shall exist, "Applicable Percentage" shall mean the percentage of the Aggregate Commitment (disregarding any Defaulting Lender's Commitment) represented by such Lender's Commitment. If the Commitments have terminated or expired, the Applicable Percentages shall be determined based upon the Commitments most recently in effect, giving effect to any assignments and to any Lender's status as a Defaulting Lender at the time of determination.

"Applicable Rate" means, for any day, with respect to any ABR Loan, Term Benchmark Revolving Loan, RFR Revolving Loan or CBR Loan or with respect to the facility fees payable hereunder, as the case may be, the applicable rate *per annum* set forth below under the caption "ABR Spread", "Term Benchmark Spread", "RFR Spread", "CBR Spread" or "Facility Fee Rate", as the case may be, based upon the ratings by Moody's and S&P, respectively, applicable on such date to the Index Debt, subject to any Sustainability Adjustment in effect at such time as provided below:

	Index Debt Ratings (Moody's/S&P)	**Facility Fee**	**Term Benchmark Spread**	**RFR Spread**	**CBR Spread**	**ABR Spread**
Category 1	A2/A or higher	0.07%	0.805%	0.805%	0.805%	0%
Category 2	A3/A-	0.10%	0.90%	0.90%	0.90%	0%
Category 3	Baa1/BBB+	0.125%	1.00%	1.00%	1.00%	0%
Category 4	Baa2/BBB	0.15%	1.10%	1.10%	1.10%	0.10%
Category 5	Baa3/BBB- or lower	0.20%	1.30%	1.30%	1.30%	0.30%

For purposes of the foregoing: (i) if either Moody's or S&P shall not have in effect a rating for the Index Debt (other than by reason of the circumstances referred to in the last sentence of this definition), then such rating agency shall be deemed to have established a rating in Category 5; (ii) if the ratings established or deemed to have been established by Moody's and S&P for the Index Debt shall fall within different categories, the category then in effect shall be based on the higher of the two ratings unless one of the two ratings is two or more categories lower than the other, in which case the category then in effect shall be determined by reference to the category next below that of the higher of the two ratings; and (iii) if the ratings established or deemed to have been established by Moody's and S&P for the Index Debt shall be changed (other than as a result of a change in the rating system of Moody's or S&P), such change shall be effective as of the date on which it is first announced by the applicable rating agency, irrespective of when notice of such change shall have been furnished by the Borrower to the Administrative Agent and the Lenders pursuant to the Loan Documents or otherwise. Each change in the Applicable Rate shall apply during the period commencing on the effective date of such change and ending on the date immediately preceding the effective date of the next such change. If the rating system of Moody's or S&P shall change, or if either such rating agency shall cease to be in the business of rating corporate debt obligations, the Borrower and the Lenders shall negotiate in good faith to amend this definition to reflect such changed rating system or the unavailability of ratings from such rating agency and, pending the effectiveness of any such amendment, the Applicable Rate shall be determined by reference to the rating most recently in effect prior to such change or cessation.

During any applicable Sustainability Adjustment Period, the Applicable Rate shall be decreased or increased, as the case may be, by the Sustainability Adjustment (if any) in effect during such Sustainability Adjustment Period; provided, that in no event shall any Applicable Rate be less than zero.

"Approved Electronic Platform" has the meaning assigned to it in in Section 8.03(a).

"Approved Fund" has the meaning assigned to such term in Section 9.04(b).

"Arrangers" means JPMorgan Chase Bank, N.A., Goldman Sachs Bank USA, Barclays Bank PLC, Citibank, N.A., BNP Paribas Securities Corp. and BofA Securities, Inc., in their respective capacities as a Joint Lead Arranger and Joint Bookrunner with respect hereto.

"Assignment and Assumption" means an assignment and assumption agreement entered into by a Lender and an assignee (with the consent of any party whose consent is required by Section 9.04), and accepted by the Administrative Agent, in the form of Exhibit A or any other form (including electronic records generated by the use of an electronic platform) approved by the Administrative Agent.

"Attributable Debt" means, with respect to any Sale and Leaseback Transaction, the present value (discounted at the rate set forth or implicit in the terms of the lease included in such Sale and Leaseback Transaction) of the total obligations of the lessee for rental payments (other than amounts required to be paid on account of Taxes, maintenance, repairs, insurance, assessments, utilities, operating and labor costs and other items that do not constitute payments for property rights) during the remaining term of the lease included in such Sale and Leaseback Transaction (including any period for which such lease has been extended). In the case of any lease that is terminable by the lessee upon payment of a penalty, the Attributable Debt shall be the lesser of the Attributable Debt determined assuming termination on the first date such lease may be terminated (in which case the Attributable Debt shall also include the amount of the penalty, but no rent shall be considered as required to be paid under such lease subsequent to the first date upon which it may be so terminated) or the Attributable Debt determined assuming no such termination.

"Augmenting Lender" has the meaning assigned to such term in Section 2.20.

"Availability Period" means the period from and including the Effective Date to but excluding the earlier of the Maturity Date and the date of termination of the Commitments.

"Available Tenor" means, as of any date of determination and with respect to the then-current Benchmark for any Agreed Currency, as applicable, any tenor for such Benchmark (or component thereof) or payment period for interest calculated with reference to such Benchmark (or component thereof), as applicable, that is or may be used for determining the length of an Interest Period for any term rate or otherwise, for determining any frequency of making payments of interest calculated pursuant to this Agreement as of such date and not including, for the avoidance of doubt, any tenor for such Benchmark that is then-removed from the definition of "Interest Period" pursuant to clause (~~f~~e) of Section 2.14.

"Bail-In Action" means the exercise of any Write-Down and Conversion Powers by the applicable Resolution Authority in respect of any liability of an Affected Financial Institution.

"Bail-In Legislation" means (a) with respect to any EEA Member Country implementing Article 55 of Directive 2014/59/EU of the European Parliament and of the Council of the European Union, the implementing law, regulation rule or requirement for such EEA Member Country from time to time which is described in the EU Bail-In Legislation Schedule and (b) with respect to the United Kingdom, Part I of the United Kingdom Banking Act 2009 (as amended from time to time) and any other law, regulation or rule applicable in the United Kingdom relating to the resolution of unsound or failing banks, investment firms or other financial institutions or their affiliates (other than through liquidation, administration or other insolvency proceedings).

"Banking Services" means each and any of the following bank services provided to the Borrower or any Subsidiary by any Lender or any of its Affiliates: (a) credit cards for commercial customers (including, without limitation, commercial credit cards and purchasing cards), (b) stored value cards and (c) treasury management services (including, without limitation, controlled disbursement, automated clearinghouse transactions, return items, overdrafts and interstate depository network services).

"Banking Services Agreement" means any agreement entered into by the Borrower or any Subsidiary in connection with Banking Services.

"Bankruptcy Event" means, with respect to any Person, such Person has, or has a direct or indirect parent company that has, (i) become the subject of a bankruptcy or insolvency proceeding, or has had a receiver, conservator, trustee, administrator, custodian, assignee for the benefit of creditors or similar Person charged with the reorganization or liquidation of its business appointed for it, or, in the good faith determination of the Administrative Agent, has taken any action in furtherance of, or indicating its consent to, approval of, or acquiescence in, any such proceeding or appointment, (ii) has had any order for relief in such proceeding entered in respect thereof or (iii) become the subject of a Bail-in Action; provided that a Bankruptcy Event shall not result solely by virtue of any ownership interest, or the acquisition of any ownership interest, in such Person by a Governmental Authority or instrumentality thereof, provided, further, that such ownership interest does not result in or provide such Person with immunity from the jurisdiction of courts within the United States or from the enforcement of judgments or writs of attachment on its assets or permit such Person (or such Governmental Authority or instrumentality) to reject, repudiate, disavow or disaffirm any contracts or agreements made by such Person.

"Benchmark" means, initially, with respect to any (i) RFR Loan in any Agreed Currency, the applicable Relevant Rate for such Agreed Currency or (ii) Term Benchmark Loan, the Relevant Rate for ~~such~~the applicable Agreed Currency; provided that if a Benchmark Transition Event~~, a Term SOFR Transition Event, an Early Opt-in Election or an Other Benchmark Rate Election, as applicable, and its~~ and the related Benchmark Replacement Date have occurred with respect to the applicable Relevant Rate or the then-current Benchmark for such Agreed Currency, then "Benchmark" means the applicable Benchmark Replacement to the extent that such Benchmark Replacement has replaced such prior benchmark rate pursuant to clause (b) ~~or clause (c)~~ of Section 2.14.

"Benchmark Replacement" means, for any Available Tenor, the first alternative set forth in the order below that can be determined by the Administrative Agent for the applicable Benchmark Replacement Date; provided that, in the case of any Loan denominated in ~~an~~a Foreign Currency ~~or in the case of an Other Benchmark Rate Election~~, "Benchmark Replacement" shall mean the alternative set forth in (~~3~~2) below:

~~(1) in the case of any Loan denominated in Dollars, the sum of: (a) Term SOFR and (b) the related Benchmark Replacement Adjustment;~~

(~~2~~1) in the case of any Loan denominated in Dollars, the sum of: (a) Daily Simple SOFR and (b) the related Benchmark Replacement Adjustment;

(~~3~~2) the sum of: (a) the alternate benchmark rate that has been selected by the Administrative Agent and the Borrower as the replacement for the then-current Benchmark for the applicable Corresponding Tenor giving due consideration to (i) any selection or recommendation of a replacement benchmark rate or the mechanism for determining such a rate by the Relevant Governmental Body or (ii) any evolving or then-prevailing market convention for determining a benchmark rate as a replacement for the then-current Benchmark for syndicated credit facilities denominated in the applicable Agreed Currency at such time in the United States and (b) the related Benchmark Replacement Adjustment;

~~*provided that*, in the case of clause (1), such Unadjusted Benchmark Replacement is displayed on a screen or other information service that publishes such rate from time to time as selected by the Administrative Agent in its reasonable discretion; *provided further* that, in the case of clause (3), when such clause is used to determine the Benchmark Replacement in connection with the occurrence of an Other Benchmark Rate Election, the alternate benchmark rate selected by the Administrative Agent and the Borrower shall be the term benchmark rate that is used in lieu of a LIBOR-based rate in the relevant other Dollar-denominated syndicated credit facilities; *provided further* that, notwithstanding anything to the contrary in this Agreement or in any other Loan Document, upon the occurrence of a Term SOFR Transition Event, and the delivery of a Term SOFR Notice, on the applicable Benchmark Replacement Date the "Benchmark Replacement" shall revert to and shall be deemed to be the sum of (a) Term SOFR and (b) the related Benchmark Replacement Adjustment, as set forth in clause (1) of this definition (subject to the first proviso above).~~

If the Benchmark Replacement as determined pursuant to clause (1)~~;~~ or (2~~) or (3~~) above would be less than the Floor, the Benchmark Replacement will be deemed to be the Floor for the purposes of this Agreement and the other Loan Documents.

"Benchmark Replacement Adjustment" means, with respect to any replacement of the then-current Benchmark with an Unadjusted Benchmark Replacement for any applicable Interest Period and Available Tenor for any setting of such Unadjusted Benchmark Replacement~~:~~

the spread adjustment, or method for calculating or determining such spread adjustment, (which may be a positive or negative value or zero) that has been selected by ~~(1) for purposes of clauses (1) and (2) of the definition of "Benchmark Replacement," the first alternative set forth in the order below that can be determined by the Administrative Agent:~~

~~(a) the spread adjustment, or method for calculating or determining such spread adjustment, (which may be a positive or negative value or zero) as of the Reference Time such Benchmark Replacement is first set for such Interest Period that has been selected or recommended by the Relevant Governmental Body for the replacement of such Benchmark with the applicable Unadjusted Benchmark Replacement for the applicable Corresponding Tenor;~~

~~(b) the spread adjustment (which may be a positive or negative value or zero) as of the Reference Time such Benchmark Replacement is first set for such Interest Period that would apply to the fallback rate for a derivative transaction referencing the ISDA Definitions to be effective upon an index cessation event with respect to such Benchmark for the applicable Corresponding Tenor; and~~

~~(2) for purposes of clause (3) of the definition of "Benchmark Replacement," the spread adjustment, or method for calculating or determining such spread adjustment, (which may be a positive or negative value or zero) that has been selected by the~~the Administrative Agent and the Borrower for the applicable Corresponding Tenor giving due consideration to (i) any selection or recommendation of a spread adjustment, or method for calculating or determining such spread adjustment, for the replacement of such Benchmark with the applicable Unadjusted Benchmark Replacement by the Relevant Governmental Body on the applicable Benchmark Replacement Date and/or (ii) any evolving or then-prevailing market convention for determining a spread adjustment, or method for calculating or determining such spread adjustment, for the replacement of such Benchmark with the applicable Unadjusted Benchmark Replacement for syndicated credit facilities denominated in the applicable Agreed Currency at such time~~;~~.

~~*provided* that, in the case of clause (1) above, such adjustment is displayed on a screen or other information service that publishes such Benchmark Replacement Adjustment from time to time as selected by the Administrative Agent in its reasonable discretion.~~

"Benchmark Replacement Conforming Changes" means, with respect to any Benchmark Replacement and/or any Term Benchmark Loan denominated in Dollars, any technical, administrative or operational changes (including changes to the definition of "Alternate Base Rate," the definition of "Business Day~~;~~", the definition of "U.S. Government Securities Business Day", the definition of "RFR Business Day", the definition of "Interest Period," timing and frequency of determining rates and making payments of interest, timing of borrowing requests or prepayment, conversion or continuation notices, length of lookback periods, the applicability of breakage provisions, and other technical, administrative or operational matters) that the Administrative Agent decides may be appropriate to reflect the adoption and implementation of such Benchmark ~~Replacement~~ and to permit the administration thereof by the Administrative Agent in a manner substantially consistent with market practice (or, if the Administrative Agent decides that adoption of any portion of such market practice is not administratively feasible or if the Administrative Agent determines that no market practice for the administration of such Benchmark ~~Replacement~~ exists, in such other manner of administration as the Administrative Agent decides is reasonably necessary in connection with the administration of this Agreement and the other Loan Documents).

"Benchmark Replacement Date" means, with respect to any Benchmark, the earliest to occur of the following events with respect to such then-current Benchmark:

(1) in the case of clause (1) or (2) of the definition of "Benchmark Transition Event," the later of (a) the date of the public statement or publication of information referenced therein and (b) the date on which the administrator of such Benchmark (or the published component used in the calculation thereof) permanently or indefinitely ceases to provide all Available Tenors of such Benchmark (or such component thereof); or

(2) in the case of clause (3) of the definition of "Benchmark Transition Event," the first date on which such Benchmark (or the published component used in the calculation thereof) has been determined and announced by the regulatory supervisor for the administrator of such Benchmark (or such component thereof) to be no longer representative; provided, that such non-representativeness will be determined by reference to the most recent statement or publication referenced in such clause (e3) and even if any Available Tenor of such Benchmark (or such component thereof) continues to be provided on such date;.

~~(3) in the case of a Term SOFR Transition Event, the date that is thirty (30) days after the date a Term SOFR Notice is provided to the Lenders and the Borrower pursuant to Section 2.14(c); or~~

~~(4) in the case of an Early Opt-in Election or an Other Benchmark Rate Election, the sixth (6th) Business Day after the date notice of such Early Opt-in Election or Other Benchmark Rate Election, as applicable, is provided to the Lenders, so long as the Administrative Agent has not received, by 5:00 p.m. (New York City time) on the fifth (5th) Business Day after the date notice of such Early Opt-in Election or Other Benchmark Rate Election, as applicable, is provided to the Lenders, written notice of objection to such Early Opt-in Election or Other Benchmark Rate Election, as applicable, from Lenders comprising the Required Lenders.~~

For the avoidance of doubt, (i) if the event giving rise to the Benchmark Replacement Date occurs on the same day as, but earlier than, the Reference Time in respect of any determination, the Benchmark Replacement Date will be deemed to have occurred prior to the Reference Time for such determination and (ii) the "Benchmark Replacement Date" will be deemed to have occurred in the case of clause (1) or (2) with respect to any Benchmark upon the occurrence of the applicable event or events set forth therein with respect to all then-current Available Tenors of such Benchmark (or the published component used in the calculation thereof).

"Benchmark Transition Event" means, with respect to any Benchmark, the occurrence of one or more of the following events with respect to such then-current Benchmark:

(1) a public statement or publication of information by or on behalf of the administrator of such Benchmark (or the published component used in the calculation thereof) announcing that such administrator has ceased or will cease to provide all Available Tenors of such Benchmark (or such component thereof), permanently or indefinitely, provided that, at the time of such statement or publication, there is no successor administrator that will continue to provide any Available Tenor of such Benchmark (or such component thereof);

(2) a public statement or publication of information by the regulatory supervisor for the administrator of such Benchmark (or the published component used in the calculation thereof), the Federal Reserve Board, the NYFRB, the CME Term SOFR Administrator, the central bank for the Agreed Currency applicable to such Benchmark, an insolvency official with jurisdiction over the administrator for such Benchmark (or such component), a resolution authority with jurisdiction over the administrator for such Benchmark (or such component), in each case, or a court or an entity with similar insolvency or resolution authority over the administrator for such Benchmark (or such component), in each case, which states that the administrator of such Benchmark (or such component) has ceased or will cease to provide all Available Tenors of such Benchmark (or such component thereof) permanently or indefinitely; provided that, at the time of such statement or publication, there is no successor administrator that will continue to provide any Available Tenor of such Benchmark (or such component thereof); or

(3) a public statement or publication of information by the regulatory supervisor for the administrator of such Benchmark (or the published component used in the calculation thereof) announcing that all Available Tenors of such Benchmark (or such component thereof) are no longer, or as of a specified future date will no longer be, representative.

For the avoidance of doubt, a "Benchmark Transition Event" will be deemed to have occurred with respect to any Benchmark if a public statement or publication of information set forth above has occurred with respect to each then-current Available Tenor of such Benchmark (or the published component used in the calculation thereof).

"Benchmark Unavailability Period" means, with respect to any Benchmark, the period (if any) (x) beginning at the time that a Benchmark Replacement Date pursuant to clauses (1) or (2) of that definition has occurred if, at such time, no Benchmark Replacement has replaced such then-current Benchmark for all purposes hereunder and under any Loan Document in accordance with Section 2.14 and (y) ending at the time that a Benchmark Replacement has replaced such then-current Benchmark for all purposes hereunder and under any Loan Document in accordance with Section 2.14.

"Beneficial Ownership Regulation" means 31 C.F.R. § 1010.230.

"Benefit Plan" means any of (a) an "employee benefit plan" (as defined in Section 3(3) of ERISA) that is subject to Title I of ERISA, (b) a "plan" as defined in Section 4975 of the Code to which Section 4975 of the Code applies, and (c) any Person whose assets include (for purposes of the Plan Asset Regulations or otherwise for purposes of Title I of ERISA or Section 4975 of the Code) the assets of any such "employee benefit plan" or "plan".

"BHC Act Affiliate" of a party means an "affiliate' (as such term is defined under, and interpreted in accordance with, 12 U.S.C. 1841(k)) of such party.

"Board" means the Board of Governors of the Federal Reserve System of the United States of America.

"Borrower" means Lam Research Corporation, a Delaware corporation.

"Borrowing" means (a) Revolving Loans of the same Type, made, converted or continued on the same date and, in the case of Term Benchmark Loans, as to which a single Interest Period is in effect or (b) a Swingline Loan.

"Borrowing Request" means a request by the Borrower for a Revolving Borrowing in accordance with Section 2.03 in the form attached hereto as Exhibit H-1 or any other form approved by the Administrative Agent.

"Business Day" means, any day (other than a Saturday or a Sunday) on which banks are open for business in New York City; provided that, ~~(a) in relation to Loans denominated in Pounds Sterling and in relation to the calculation or computation of LIBOR, any day (other than a Saturday or a Sunday) on which banks are open for business in London, (b~~in addition to the foregoing, a Business Day shall be (a) in relation to Loans denominated in Japanese Yen and in relation to the calculation or computation of TIBOR or the Japanese Prime Rate, any day (other than a Saturday or a Sunday) on which banks are open for general business in Japan, (~~c~~b) in relation to Loans denominated in Euros and in relation to the calculation or computation of EURIBOR, any day which is a ~~TARGET2~~TARGET Day ~~and~~, (~~d~~c) in relation to RFR Loans and any interest rate settings, fundings, disbursements, settlements or payments of any such RFR Loan, or any other dealings in the applicable Agreed Currency of such RFR Loan, any such day that is only an RFR Business Day~~.~~ and (d) in relation to Loans referencing the Adjusted Term SOFR Rate and any interest rate settings, fundings, disbursements, settlements or payments of any such Loans referencing the Adjusted Term SOFR Rate or any other dealings of such Loans referencing the Adjusted Term SOFR Rate, any such day that is a U.S. Government Securities Business Day.

"Capital Lease Obligations" of any Person means the obligations of such Person to pay rent or other amounts under any lease of (or other arrangement conveying the right to use) real or personal property, or a combination thereof, which obligations are required to be classified and accounted for as capital lease obligations on

a balance sheet of such Person under GAAP, and the amount of such obligations shall be the capitalized amount thereof determined in accordance with GAAP.

"CBR Loan" means a Loan that bears interest at a rate determined by reference to the Central Bank Rate or the Japanese Prime Rate.

"CBR Spread" means the Applicable Rate, applicable to such Loan that is replaced by a CBR Loan.

"Central Bank Rate" means, ~~(A)~~ the greater of (~~i~~I)(A) for any Loan denominated in (a) Pounds Sterling, the Bank of England (or any successor thereto)'s "Bank Rate" as published by the Bank of England (or any successor thereto) from time to time, (b) Euro, one of the following three rates as may be selected by the Administrative Agent in its reasonable discretion: (1) the fixed rate for the main refinancing operations of the European Central Bank (or any successor thereto), or, if that rate is not published, the minimum bid rate for the main refinancing operations of the European Central Bank (or any successor thereto), each as published by the European Central Bank (or any successor thereto) from time to time, (2) the rate for the marginal lending facility of the European Central Bank (or any successor thereto), as published by the European Central Bank (or any successor thereto) from time to time or (3) the rate for the deposit facility of the central banking system of the Participating Member States, as published by the European Central Bank (or any successor thereto) from time to time, (c) Japanese Yen, the "short-term prime lending rate" as publicly announced by the Bank of Japan (or any successor thereto) from time to time, and (d) any other Foreign Currency determined after the Effective Date, a central bank rate as determined by the Administrative Agent in its reasonable discretion ~~and (ii) 0.00%~~; plus (B) the applicable Central Bank Rate Adjustment and (II) the Floor.

"Central Bank Rate Adjustment" means, for any day, for any Loan denominated in (a) Euro, a rate equal to the difference (which may be a positive or negative value or zero) of (i) the average of the Adjusted EURIBOR Rate for the five most recent Business Days preceding such day for which the EURIBOR Screen Rate was available (excluding, from such averaging, the highest and the lowest Adjusted EURIBOR Rate applicable during such period of five Business Days) minus (ii) the Central Bank Rate in respect of Euro in effect on the last Business Day in such period, (b) Pounds Sterling, a rate equal to the difference (which may be a positive or negative value or zero) of (i) the average of ~~SONIA~~Adjusted Daily Simple RFR for Pounds Sterling Borrowings for the five most recent RFR Business Days preceding such day for which ~~SONIA~~Adjusted Daily Simple RFR for Pounds Sterling Borrowings was available (excluding, from such averaging, the highest and the lowest ~~SONIA~~such Adjusted Daily Simple RFR applicable during such period of five RFR Business Days) minus (ii) the Central Bank Rate in respect of Pounds Sterling in effect on the last RFR Business Day in such period, (c) Japanese Yen, a rate equal to the difference (which may be a positive or negative value or zero) of (i) the average of the TIBOR Rate for the five most recent Business Days preceding such day for which the TIBOR Screen Rate was available (excluding, from such averaging, the highest and the lowest TIBOR Rate applicable during such period of five Business Days) minus (ii) the Central Bank Rate in respect of Japanese Yen in effect on the last RFR Business Day in such period and (d) any other Foreign Currency determined after the Effective Date, a Central Bank Rate Adjustment as determined by the Administrative Agent in its reasonable discretion. For purposes of this definition, (x) the term Central Bank Rate shall be determined disregarding clause (B) of the definition of such term and (y) ~~each of~~ the EURIBOR Rate ~~and the TIBOR Rate~~ on any day shall be based on the EURIBOR Screen Rate ~~or the TIBOR Screen Rate, as applicable,~~ on such day at approximately the time referred to in the definition of such term for deposits in the applicable Agreed Currency for a maturity of one month ~~(or, in the event the EURIBOR Screen Rate or the TIBOR Screen Rate, as applicable, for deposits in the applicable Agreed Currency is not available for such maturity of one month, shall be based on the EURIBOR Interpolated Rate or the TIBOR Interpolated Rate, as applicable, as of such time); provided that if such rate shall be less than 0.00%, such rate shall be deemed to be 0.00%.~~

"Change in Control" means (a) the acquisition of ownership, directly or indirectly, beneficially or of record, by any Person or group (within the meaning of the Securities Exchange Act of 1934 and the rules of the SEC thereunder as in effect on the date hereof), of Equity Interests representing more than 40% of the aggregate ordinary voting power represented by the issued and outstanding Equity Interests of the Borrower; or (b) occupation of a majority of the seats (other than vacant seats) on the board of directors of the Borrower by Persons who were neither (i) approved by the board of directors of the Borrower nor (ii) appointed by directors so approved.

"Change in Law" means the occurrence, after the date of this Agreement (or with respect to any Lender, if later, the date on which such Lender becomes a Lender), of any of the following: (a) the adoption or taking effect of any law, rule, regulation or treaty, (b) any change in any law, rule, regulation or treaty or in the administration, interpretation, implementation or application thereof by any Governmental Authority, or (c) the making or issuance of any request, rules, guideline, requirement or directive (whether or not having the force of law) by any Governmental Authority; provided however, that notwithstanding anything herein to the contrary, (i) the Dodd-Frank Wall Street Reform and Consumer Protection Act and all requests, rules, guidelines, requirements and directives thereunder, issued in connection therewith or in implementation thereof, and (ii) all requests, rules, guidelines, requirements and directives promulgated by the Bank for International Settlements, the Basel Committee on Banking Supervision (or any successor or similar authority) or the United States or foreign regulatory authorities, in each case pursuant to Basel III, shall in each case be deemed to be a "Change in Law" regardless of the date enacted, adopted, issued or implemented.

"Charges" has the meaning assigned to such term in Section 9.15.

"Class", when used in reference to any Loan or Borrowing, refers to whether such Loan, or the Loans comprising such Borrowing, are Revolving Loans or Swingline Loans.

"CME Term SOFR Administrator" means CME Group Benchmark Administration Limited as administrator of the forward-looking term Secured Overnight Financing Rate (SOFR) (or a successor administrator).

"Code" means the Internal Revenue Code of 1986, as amended.

"Commitment" means, with respect to each Lender, the commitment of such Lender to make Revolving Loans and to acquire participations in Letters of Credit and Swingline Loans hereunder, expressed as an amount representing the maximum aggregate amount of such Lender's Revolving Credit Exposure hereunder, as such commitment may be (a) reduced or terminated from time to time pursuant to Section 2.09, (b) increased from time to time pursuant to Section 2.20 and (c) reduced or increased from time to time pursuant to assignments by or to such Lender pursuant to Section 9.04. The initial amount of each Lender's Commitment is set forth on Schedule 2.01, or in the Assignment and Assumption or other documentation or record (as such term is defined in Section 9-102(a)(70) of the New York Uniform Commercial Code) contemplated hereby pursuant to which such Lender shall have assumed its Commitment, as applicable.

"Commodity Exchange Act" means the Commodity Exchange Act (7 U.S.C. § 1 et seq.), as amended from time to time, and any successor statute

"Communications" means, collectively, any notice, demand, communication, information, document or other material provided by or on behalf of any Loan Party pursuant to any Loan Document or the transactions contemplated therein which is distributed by the Administrative Agent, any Lender or any Issuing Bank by means of electronic communications pursuant to this Section, including through an Approved Electronic Platform.

"Connection Income Taxes" means Other Connection Taxes that are imposed on or measured by net income (however denominated) or that are franchise Taxes or branch profits Taxes.

"Consolidated Adjusted EBITDA" means, for any period, an amount determined for the Borrower and its Subsidiaries on a consolidated basis equal to (i) Consolidated Adjusted Net Income, plus (ii) the sum, without duplication, to the extent not already added in the definition of Consolidated Adjusted Net Income, of the amounts for such period of (a) consolidated interest expense of the Borrower and its Subsidiaries, plus (b) provisions for Taxes based on income, plus (c) total depreciation expense, plus (d) total amortization expense, plus (e) losses from dispositions of assets or liabilities outside of the ordinary course of business, plus (f) other non-cash items reducing Consolidated Adjusted Net Income (excluding any such non-cash item to the extent that it represents an accrual or reserve for potential cash items in any future period or amortization of a prepaid cash item that was paid in a prior period), plus (g) unusual or non-recurring charges arising from the restructuring or rationalization of product lines, minus (iii) the sum, without duplication, to the extent not already deducted in the definition of Consolidated

Adjusted Net Income, of the amounts for such period of (a) other non-cash items increasing Consolidated Adjusted Net Income for such period (excluding any such non-cash item to the extent it represents the reversal of an accrual or reserve for potential cash item in any prior period), plus (b) interest income, plus (c) other income, plus (d) gains from dispositions of assets or liabilities outside of the ordinary course of business for such period. If during such period, the Borrower or any of its Subsidiaries shall have made an acquisition or disposition for consideration in excess of $50,000,000, Consolidated Adjusted EBITDA for such period shall be calculated on a pro forma basis in accordance with Section 1.04(b).

"Consolidated Adjusted Net Income" means, for any period, (i) the net income (or loss) of the Borrower and its Subsidiaries on a consolidated basis for such period taken as a single accounting period determined in conformity with GAAP, plus (ii) the sum of (a) to the extent deducted in determining net income pursuant to the foregoing clause (i), amortization of intangible assets acquired in connection with the acquisition of any Person or division or line of business of a Person, plus (b) effects of purchase accounting adjustments made in relation to any consummated acquisition, plus (c) any impairment charges or asset write-offs, including impairment charges or asset write-offs related to intangible assets (including goodwill) and long-lived assets, plus (d) any restructuring charges, plus (e) any amortization expense related to notes discounts, plus (f) actual integration costs associated with any consummated acquisition minus (iii) the sum of (a) the income (or loss) of any Person (other than a Subsidiary of the Borrower) in which any other Person (other than the Borrower or any of its Subsidiaries) has a joint interest, plus (b) the income (or loss) of any Person accrued prior to the date it becomes a Subsidiary of the Borrower or is merged into or consolidated with the Borrower or any of its Subsidiaries or that Person's assets are acquired by the Borrower or any of its Subsidiaries, plus (c) the income of any Subsidiary of the Borrower to the extent that the declaration or payment of dividends or similar distributions by such Subsidiary of that income is not at the time permitted by operation of the terms of its charter or any agreement, instrument, judgment, decree, order, statute, rule or governmental regulation applicable to that Subsidiary, plus (d) one-time significant gains, plus (e) any restructuring gains.

"Consolidated Total Assets" means, as of the date of any determination thereof, total assets of the Borrower and its Subsidiaries calculated in accordance with GAAP on a consolidated basis as of such date.

"Consolidated Total Indebtedness" means at any time the sum, without duplication, of (a) the aggregate Indebtedness of the Borrower and its Subsidiaries calculated on a consolidated basis as of such time in accordance with GAAP (but subject to Section 1.04), (b) the aggregate amount of Indebtedness of the Borrower and its Subsidiaries relating to the maximum drawing amount of all letters of credit outstanding and bankers acceptances and (c) Indebtedness of the type referred to in clauses (a) or (b) hereof of another Person guaranteed by the Borrower or any of its Subsidiaries.

"Control" means the possession, directly or indirectly, of the power to direct or cause the direction of the management or policies of a Person, whether through the ability to exercise voting power, by contract or otherwise. The terms "Controlling" and "Controlled" have meanings correlative thereto.

"Convertible Debt" means any Indebtedness issued or incurred pursuant to any of (a) the Existing Convertible Notes and (b) any other unsecured notes issued by the Borrower that are convertible into common stock of the Borrower, cash or any combination thereof.

"Corresponding Tenor" with respect to any Available Tenor means, as applicable, either a tenor (including overnight) or an interest payment period having approximately the same length (disregarding business day adjustment) as such Available Tenor.

"Covered Entity" means any of the following:

(i) a "covered entity" as that term is defined in, and interpreted in accordance with, 12 C.F.R. § 252.82(b);

(ii) a "covered bank" as that term is defined in, and interpreted in accordance with, 12 C.F.R. § 47.3(b); or

(iii) a "covered FSI" as that term is defined in, and interpreted in accordance with, 12 C.F.R. § 382.2(b).

"Covered Party" has the meaning assigned to it in Section 9.18.

"Credit Event" means a Borrowing, the issuance, amendment or extension of a Letter of Credit, an LC Disbursement or any of the foregoing.

"Credit Party" means the Administrative Agent, the Issuing Bank, the Swingline Lender or any other Lender.

"Daily Simple RFR" means, for any day (an "RFR Interest Day"), an interest rate per annum equal to, for any RFR Loan denominated in (i) Pounds Sterling, SONIA for the day that is 5 RFR Business Days prior to (A) if such RFR Interest Day is an RFR Business Day, such RFR Interest Day or (B) if such RFR Interest Day is not an RFR Business Day, the RFR Business Day immediately preceding such RFR Interest Day and (ii) Dollars, Daily Simple SOFR (following a Benchmark Transition Event and Benchmark Replacement Date with respect to the Term SOFR Rate).

"Daily Simple ~~RFR~~SOFR" means, for any day (~~an~~a "~~RFR Interest~~SOFR Rate Day"), ~~an interest~~a rate per annum equal to ~~the greater of (a) SONIA~~SOFR for the day (such day "SOFR Determination Date") that is five (5) RFR Business Days prior to (~~A~~i) if such ~~RFR Interest~~SOFR Rate Day is ~~a~~an RFR Business Day, such ~~RFR Interest~~SOFR Rate Day or (~~B~~ii) if such ~~RFR Interest~~SOFR Rate Day is not ~~a~~an RFR Business Day, the RFR Business Day immediately preceding such ~~RFR Interest Day or (B) if such RFR Interest Day is not a Business Day, the Business Day immediately preceding such RFR Interest Day and (b) 0.00%~~SOFR Rate Day, in each case, as such SOFR is published by the SOFR Administrator on the SOFR Administrator's Website. Any change in Daily Simple ~~RFR~~SOFR due to a change in ~~the applicable RFR~~SOFR shall be effective from and including the effective date of such change in ~~the RFR~~SOFR without notice to the Borrower.

~~"Daily Simple SOFR" means, for any day, SOFR, with the conventions for this rate (which may include a lookback) being established by the Administrative Agent in accordance with the conventions for this rate selected or recommended by the Relevant Governmental Body for determining "Daily Simple SOFR" for business loans; provided, that if the Administrative Agent decides that any such convention is not administratively feasible for the Administrative Agent, then the Administrative Agent may establish another convention in its reasonable discretion.~~

"Default" means any event or condition which constitutes an Event of Default or which upon notice, lapse of time or both would, unless cured or waived, become an Event of Default.

"Default Right" has the meaning assigned to that term in, and shall be interpreted in accordance with, 12 C.F.R. §§ 252.81, 47.2 or 382.1, as applicable.

"Defaulting Lender" means any Lender that (a) has failed, within two Business Days of the date required to be funded or paid, to (i) fund any portion of its Loans, (ii) fund any portion of its participations in Letters of Credit or Swingline Loans or (iii) pay over to any Credit Party any other amount required to be paid by it hereunder, unless, in the case of clause (i) above, such Lender notifies the Administrative Agent in writing that such failure is the result of such Lender's good faith determination that a condition precedent to funding (specifically identified and including the particular default, if any) has not been satisfied, (b) has notified the Borrower or any Credit Party in writing, or has made a public statement to the effect, that it does not intend or expect to comply with any of its funding obligations under this Agreement (unless such writing or public statement indicates that such position is based on such Lender's good faith determination that a condition precedent (specifically identified and including the particular default, if any) to funding a loan under this Agreement cannot be satisfied) or generally under other agreements in which it commits to extend credit, (c) has failed, within three Business Days after request by a Credit Party, acting in good faith, to provide a certification in writing from an authorized officer of such Lender that it will comply with its obligations to fund prospective Loans and participations in then outstanding Letters of Credit and Swingline Loans under this Agreement, provided that such Lender shall cease to be a Defaulting Lender pursuant to

this clause (c) upon such Credit Party's receipt of such certification in form and substance satisfactory to it and the Administrative Agent, or (d) has become the subject of a Bankruptcy Event.

"Departing Lender" means Wells Fargo Bank, N.A.

"Documentation Agent" means each of Deutsche Bank Securities Inc., Mizuho Bank, Ltd., MUFG Bank, Ltd. and Truist Bank, in its capacity as co-documentation agent for the credit facility evidenced by this Agreement.

"Dollar Equivalent" means, for any amount, at the time of determination thereof, (a) if such amount is expressed in Dollars, such amount, (b) if such amount is expressed in a Foreign Currency, the equivalent of such amount in Dollars determined by using the rate of exchange for the purchase of Dollars with the Foreign Currency last provided (either by publication or otherwise provided to the Administrative Agent) by Reuters on the Business Day (New York City time) immediately preceding the date of determination or if such service ceases to be available or ceases to provide a rate of exchange for the purchase of Dollars with the Foreign Currency, as provided by such other publicly available information service which provides that rate of exchange at such time in place of Reuters chosen by the Administrative Agent in its sole discretion (or if such service ceases to be available or ceases to provide such rate of exchange, the equivalent of such amount in Dollars as determined by the Administrative Agent using any method of determination it deems appropriate in its sole discretion) and (c) if such amount is denominated in any other currency, the equivalent of such amount in Dollars as determined by the Administrative Agent using any method of determination it deems appropriate in its sole discretion.

"Dollars" or "$" refers to lawful money of the United States of America.

"Domestic Subsidiary" means a Subsidiary organized under the laws of a jurisdiction located in the United States of America or any political subdivision thereof, other than (i) any Foreign Subsidiary Holdco or (ii) any subsidiary of either a Foreign Subsidiary Holdco or a Foreign Subsidiary.

~~"Early Opt-in Election" means, if the then current Benchmark with respect to Dollars is LIBO Rate, the occurrence of:~~

~~(1) a notification by the Administrative Agent to (or the request by the Borrower to the Administrative Agent to notify) each of the other parties hereto that at least five currently outstanding Dollar-denominated syndicated credit facilities at such time contain (as a result of amendment or as originally executed) a SOFR-based rate (including SOFR, a Term SOFR or any other rate based upon SOFR) as a benchmark rate (and such syndicated credit facilities are identified in such notice and are publicly available for review), and~~

~~(2) the joint election by the Administrative Agent and the Borrower to trigger a fallback from LIBO Rate and the provision, as applicable, by the Administrative Agent of written notice of such election to the Borrower and the Lenders.~~

"ECP" means an "eligible contract participant" as defined in Section 1(a)(18) of the Commodity Exchange Act or any regulations promulgated thereunder and the applicable rules issued by the Commodity Futures Trading Commission and/or the SEC.

"EEA Financial Institution" means (a) any credit institution or investment firm established in any EEA Member Country which is subject to the supervision of an EEA Resolution Authority, (b) any entity established in an EEA Member Country which is a parent of an institution described in clause (a) of this definition, or (c) any financial institution established in an EEA Member Country which is a subsidiary of an institution described in clauses (a) or (b) of this definition and is subject to consolidated supervision with its parent.

"EEA Member Country" means any of the member states of the European Union, Iceland, Liechtenstein, and Norway.

"EEA Resolution Authority" means any public administrative authority or any Person entrusted with public administrative authority of any EEA Member Country (including any delegee) having responsibility for the resolution of any EEA Financial Institution.

"Effective Date" means the date on which the conditions specified in Section 4.01 are satisfied (or waived in accordance with Section 9.02).

"Electronic Signature" means an electronic sound, symbol, or process attached to, or associated with, a contract or other record and adopted by a Person with the intent to sign, authenticate or accept such contract or record.

"Electronic System" means any electronic system, including e-mail, e-fax, Intralinks®, ClearPar® and any other Internet or extranet-based site, whether such electronic system is owned, operated or hosted by the Administrative Agent and the Issuing Bank and any of its respective Related Parties or any other Person, providing for access to data protected by passcodes or other security system.

"Energy Savings" means, for any Reference Year, the annual energy savings equivalent, measured in millions of kilowatt hours (kWh), resulting from energy efficiency projects executed during such Reference Year or a prior Reference Year at the sites of the Borrower and its consolidated Subsidiaries and for which the energy savings analysis was completed during such Reference Year; provided that, notwithstanding the foregoing, any energy savings included in the ESG Compliance Certificate for a Reference Year may not be included in any ESG Compliance Certificate for any subsequent Reference Year.

"Energy Savings Fee Adjustment" means, with respect to any Reference Year, (a) positive 0.005% if the Energy Savings for such Reference Year as set forth in the ESG Annual Report for such Reference Year is less than the Energy Savings Threshold for such Reference Year, (b) zero if the Energy Savings for such Reference Year as set forth in the ESG Annual Report for such Reference Year is more than or equal to the Energy Savings Threshold for such Reference Year but less than the Energy Savings Target for such Reference Year, or (c) negative 0.005% if the Energy Savings for such Reference Year as set forth in the ESG Annual Report for such Reference Year is more than or equal to the Energy Savings Target for such Reference Year.

"Energy Savings Margin Adjustment" means, with respect to any Reference Year, (a) positive 0.02% if the Energy Savings for such Reference Year as set forth in the ESG Annual Report for such Reference Year is less than the Energy Savings Threshold for such Reference Year, (b) zero if the Energy Savings for such Reference Year as set forth in the ESG Annual Report for such Reference Year is more than or equal to the Energy Savings Threshold for such Reference Year but less than the Energy Savings Target for such Reference Year, or (c) negative 0.02% if the Energy Savings for such Reference Year as set forth in the ESG Annual Report for such Reference Year is more than or equal to the Energy Savings Target for such Reference Year.

"Energy Savings Target" means, with respect to any Reference Year, the "Target" for Energy Savings for such Reference Year as set forth in the Sustainability Table.

"Energy Savings Threshold" means, with respect to any Reference Year, the "Threshold" for Energy Savings for such Reference Year as set forth in the Sustainability Table.

"Environmental Laws" means all laws, rules, regulations, codes, ordinances, orders, decrees, judgments, injunctions, notices or binding agreements issued, promulgated or entered into by any Governmental Authority, relating in any way to the environment, preservation or reclamation of natural resources, the management, release or threatened release of any Hazardous Material or to health and safety matters.

"Environmental Liability" means any liability, contingent or otherwise (including any liability for damages, costs of environmental remediation, fines, penalties or indemnities), of the Borrower or any Subsidiary directly or indirectly resulting from or based upon (a) violation of any Environmental Law, (b) the generation, use, handling, transportation, storage, treatment or disposal of any Hazardous Materials, (c) exposure to any Hazardous Materials, (d) the release or threatened release of any Hazardous Materials into the environment or (e) any contract, agreement

or other consensual arrangement pursuant to which liability is assumed or imposed with respect to any of the foregoing.

"Equity Interests" means shares of capital stock, partnership interests, membership interests in a limited liability company, beneficial interests in a trust or other equity ownership interests in a Person, and any warrants, options or other rights entitling the holder thereof to purchase or acquire any of the foregoing.

"ERISA" means the Employee Retirement Income Security Act of 1974, as amended from time to time.

"ERISA Affiliate" means any trade or business (whether or not incorporated) that, together with the Borrower, is treated as a single employer under Section 414(b) or (c) of the Code or, solely for purposes of Section 302 of ERISA and Section 412 of the Code, is treated as a single employer under Section 414 of the Code.

"ERISA Event" means (a) any "reportable event", as defined in Section 4043 of ERISA or the regulations issued thereunder with respect to a Plan (other than an event for which the 30-day notice period is waived); (b) the failure to satisfy the "minimum funding standard" (as defined in Section 412 of the Code or Section 302 of ERISA), whether or not waived; (c) the filing pursuant to Section 412(c) of the Code or Section 302(c) of ERISA of an application for a waiver of the minimum funding standard with respect to any Plan; (d) the incurrence by the Borrower or any of its ERISA Affiliates of any liability under Title IV of ERISA with respect to the termination of any Plan; (e) the receipt by the Borrower or any ERISA Affiliate from the PBGC or a plan administrator of any notice relating to an intention to terminate any Plan or Plans or to appoint a trustee to administer any Plan; (f) the incurrence by the Borrower or any of its ERISA Affiliates of any liability with respect to the withdrawal or partial withdrawal of the Borrower or any of its ERISA Affiliates from any Plan or Multiemployer Plan; or (g) the receipt by the Borrower or any ERISA Affiliate of any notice, or the receipt by any Multiemployer Plan from the Borrower or any ERISA Affiliate of any notice, concerning the imposition upon the Borrower or any of its ERISA Affiliates of Withdrawal Liability or a determination that a Multiemployer Plan is, or is expected to be, insolvent or in critical status, within the meaning of Title IV of ERISA.

"ESG Annual Report" means, for any Reference Year, an annual report (it being understood that such annual report may take the form of the annual Sustainability Report) that sets forth the calculations for each Sustainability Metric for such Reference Year audited by the Sustainability Metric Auditor.

"ESG Compliance Certificate" means a certificate duly executed by a Responsible Officer of the Borrower substantially in the form of Exhibit B or such other form reasonably acceptable to the Administrative Agent, and attaching (a) true and correct copies of the ESG Annual Report for the applicable Reference Year and setting forth the Sustainability Adjustment for such Reference Year and computations in reasonable detail in respect thereof and (b) a review report of the Sustainability Metric Auditor confirming that the Sustainability Metric Auditor is not aware of any material modifications that should be made to such computations in order for the Sustainability Metric Auditor to be presented in all material respects in conformity with the applicable reporting criteria.

"EU Bail-In Legislation Schedule" means the EU Bail-In Legislation Schedule published by the Loan Market Association (or any successor person), as in effect from time to time.

~~"EURIBOR Interpolated Rate" means, at any time, with respect to any Term Benchmark Borrowing denominated in Euros and for any Interest Period, the rate per annum (rounded to the same number of decimal places as the EURIBOR Screen Rate) determined by the Administrative Agent (which determination shall be conclusive and binding absent manifest error) to be equal to the rate that results from interpolating on a linear basis between: (a) the EURIBOR Screen Rate for the longest period (for which the EURIBOR Screen Rate is available for Euros) that is shorter than the Impacted EURIBOR Rate Interest Period; and (b) the EURIBOR Screen Rate for the shortest period (for which the EURIBOR Screen Rate is available for Euros) that exceeds the Impacted EURIBOR Rate Interest Period, in each case, at such time; provided that, if any EURIBOR Interpolated Rate shall be less than 0.00%, such rate shall be deemed to be 0.00% for the purposes of this Agreement.~~

"EURIBOR Rate" means, with respect to any Term Benchmark Borrowing denominated in Euros and for any Interest Period, the EURIBOR Screen Rate ~~at approximately 11:00 a.m., Brussels time, two TARGET2~~two (2)

TARGET Days prior to the commencement of such Interest Period~~; provided that, if the EURIBOR Screen Rate shall not be available at such time for such Interest Period (an "Impacted EURIBOR Rate Interest Period") with respect to Euros then the EURIBOR Rate shall be the EURIBOR Interpolated Rate~~.

"EURIBOR Screen Rate" means the euro interbank offered rate administered by the European Money Markets Institute (or any other person which takes over the administration of that rate) for the relevant period displayed (before any correction, recalculation or republication by the administrator) on page EURIBOR01 of the Thomson Reuters screen (or any replacement Thomson Reuters page which displays that rate) or on the appropriate page of such other information service which publishes that rate from time to time in place of Thomson Reuters as ~~of~~published at approximately 11:00 a.m. Brussels time two ~~TARGET2~~(2) TARGET Days prior to the commencement of such Interest Period. If such page or service ceases to be available, the Administrative Agent may specify another page or service displaying the relevant rate after consultation with the Borrower. ~~If the EURIBOR Screen Rate shall be less than 0.00%, the EURIBOR Screen Rate shall be deemed to be 0.00% for purposes of this Agreement.~~

"euro" and/or "€" means the single currency of the Participating Member States.

"Event of Default" has the meaning assigned to such term in Section 7.01.

"Excluded Swap Obligation" means, with respect to any Loan Party, any Specified Swap Obligation if, and to the extent that, all or a portion of the Guarantee of such Loan Party of, or the grant by such Loan Party of a security interest to secure, such Specified Swap Obligation (or any Guarantee thereof) is or becomes illegal under the Commodity Exchange Act or any rule, regulation or order of the Commodity Futures Trading Commission (or the application or official interpretation of any thereof) by virtue of such Loan Party's failure for any reason to constitute an ECP at the time the Guarantee of such Loan Party or the grant of such security interest becomes effective with respect to such Specified Swap Obligation. If a Specified Swap Obligation arises under a master agreement governing more than one swap, such exclusion shall apply only to the portion of such Specified Swap Obligation that is attributable to swaps for which such Guarantee or security interest is or becomes illegal.

"Excluded Taxes" means any of the following Taxes imposed on or with respect to a Recipient or required to be withheld or deducted from a payment to a Recipient, (a) Taxes imposed on or measured by net income (however denominated), franchise Taxes, and branch profits Taxes, in each case, (i) imposed as a result of such Recipient being organized under the laws of, or having its principal office or, in the case of any Lender, its applicable lending office located in, the jurisdiction imposing such Tax (or any political subdivision thereof) or (ii) that are Other Connection Taxes, (b) in the case of a Lender, U.S. Federal withholding Taxes imposed on amounts payable to or for the account of such Lender with respect to an applicable interest in a Loan or Commitment pursuant to a law in effect on the date on which (i) such Lender acquires such interest in the Loan or Commitment (other than pursuant to an assignment request by the Borrower under Section 2.19(b)) or (ii) such Lender changes its lending office, except in each case to the extent that, pursuant to Section 2.17, amounts with respect to such Taxes were payable either to such Lender's assignor immediately before such Lender acquired the applicable interest in a Loan or Commitment or to such Lender immediately before it changed its lending office, (c) Taxes attributable to such Recipient's failure to comply with Section 2.17(f) and (d) any withholding Taxes imposed under FATCA.

"Existing Convertible Notes" means the Novellus Convertible Notes.

"Existing Credit Agreement" has the meaning assigned to such term in the recitals hereto.

"Extended Revolving Commitments" has the meaning assigned to such term in Section 2.23(a).

"Extension" has the meaning assigned to such term in Section 2.23(a).

"Extension Offer" has the meaning assigned to such term in Section 2.23(a).

"FATCA" means Sections 1471 through 1474 of the Code, as of the date of this Agreement (or any amended or successor version that is substantively comparable and not materially more onerous to comply with),

any current or future regulations or official interpretations thereof, any agreement entered into pursuant to Section 1471(b)(1) of the Code and any fiscal or regulatory legislation, rules or practices adopted pursuant to any intergovernmental agreement, treaty or convention among Governmental Authorities and implementing such Sections of the Code.

"Federal Funds Effective Rate" means, for any day, the rate calculated by the NYFRB based on such day's federal funds transactions by depositary institutions, as determined in such manner as shall be set forth on the NYFRB's Website from time to time, and published on the next succeeding Business Day by the NYFRB as the effective federal funds rate; provided that if the Federal Funds Effective Rate as so determined would be less than zero, such rate shall be deemed to be zero for the purposes of this Agreement.

"Financial Officer" means the chief financial officer, principal financial officer, principal accounting officer, treasurer, vice president of finance, controller or assistant controller of the Borrower.

"Financials" means the annual or quarterly financial statements, and accompanying certificates and other documents, of the Borrower and its Subsidiaries required to be delivered pursuant to Section 5.01(a) or 5.01(b).

"Floor" means the benchmark rate floor, if any, provided in this Agreement initially (as of the execution of this Agreement, the modification, amendment or renewal of this Agreement or otherwise) with respect to ~~LIBO~~the Adjusted Term SOFR Rate, Adjusted EURIBOR Rate, Adjusted TIBOR Rate~~or~~, each Adjusted Daily Simple RFR, the Japanese Prime Rate or the Central Bank Rate, as applicable. For the avoidance of doubt the initial Floor for each of Adjusted Term SOFR Rate, Adjusted EURIBOR Rate, Adjusted TIBOR Rate, each Adjusted Daily Simple RFR, the Japanese Prime Rate or the Central Bank Rate shall be zero.

"Foreign Currencies" means Agreed Currencies other than Dollars.

"Foreign Currency Letter of Credit" means a Letter of Credit denominated in a Foreign Currency.

"Foreign Lender" means (a) if the Borrower is a U.S. Person, a Lender, with respect to such Borrower, that is not a U.S. Person, and (b) if the Borrower is not a U.S. Person, a Lender, with respect to such Borrower, that is resident or organized under the laws of a jurisdiction other than that in which the Borrower is resident for tax purposes.

"Foreign Subsidiary" means any Subsidiary that is not a Domestic Subsidiary.

"Foreign Subsidiary Holdco" means any Subsidiary substantially all of the assets of which consist of Equity Interests and/or Indebtedness of one or more Foreign Subsidiaries.

"GAAP" means generally accepted accounting principles in the United States of America.

"Governmental Authority" means the government of the United States of America, any other nation or any political subdivision thereof, whether state or local, and any agency, authority, instrumentality, regulatory body, court, central bank or other entity exercising executive, legislative, judicial, taxing, regulatory or administrative powers or functions of or pertaining to government.

"Guarantee" of or by any Person (the "guarantor") means any obligation, contingent or otherwise, of the guarantor guaranteeing or having the economic effect of guaranteeing any Indebtedness or other obligation of any other Person (the "primary obligor") in any manner, whether directly or indirectly, and including any obligation of the guarantor, direct or indirect, (a) to purchase or pay (or advance or supply funds for the purchase or payment of) such Indebtedness or other obligation or to purchase (or to advance or supply funds for the purchase of) any security for the payment thereof, (b) to purchase or lease property, securities or services for the purpose of assuring the owner of such Indebtedness or other obligation of the payment thereof, (c) to maintain working capital, equity capital or any other financial statement condition or liquidity of the primary obligor so as to enable the primary obligor to pay such Indebtedness or other obligation or (d) as an account party in respect of any letter of credit or

letter of guaranty issued to support such Indebtedness or obligation; provided, that the term "Guarantee" shall not include endorsements for collection or deposit in the ordinary course of business.

"Hazardous Materials" means all explosive or radioactive substances or wastes and all hazardous or toxic substances, wastes or other pollutants, including petroleum or petroleum distillates, asbestos or asbestos containing materials, polychlorinated biphenyls, radon gas, infectious or medical wastes and all other substances or wastes of any nature regulated pursuant to any Environmental Law.

~~"Impacted EURIBOR Rate Interest Period" has the meaning assigned to such term in the definition of "EURIBOR Rate."~~

~~"Impacted LIBO Rate Interest Period" has the meaning assigned to such term in the definition of "LIBO Rate."~~

~~"Impacted TIBOR Rate Interest Period" has the meaning assigned to such term in the definition of "TIBOR Rate."~~

"Increasing Lender" has the meaning assigned to such term in Section 2.20.

"Incremental Term Loan" has the meaning assigned to such term in Section 2.20.

"Incremental Term Loan Amendment" has the meaning assigned to such term in Section 2.20.

"Indebtedness" of any Person means, without duplication, (a) all obligations of such Person for borrowed money or with respect to deposits or advances of any kind, (b) all obligations of such Person evidenced by bonds, debentures, notes or similar instruments, (c) all obligations of such Person upon which interest charges are customarily paid, (d) all obligations of such Person under conditional sale or other title retention agreements relating to property acquired by such Person, (e) all obligations of such Person in respect of the deferred purchase price of property or services (excluding current accounts payable incurred in the ordinary course of business), (f) all Indebtedness of others secured by (or for which the holder of such Indebtedness has an existing right, contingent or otherwise, to be secured by) any Lien on property owned or acquired by such Person, whether or not the Indebtedness secured thereby has been assumed, (g) all Guarantees by such Person of Indebtedness of others, (h) all Capital Lease Obligations of such Person, (i) all obligations, contingent or otherwise, of such Person as an account party in respect of letters of credit and letters of guaranty, (j) all obligations, contingent or otherwise, of such Person in respect of bankers' acceptances, (k) all Attributable Debt of such Person and (l) any other Off-Balance Sheet Liability (excluding obligations and liabilities to the extent the same are (1) cash collateralized or (2) segregated in a restricted account and reflected on the balance sheet of such Person as restricted cash) of such Person. The Indebtedness of any Person shall include the Indebtedness of any other entity (including any partnership in which such Person is a general partner) to the extent such Person is liable therefor as a result of such Person's ownership interest in or other relationship with such entity, except to the extent the terms of such Indebtedness provide that such Person is not liable therefor.

"Indemnified Taxes" means (a) Taxes, other than Excluded Taxes, imposed on or with respect to any payment made by or on account of any obligation of any Loan Party under any Loan Document and (b) to the extent not otherwise described in clause (a), Other Taxes.

"Indemnitee" has the meaning assigned to such term in Section 9.03(b).

"Index Debt" means senior, unsecured, long-term indebtedness for borrowed money of the Borrower that is not guaranteed by any other Person or subject to any other credit enhancement.

"Ineligible Institution" has the meaning assigned to such term in Section 9.04(b).

"Information" has the meaning assigned to such term in Section 9.12.

"Interest Election Request" means a request by the Borrower to convert or continue a Revolving Borrowing in accordance with Section 2.08 in the form attached hereto as Exhibit H-2 or any other form approved by the Administrative Agent.

"Interest Payment Date" means (a) with respect to any ABR Loan (other than a Swingline Loan), the last day of each March, June, September and December and the Maturity Date, (b) with respect to any RFR Loan, (1) each date that is on the numerically corresponding day in each calendar month that is one month after the Borrowing of such Loan (or, if there is no such numerically corresponding day in such month, then the last day of such month) and (2) the Maturity Date, (c) with respect to any Term Benchmark Loan, the last day of each Interest Period applicable to the Borrowing of which such Loan is a part and, in the case of a Term Benchmark Borrowing with an Interest Period of more than three months' duration, each day prior to the last day of such Interest Period that occurs at intervals of three months' duration after the first day of such Interest Period, and the Maturity Date and (d) with respect to any Swingline Loan, the day that such Loan is required to be repaid and the Maturity Date.

"Interest Period" means with respect to any Term Benchmark Borrowing, the period commencing on the date of such Borrowing and ending on the numerically corresponding day in the calendar month that is one, three or six months ~~(or, with the consent of each Lender, twelve months)~~ thereafter (in each case, subject to the availability for the Benchmark applicable to the relevant Loan or Commitment for any Agreed Currency), as the Borrower may elect; provided, that (i) if any Interest Period would end on a day other than a Business Day, such Interest Period shall be extended to the next succeeding Business Day unless~~, in the case of a Term Benchmark Borrowing only,~~ such next succeeding Business Day would fall in the next calendar month, in which case such Interest Period shall end on the next preceding Business Day, (ii) any Interest Period ~~pertaining to a Term Benchmark Borrowing~~ that commences on the last Business Day of a calendar month (or on a day for which there is no numerically corresponding day in the last calendar month of such Interest Period) shall end on the last Business Day of the last calendar month of such Interest Period and (iii) no tenor that has been removed from this definition pursuant to Section 2.14(~~f~~e) shall be available for specification in such Borrowing Request or Interest Election Request. For purposes hereof, the date of a Borrowing initially shall be the date on which such Borrowing is made and, in the case of a Revolving Borrowing, thereafter shall be the effective date of the most recent conversion or continuation of such Borrowing.

"IRS" means the United States Internal Revenue Service.

~~"ISDA Definitions" means the 2006 ISDA Definitions published by the International Swaps and Derivatives Association, Inc. or any successor thereto, as amended or supplemented from time to time, or any successor definitional booklet for interest rate derivatives published from time to time by the International Swaps and Derivatives Association, Inc. or such successor thereto.~~

"Issuing Bank" means the Lender designated by the Borrower as the "Issuing Bank" hereunder that has agreed to such designation (and is reasonably acceptable to the Administrative Agent), in its capacity as the issuer of Letters of Credit hereunder, and its successors in such capacity as provided in Section 2.06(i). The Issuing Bank may, in its discretion, arrange for one or more Letters of Credit to be issued by Affiliates of the Issuing Bank, in which case the term "Issuing Bank" shall include any such Affiliate with respect to Letters of Credit issued by such Affiliate. Each reference herein to the "Issuing Bank" in connection with a Letter of Credit or other matter shall be deemed to be a reference to the relevant Issuing Bank with respect thereto.

"Japanese Prime Rate" means for any Loan denominated in Japanese Yen the greater of (a) (i) the Japanese local bank prime rate plus (ii) the Japanese Prime Rate Adjustment and (b) the Floor.

"Japanese Prime Rate Adjustment" means, for any day, for any Loan denominated in Japanese Yen, a rate equal to the difference (which may be a positive or negative value or zero) of (i) the average of the Adjusted TIBOR Rate for the five most recent Business Days preceding such day for which the TIBOR Screen Rate was available (excluding, from such averaging, the highest and the lowest Adjusted TIBOR Rate applicable during such period of five Business Days) minus (ii) the Japanese Prime Rate in effect on the last Business Day in such period. For purposes of this definition, the TIBOR Rate on any day shall be based on the TIBOR Screen Rate on such day at

approximately the time referred to in the definition of such term for deposits in Japanese Yen for a maturity of one month.

"Japanese Yen" means the lawful currency of Japan.

"LC Collateral Account" has the meaning assigned to such term in Section 2.06(j).

"LC Disbursement" means a payment made by the Issuing Bank pursuant to a Letter of Credit.

"LC Exposure" means, at any time, the sum of (a) the aggregate undrawn Dollar Equivalent of all outstanding Letters of Credit at such time plus (b) the aggregate Dollar Equivalent of all LC Disbursements that have not yet been reimbursed by or on behalf of the Borrower at such time. The LC Exposure of any Lender at any time shall be its Applicable Percentage of the total LC Exposure at such time.

"Lender Parent" means, with respect to any Lender, any Person as to which such Lender is, directly or indirectly, a subsidiary.

"Lender Presentation" means the Lender Presentation, dated May 2021 relating to the Borrower and the Transactions.

"Lenders" means the Persons listed on Schedule 2.01 and any other Person that shall have become a Lender hereunder pursuant to Section 2.20 or pursuant to an Assignment and Assumption, other than any such Person that ceases to be a party hereto pursuant to an Assignment and Assumption. Unless the context otherwise requires, the term "Lenders" includes the Swingline Lender and the Issuing Bank. For the avoidance of doubt, the term "Lenders" excludes the Departing Lender.

"Letter of Credit" means any letter of credit issued pursuant to this Agreement.

"Leverage Covenant" has the meaning assigned to such term in Section 6.05.

"Liabilities" means any losses, claims (including intraparty claims), demands, damages or liabilities of any kind.

~~"LIBO Interpolated Rate" means, at any time, with respect to any Term Benchmark Borrowing denominated in Dollars and for any Interest Period, the rate per annum (rounded to the same number of decimal places as the LIBO Screen Rate) determined by the Administrative Agent (which determination shall be conclusive and binding absent manifest error) to be equal to the rate that results from interpolating on a linear basis between: (a) the LIBO Screen Rate for the longest period (for which the LIBO Screen Rate is available for the applicable Agreed Currency) that is shorter than the Impacted LIBO Rate Interest Period, and (b) the LIBO Screen Rate for the shortest period (for which the LIBO Screen Rate is available for the applicable Agreed Currency) that exceeds the Impacted LIBO Rate Interest Period, in each case, at such time; provided that if any LIBO Interpolated Rate shall be less than 0.00%, such rate shall be deemed to be 0.00% for the purposes of this Agreement.~~

~~"LIBO Rate" means, with respect to any Term Benchmark Borrowing denominated in Dollars and for any Interest Period, the LIBO Screen Rate at approximately 11:00 a.m., London time, two Business Days prior to the commencement of such Interest Period, provided that if the LIBO Screen Rate shall not be available at such time for such Interest Period (an "Impacted LIBO Rate Interest Period") with respect to such Agreed Currency then the LIBO Rate shall be the LIBO Interpolated Rate.~~

~~"LIBO Screen Rate" means, for any day and time, with respect to any Term Benchmark Borrowing denominated in Dollars and for any Interest Period, the London interbank offered rate as administered by ICE Benchmark Administration (or any other Person that takes over the administration of such rate) for such Agreed Currency for a period equal in length to such Interest Period as displayed on such day and time on pages LIBOR01 or LIBOR02 of the Reuters screen that displays such rate (or, in the event such rate does not appear on a Reuters page or screen, on any successor or substitute page on such screen that displays such rate, or on the appropriate page~~

~~of such other information service that publishes such rate from time to time as selected by the Administrative Agent in its reasonable discretion); *provided that* if the LIBO Screen Rate as so determined would be less than 0.00%, such rate shall be deemed to be 0.00% for the purposes of this Agreement.~~

~~"LIBOR" has the meaning assigned to such term in Section 1.06.~~

"Lien" means, with respect to any asset, (a) any mortgage, deed of trust, lien, pledge, hypothecation, encumbrance, charge or security interest in, on or of such asset, (b) the interest of a vendor or a lessor under any conditional sale agreement, capital lease or title retention agreement (or any financing lease having substantially the same economic effect as any of the foregoing) relating to such asset and (c) in the case of securities, any purchase option, call or similar right of a third party with respect to such securities.

"Loan Documents" means this Agreement, any promissory notes issued pursuant to Section 2.10(e), any Letter of Credit applications, the Subsidiary Guaranty, and all other agreements, instruments, documents and certificates identified in Section 4.01 executed and delivered to, or in favor of, the Administrative Agent or any Lenders and including all other pledges, powers of attorney, consents, assignments, contracts, notices, letter of credit agreements and all other written matter whether heretofore, now or hereafter executed by or on behalf of any Loan Party, or any employee of any Loan Party, and delivered to the Administrative Agent or any Lender in connection with this Agreement or the transactions contemplated hereby. Any reference in this Agreement or any other Loan Document to a Loan Document shall include all appendices, exhibits or schedules thereto, and all amendments, restatements, supplements or other modifications thereto, and shall refer to this Agreement or such Loan Document as the same may be in effect at any and all times such reference becomes operative.

"Loan Parties" means, collectively, the Borrower and the Subsidiary Guarantors.

"Loans" means the loans made by the Lenders to the Borrower pursuant to this Agreement.

"Local Time" means (i) New York City time in the case of a Loan, Borrowing or LC Disbursement denominated in Dollars and (ii) in the case of a Loan, Borrowing or LC Disbursement denominated in a Foreign Currency, the local time in the place of settlement for such Foreign Currency as may be determined by the Administrative Agent or the Issuing Bank, as the case may be, to be necessary for timely settlement on the relevant date in accordance with normal banking procedures in the place of payment.

"Material Adverse Effect" means a material adverse effect on (a) the business, assets, operations or condition (financial or otherwise) of the Borrower and the Subsidiaries taken as a whole, (b) the ability of the Borrower to perform any of its obligations under this Agreement or (c) the validity or enforceability of this Agreement or any and all other Loan Documents or the rights or remedies of the Administrative Agent and the Lenders thereunder.

"Material Domestic Subsidiary" means each Material Subsidiary that is a Domestic Subsidiary.

"Material Subsidiary" means each Subsidiary that is so designated by the Borrower or which, as of the end of the most recent fiscal quarter of the Borrower, for the period of four consecutive fiscal quarters then ended, for which financial statements have been delivered pursuant to Section 5.01(a) or (b) (or, if prior to the date of the delivery of the first financial statements to be delivered pursuant to Section 5.01(a) or (b), the most recent financial statements referred to in Section 3.04(a)), contributed greater than 5% of the Borrower's consolidated revenues for such period (excluding intercompany sales); provided that, if at any time the aggregate amount of the Borrower's consolidated revenues attributable to all Subsidiaries that are not Material Subsidiaries exceeds 10% of the Borrower's consolidated revenues for any such period, the Borrower (or, in the event the Borrower has failed to do so within ten days, the Administrative Agent) shall designate sufficient Subsidiaries as "Material Subsidiaries" to eliminate such excess, and such designated Subsidiaries shall for all purposes of this Agreement constitute Material Subsidiaries.

"Material Indebtedness" means Indebtedness (other than the Loans and Letters of Credit), or obligations in respect of one or more Swap Agreements, of any one or more of the Borrower and its Subsidiaries in an aggregate

principal amount exceeding $150,000,000. For purposes of determining Material Indebtedness, the "principal amount" of the obligations of the Borrower or any Subsidiary in respect of any Swap Agreement at any time shall be the maximum aggregate amount (giving effect to any netting agreements) that the Borrower or such Subsidiary would be required to pay if such Swap Agreement were terminated at such time.

"Maturity Date" means the later of (a) June 17, 2026 and (b) if the maturity date is extended for such Lender pursuant to Section 2.23, such extended maturity date determined pursuant to such Section; provided that, in each case, if such date is not a Business Day, the Maturity Date shall be the immediately preceding Business Day.

"Maximum Rate" has the meaning assigned to such term in Section 9.15.

"Minimum Extension Condition" has the meaning assigned to such term in Section 2.23(b).

"Moody's" means Moody's Investors Service, Inc.

"Multiemployer Plan" means a multiemployer plan as defined in Section 4001(a)(3) of ERISA.

"Non-Consenting Lender" has the meaning assigned to such term in Section 9.02(d).

"Novellus Convertible Notes" means the 2.65% Senior Convertible Notes due 2041 issued by Novellus Systems, Inc., a Subsidiary of the Borrower, pursuant to the First Supplemental Indenture between Novellus Systems, Inc. and The Bank of New York Mellon Trust Company, N.A., as trustee, dated as of June 4, 2012, which senior convertible notes are guaranteed by the Borrower.

"NYFRB" means the Federal Reserve Bank of New York.

"NYFRB Rate" means, for any day, the greater of (a) the Federal Funds Effective Rate in effect on such day and (b) the Overnight Bank Funding Rate in effect on such day (or for any day that is not a Business Day, for the immediately preceding Business Day); *provided* that if none of such rates are published for any day that is a Business Day, the term "NYFRB Rate" means the rate for a federal funds transaction quoted at ~~11:00 a.m~~11:00 a.m. on such day received by the Administrative Agent from a federal funds broker of recognized standing selected by it; *provided*, *further*, that if any of the aforesaid rates as so determined would be less than 0.00%, such rate shall be deemed to be 0.00% for purposes of this Agreement.

"NYFRB's Website" means the website of the NYFRB at http://www.newyorkfed.org, or any successor source.

"Obligations" means all unpaid principal of and accrued and unpaid interest on the Loans, all LC Exposure, all accrued and unpaid fees and all expenses, reimbursements, indemnities and other obligations and indebtedness (including interest and fees accruing during the pendency of any bankruptcy, insolvency, receivership or other similar proceeding, regardless of whether allowed or allowable in such proceeding), obligations and liabilities of any of the Borrower and its Subsidiaries to any of the Lenders, the Administrative Agent, the Issuing Bank or any indemnified party, individually or collectively, existing on the Effective Date or arising thereafter, direct or indirect, joint or several, absolute or contingent, matured or unmatured, liquidated or unliquidated, secured or unsecured, arising by contract, operation of law or otherwise, arising or incurred under this Agreement or any of the other Loan Documents or to the Lenders or any of their Affiliates under any Swap Agreement or any Banking Services Agreement or in respect of any of the Loans made or reimbursement or other obligations incurred or any of the Letters of Credit or other instruments at any time evidencing any thereof; provided that, notwithstanding the foregoing, the definition of "Obligations" shall not create or include any guarantee by any Loan Party of (or grant of security interest by any Loan Party to support, as applicable) any Excluded Swap Obligations of such Loan Party for purposes of determining any obligations of any Loan Party.

"OFAC" means the Office of Foreign Assets Control of the U.S. Department of the Treasury.

"Off-Balance Sheet Liability" of a Person means (a) any repurchase obligation or liability of such Person with respect to accounts or notes receivable sold by such Person, (b) any indebtedness, liability or obligation under any so-called "synthetic lease" transaction entered into by such Person, or (c) any indebtedness, liability or obligation arising with respect to any other transaction which is the functional equivalent of or takes the place of borrowing but which does not constitute a liability on the balance sheet of such Person (other than operating leases).

~~"Other Benchmark Rate Election" means, with respect to any Loan denominated in Dollars, if the then-current Benchmark is the LIBO Rate, the occurrence of:~~

~~(a) a request by the Borrower to the Administrative Agent to notify each of the other parties hereto that, at the determination of the Borrower, Dollar-denominated syndicated credit facilities at such time contain (as a result of amendment or as originally executed), in lieu of a LIBOR-based rate, a term benchmark rate as a benchmark rate, and~~

~~(b) the Administrative Agent, in its sole discretion, and the Borrower jointly elect to trigger a fallback from the LIBO Rate and the provision, as applicable, by the Administrative Agent of written notice of such election to the Borrower and the Lenders.~~

"Other Connection Taxes" means, with respect to any Recipient, Taxes imposed as a result of a present or former connection between such Recipient and the jurisdiction imposing such Tax (other than connections arising from such Recipient having executed, delivered, become a party to, performed its obligations under, received payments under, received or perfected a security interest under, engaged in any other transaction pursuant to or enforced any Loan Document, or sold or assigned an interest in any Loan or Loan Document).

"Other Taxes" means all present or future stamp, court or documentary, intangible, recording, filing or similar Taxes that arise from any payment made under, from the execution, delivery, performance, enforcement or registration of, from the receipt or perfection of a security interest under, or otherwise with respect to, any Loan Document, except any such Taxes that are Other Connection Taxes imposed with respect to an assignment (other than an assignment made pursuant to Section 2.19).

"Overnight Bank Funding Rate" means, for any day, the rate comprised of both overnight federal funds and overnight ~~Term Benchmark borrowings~~eurodollar transactions denominated in Dollars by U.S.-managed banking offices of depository institutions, as such composite rate shall be determined by the NYFRB as set forth on the NYFRB's Website from time to time, and published on the next succeeding Business Day by the NYFRB as an overnight bank funding rate.

"Overnight Foreign Currency Rate" means, for any amount payable in a Foreign Currency, the rate of interest per annum as determined by the Administrative Agent or the Issuing Bank, as the case may be, in accordance with banking industry rules on interbank compensation.

"Participant" has the meaning assigned to such term in Section 9.04(c).

"Participant Register" has the meaning assigned to such term in Section 9.04(c).

"Participating Member State" means any member state of the European Union that adopts or has adopted the euro as its lawful currency in accordance with legislation of the European Union relating to economic and monetary union.

"Patriot Act" means the USA PATRIOT Act (Title III of Pub. L. 107-56 (signed into law October 26, 2001)).

"Payment" has the meaning assigned to it in Section 8.06(c).

"Payment Notice" has the meaning assigned to it in Section 8.06(c).

"PBGC" means the Pension Benefit Guaranty Corporation referred to and defined in ERISA and any successor entity performing similar functions.

"Permitted Encumbrances" means:

(a) Liens imposed by law for Taxes that are not yet due or are being contested in compliance with Section 5.04;

(b) carriers', warehousemen's, mechanics', materialmen's, repairmen's and other like Liens imposed by law, arising in the ordinary course of business and securing obligations that are not overdue by more than 30 days or are being contested in compliance with Section 5.04;

(c) pledges and deposits made in the ordinary course of business in compliance with workers' compensation, unemployment insurance and other social security laws or regulations;

(d) deposits to secure the performance of bids, trade contracts, leases, statutory obligations, surety and appeal bonds, performance bonds and other obligations of a like nature, in each case in the ordinary course of business;

(e) judgment Liens in respect of judgments that do not constitute an Event of Default under Section 7.01(k); and

(f) easements, zoning restrictions, rights-of-way and similar encumbrances on real property imposed by law or arising in the ordinary course of business that do not secure any monetary obligations and do not materially detract from the value of the affected property or interfere with the ordinary conduct of business of the Borrower or any Subsidiary;

provided that the term "Permitted Encumbrances" shall not include any Lien securing Indebtedness.

"Person" means any natural person, corporation, limited liability company, trust, joint venture, association, company, partnership, Governmental Authority or other entity.

"Plan" means any employee pension benefit plan (other than a Multiemployer Plan) subject to the provisions of Title IV of ERISA or Section 412 of the Code or Section 302 of ERISA, and in respect of which the Borrower or any ERISA Affiliate is (or, if such plan were terminated, would under Section 4069 of ERISA be deemed to be) an "employer" as defined in Section 3(5) of ERISA.

"Plan Asset Regulation" means 29 CFR § 2510.3-101, as modified by Section 3(42) of ERISA, as amended from time to time.

"Pounds Sterling" means the lawful currency of the United Kingdom.

"Prime Rate" means the rate of interest last quoted by The Wall Street Journal as the "Prime Rate" in the U.S. or, if The Wall Street Journal ceases to quote such rate, the highest per annum interest rate published by the Federal Reserve Board in Federal Reserve Statistical Release H.15 (519) (Selected Interest Rates) as the "bank prime loan" rate or, if such rate is no longer quoted therein, any similar rate quoted therein (as determined by the Administrative Agent) or any similar release by the Federal Reserve Board (as determined by the Administrative Agent). Each change in the Prime Rate shall be effective from and including the date such change is publicly announced or quoted as being effective.

"Proceeding" means any claim, litigation, investigation, action, suit, arbitration or administrative, judicial or regulatory action or proceeding in any jurisdiction.

"PTE" means a prohibited transaction class exemption issued by the U.S. Department of Labor, as any such exemption may be amended from time to time.

"QFC" has the meaning assigned to the term "qualified financial contract" in, and shall be interpreted in accordance with, 12 U.S.C. 5390(c)(8)(D).

"QFC Credit Support" has the meaning assigned to it in Section 9.18.

"Recipient" means (a) the Administrative Agent, (b) any Lender and (c) the Issuing Bank, as applicable.

"Reference Time" with respect to any setting of the then-current Benchmark means (1) if such Benchmark is ~~LIBO~~the Term SOFR Rate, ~~11:00 a.m. (London~~5:00 a.m. (Chicago time) on the day that is two ~~London banking days~~U.S. Government Securities Business Days preceding the date of such setting, (2) if such Benchmark is EURIBOR Rate, 11:00 a.m. Brussels time two ~~TARGET2~~TARGET Days preceding the date of such setting, (3) if such Benchmark is TIBOR Rate, 11:00 a.m. Japan time two Business Days preceding the date of such setting, (4) if the RFR for such Benchmark is SONIA, then 4four RFR Business Days prior to such setting, ~~or~~(5) if, following a Benchmark Transition Event and Benchmark Replacement Date with respect to the Term SOFR Rate, the RFR for such Benchmark is Daily Simple SOFR, then four RFR Business Days prior to such setting or (6) if such Benchmark is none of the ~~LIBO~~Term SOFR Rate, the EURIBOR Rate, the TIBOR Rate or SONIA, the time determined by the Administrative Agent in its reasonable discretion.

"Reference Year" means a period of 12 calendar months beginning on January 1 of any year and ending on December 31 of the same year. For purposes of this Agreement, the first Reference Year will be the 12-month period ending December 31, 2021.

"Register" has the meaning assigned to such term in Section 9.04(b).

"Related Parties" means, with respect to any specified Person, such Person's Affiliates and the respective directors, officers, employees, agents, advisors and representatives of such Person and such Person's Affiliates.

"Relevant Governmental Body" means (i) with respect to a Benchmark Replacement in respect of Loans denominated in Dollars, the Federal Reserve Board and/or the NYFRB, or a committee officially endorsed or convened by the Federal Reserve Board and/or the NYFRB or, in each case, any successor thereto, (ii) with respect to a Benchmark Replacement in respect of Loans denominated in Pounds Sterling, the Bank of England, or a committee officially endorsed or convened by the Bank of England or, in each case, any successor thereto, (iii) with respect to a Benchmark Replacement in respect of Loans denominated in Euros, the European Central Bank, or a committee officially endorsed or convened by the European Central Bank or, in each case, any successor thereto, (iv) with respect to a Benchmark Replacement in respect of Loans denominated in Japanese Yen, the Bank of Japan, or a committee officially endorsed or convened by the Bank of Japan or, in each case, any successor thereto, and (v) with respect to a Benchmark Replacement in respect of Loans denominated in any other currency, (a) the central bank for the currency in which such Benchmark Replacement is denominated or any central bank or other supervisor which is responsible for supervising either (1) such Benchmark Replacement or (2) the administrator of such Benchmark Replacement or (b) any working group or committee officially endorsed or convened by (1) the central bank for the currency in which such Benchmark Replacement is denominated, (2) any central bank or other supervisor that is responsible for supervising either (A) such Benchmark Replacement or (B) the administrator of such Benchmark Replacement, (3) a group of those central banks or other supervisors or (4) the Financial Stability Board or any part thereof.

"Relevant Rate" means (i) with respect to any Term Benchmark Borrowing denominated in Dollars, the ~~LIBO~~Adjusted Term SOFR Rate, (ii) with respect to any Term Benchmark Borrowing denominated in Euros, the Adjusted EURIBOR Rate, ~~or~~ (iii) with respect to any Term Benchmark Borrowing denominated in Japanese Yen, the Adjusted TIBOR Rate, as applicable or (iv) with respect to any RFR Borrowing denominated in Pounds Sterling or Dollars, the applicable Adjusted Daily Simple RFR, as applicable.

"Relevant Screen Rate" means (i) with respect to any Term Benchmark Borrowing denominated in Dollars, the ~~LIBO Screen~~Term SOFR Reference Rate, (ii) with respect to any Term Benchmark Borrowing denominated in Euros, the EURIBOR Screen Rate or (iii) with respect to any Term Benchmark Borrowing denominated in Japanese Yen, the TIBOR Screen Rate, as applicable~~, as applicable~~.

"Required Lenders" means, at any time, Lenders having Revolving Credit Exposures and unused Commitments representing more than 50% of the sum of the total Revolving Credit Exposures and unused Commitments at such time.

"Resolution Authority" means an EEA Resolution Authority or, with respect to any UK Financial Institution, a UK Resolution Authority.

"Responsible Officer" means a Financial Officer or any of the chief executive officer, president, any executive vice president, any senior vice president, chief operating officer or chief legal officer of the Borrower.

"Reuters" means, as applicable, Thomson Reuters Corp., Refinitiv, or any successor thereto.

"Revaluation Date" shall mean (a) with respect to any Loan denominated in any Foreign Currency, each of the following: (i) the date of the Borrowing of such Loan and (ii)(A) with respect to any Term Benchmark Loan, each date of a conversion into or continuation of such Loan pursuant to the terms of this Agreement and (B) with respect to any RFR Loan, each date that is on the numerically corresponding day in each calendar month that is one month after the Borrowing of such Loan (or, if there is no such numerically corresponding day in such month, then the last day of such month); (b) with respect to any Letter of Credit denominated in ~~an~~a Foreign Currency, each of the following: (i) the date on which such Letter of Credit is issued, (ii) the first Business Day of each calendar month and (iii) the date of any amendment of such Letter of Credit that has the effect of increasing the face amount thereof; and (c) any additional date as the Administrative Agent may determine at any time when an Event of Default exists.

"Revolving Credit Exposure" means, with respect to any Lender at any time, the sum of the outstanding principal amount of such Lender's Revolving Loans and its LC Exposure and Swingline Exposure at such time.

"Revolving Loan" means a Loan made pursuant to Section 2.01.

"RFR" means, for any RFR Loan denominated in (a) Pounds Sterling, SONIA and (b) Dollars (solely following a Benchmark Transition Event and Benchmark Replacement Date with respect to the Term SOFR Rate), Daily Simple SOFR.

"RFR Administrator" means the SONIA Administrator or the SOFR Administrator.

"RFR Borrowing" means, as to any Borrowing, the RFR Loans comprising such Borrowing.

"RFR Business Day" means, for any Loan denominated in (a) Pounds Sterling, any day except for (i) a Saturday, (ii) a Sunday or (iii) a day on which banks are closed for general business in London and (b) Dollars, a U.S. Government Securities Business Day.

"RFR Interest Day" has the meaning specified in the definition of "Daily Simple RFR".

"RFR Loan" means a Loan that bears interest at a rate based on the Adjusted Daily Simple RFR if denominated in Dollars or SONIA if denominated in Pounds Sterling.

"S&P" means Standard & Poor's Ratings Services, a Standard & Poor's Financial Services LLC business.

"Sale and Leaseback Transaction" means any sale or other transfer of any property or asset by any Person with the intent to lease such property or asset as lessee.

"Sanctioned Country" means, at any time, a country, region or territory which is the subject or target of any Sanctions.

"Sanctioned Person" means, at any time, (a) any Person listed in any Sanctions-related list of designated Persons maintained by OFAC, the U.S. Department of State, the United Nations Security Council, the European Union, any EU member state or Her Majesty's Treasury of the United Kingdom, (b) any Person operating, organized or resident in a Sanctioned Country, (c) any Person owned or controlled by any such Person or Persons described in the foregoing clauses (a) or (b), or (d) any Person otherwise the subject of any Sanctions.

"Sanctions" means economic or financial sanctions or trade embargoes imposed, administered or enforced from time to time by (a) the U.S. government, including those administered by OFAC or the U.S. Department of State or (b) the United Nations Security Council, the European Union, any EU member state or Her Majesty's Treasury of the United Kingdom.

"SEC" means the United States Securities and Exchange Commission.

"Securities Act" means the United States Securities Act of 1933.

"SOFR" means~~, with respect to any Business Day, a rate per annum~~ equal to the secured overnight financing rate ~~for such Business Day published~~as administered by the SOFR Administrator ~~on the SOFR Administrator's Website on the immediately succeeding Business Day~~.

"SOFR Administrator" means the NYFRB (or a successor administrator of the secured overnight financing rate).

"SOFR Administrator's Website" means the NYFRB's Website, currently at http://www.newyorkfed.org, or any successor source for the secured overnight financing rate identified as such by the SOFR Administrator from time to time.

"SOFR Determination Date" has the meaning specified in the definition of "Daily Simple SOFR".

"SOFR Rate Day" has the meaning specified in the definition of "Daily Simple SOFR".

"SONIA" means, with respect to any Business Day, a rate per annum equal to the Sterling Overnight Index Average for such Business Day published by the SONIA Administrator on the SONIA Administrator's Website on the immediately succeeding Business Day.

"SONIA Administrator" means the Bank of England (or any successor administrator of the Sterling Overnight Index Average).

"SONIA Administrator's Website" means the Bank of England's website, currently at http://www.bankofengland.co.uk, or any successor source for the Sterling Overnight Index Average identified as such by the SONIA Administrator from time to time.

"Specified Ancillary Obligations" means all obligations and liabilities (including interest and fees accruing during the pendency of any bankruptcy, insolvency, receivership or other similar proceeding, regardless of whether allowed or allowable in such proceeding) of any of the Subsidiaries, existing on the Effective Date or arising thereafter, direct or indirect, joint or several, absolute or contingent, matured or unmatured, liquidated or unliquidated, secured or unsecured, arising by contract, operation of law or otherwise, to the Lenders or any of their Affiliates under any Swap Agreement or any Banking Services Agreement; provided that, notwithstanding the foregoing, the definition of "Specified Ancillary Obligations" shall not create or include any guarantee by the Borrower of (or grant of security interest by the Borrower to support, as applicable) any Excluded Swap Obligations of the Borrower for purposes of determining any obligations of the Borrower.

"Specified Swap Obligation" means, with respect to any Loan Party, any obligation to pay or perform under any agreement, contract or transaction that constitutes a "swap" within the meaning of Section 1a(47) of the Commodity Exchange Act or any rules or regulations promulgated thereunder.

"Statutory Reserve Rate" means a fraction (expressed as a decimal), the numerator of which is the number one and the denominator of which is the number one minus the aggregate of the maximum reserve percentage (including any marginal, special, emergency or supplemental reserves) expressed as a decimal established by the Federal Reserve Board to which the Administrative Agent is subject with respect to the Adjusted ~~LIBO Rate, Adjusted~~ EURIBOR Rate or Adjusted TIBOR Rate, as applicable, for eurocurrency funding (currently referred to as "Eurocurrency liabilities" in Regulation D of the Board) or any other reserve ratio or analogous requirement of any central banking or financial regulatory authority imposed in respect of the maintenance of the Commitments or the funding of the Loans. Such reserve percentage shall include those imposed pursuant to Regulation D of the Board. Term Benchmark Loans for which the associated Benchmark is adjusted by reference to the Statutory Reserve Rate (per the related definition of such Benchmark) shall be deemed to constitute eurocurrency funding and to be subject to such reserve requirements without benefit of or credit for proration, exemptions or offsets that may be available from time to time to any Lender under Regulation D of the Board or any comparable regulation. The Statutory Reserve Rate shall be adjusted automatically on and as of the effective date of any change in any reserve percentage.

"Subordinated Indebtedness" means any Indebtedness of the Borrower or any Subsidiary the payment of which is subordinated to payment of the Obligations under the Loan Documents.

"subsidiary" means, with respect to any Person (the "parent") at any date, any corporation, limited liability company, partnership, association or other entity the accounts of which would be consolidated with those of the parent in the parent's consolidated financial statements if such financial statements were prepared in accordance with GAAP as of such date, as well as any other corporation, limited liability company, partnership, association or other entity (a) of which securities or other ownership interests representing more than 50% of the equity or more than 50% of the ordinary voting power or, in the case of a partnership, more than 50% of the general partnership interests are, as of such date, owned, Controlled or held, or (b) that is, as of such date, otherwise Controlled, by the parent or one or more subsidiaries of the parent or by the parent and one or more subsidiaries of the parent.

"Subsidiary" means any subsidiary of the Borrower.

"Subsidiary Guarantor" means each Material Domestic Subsidiary that is a party to the Subsidiary Guaranty. The Subsidiary Guarantors on the Effective Date are identified as such in Schedule 3.01 hereto.

"Subsidiary Guaranty" means a guaranty in the form of Exhibit F (including any and all supplements thereto) and executed by each Subsidiary Guarantor, as amended, restated, supplemented or otherwise modified from time to time.

"Supported QFC" has the meaning assigned to it in Section 9.18.

"Sustainability Adjustment" means, for any Sustainability Adjustment Period (beginning with the Sustainability Adjustment Period commencing in the Reference Year ending December 31, 2022 and relating to the Sustainability Metrics reported in the ESG Compliance Certificate delivered by the Borrower for the Reference Year ending December 31, 2021), determined by reference to the Sustainability Metrics reported in the ESG Compliance Certificate delivered by the Borrower pursuant to 5.01(g) for the immediately preceding Reference Year and reflected in the ESG Annual Report for such Reference Year:

(a) with respect to the Applicable Rate for interest on Loans and fees on Letters of Credit (but not the Applicable Rate for facility fees), the sum of (i) the Energy Savings Margin Adjustment for such Reference Year, *plus* (ii) the Total Reported Injury Rate Margin Adjustment for such Reference Year; and

(b) with respect to the Applicable Rate for facility fees (but not the Applicable Rate for interest on Loans and fees on Letters of Credit), the sum of (i) the Energy Savings Fee Adjustment for such Reference Year, *plus* (ii) the Total Reported Injury Rate Fee Adjustment for such Reference Year;

provided that, notwithstanding the foregoing, if for any calendar year (x) any Sustainability Metric shall not be able to be determined for any reason (other than as described in the immediately following proviso) or (y) the Administrative Agent shall not have received an ESG Compliance Certificate or the applicable ESG Annual Report for the applicable Reference Year by the date required under Section 5.01(g), then, in each case, the Sustainability Adjustment for the applicable Sustainability Adjustment Period commencing during such calendar year shall be deemed to be the rate per annum described in clause (a) of each of the definitions of Energy Savings Margin Adjustment, Energy Savings Fee Adjustment, Total Reported Injury Rate Margin Adjustment and Total Reported Injury Rate Fee Adjustment, as applicable, and until such time as the Administrative Agent shall have received the ESG Compliance Certificate and applicable ESG Annual Report reflecting the Sustainability Metrics for such Reference Year (and, commencing on the fifth Business Day following such receipt by the Administrative Agent, the Sustainability Adjustment for such Sustainability Adjustment Period shall be the rate per annum determined in accordance with the definitions of Energy Savings Margin Adjustment, Energy Savings Fee Adjustment, Total Reported Injury Rate Margin Adjustment and Total Reported Injury Rate Fee Adjustment, as applicable); provided further that, notwithstanding the foregoing, in the event that the methodologies or other bases upon which the reporting of any portion of any Sustainability Metric for any Reference Year shall change from the methodologies and bases for the determination of the Sustainability Threshold for such Sustainability Metric on the Effective Date, the Sustainability Adjustment attributable to such Sustainability Metric for the applicable Sustainability Adjustment Period commencing during the applicable calendar year shall be deemed to be the rate per annum described in clause (b) of the definitions of Energy Savings Margin Adjustment, Energy Savings Fee Adjustment, Total Reported Injury Rate Margin Adjustment and Total Reported Injury Rate Fee Adjustment, as applicable. There shall only be one ESG Compliance Certificate delivered in respect of any Reference Year.

For the avoidance of doubt, until the delivery of the ESG Compliance Certificate delivered in respect of the Reference Year ending December 31, 2021 pursuant to 5.01(g), the Sustainability Adjustment shall be zero and there shall be no Sustainability Adjustment to the Applicable Rate. If, as a result of (A) any restatement or reissuance or other modification of any ESG Annual Report which impacts any Sustainability Metric for any Sustainability Adjustment Period, (B) the agreement by the Borrower and the Lenders that any Sustainability Metric as calculated by the Borrower at the time of delivery of the ESG Compliance Certificate for any Sustainability Adjustment Period was materially inaccurate (an "ESG Inaccuracy") or (C) the Borrower or the Lenders becoming aware of any ESG Inaccuacy in any Sustainability Metric for any Sustainability Adjustment Period, and in each case, a proper calculation of the applicable Sustainability Metric(s) would have resulted in an Applicable Rate for such Sustainability Adjustment Period greater than the specified Applicable Rate actually in effect for such Sustainability Adjustment Period, then, in each case, the Borrower (x) shall promptly provide written notice to the Administrative Agent of such fact, (y) shall immediately and retroactively be obligated to pay to the Administrative Agent, for the account of the applicable Lenders or Issuing Bank, as the case may be, promptly on written demand by the Administrative Agent (or, after the occurrence of an Event of Default under Section 7.01(h) or (i) with respect to the Borrower, automatically and without further action by the Administrative Agent, any Lender or the Issuing Bank), an amount equal to the excess of the amount of interest and fees that should have been paid during such Sustainability Adjustment Period over the amount of interest and fees actually paid during such Sustainability Adjustment Period, but, in any event, within ten (10) days and (z) if requested by the Administrative Agent, shall advise the Administrative Agent of the correct Sustainability Metric(s) or provide a correction to the information provided, including, without limitation, the delivery of a replacement ESG Compliance Certificate calculating such correct Sustainability Metric(s), which revised ESG Compliance Certificate shall apply on the tenth Business Day following the date of delivery of such revised ESG Compliance Certificate through the end of such Sustainability Adjustment Period.

It is understood and agreed that any ESG Inaccuracy (and any consequences thereof) shall not constitute a Default or Event of Default; provided that, the Borrower complies with the terms of this "Sustainability Adjustment" definition with respect to such ESG Inaccuracy. Notwithstanding anything to the contrary herein, unless such amounts shall be due upon the occurrence of any Bankruptcy Event with respect to the Borrower or the occurrence of the Maturity Date or any acceleration of the Obligations, (i) any additional amounts required to be paid pursuant

to the immediately preceding paragraph shall not be due and payable until the date that is ten (10) Business Days after a written demand is delivered for such payment by the Administrative Agent in accordance with such paragraph, (ii) any nonpayment of such additional amounts prior to or upon the date that is ten (10) Business Days after such written demand for payment by the Administrative Agent shall not constitute a Default (whether retroactively or otherwise) and (iii) none of such additional amounts shall be deemed overdue prior to such date that is ten (10) Business Days after such written demand.

Each party hereby agrees that neither the Administrative Agent nor the Sustainability Structuring Agent shall have any responsibility for (or liability in respect of) reviewing, auditing or otherwise evaluating any calculation by the Borrower of any Sustainability Adjustment (or any of the data or computations that are part of or related to any such calculation) set forth in any ESG Compliance Certificate (and the Administrative Agent may rely conclusively on any such certificate, without further inquiry).

To the extent that any event occurs (which would include, without limitation, a material disposition or material acquisition) which the Borrower and Administrative Agent mutually agree (each acting reasonably) means that any provision or requirement under the ESG Compliance Certificate is no longer appropriate, then, the Borrower and the Administrative Agent will report to the Lenders that such provision or requirement shall no longer apply and shall cease to refer to such provision or requirement in the ESG Compliance Certificate.

"Sustainability Adjustment Period" means, for any calendar year of the Borrower, the period (a) commencing on the fifth Business Day following the earlier of (x) the actual date of delivery of the ESG Compliance Certificate for the applicable Reference Year pursuant to 5.01(g), and (y) the required date of delivery of the ESG Compliance Certificate for the applicable Reference Year as required by Section 5.01(g), and (b) ending (but not including) the fifth Business Day following the earlier of (x) the actual date of delivery of the ESG Compliance Certificate for the next succeeding Reference Year, and (y) the required date of delivery of the ESG Compliance Certificate for the next succeeding Reference Year as required by Section 5.01(g). For the avoidance of doubt, an ESG Compliance Certificate shall not be deemed to be delivered for purposes of this definition unless, and only at such time that, the ESG Annual Report for the applicable Reference Year is publicly available.

"Sustainability Metric" means, for any Reference Year, (a) the Energy Savings for such Reference Year or (b) the Total Reported Injury Rate for such Reference Year, or both, as the context requires.

"Sustainability Metric Auditor" means an internationally recognized "big four" auditing firm or a reputable sustainability assurance provider reasonably satisfactory to the Administrative Agent and the Sustainability Structuring Agent.

"Sustainability Report" means, for any Reference Year, the annual non-financial disclosure form according to the GRI Standard for Sustainability Reporting publicly reported by the Borrower for such Reference Year and published on an Internet or intranet website to which each Lender and the Administrative Agent have been granted access free of charge.

"Sustainability Structuring Agent" means BNP Paribas, in its capacity as Sustainability Structuring Agent hereunder.

"Sustainability Table" for the applicable Sustainability Metric and Reference Year, means:

Total Reported Injury Rate	Reference Year				
	2021	2022	2023	2024	2025
Target	0.3	0.3	0.3	0.3	0.3
Threshold	0.4	0.4	0.4	0.4	0.4

Energy Savings	Reference Year				
	2021	2022	2023	2024	2025
Target	2.00	2.00	1.90	1.80	1.70
Threshold	1.50	1.50	1.43	1.35	1.28

"Sustainability Threshold" means, with respect to any Sustainability Metric for any Reference Year, the "Threshold" for such Sustainability Metric for such Reference Year as set forth in the Sustainability Table.

"Swap Agreement" means any agreement with respect to any swap, forward, future or derivative transaction or option or similar agreement involving, or settled by reference to, one or more rates, currencies, commodities, equity or debt instruments or securities, or economic, financial or pricing indices or measures of economic, financial or pricing risk or value or any similar transaction or any combination of these transactions; provided that no phantom stock or similar plan providing for payments only on account of services provided by current or former directors, officers, employees or consultants of the Borrower or the Subsidiaries shall be a Swap Agreement.

"Swingline Exposure" means, at any time, the aggregate principal amount of all Swingline Loans outstanding at such time. The Swingline Exposure of any Lender at any time shall be its Applicable Percentage of the total Swingline Exposure at such time.

"Swingline Lender" means JPMorgan Chase Bank, N.A., in its capacity as lender of Swingline Loans hereunder.

"Swingline Loan" means a Loan made pursuant to Section 2.05.

"Syndication Agent" means each of Goldman Sachs Bank USA, Barclays Bank PLC, Citibank, N.A., BNP Paribas and Bank of America, N.A., in its capacity as syndication agent for the credit facility evidenced by this Agreement.

"TARGET2" means the Trans-European Automated Real-time Gross Settlement Express Transfer payment system which utilizes a single shared platform and which was launched on November 19, 2007.

"~~TARGET2~~TARGET Day" means any day on which TARGET2 (or, if such payment system ceases to be operative, such other payment system, if any, determined by the Administrative Agent to be a suitable replacement) is open for the settlement of payments in Euro.

"Taxes" means all present or future taxes, levies, imposts, duties, deductions, withholdings (including backup withholding), assessments, fees or other charges imposed by any Governmental Authority, including any interest, additions to tax or penalties applicable thereto.

"Term Benchmark", when used in reference to a currency means an Agreed Currency and when used in reference to any Loan or Borrowing, means that such Loan, or the Loans comprising such Borrowing, bears interest at a rate determined by reference to the Adjusted ~~LIBO~~Term SOFR Rate, the Adjusted EURIBOR Rate or the Adjusted TIBOR Rate.

"Term Benchmark Payment Office" of the Administrative Agent shall mean, for each Foreign Currency, the office, branch, affiliate or correspondent bank of the Administrative Agent for such currency as specified from time to time by the Administrative Agent to the Borrower and each Lender.

~~"Term SOFR" means, for the applicable Corresponding Tenor as of the applicable Reference Time, the forward-looking term rate based on SOFR that has been selected or recommended by the Relevant Governmental Body.~~

"Term SOFR ~~Notice~~" ~~means a notification by the Administrative Agent to the Lenders and the Borrower of the occurrence of a Term SOFR Transition Event.~~Determination Day" has the meaning assigned to it under the definition of Term SOFR Reference Rate.

"Term SOFR ~~Transition Event~~" ~~means the determination by the Administrative Agent that (a) Term SOFR has been recommended for use by the Relevant Governmental Body, (b) the administration of Term SOFR is administratively feasible for the Administrative Agent and (c) a Benchmark Transition Event or an Early Opt-in Election, as applicable (and, for the avoidance of doubt, not in the case of an Other Benchmark Rate Election), has previously occurred resulting in a Benchmark Replacement in accordance with Section 2.14 that is not Term SOFR.~~Rate" means, with respect to any Term Benchmark Borrowing denominated in Dollars and for any tenor comparable to the applicable Interest Period, the Term SOFR Reference Rate at approximately 5:00 a.m., Chicago time, two U.S. Government Securities Business Days prior to the commencement of such tenor comparable to the applicable Interest Period, as such rate is published by the CME Term SOFR Administrator.

~~"TIBOR Interpolated Rate" means, at any time, with respect to any Term Benchmark Borrowing denominated in Japanese Yen and for any Interest Period, the rate per annum (rounded to the same number of decimal places as the TIBOR Screen Rate) determined by the Administrative Agent (which determination shall be conclusive and binding absent manifest error) to be equal to the rate that results from interpolating on a linear basis between: (a) the TIBOR Screen Rate for the longest period (for which the TIBOR Screen Rate is available for Japanese Yen) that is shorter than the Impacted TIBOR Rate Interest Period; and (b) the TIBOR Screen Rate for the shortest period (for which the TIBOR Screen Rate is available for Japanese Yen) that exceeds the Impacted TIBOR Rate Interest Period, in each case, at such time; provided that, if any TIBOR Interpolated Rate shall be less than 0.00%, such rate shall be deemed to be 0.00% for the purposes of this Agreement.~~

"Term SOFR Reference Rate" means, for any day and time (such day, the "Term SOFR Determination Day"), with respect to any Term Benchmark Borrowing denominated in Dollars and for any tenor comparable to the applicable Interest Period, the rate per annum published by the CME Term SOFR Administrator and identified by the Administrative Agent as the forward-looking term rate based on SOFR. If by 5:00 pm (New York City time) on such Term SOFR Determination Day, the "Term SOFR Reference Rate" for the applicable tenor has not been published by the CME Term SOFR Administrator and a Benchmark Replacement Date with respect to the Term SOFR Rate has not occurred, then, so long as such day is otherwise a U.S. Government Securities Business Day, the Term SOFR Reference Rate for such Term SOFR Determination Day will be the Term SOFR Reference Rate as published in respect of the first preceding U.S. Government Securities Business Day for which such Term SOFR Reference Rate was published by the CME Term SOFR Administrator, so long as such first preceding U.S. Government Securities Business Day is not more than five (5) U.S. Government Securities Business Days prior to such Term SOFR Determination Day.

"TIBOR Rate" means, with respect to any Term Benchmark Borrowing denominated in Japanese Yen and for any Interest Period, the TIBOR Screen Rate ~~at approximately 11:00 a.m., Japan time,~~ two Business Days prior to the commencement of such Interest Period~~; provided that, if the TIBOR Screen Rate shall not be available at such time for such Interest Period (an "Impacted TIBOR Rate Interest Period") with respect to Japanese Yen then the TIBOR Rate shall be the TIBOR Interpolated Rate~~.

"TIBOR Screen Rate" means the Tokyo interbank offered rate administered by the Ippan Shadan Hojin JBA TIBOR Administration (or any other person which takes over the administration of that rate) for ~~Japanese Yen and for~~ the relevant currency and period displayed on page DTIBOR01 of the Reuters screen (or, in the event such rate does not appear on such Reuters page or screen, on any successor or substitute page on such screen that displays such rate, or on the appropriate page of such other information service that publishes such rate as selected by the Administrative Agent from time to time in its reasonable discretion) ~~at or about 11:00 a.m~~as published at approximately 1:00 p.m. Japan time two Business Days prior to the commencement of such Interest Period. ~~If the TIBOR Screen Rate shall be less than 0.00%, the TIBOR Screen Rate shall be deemed to be 0.00% for purposes of this Agreement.~~

"Total Reported Injury Rate" means, for any Reference Year, the Total Reported Injury Rate that is reported for such Reference Year, defined as the number of work-related injuries per 100 full-time workers during a

one-year period across the sites of the Borrower and its consolidated Subsidiaries (but excluding the sites of the Borrower's Subsidiary Silfex, Inc.), and calculated in accordance with the U.S. Bureau of Labor Statistics (BLS) and the Occupational Safety and Health Administration (OSHA) requirements.

"Total Reported Injury Rate Fee Adjustment" means, with respect to any Reference Year, (a) positive 0.005% if the Total Reported Injury Rate for such Reference Year as set forth in the ESG Annual Report for such Reference Year is more than the Total Reported Injury Rate Threshold for such Reference Year, (b) zero if the Total Reported Injury Rate for such Reference Year as set forth in the ESG Annual Report for such Reference Year is less than or equal to the Total Reported Injury Rate Threshold for such Reference Year but more than the Total Reported Injury Rate Target for such Reference Year, or (c) negative 0.005% if the Total Reported Injury Rate for such Reference Year as set forth in the ESG Annual Report for such Reference Year is less than or equal to the Total Reported Injury Rate Target for such Reference Year.

"Total Reported Injury Rate Margin Adjustment" means, with respect to any Reference Year, (a) positive 0.02% if the Total Reported Injury Rate for such Reference Year as set forth in the ESG Annual Report for such Reference Year is more than the Total Reported Injury Rate Threshold for such Reference Year, (b) zero if the Total Reported Injury Rate for such Reference Year as set forth in the ESG Annual Report for such Reference Year is less than or equal to the Total Reported Injury Rate Threshold for such Reference Year but more than the Total Reported Injury Rate Target for such Reference Year, or (c) negative 0.02% if the Total Reported Injury Rate for such Reference Year as set forth in the ESG Annual Report for such Reference Year is less than or equal to the Total Reported Injury Rate Target for such Reference Year.

"Total Reported Injury Rate Target" means, with respect to any Reference Year, the "Target" for Total Reported Injury Rate for such Reference Year as set forth in the Sustainability Table.

"Total Reported Injury Rate Threshold" means, with respect to any Reference Year, the "Threshold" for Total Reported Injury Rate for such Reference Year as set forth in the Sustainability Table.

"Transactions" means the execution, delivery and performance by the Loan Parties of this Agreement and the other Loan Documents, the borrowing of Loans and other credit extensions, the use of the proceeds thereof and the issuance of Letters of Credit hereunder.

"Type", when used in reference to any Loan or Borrowing, refers to whether the rate of interest on such Loan, or on the Loans comprising such Borrowing, is determined by reference to the Adjusted ~~LIBO~~Term SOFR Rate, the Adjusted EURIBOR Rate, the Adjusted TIBOR Rate, the Alternate Base Rate or the Adjusted Daily Simple RFR.

"UK Financial Institutions" means any BRRD Undertaking (as such term is defined under the PRA Rulebook (as amended from time to time) promulgated by the United Kingdom Prudential Regulation Authority) or any person falling within IFPRU 11.6 of the FCA Handbook (as amended from time to time) promulgated by the United Kingdom Financial Conduct Authority, which includes certain credit institutions and investment firms, and certain affiliates of such credit institutions or investment firms.

"UK Resolution Authority" means the Bank of England or any other public administrative authority having responsibility for the resolution of any UK Financial Institution.

"Unadjusted Benchmark Replacement" means the applicable Benchmark Replacement excluding the related Benchmark Replacement Adjustment.

"U.S. Government Securities Business Day" means any day except for (i) a Saturday, (ii) a Sunday or (iii) a day on which the Securities Industry and Financial Markets Association recommends that the fixed income departments of its members be closed for the entire day for purposes of trading in United States government securities.

"U.S. Person" means a "United States person" within the meaning of Section 7701(a)(30) of the Code.

"U.S. Tax Compliance Certificate" has the meaning assigned to such term in Section 2.17(f)(ii)(B)(3).

"Withdrawal Liability" means liability to a Multiemployer Plan as a result of a complete or partial withdrawal from such Multiemployer Plan, as such terms are defined in Part I of Subtitle E of Title IV of ERISA.

"Write-Down and Conversion Powers" means, (a) with respect to any EEA Resolution Authority, the write-down and conversion powers of such EEA Resolution Authority from time to time under the Bail-In Legislation for the applicable EEA Member Country, which write-down and conversion powers are described in the EU Bail-In Legislation Schedule, and (b) with respect to the United Kingdom, any powers of the applicable Resolution Authority under the Bail-In Legislation to cancel, reduce, modify or change the form of a liability of any UK Financial Institution or any contract or instrument under which that liability arises, to convert all or part of that liability into shares, securities or obligations of that person or any other person, to provide that any such contract or instrument is to have effect as if a right had been exercised under it or to suspend any obligation in respect of that liability or any of the powers under that Bail-In Legislation that are related to or ancillary to any of those powers.

SECTION 1.02. Classification of Loans and Borrowings. For purposes of this Agreement, Loans may be classified and referred to by Class (e.g., a "Revolving Loan") or by Type (e.g., a "Term Benchmark Loan" or an "RFR Loan") or by Class and Type (e.g., a "Term Benchmark Revolving Loan" or an "RFR Revolving Loan"). Borrowings also may be classified and referred to by Class (e.g., a "Revolving Borrowing") or by Type (e.g., a "Term Benchmark Borrowing" or an "RFR Borrowing") or by Class and Type (e.g., a "Term Benchmark Revolving Borrowing" or an "RFR Revolving Borrowing").

SECTION 1.03. Terms Generally. The definitions of terms herein shall apply equally to the singular and plural forms of the terms defined. Whenever the context may require, any pronoun shall include the corresponding masculine, feminine and neuter forms. The words "include", "includes" and "including" shall be deemed to be followed by the phrase "without limitation". The word "will" shall be construed to have the same meaning and effect as the word "shall". The word "law" shall be construed as referring to all statutes, rules, regulations, codes and other laws (including official rulings and interpretations thereunder having the force of law or with which affected Persons customarily comply), and all judgments, orders and decrees, of all Governmental Authorities. Unless the context requires otherwise (a) any definition of or reference to any agreement, instrument or other document herein shall be construed as referring to such agreement, instrument or other document as from time to time amended, restated, supplemented or otherwise modified (subject to any restrictions on such amendments, restatements, supplements or modifications set forth herein), (b) any definition of or reference to any statute, rule or regulation shall be construed as referring thereto as from time to time amended, supplemented or otherwise modified (including by succession of comparable successor laws), (c) any reference herein to any Person shall be construed to include such Person's successors and assigns (subject to any restrictions on assignment set forth herein) and, in the case of any Governmental Authority, any other Governmental Authority that shall have succeeded to any or all functions thereof, (d) the words "herein", "hereof" and "hereunder", and words of similar import, shall be construed to refer to this Agreement in its entirety and not to any particular provision hereof, (e) all references herein to Articles, Sections, Exhibits and Schedules shall be construed to refer to Articles and Sections of, and Exhibits and Schedules to, this Agreement and (f) the words "asset" and "property" shall be construed to have the same meaning and effect and to refer to any and all tangible and intangible assets and properties, including cash, securities, accounts and contract rights.

SECTION 1.04. Accounting Terms; GAAP; Pro Forma Calculations. (a) Except as otherwise expressly provided herein, all terms of an accounting or financial nature shall be construed in accordance with GAAP, as in effect from time to time; provided that, if the Borrower notifies the Administrative Agent that the Borrower requests an amendment to any provision hereof to eliminate the effect of any change occurring after the date hereof in GAAP or in the application thereof on the operation of such provision (or if the Administrative Agent notifies the Borrower that the Required Lenders request an amendment to any provision hereof for such purpose), regardless of whether any such notice is given before or after such change in GAAP or in the application thereof, then such provision shall be interpreted on the basis of GAAP as in effect and applied immediately before such change shall have become effective until such notice shall have been withdrawn or such provision amended in accordance herewith. Notwithstanding any other provision contained herein, all terms of an accounting or financial nature used herein

shall be construed, and all computations of amounts and ratios referred to herein shall be made (i) without giving effect to any election under Accounting Standards Codification 825-10-25 (or any other Accounting Standards Codification or Financial Accounting Standard having a similar result or effect) to value any Indebtedness or other liabilities of the Borrower or any Subsidiary at "fair value", as defined therein and (ii) without giving effect to any treatment of Indebtedness in respect of convertible debt instruments under Accounting Standards Codification 470-20 (or any other Accounting Standards Codification or Financial Accounting Standard having a similar result or effect) to value any such Indebtedness in a reduced or bifurcated manner as described therein, and such Indebtedness shall at all times be valued at the full stated principal amount thereof.

(b) Except as otherwise expressly provided herein, all pro forma computations required to be made hereunder giving effect to any acquisition or disposition for consideration in excess of $50,000,000, or issuance, incurrence or assumption of Indebtedness, or other transaction shall in each case be calculated giving pro forma effect thereto (and, in the case of any pro forma computation made hereunder to determine whether such acquisition or disposition, or issuance, incurrence or assumption of Indebtedness, or other transaction is permitted to be consummated hereunder, to any other such transaction consummated since the first day of the period covered by any component of such pro forma computation and on or prior to the date of such computation) as if such transaction had occurred on the first day of the period of four consecutive fiscal quarters ending with the most recent fiscal quarter for which financial statements shall have been delivered pursuant to Section 5.01(a) or 5.01(b) (or, prior to the delivery of any such financial statements, ending with the last fiscal quarter included in the financial statements referred to in Section 3.04(a)), and, to the extent applicable, to the historical earnings and cash flows associated with the assets acquired or disposed of (but without giving effect to any synergies or cost savings) and any related incurrence or reduction of Indebtedness, all in accordance with Article 11 of Regulation S-X under the Securities Act. If any Indebtedness bears a floating rate of interest and is being given pro forma effect, the interest on such Indebtedness shall be calculated as if the rate in effect on the date of determination had been the applicable rate for the entire period (taking into account any Swap Agreement applicable to such Indebtedness).

(c) Notwithstanding anything to the contrary contained in Section 1.04(a) or in the definition of "Capital Lease Obligations," any change in accounting for leases pursuant to GAAP resulting from the adoption of Financial Accounting Standards Board Accounting Standards Update No. 2016-02, Leases (Topic 842) ("FAS 842"), to the extent such adoption would require treating any lease (or similar arrangement conveying the right to use) as a capital lease where such lease (or similar arrangement) would not have been required to be so treated under GAAP as in effect on December 31, 2015, such lease shall not be considered a capital lease, and all calculations and deliverables under this Agreement or any other Loan Document shall be made or delivered, as applicable, in accordance therewith.

SECTION 1.05. Status of Obligations. In the event that the Borrower or any other Loan Party shall at any time issue or have outstanding any Subordinated Indebtedness, the Borrower shall take or cause such other Loan Party to take all such actions as shall be necessary to cause the Obligations to constitute senior indebtedness (however denominated) in respect of such Subordinated Indebtedness and to enable the Administrative Agent and the Lenders to have and exercise any payment blockage or other remedies available or potentially available to holders of senior indebtedness under the terms of such Subordinated Indebtedness. Without limiting the foregoing, the Obligations are hereby designated as "senior indebtedness" and as "designated senior indebtedness" and words of similar import under and in respect of any indenture or other agreement or instrument under which such Subordinated Indebtedness is outstanding and are further given all such other designations as shall be required under the terms of any such Subordinated Indebtedness in order that the Lenders may have and exercise any payment blockage or other remedies available or potentially available to holders of senior indebtedness under the terms of such Subordinated Indebtedness.

SECTION 1.06. Interest Rates; ~~LIBOR~~Benchmark Notification. The interest rate on a Loan denominated in Dollars or ~~an~~a Foreign Currency may be derived from an interest rate benchmark that may be discontinued or is, or may in the future become, the subject of regulatory reform. ~~Regulators have signaled the need to use alternative benchmark reference rates for some of these interest rate benchmarks and, as a result, such interest rate benchmarks may cease to comply with applicable laws and regulations, may be permanently discontinued, and/or the basis on which they are calculated may change. The London interbank offered rate ("LIBOR") is intended to represent the rate at which contributing banks may obtain short-term borrowings from each other in the London interbank market. On March 5, 2021, the U.K. Financial Conduct Authority ("FCA") publicly announced that: (a) immediately after~~

~~December 31, 2021, publication of all seven euro LIBOR settings, the spot next, 1-week, 2-month and 12-month Japanese Yen LIBOR settings, the overnight, 1-week, 2-month and 12-month British Pound Sterling LIBOR settings, and the 1-week and 2-month U.S. Dollar LIBOR settings will permanently cease; immediately after June 30, 2023, publication of the overnight and 12-month U.S. Dollar LIBOR settings will permanently cease; immediately after December 31, 2021, the 1-month, 3-month and 6-month Japanese Yen LIBOR settings and the 1-month, 3-month and 6-month British Pound Sterling LIBOR settings will cease to be provided or, subject to consultation by the FCA, be provided on a changed methodology (or "synthetic") basis and no longer be representative of the underlying market and economic reality they are intended to measure and that representativeness will not be restored; and immediately after June 30, 2023, the 1-month, 3-month and 6-month U.S. Dollar LIBOR settings will cease to be provided or, subject to the FCA's consideration of the case, be provided on a synthetic basis and no longer be representative of the underlying market and economic reality they are intended to measure and that representativeness will not be restored. There is no assurance that dates announced by the FCA will not change or that the administrator of LIBOR and/or regulators will not take further action that could impact the availability, composition, or characteristics of LIBOR or the currencies and/or tenors for which LIBOR is published. Each party to this agreement should consult its own advisors to stay informed of any such developments. Public and private sector industry initiatives are currently underway to identify new or alternative reference rates to be used in place of LIBOR.~~ Upon the occurrence of a Benchmark Transition Event, ~~a Term SOFR Transition Event, an Early Opt-in Election or an Other Benchmark Rate Election,~~ Section 2.14(b) ~~and (c) provide~~provides a mechanism for determining an alternative rate of interest. The ~~Administrative Agent will promptly notify the Borrower, pursuant to Section 2.14(c), of any change to the reference rate upon which the interest rate on Term Benchmark Loans is based. However, the~~ Administrative Agent does not warrant or accept any responsibility for, and shall not have any liability with respect to, the ~~continuation of~~ administration ~~of~~, submission ~~of~~, ~~calculation of~~performance or any other matter related to ~~the Daily Simple RFR, LIBOR or other rates in the definition of "LIBO Rate" (or "EURIBOR Rate", or "TIBOR Rate", as applicable)~~any interest rate used in this Agreement, or with respect to any alternative or successor rate thereto, or replacement rate thereof ~~(including (i) any such alternative, successor or replacement rate implemented pursuant to Section 2.14(b) or (c), whether upon the occurrence of a Benchmark Transition Event, a Term SOFR Transition Event, an Early Opt-in Election or an Other Benchmark Rate Election, and (ii) the implementation of any Benchmark Replacement Conforming Changes pursuant to Section 2.14(d))~~, including without limitation, whether the composition or characteristics of any such alternative, successor or replacement reference rate will be similar to, or produce the same value or economic equivalence of, the ~~Daily Simple RFR, the LIBO Rate (or the EURIBOR Rate, or the TIBOR Rate, as applicable)~~existing interest rate being replaced or have the same volume or liquidity as did ~~the London interbank offered rate (or the euro interbank offered rate or the Tokyo interbank offered rate, as applicable)~~any existing interest rate prior to its discontinuance or unavailability. The Administrative Agent and its affiliates and/or other related entities may engage in transactions that affect the calculation of any ~~Daily Simple RFR~~, interest rate used in this Agreement or any alternative, successor or alternative rate (including any Benchmark Replacement) and/or any relevant adjustments thereto, in each case, in a manner adverse to the Borrower. The Administrative Agent may select information sources or services in its reasonable discretion to ascertain any ~~RFR, Daily Simple RFR or the Relevant Rate~~interest rate used in this Agreement, any component thereof, or rates referenced in the definition thereof, in each case pursuant to the terms of this Agreement, and shall have no liability to the Borrower, any Lender or any other person or entity for damages of any kind, including direct or indirect, special, punitive, incidental or consequential damages, costs, losses or expenses (whether in tort, contract or otherwise and whether at law or in equity), for any error or calculation of any such rate (or component thereof) provided by any such information source or service.

SECTION 1.07. Letter of Credit Amounts. Unless otherwise specified herein, the amount of a Letter of Credit at any time shall be deemed to be the Dollar Equivalent of the stated amount of such Letter of Credit available to be drawn at such time; provided that with respect to any Letter of Credit that, by its terms or the terms of any Letter of Credit Agreement related thereto, provides for one or more automatic increases in the available amount thereof, the amount of such Letter of Credit shall be deemed to be the Dollar Equivalent of the maximum amount of such Letter of Credit after giving effect to all such increases, whether or not such maximum amount is available to be drawn at such time. For all purposes of this Agreement, if on any date of determination a Letter of Credit has expired by its terms but any amount may still be drawn thereunder by reason of the operation of Article 29(a) of the Uniform Customs and Practice for Documentary Credits, International Chamber of Commerce Publication No. 600 (or such later version thereof as may be in effect at the applicable time) or Rule 3.13 or Rule 3.14 of the

International Standby Practices, International Chamber of Commerce Publication No. 590 (or such later version thereof as may be in effect at the applicable time) or similar terms of the Letter of Credit itself, or if compliant documents have been presented but not yet honored, such Letter of Credit shall be deemed to be "outstanding" and "undrawn" in the amount so remaining available to be paid, and the obligations of the Borrower and each Lender shall remain in full force and effect until the Issuing Bank and the Lenders shall have no further obligations to make any payments or disbursements under any circumstances with respect to any Letter of Credit.

SECTION 1.08. Divisions. For all purposes under the Loan Documents, in connection with any division or plan of division under Delaware law (or any comparable event under a different jurisdiction's laws): (a) if any asset, right, obligation or liability of any Person becomes the asset, right, obligation or liability of a different Person, then it shall be deemed to have been transferred from the original Person to the subsequent Person, and (b) if any new Person comes into existence, such new Person shall be deemed to have been organized and acquired on the first date of its existence by the holders of its Equity Interests at such time.

SECTION 1.09. Exchange Rates; Currency Equivalents. (a) The Administrative Agent or the Issuing Bank, as applicable, shall determine the Dollar Equivalent amounts of Term Benchmark Borrowings, RFR Borrowings or Letter of Credit extensions denominated in Foreign Currencies. Such Dollar Equivalent shall become effective as of such Revaluation Date and shall be the Dollar Equivalent of such amounts until the next Revaluation Date to occur. Except for purposes of financial statements delivered by the Borrower hereunder or calculating financial covenants hereunder or except as otherwise provided herein, the applicable amount of any Agreed Currency (other than Dollars) for purposes of the Loan Documents shall be such Dollar Equivalent amount as so determined by the Administrative Agent or the Issuing Bank, as applicable.

(b) Wherever in this Agreement in connection with a Borrowing, conversion, continuation or prepayment of a Term Benchmark Loan or an RFR Loan or the issuance, amendment or extension of a Letter of Credit, an amount, such as a required minimum or multiple amount, is expressed in Dollars, but such Borrowing, Loan or Letter of Credit is denominated in an Foreign Currency, such amount shall be the Dollar Equivalent of such amount (rounded to the nearest unit of such Foreign Currency, with 0.5 of a unit being rounded upward), as determined by the Administrative Agent or the Issuing Bank, as the case may be.

SECTION 1.10. Amendment and Restatement of Existing Credit Agreement.

(a) The parties to this Agreement agree that, on the Effective Date, the terms and provisions of the Existing Credit Agreement shall be and hereby are amended, superseded and restated in their entirety by the terms and provisions of this Agreement. Neither the execution, delivery and acceptance of this Agreement nor any of the terms, covenants, conditions or other provisions set forth herein are intended, nor shall they be deemed or construed, to effect a novation of any liens or indebtedness or other obligations under the Existing Credit Agreement or any other Loan Document (as defined in the Existing Credit Agreement) or to pay, extinguish, release, satisfy or discharge (i) all or any part of the indebtedness or other obligations evidenced by the Existing Credit Agreement, (ii) the liability of any Person under the Existing Credit Agreement or the Loan Documents (as defined under the Existing Credit Agreement) executed and delivered in connection therewith, (iii) the liability of any Person with respect to the Existing Credit Agreement or any indebtedness or other obligations evidenced thereby, or (iv) any deeds of trust, mortgages, liens, security interests or contractual or legal rights securing all or any part of such indebtedness or other obligations. All Loans made, and Obligations incurred, under the Existing Credit Agreement which are outstanding on the Effective Date (and not terminated or otherwise repaid with the proceeds of any Loans made hereunder on the Effective Date) shall be re-evidenced as Loans and Obligations, respectively, under (and shall be governed by the terms of) this Agreement and the other Loan Documents.

(b) Without limiting the foregoing, upon the effectiveness of the amendment and restatement contemplated hereby on the Effective Date and except as otherwise expressly provided herein:

(i) all references in the "Loan Documents" (as defined in the Existing Credit Agreement) to the "Administrative Agent", the "Credit Agreement" and the "Loan Documents" shall be deemed to refer to the Administrative Agent, this Agreement and the Loan Documents;

(ii) the "Commitments" (as defined in the Existing Credit Agreement) shall continue as Commitments hereunder as set forth on Schedule 2.01;

(iii) the "Revolving Loans" (as defined in the Existing Credit Agreement) outstanding under the Existing Credit Agreement, if any, shall continue as Revolving Loans hereunder;

(iv) the Administrative Agent shall make such reallocations, sales, assignments or other relevant actions in respect of the "Commitments" and "Revolving Credit Exposure" (each as defined in and in effect under the Existing Credit Agreement) as are necessary in order that each Lender's Revolving Credit Exposure hereunder reflects such Lender's Applicable Percentage thereof on the Effective Date (and in no event exceeds each such Lender's Commitment hereunder), and the Borrower and each Lender that was a "Lender" under the Existing Credit Agreement (constituting the "Required Lenders" under and as defined therein) hereby agrees (with effect immediately prior to the Effective Date) that (x) such reallocation, sales and assignments shall be deemed to have been effected by way of, and subject to the terms and conditions of, Assignment and Assumptions, without the payment of any related assignment fee, and no other documents or instruments shall be, or shall be required to be, executed in connection with such assignments (all of which are hereby waived), (y) such reallocation shall satisfy the assignment provisions of Section 9.04 and Section 9.02(d) of the Existing Credit Agreement and (z) in connection with such reallocation, sales, assignments or other relevant actions, the Borrower shall pay all interest and fees outstanding under the Existing Credit Agreement and accrued to the date hereof to the Administrative Agent for the account of the Lenders party hereto, together with any losses, costs and expenses incurred by Lenders under Section 2.16 of the Existing Credit Agreement; and

(v) each of the signatories hereto that is also a party to the Existing Credit Agreement hereby consents to any of the actions described in the foregoing clause (iv) and agrees that any and all required notices and required notice periods under the Existing Credit Agreement in connection with any of the actions described in the foregoing clause (iv) on the Effective Date are hereby waived and of no force and effect.

(c) Without limiting the foregoing, each Loan Party hereto, as debtor, grantor, pledgor, guarantor, or another similar capacity in which such Loan Party grants liens or security interests in its properties or otherwise acts as a guarantor, joint or several obligor or other accommodation party, as the case may be, in each case under the "Loan Documents" as defined in the Existing Credit Agreement, hereby (i) ratifies and reaffirms all of its payment and performance obligations, contingent or otherwise, under each of the "Loan Documents" as defined in the Existing Credit Agreement to which it is a party and (ii) to the extent such Loan Party granted liens on or security interests in any of its properties pursuant to any of the "Loan Documents" as defined in the Existing Credit Agreement, hereby ratifies and reaffirms such grant of security (and any filings with Governmental Authorities made in connection therewith) and confirms that such liens and security interests continue to secure the Obligations.

(d) The Revolving Loans (as defined in the Existing Credit Agreement) previously made to the Borrower by the Departing Lender under the Existing Credit Agreement which remain outstanding as of the date of this Agreement (if any) shall be repaid in full (accompanied by any accrued and unpaid interest and fees thereon), the Departing Lender's "Commitment" under the Existing Credit Agreement shall be terminated and the Departing Lender shall not be a Lender hereunder.

ARTICLE II

The Credits

SECTION 2.01. Commitments. Subject to the terms and conditions set forth herein, each Lender (severally and not jointly) agrees to make Revolving Loans to the Borrower in Agreed Currencies from time to time during the Availability Period in an aggregate principal amount that will not result in (a) subject to Section 2.11(b), the Dollar Equivalent of such Lender's Revolving Credit Exposure exceeding such Lender's Commitment or (b) subject to Section 2.11(b), the sum of the Dollar Equivalent of the total Revolving Credit Exposures exceeding the Aggregate Commitment. Within the foregoing limits and subject to the terms and conditions set forth herein, the Borrower may borrow, prepay and reborrow Revolving Loans.

SECTION 2.02. Loans and Borrowings. (a) Each Revolving Loan (other than a Swingline Loan) shall be made as part of a Borrowing consisting of Revolving Loans made by the Lenders ratably in accordance with their respective Commitments. The failure of any Lender to make any Loan required to be made by it shall not relieve any other Lender of its obligations hereunder; provided that the Commitments of the Lenders are several and no Lender shall be responsible for any other Lender's failure to make Loans as required. Any Swingline Loan shall be made in accordance with the procedures set forth in Section 2.05.

(b) Subject to Section 2.14, each Revolving Borrowing shall be comprised (A) in the case of Borrowings in Dollars, entirely of ABR Loans ~~or~~, Term Benchmark Loans or RFR Loans and (B) in the case of Borrowings in any other Agreed Currency, entirely of Term Benchmark Loans or RFR Loans, as applicable, in each case of the same Agreed Currency, in each case, as the Borrower may request in accordance herewith; provided that each ABR Loan shall only be made in Dollars. Each Swingline Loan shall be an ABR Loan. Each Lender at its option may make any Loan by causing any domestic or foreign branch or Affiliate of such Lender to make such Loan (and in the case of an Affiliate, the provisions of Sections 2.14, 2.15, 2.16 and 2.17 shall apply to such Affiliate to the same extent as to such Lender); provided that any exercise of such option shall not affect the obligation of the Borrower to repay such Loan in accordance with the terms of this Agreement.

(c) At the commencement of each Interest Period for any Term Benchmark Revolving Borrowing, such Borrowing shall be in an aggregate amount that is an integral multiple of $1,000,000 (or, if such Borrowing is denominated in (i) Japanese Yen, JPY100,000,000 or (ii) a Foreign Currency other than Japanese Yen, 1,000,000 units of such currency) and not less than $5,000,000 (or, if such Borrowing is denominated in (i) Japanese Yen, JPY500,000,000 or (ii) a Foreign Currency other than Japanese Yen, 5,000,000 units of such currency). At the time that each ABR Revolving Borrowing and/or RFR Borrowing is made, such Borrowing shall be in an aggregate amount that is an integral multiple of the Dollar Equivalent of $1,000,000 and not less than the Dollar Equivalent of $5,000,000; provided that an ABR Revolving Borrowing may be in an aggregate amount that is equal to the entire unused balance of the Aggregate Commitment or that is required to finance the reimbursement of an LC Disbursement as contemplated by Section 2.06(e). Each Swingline Loan shall be in an amount that is an integral multiple of $500,000 and not less than $1,000,000. Borrowings of more than one Type and Class may be outstanding at the same time; provided that there shall not at any time be more than a total of seven Term Benchmark Revolving Borrowings or RFR Borrowings outstanding.

(d) Notwithstanding any other provision of this Agreement, the Borrower shall not be entitled to request, or to elect to convert or continue, any Borrowing if the Interest Period requested with respect thereto would end after the Maturity Date.

SECTION 2.03. Requests for Revolving Borrowings. To request a Revolving Borrowing, the Borrower shall notify the Administrative Agent of such request (a) by irrevocable written notice (via a written Borrowing Request signed by the Borrower, promptly followed by telephonic confirmation of such request) in the case of a Term Benchmark Borrowing, not later than 12:00 noon, Local Time, three U.S. Government Securities Business Days (in the case of a Term Benchmark Borrowing denominated in Dollars) or by irrevocable written notice (via a written Borrowing Request signed by the Borrower) not later than 11:00 a.m., Local Time, four Business Days (in the case of a Term Benchmark Borrowing denominated in a Foreign Currency), in each case before the date of the proposed Borrowing, (b) by irrevocable written notice (via a written Borrowing Request signed by the Borrower, promptly followed by telephonic confirmation of such request) in the case of an RFR Borrowing, not later than 12:00 noon, New York City time, five U.S. Government Securities Business Days (in the case of an RFR Borrowing denominated in Dollars) or not later than 11:00 a.m., New York City time, five RFR Business Days (in the case of an RFR Borrowing denominated in Pounds Sterling), in each case before the date of the proposed Borrowing or (c) by telephone in the case of an ABR Borrowing, not later than 12:00 noon, New York City time, one Business Day before the date of the proposed Borrowing; provided that any such notice of an ABR Revolving Borrowing to finance the reimbursement of an LC Disbursement as contemplated by Section 2.06(e) may be given not later than 10:00 a.m., New York City time, on the date of the proposed Borrowing. Each such telephonic Borrowing Request shall be irrevocable and shall be confirmed promptly by hand delivery or telecopy to the Administrative Agent of a written Borrowing Request signed by the Borrower. Each such telephonic and written Borrowing Request shall specify the following information in compliance with Section 2.02:

(i) the Agreed Currency and aggregate amount of the requested Borrowing;

(ii) the date of such Borrowing, which shall be a Business Day;

(iii) whether such Borrowing is to be an ABR Borrowing, a Term Benchmark Borrowing or an RFR Borrowing;

(iv) in the case of a Term Benchmark Borrowing, the Agreed Currency and initial Interest Period to be applicable thereto, which shall be a period contemplated by the definition of the term "Interest Period"; and

(v) the location and number of the Borrower's account to which funds are to be disbursed, which shall comply with the requirements of Section 2.07.

If no election as to the currency of a Borrowing is specified, then the requested Revolving Borrowing shall be made in Dollars. If no election as to the Type of Revolving Borrowing is specified, then, in the case of a Borrowing denominated in Dollars, the requested Revolving Borrowing shall be an ABR Borrowing. If no Interest Period is specified with respect to any requested Term Benchmark Revolving Borrowing, then the Borrower shall be deemed to have selected an Interest Period of one month's duration. Promptly following receipt of a Borrowing Request in accordance with this Section, the Administrative Agent shall advise each Lender of the details thereof and of the amount of such Lender's Loan to be made as part of the requested Borrowing. Notwithstanding the foregoing, in no event shall the Borrower be permitted to request pursuant to this Section 2.03, a CBR Loan or, prior to a Benchmark Transition Event and Benchmark Replacement Date with respect to the Term SOFR Rate, a Daily Simple SOFR Loan (it being understood and agreed that a Central Bank Rate and Daily Simple SOFR shall only apply to the extent provided in Sections 2.08(e) (solely with respect to the Central Bank Rate), 2.14(a) and 2.14(f)).

SECTION 2.04. [Reserved].

SECTION 2.05. Swingline Loans. (a) Subject to the terms and conditions set forth herein, the Swingline Lender may in its sole discretion make Swingline Loans in Dollars to the Borrower from time to time during the Availability Period, in an aggregate principal amount at any time outstanding that will not result in (i) the aggregate principal amount of outstanding Swingline Loans exceeding $15,000,000 or (ii) the Dollar Equivalent of the total Revolving Credit Exposures exceeding the Aggregate Commitment; provided that the Swingline Lender shall not be required to make a Swingline Loan to refinance an outstanding Swingline Loan. Within the foregoing limits and subject to the terms and conditions set forth herein, the Borrower may borrow, prepay and reborrow Swingline Loans.

(b) To request a Swingline Loan, the Borrower shall notify the Administrative Agent of such request by telephone (confirmed by telecopy or electronic mail), not later than 1:00 p.m., New York City time, on the day of a proposed Swingline Loan. Each such notice shall be in a form approved by the Administrative Agent, shall be irrevocable and shall specify the requested date (which shall be a Business Day) and amount of the requested Swingline Loan. The Administrative Agent will promptly advise the Swingline Lender of any such notice received from the Borrower. The Swingline Lender shall make each Swingline Loan available to the Borrower by means of a credit to the general deposit account of the Borrower with the Swingline Lender (or, in the case of a Swingline Loan made to finance the reimbursement of an LC Disbursement as provided in Section 2.06(e), by remittance to the Issuing Bank) by 3:00 p.m., New York City time, on the requested date of such Swingline Loan.

(c) The Swingline Lender may by written notice given to the Administrative Agent not later than 10:00 a.m., New York City time, on any Business Day require the Lenders to acquire participations on such Business Day in all or a portion of the Swingline Loans outstanding. Such notice shall specify the aggregate amount of Swingline Loans in which Lenders will participate. Promptly upon receipt of such notice, the Administrative Agent will give notice thereof to each Lender, specifying in such notice such Lender's Applicable Percentage of such Swingline Loan or Loans. Each Lender hereby absolutely and unconditionally agrees, upon receipt of notice as provided above, to pay to the Administrative Agent, for the account of the Swingline Lender, such Lender's Applicable Percentage of such Swingline Loan or Loans. Each Lender acknowledges and agrees that its obligation

to acquire participations in Swingline Loans pursuant to this paragraph is absolute and unconditional and shall not be affected by any circumstance whatsoever, including the occurrence and continuance of a Default or reduction or termination of the Commitments, and that each such payment shall be made without any offset, abatement, withholding or reduction whatsoever. Each Lender shall comply with its obligation under this paragraph by wire transfer of immediately available funds, in the same manner as provided in Section 2.07 with respect to Loans made by such Lender (and Section 2.07 shall apply, mutatis mutandis, to the payment obligations of the Lenders), and the Administrative Agent shall promptly pay to the Swingline Lender the amounts so received by it from the Lenders. The Administrative Agent shall notify the Borrower of any participations in any Swingline Loan acquired pursuant to this paragraph, and thereafter payments in respect of such Swingline Loan shall be made to the Administrative Agent and not to the Swingline Lender. Any amounts received by the Swingline Lender from the Borrower (or other party on behalf of the Borrower) in respect of a Swingline Loan after receipt by the Swingline Lender of the proceeds of a sale of participations therein shall be promptly remitted to the Administrative Agent; any such amounts received by the Administrative Agent shall be promptly remitted by the Administrative Agent to the Lenders that shall have made their payments pursuant to this paragraph and to the Swingline Lender, as their interests may appear; provided that any such payment so remitted shall be repaid to the Swingline Lender or to the Administrative Agent, as applicable, if and to the extent such payment is required to be refunded to the Borrower for any reason. The purchase of participations in a Swingline Loan pursuant to this paragraph shall not relieve the Borrower of any default in the payment thereof.

SECTION 2.06. Letters of Credit. (a) General. Subject to the terms and conditions set forth herein, the Borrower may request the issuance of Letters of Credit denominated in Agreed Currencies as the applicant thereof for the support of its or its Subsidiaries' obligations, in a form reasonably acceptable to the Administrative Agent and the Issuing Bank, at any time and from time to time during the Availability Period, and the Issuing Bank hereby agrees to issue such Letters of Credit in its sole discretion. In the event of any inconsistency between the terms and conditions of this Agreement and the terms and conditions of any form of letter of credit application or other agreement submitted by the Borrower to, or entered into by the Borrower with, the Issuing Bank relating to any Letter of Credit, the terms and conditions of this Agreement shall control. The Borrower unconditionally and irrevocably agrees that, in connection with any Letter of Credit issued for the support of any Subsidiary's obligations as provided in the first sentence of this paragraph, the Borrower will be fully responsible for the reimbursement of LC Disbursements in accordance with the terms hereof, the payment of interest thereon and the payment of fees due under Section 2.12(b) to the same extent as if it were the sole account party in respect of such Letter of Credit (the Borrower hereby irrevocably waiving any defenses that might otherwise be available to it as a guarantor or surety of the obligations of such a Subsidiary that is an account party in respect of any such Letter of Credit).

(b) Notice of Issuance, Amendment, Extension; Certain Conditions. To request the issuance of a Letter of Credit (or the amendment or extension of an outstanding Letter of Credit), the Borrower shall hand deliver or telecopy (or transmit by electronic communication, if arrangements for doing so have been approved by the Issuing Bank) to the Issuing Bank and the Administrative Agent (reasonably in advance of the requested date of issuance, amendment or extension, but in any event no less than three Business Days) a notice requesting the issuance of a Letter of Credit, or identifying the Letter of Credit to be amended or extended, and specifying the date of issuance, amendment or extension (which shall be a Business Day), the date on which such Letter of Credit is to expire (which shall comply with paragraph (c) of this Section), the amount of such Letter of Credit, the Agreed Currency applicable thereto, the name and address of the beneficiary thereof and such other information as shall be necessary to prepare, amend or extend such Letter of Credit. If requested by the Issuing Bank, the Borrower also shall submit a letter of credit application on the Issuing Bank's standard form in connection with any request for a Letter of Credit. A Letter of Credit shall be issued, amended or extended only if (and upon issuance, amendment or extension of each Letter of Credit the Borrower shall be deemed to represent and warrant that), after giving effect to such issuance, amendment or extension (i) subject to Section 2.11(b), the Dollar Equivalent of the LC Exposure shall not exceed $35,000,000 and (ii) subject to Section 2.11(b), the sum of the Dollar Equivalent of the total Revolving Credit Exposures shall not exceed the Aggregate Commitment.

The Issuing Bank shall not be under any obligation to issue any Letter of Credit if:

(i) any order, judgment or decree of any Governmental Authority or arbitrator shall by its terms purport to enjoin or restrain the Issuing Bank from issuing such Letter of Credit, or any law applicable to the Issuing Bank shall prohibit, or require that the Issuing Bank refrain from, the issuance of letters of credit

generally or such Letter of Credit in particular or shall impose upon the Issuing Bank with respect to such Letter of Credit any restriction, reserve or capital requirement (for which the Issuing Bank is not otherwise compensated hereunder) not in effect on the Effective Date, or shall impose upon the Issuing Bank any unreimbursed loss, cost or expense that was not applicable on the Effective Date and that the Issuing Bank in good faith deems material to it; or

(ii) the issuance of such Letter of Credit would violate one or more policies of the Issuing Bank applicable to letters of credit generally.

(c) Expiration Date. Each Letter of Credit shall expire (or be subject to termination by notice from the Issuing Bank to the beneficiary thereof) at or prior to the close of business on the earlier of (i) the date one year after the date of the issuance of such Letter of Credit (or, in the case of any extension thereof, one year after such extension) and (ii) the date that is five Business Days prior to the Maturity Date, provided that any Letter of Credit with a one-year term may provide for the extension thereof for additional one-year periods (which shall in no event extend beyond the date referred to in clause (ii) above).

(d) Participations. By the issuance of a Letter of Credit (or an amendment to a Letter of Credit increasing the amount thereof) and without any further action on the part of the Issuing Bank or the Lenders, the Issuing Bank hereby grants to each Lender, and each Lender hereby acquires from the Issuing Bank, a participation in such Letter of Credit equal to such Lender's Applicable Percentage of the aggregate amount available to be drawn under such Letter of Credit. In consideration and in furtherance of the foregoing, each Lender hereby absolutely and unconditionally agrees to pay to the Administrative Agent, for the account of the Issuing Bank, such Lender's Applicable Percentage of each LC Disbursement made by the Issuing Bank and not reimbursed by the Borrower on the date due as provided in paragraph (e) of this Section, or of any reimbursement payment required to be refunded to the Borrower for any reason. Each Lender acknowledges and agrees that its obligation to acquire participations pursuant to this paragraph in respect of Letters of Credit is absolute and unconditional and shall not be affected by any circumstance whatsoever, including any amendment or extension of any Letter of Credit or the occurrence and continuance of a Default or reduction or termination of the Commitments, and that each such payment shall be made without any offset, abatement, withholding or reduction whatsoever.

(e) Reimbursement. If the Issuing Bank shall make any LC Disbursement in respect of a Letter of Credit, the Borrower shall reimburse such LC Disbursement by paying to the Administrative Agent in Dollars the Dollar Equivalent equal to such LC Disbursement, calculated as of the date the Issuing Bank made such LC Disbursement (or if the Issuing Bank shall so elect in its sole discretion by notice to the Borrower, in such other Agreed Currency which was paid by the Issuing Bank pursuant to such LC Disbursement in an amount equal to such LC Disbursement) not later than 12:00 noon, Local Time, on the date that such LC Disbursement is made, if the Borrower shall have received notice of such LC Disbursement prior to 10:00 a.m., Local Time, on such date, or, if such notice has not been received by the Borrower prior to such time on such date, then not later than 12:00 noon, Local Time, on the Business Day immediately following the day that the Borrower receives such notice, if such notice is not received prior to such time on the day of receipt; provided that, if such LC Disbursement is not less than the Dollar Equivalent of $1,000,000, the Borrower may, subject to the conditions to borrowing set forth herein, request in accordance with Section 2.03 or 2.05 that such payment be financed with (i) to the extent such LC Disbursement was made in Dollars, an ABR Revolving Borrowing, Term Benchmark Revolving Borrowing or Swingline Loan in Dollars in an amount equal to such LC Disbursement or (ii) to the extent that such LC Disbursement was made in a Foreign Currency, a Term Benchmark Revolving Borrowing in such Foreign Currency in an amount equal to such LC Disbursement and, in each case, to the extent so financed, the Borrower's obligation to make such payment shall be discharged and replaced by the resulting ABR Revolving Borrowing, Term Benchmark Revolving Borrowing or Swingline Loan, as applicable. If the Borrower fails to make such payment when due, the Administrative Agent shall notify each Lender of the applicable LC Disbursement, the payment then due from the Borrower in respect thereof and such Lender's Applicable Percentage thereof. Promptly following receipt of such notice, each Lender shall pay to the Administrative Agent its Applicable Percentage of the payment then due from the Borrower, in the same manner as provided in Section 2.07 with respect to Loans made by such Lender (and Section 2.07 shall apply, mutatis mutandis, to the payment obligations of the Lenders), and the Administrative Agent shall promptly pay to the Issuing Bank the amounts so received by it from the Lenders. Promptly following receipt by the Administrative Agent of any payment from the Borrower pursuant to this paragraph, the Administrative Agent shall distribute such payment to the Issuing Bank or, to the extent that Lenders have made payments pursuant to this paragraph to reimburse the Issuing Bank, then to such Lenders and the Issuing

Bank as their interests may appear. Any payment made by a Lender pursuant to this paragraph to reimburse the Issuing Bank for any LC Disbursement (other than the funding of ABR Revolving Loans or a Swingline Loan as contemplated above) shall not constitute a Loan and shall not relieve the Borrower of its obligation to reimburse such LC Disbursement. If the Borrower's reimbursement of, or obligation to reimburse, any amounts in any Foreign Currency would subject the Administrative Agent, the Issuing Bank or any Lender to any stamp duty, ad valorem charge or similar tax that would not be payable if such reimbursement were made or required to be made in Dollars, the Borrower shall, at its option, either (x) pay the amount of any such tax requested by the Administrative Agent, the Issuing Bank or the relevant Lender or (y) reimburse each LC Disbursement made in such Foreign Currency in Dollars, in an amount equal to the Dollar Equivalent, calculated on the date such LC Disbursement is made, of such LC Disbursement.

(f) Obligations Absolute. The Borrower's obligation to reimburse LC Disbursements as provided in paragraph (e) of this Section shall be absolute, unconditional and irrevocable, and shall be performed strictly in accordance with the terms of this Agreement under any and all circumstances whatsoever and irrespective of (i) any lack of validity or enforceability of any Letter of Credit or this Agreement, or any term or provision therein, (ii) any draft or other document presented under a Letter of Credit proving to be forged, fraudulent or invalid in any respect or any statement therein being untrue or inaccurate in any respect, (iii) payment by the Issuing Bank under a Letter of Credit against presentation of a draft or other document that does not comply with the terms of such Letter of Credit, (iv) any other event or circumstance whatsoever, whether or not similar to any of the foregoing, that might, but for the provisions of this Section, constitute a legal or equitable discharge of, or provide a right of setoff against, the Borrower's obligations hereunder or (v) any adverse change in the relevant exchange rates or in the availability of the relevant Foreign Currency to the Borrower or any Subsidiary or in the relevant currency markets generally. Neither the Administrative Agent, the Lenders nor the Issuing Bank, nor any of their Related Parties, shall have any liability or responsibility by reason of or in connection with the issuance or transfer of any Letter of Credit or any payment or failure to make any payment thereunder (irrespective of any of the circumstances referred to in the preceding sentence), or any error, omission, interruption, loss or delay in transmission or delivery of any draft, notice or other communication under or relating to any Letter of Credit (including any document required to make a drawing thereunder), any error in interpretation of technical terms, any error in translation or any consequence arising from causes beyond the control of the Issuing Bank; provided that the foregoing shall not be construed to excuse the Issuing Bank from liability to the Borrower to the extent of any direct damages (as opposed to special, indirect, consequential or punitive damages, claims in respect of which are hereby waived by the Borrower to the extent permitted by applicable law) suffered by the Borrower that are caused by the Issuing Bank's failure to exercise care when determining whether drafts and other documents presented under a Letter of Credit comply with the terms thereof. The parties hereto expressly agree that, in the absence of gross negligence or willful misconduct on the part of the Issuing Bank (as finally determined by a court of competent jurisdiction), the Issuing Bank shall be deemed to have exercised care in each such determination. In furtherance of the foregoing and without limiting the generality thereof, the parties agree that, with respect to documents presented which appear on their face to be in substantial compliance with the terms of a Letter of Credit, the Issuing Bank may, in its sole discretion, either accept and make payment upon such documents without responsibility for further investigation, regardless of any notice or information to the contrary, or refuse to accept and make payment upon such documents if such documents are not in strict compliance with the terms of such Letter of Credit.

(g) Disbursement Procedures. The Issuing Bank for any Letter of Credit shall, within the time allowed by applicable law or the specific terms of the Letter of Credit following its receipt thereof, examine all documents purporting to represent a demand for payment under a Letter of Credit. The Issuing Bank shall promptly after such examination notify the Administrative Agent and the Borrower by telephone (confirmed by telecopy or electronic mail) of such demand for payment and whether the Issuing Bank has made or will make an LC Disbursement thereunder; provided that any failure to give or delay in giving such notice shall not relieve the Borrower of its obligation to reimburse the Issuing Bank and the Lenders with respect to any such LC Disbursement.

(h) Interim Interest. If the Issuing Bank shall make any LC Disbursement, then, unless the Borrower shall reimburse such LC Disbursement in full in the applicable currency on the date such LC Disbursement is made, the unpaid amount thereof shall bear interest, for each day from and including the date such LC Disbursement is made to but excluding the date that the Borrower reimburses such LC Disbursement, at the rate per annum then applicable to ABR Revolving Loans (or in the case such LC Disbursement is denominated in a Foreign Currency, at the Overnight Foreign Currency Rate for such Agreed Currency plus the then effective Applicable Rate with respect

to Term Benchmark Revolving Loans); provided that, if the Borrower fails to reimburse such LC Disbursement when due pursuant to paragraph (e) of this Section, then Section 2.13(d) shall apply. Interest accrued pursuant to this paragraph shall be for the account of the Issuing Bank, except that interest accrued on and after the date of payment by any Lender pursuant to paragraph (e) of this Section to reimburse the Issuing Bank shall be for the account of such Lender to the extent of such payment.

(i) Replacement of Issuing Bank. The Issuing Bank may be replaced at any time by written agreement among the Borrower, the Administrative Agent, the replaced Issuing Bank and the successor Issuing Bank. The Administrative Agent shall notify the Lenders of any such replacement of the Issuing Bank. At the time any such replacement shall become effective, the Borrower shall pay all unpaid fees accrued for the account of the replaced Issuing Bank pursuant to Section 2.12(b). From and after the effective date of any such replacement, (i) the successor Issuing Bank shall have all the rights and obligations of the Issuing Bank under this Agreement with respect to Letters of Credit to be issued thereafter and (ii) references herein to the term "Issuing Bank" shall be deemed to refer to such successor or to any previous Issuing Bank, or to such successor and all previous Issuing Banks, as the context shall require. After the replacement of an Issuing Bank hereunder, the replaced Issuing Bank shall remain a party hereto and shall continue to have all the rights and obligations of an Issuing Bank under this Agreement with respect to Letters of Credit then outstanding and issued by it prior to such replacement, but shall not be required to issue additional Letters of Credit or extend or otherwise amend any existing Letter of Credit.

(j) Cash Collateralization. If any Event of Default shall occur and be continuing, on the Business Day that the Borrower receives notice from the Administrative Agent or the Required Lenders (or, if the maturity of the Loans has been accelerated, Lenders with LC Exposure representing greater than 50% of the total LC Exposure) demanding the deposit of cash collateral pursuant to this paragraph, the Borrower shall deposit in an account with the Administrative Agent, in the name of the Administrative Agent and for the benefit of the Lenders (the "LC Collateral Account"), an amount in cash equal to 102% of the Dollar Equivalent of the LC Exposure as of such date plus any accrued and unpaid interest thereon; provided that (i) the portions of such amount attributable to undrawn Foreign Currency Letters of Credit or LC Disbursements in a Foreign Currency that the Borrower is not late in reimbursing shall be deposited in the applicable Foreign Currencies in the actual amounts of such undrawn Letters of Credit and LC Disbursements and (ii) the obligation to deposit such cash collateral shall become effective immediately, and such deposit shall become immediately due and payable, without demand or other notice of any kind, upon the occurrence of any Event of Default with respect to the Borrower described in Section 7.01(h) or (i). The Borrower also shall deposit cash collateral pursuant to this paragraph as and to the extent required by Section 2.11(b). Such deposit shall be held by the Administrative Agent as collateral for the payment and performance of the Obligations. The Administrative Agent shall have exclusive dominion and control, including the exclusive right of withdrawal, over such account. Other than any interest earned on the investment of such deposits, which investments shall be made at the option and sole discretion of the Administrative Agent and at the Borrower's risk and expense, such deposits shall not bear interest. Interest or profits, if any, on such investments shall accumulate in such account. Moneys in such account shall be applied by the Administrative Agent to reimburse the Issuing Bank for LC Disbursements for which it has not been reimbursed and, to the extent not so applied, shall be held for the satisfaction of the reimbursement obligations of the Borrower for the LC Exposure at such time or, if the maturity of the Loans has been accelerated (but subject to the consent of Lenders with LC Exposure representing greater than 50% of the total LC Exposure), be applied to satisfy other Obligations. If the Borrower is required to provide an amount of cash collateral hereunder as a result of the occurrence of an Event of Default, such amount (to the extent not applied as aforesaid) shall be returned to the Borrower within three Business Days after all Events of Default have been cured or waived. If the Borrower is required to provide an amount of cash collateral hereunder under Section 2.11(b) or Section 2.22(c), such amount (to the extent not applied as aforesaid) shall be returned to the Borrower as requested by the Borrower (a) with respect to cash collateral required under Section 2.11(b), so long as after giving effect to such return, all Revolving Credit Exposures (as calculated under such Section) would be less than or equal to the Aggregate Commitment and (b) with respect to cash collateral required under Section 2.22(c), the LC Exposure of the applicable Defaulting Lender has been fully reallocated or eliminated. In addition, and without limiting the foregoing or paragraph (c) of this Section, if any LC Exposure remain outstanding after the expiration date specified in said paragraph (c), the Borrower shall immediately deposit into the LC Collateral Account an amount in cash equal to 102% of such LC Exposure as of such date plus any accrued and unpaid interest thereon.

SECTION 2.07. Funding of Borrowings. (a) Each Lender shall make each Loan to be made by it hereunder on the proposed date thereof by wire transfer of immediately available funds (i) in the case of Loans denominated in Dollars, by 12:00 noon, New York City time, to the account of the Administrative Agent most recently designated by it for such purpose by notice to the Lenders and (ii) in the case of each Loan denominated in a Foreign Currency, by 12:00 noon, Local Time, in the city of the Administrative Agent's Term Benchmark Payment Office for such currency and at such Term Benchmark Payment Office for such currency; provided that Swingline Loans shall be made as provided in Section 2.05. The Administrative Agent will make such Loans available to the Borrower by promptly crediting the amounts so received, in like funds, to (x) an account of the Borrower maintained with the Administrative Agent in New York City or Chicago and designated by the Borrower in the applicable Borrowing Request, in the case of Loans denominated in Dollars and (y) an account of the Borrower in the relevant jurisdiction and designated by the Borrower in the applicable Borrowing Request, in the case of Loans denominated in a Foreign Currency; provided that ABR Revolving Loans made to finance the reimbursement of an LC Disbursement as provided in Section 2.06(e) shall be remitted by the Administrative Agent to the Issuing Bank.

(b) Unless the Administrative Agent shall have received notice from a Lender prior to the proposed date of any Borrowing that such Lender will not make available to the Administrative Agent such Lender's share of such Borrowing, the Administrative Agent may assume that such Lender has made such share available on such date in accordance with paragraph (a) of this Section and may, in reliance upon such assumption, make available to the Borrower a corresponding amount. In such event, if a Lender has not in fact made its share of the applicable Borrowing available to the Administrative Agent, then the applicable Lender and the Borrower severally agree to pay to the Administrative Agent forthwith on demand such corresponding amount with interest thereon, for each day from and including the date such amount is made available to the Borrower to but excluding the date of payment to the Administrative Agent, at (i) in the case of such Lender, the greater of the Overnight Bank Funding Rate and a rate determined by the Administrative Agent in accordance with banking industry rules on interbank compensation (including without limitation the Overnight Foreign Currency Rate in the case of Loans denominated in a Foreign Currency) or (ii) in the case of the Borrower, the interest rate applicable to ABR Loans, or in the case of Foreign Currencies, in accordance with such market practice, in each case, as applicable. If such Lender pays such amount to the Administrative Agent, then such amount shall constitute such Lender's Loan included in such Borrowing.

SECTION 2.08. Interest Elections. (a) Each Revolving Borrowing initially shall be of the Type and Agreed Currency specified in the applicable Borrowing Request and, in the case of a Term Benchmark Revolving Borrowing, shall have an initial Interest Period as specified in such Borrowing Request. Thereafter, the Borrower may elect to convert such Borrowing to a different Type or to continue such Borrowing and, in the case of a Term Benchmark Revolving Borrowing, may elect Interest Periods therefor, all as provided in this Section. The Borrower may elect different options with respect to different portions of the affected Borrowing, in which case each such portion shall be allocated ratably among the Lenders holding the Loans comprising such Borrowing, and the Loans comprising each such portion shall be considered a separate Borrowing. This Section shall not apply to Swingline Borrowings, which may not be converted or continued.

(b) To make an election pursuant to this Section, the Borrower shall notify the Administrative Agent of such election (by telephone or irrevocable written notice in the case of a Borrowing denominated in Dollars or by irrevocable written notice (via an Interest Election Request signed by the Borrower) in the case of a Borrowing denominated in a Foreign Currency) by the time that a Borrowing Request would be required under Section 2.03 if the Borrower were requesting a Revolving Borrowing of the Type resulting from such election to be made on the effective date of such election. Each such telephonic Interest Election Request shall be irrevocable and shall be confirmed promptly by hand delivery or telecopy to the Administrative Agent of a written Interest Election Request signed by the Borrower. Notwithstanding any contrary provision herein, this Section shall not be construed to permit the Borrower to (i) change the currency of any Borrowing, (ii) elect an Interest Period for Term Benchmark Loans that does not comply with Section 2.02(d) or (iii) convert any Borrowing to a Borrowing of a Type not available under such Borrowing.

(c) Each telephonic and written Interest Election Request shall specify the following information in compliance with Section 2.02:

(i) the Agreed Currency and principal amount of the Borrowing to which such Interest Election Request applies and, if different options are being elected with respect to different portions thereof,

the portions thereof to be allocated to each resulting Borrowing (in which case the information to be specified pursuant to clauses (iii) and (iv) below shall be specified for each resulting Borrowing);

(ii) the effective date of the election made pursuant to such Interest Election Request, which shall be a Business Day;

(iii) whether the resulting Borrowing is to be an ABR Borrowing (in the case of Borrowings denominated in Dollars) or a Term Benchmark Borrowing or an RFR Borrowing; and

(iv) if the resulting Borrowing is a Term Benchmark Borrowing, the Interest Period and Agreed Currency to be applicable thereto after giving effect to such election, which Interest Period shall be a period contemplated by the definition of the term "Interest Period".

If any such Interest Election Request requests a Term Benchmark Borrowing but does not specify an Interest Period, then the Borrower shall be deemed to have selected an Interest Period of one month's duration. Notwithstanding the foregoing, in no event shall the Borrower be permitted to request pursuant to this Section 2.08(c) a CBR Loan or, prior to a Benchmark Transition Event and Benchmark Replacement Date with respect to the Term SOFR Rate, a Daily Simple SOFR Loan (it being understood and agreed that a Central Bank Rate and Daily Simple SOFR shall only apply to the extent provided in Sections 2.08(e) (solely with respect to the Central Bank Rate), 2.14(a) and 2.14(f).

(d) Promptly following receipt of an Interest Election Request, the Administrative Agent shall advise each Lender of the details thereof and of such Lender's portion of each resulting Borrowing.

(e) If the Borrower fails to deliver a timely Interest Election Request with respect to a Term Benchmark Revolving Borrowing in Dollars prior to the end of the Interest Period applicable thereto, then, unless such Borrowing is repaid as provided herein, at the end of such Interest Period such Borrowing shall be converted to an ABR Borrowing at the end of such Interest Period. If the Borrower fails to deliver a timely and complete Interest Election Request with respect to a Term Benchmark Borrowing in an Foreign Currency prior to the end of the Interest Period therefor, then, unless such Term Benchmark Borrowing is repaid as provided herein, the Borrower shall be deemed to have selected that such Term Benchmark Borrowing shall automatically be continued as a Term Benchmark Borrowing in its original Agreed Currency with an Interest Period of one month at the end of such Interest Period. Notwithstanding any contrary provision hereof, if an Event of Default has occurred and is continuing and the Administrative Agent, at the request of the Required Lenders, so notifies the Borrower, then, so long as an Event of Default is continuing(i) no outstanding Revolving Borrowing may be converted to or continued as a Term Benchmark Borrowing and (ii) unless repaid, (x) each Term Benchmark Revolving Borrowing and each RFR Borrowing, in each case, denominated in Dollars shall be converted to an ABR Borrowing at the end of the Interest Period applicable thereto and (y) each Term Benchmark Borrowing and each RFR Borrowing, in each case, denominated in ~~an~~a Foreign Currency shall bear interest at the Central Bank Rate (or in the case of Japanese Yen, the Japanese Prime Rate) for the applicable Agreed Currency plus the ~~Applicable Rate~~CBR Spread; provided that, if the Administrative Agent determines (which determination shall be conclusive and binding absent manifest error) that the Central Bank Rate (or in the case of Japanese Yen, the Japanese Prime Rate) for the applicable Agreed Currency cannot be determined, any outstanding affected Term Benchmark Loans denominated in any Agreed Currency other than Dollars shall either be (A) converted to an ABR Borrowing denominated in Dollars (in an amount equal to the Dollar Equivalent of such Foreign Currency) at the end of the Interest Period, as applicable, therefor or (B) prepaid at the end of the applicable Interest Period, as applicable, in full; provided that if no election is made by the Borrower by the earlier of (x) the date that is three Business Days after receipt by the Borrower of such notice and (y) the last day of the current Interest Period for the applicable Term Benchmark Loan, the Borrower shall be deemed to have elected clause (A) above.

SECTION 2.09. Termination and Reduction of Commitments. (a) Unless previously terminated, the Commitments shall terminate on the Maturity Date.

(b) The Borrower may at any time terminate, or from time to time reduce, the Commitments; provided that (i) each reduction of the Commitments shall be in an amount that is an integral multiple of $1,000,000 and not

less than $10,000,000 and (ii) the Borrower shall not terminate or reduce the Commitments if, after giving effect to any concurrent prepayment of the Loans in accordance with Section 2.11, the Dollar Equivalent of the sum of the Revolving Credit Exposures would exceed the Aggregate Commitment.

(c) The Borrower shall notify the Administrative Agent of any election to terminate or reduce the Commitments under paragraph (b) of this Section at least three Business Days prior to the effective date of such termination or reduction, specifying such election and the effective date thereof. Promptly following receipt of any notice, the Administrative Agent shall advise the Lenders of the contents thereof. Each notice delivered by the Borrower pursuant to this Section shall be irrevocable; provided that a notice of termination of the Commitments delivered by the Borrower may state that such notice is conditioned upon the effectiveness of other credit facilities or other transactions specified therein, in which case such notice may be revoked by the Borrower (by notice to the Administrative Agent on or prior to the specified effective date) if such condition is not satisfied. Any termination or reduction of the Commitments shall be permanent. Each reduction of the Commitments shall be made ratably among the Lenders in accordance with their respective Commitments (or as between Lenders which are Affiliates of each other, as they may determine and notify to the Administrative Agent).

SECTION 2.10. Repayment of Loans; Evidence of Debt. (a) The Borrower hereby unconditionally promises to pay (i) to the Administrative Agent for the account of each Lender the then unpaid principal amount of each Revolving Loan on the Maturity Date in the currency of such Loan and (ii) to the Administrative Agent for the account of the Swingline Lender the then unpaid principal amount of each Swingline Loan on the earlier of the Maturity Date and the first date after such Swingline Loan is made that is the 15th or last day of a calendar month and is at least two Business Days after such Swingline Loan is made; provided that on each date that a Revolving Borrowing is made, the Borrower shall repay all Swingline Loans then outstanding and the proceeds of any such Borrowing shall be applied by the Administrative Agent to repay any Swingline Loans outstanding.

(b) Each Lender shall maintain in accordance with its usual practice an account or accounts evidencing the indebtedness of the Borrower to such Lender resulting from each Loan made by such Lender, including the amounts of principal and interest payable and paid to such Lender from time to time hereunder.

(c) The Administrative Agent shall maintain accounts in which it shall record (i) the amount of each Loan made hereunder, the Class, Agreed Currency and Type thereof and the Interest Period applicable thereto, (ii) the amount of any principal or interest due and payable or to become due and payable from the Borrower to each Lender hereunder and (iii) the amount of any sum received by the Administrative Agent hereunder for the account of the Lenders and each Lender's share thereof.

(d) The entries made in the accounts maintained pursuant to paragraph (b) or (c) of this Section shall be prima facie evidence of the existence and amounts of the obligations recorded therein absent manifest error; provided that the failure of any Lender or the Administrative Agent to maintain such accounts or any error therein shall not in any manner affect the Obligations.

(e) Any Lender may request that Loans made by it be evidenced by a promissory note. In such event, the Borrower shall prepare, execute and deliver a promissory note to such Lender or its registered assigns in the form attached hereto as Exhibit I. Thereafter, the Loans evidenced by such promissory note and interest thereon shall at all times (including after assignment pursuant to Section 9.04) be represented by one or more promissory notes in such form payable to the payee named therein or its registered assigns.

(f) The accounts and records maintained by the Administrative Agent referred to in clause (c) shall be treated as part of the Register. In the event of any inconsistency between the Register and any Lender's records, the records as in the Register shall govern.

SECTION 2.11. Prepayment of Loans.

(a) The Borrower shall have the right at any time and from time to time to prepay any Borrowing in whole or in part, subject to prior notice in accordance with the provisions of this Section 2.11(a). The Borrower shall notify the Administrative Agent (and, in the case of prepayment of a Swingline Loan, the Swingline Lender) by

written notice (promptly followed by telephonic confirmation of such request) of any prepayment hereunder (i) in the case of prepayment of a Term Benchmark Revolving Borrowing, not later than 12:00 noon, Local Time, three Business Days (in the case of a Term Benchmark Borrowing denominated in Dollars) or four Business Days (in the case of a Term Benchmark Borrowing denominated in a Foreign Currency), in each case before the date of prepayment, (ii) in the case of prepayment of an RFR Borrowing, not later than 12:00 noon, New York City time, five RFR Business Days before the date of prepayment, (iii) in the case of prepayment of an ABR Revolving Borrowing, not later than 12:00 noon, New York City time, one (1) Business Day before the date of prepayment or (iv) in the case of prepayment of a Swingline Loan, not later than 1:00 p.m., New York City time, on the date of prepayment. Each such notice shall be irrevocable and shall specify the prepayment date and the principal amount of each Borrowing or portion thereof to be prepaid; provided that, if a notice of prepayment is given in connection with a conditional notice of termination of the Commitments as contemplated by Section 2.09, then such notice of prepayment may be revoked if such notice of termination is revoked in accordance with Section 2.09. Promptly following receipt of any such notice relating to a Revolving Borrowing, the Administrative Agent shall advise the Lenders of the contents thereof. Each partial prepayment of any Revolving Borrowing shall be in an amount that would be permitted in the case of an advance of a Revolving Borrowing of the same Type as provided in Section 2.02. Each prepayment of a Revolving Borrowing shall be applied ratably to the Loans included in the prepaid Borrowing. Prepayments shall be accompanied by (i) accrued interest to the extent required by Section 2.13 and (ii) break funding payments pursuant to Section 2.16.

(b) If at any time, (i) other than as a result of fluctuations in currency exchange rates, the sum of the aggregate principal Dollar Equivalent of all of the Revolving Credit Exposures (calculated, with respect to those Credit Events denominated in Foreign Currencies, as of the most recent Revaluation Date with respect to each such Credit Event) exceeds the Aggregate Commitment or (ii) solely as a result of fluctuations in currency exchange rates, the sum of the aggregate principal Dollar Equivalent of all of the Revolving Credit Exposures (so calculated) exceeds 102% of the Aggregate Commitment, the Borrower shall in each case immediately repay Borrowings or cash collateralize LC Exposure in an account with the Administrative Agent pursuant to Section 2.06(j), as applicable, in an aggregate principal amount sufficient to cause the aggregate Dollar Equivalent of all Revolving Credit Exposures (so calculated) to be less than or equal to the Aggregate Commitment.

SECTION 2.12. Fees. (a) The Borrower agrees to pay to the Administrative Agent for the account of each Lender a facility fee, which shall accrue at the Applicable Rate on the daily amount of the Commitment of such Lender (whether used or unused) during the period from and including the Effective Date to but excluding the date on which such Commitment terminates; provided that, if such Lender continues to have any Revolving Credit Exposure after its Commitment terminates, then such facility fee shall continue to accrue on the daily amount of such Lender's Revolving Credit Exposure from and including the date on which its Commitment terminates to but excluding the date on which such Lender ceases to have any Revolving Credit Exposure. Accrued facility fees shall be payable in arrears on the fifteenth day following the last day of March, June, September and December of each year and on the date on which the Commitments terminate, commencing on the first such date to occur after the date hereof; provided that any facility fees accruing after the date on which the Commitments terminate shall be payable on demand. All facility fees shall be computed on the basis of a year of 360 days and shall be payable for the actual number of days elapsed (including the first day and the last day of each period but excluding the date on which the Commitments terminate).

(b) The Borrower agrees to pay (i) to the Administrative Agent for the account of each Lender a participation fee with respect to its participations in Letters of Credit, which shall accrue at the same Applicable Rate used to determine the interest rate applicable to Term Benchmark Revolving Loans on the average daily Dollar Equivalent of such Lender's LC Exposure (excluding any portion thereof attributable to unreimbursed LC Disbursements) during the period from and including the Effective Date to but excluding the later of the date on which such Lender's Commitment terminates and the date on which such Lender ceases to have any LC Exposure and (ii) to the Issuing Bank for its own account a fronting fee, which shall accrue at the rate of 0.125% per annum on the average daily Dollar Equivalent of the LC Exposure (excluding any portion thereof attributable to unreimbursed LC Disbursements) attributable to Letters of Credit issued by the Issuing Bank during the period from and including the Effective Date to but excluding the later of the date of termination of the Commitments and the date on which there ceases to be any LC Exposure, as well as the Issuing Bank's standard fees and commissions with respect to the issuance, amendment, cancellation, negotiation, transfer, presentment or extension of any Letter of Credit or

processing of drawings thereunder. Unless otherwise specified above, accrued participation fees and fronting fees shall be payable in arrears on the last day of March, June, September and December of each year and shall be payable on the fifteenth day following such last day, commencing on the first such date to occur after the Effective Date; provided that all such fees shall be payable on the date on which the Commitments terminate and any such fees accruing after the date on which the Commitments terminate shall be payable on demand. Any other fees payable to the Issuing Bank pursuant to this paragraph shall be payable within ten days after demand. All participation fees and fronting fees shall be computed on the basis of a year of 360 days and shall be payable for the actual number of days elapsed (including the first day but excluding the last day). Participation fees and fronting fees in respect of Letters of Credit denominated in Dollars shall be paid in Dollars, and participation fees and fronting fees in respect of Letters of Credit denominated in a Foreign Currency shall be paid in such Foreign Currency.

(c) The Borrower agrees to pay to the Administrative Agent, the Arrangers and the Lenders the other applicable fees respectively required to be paid to them in the amounts and the times as separately agreed with the Borrower.

(d) All fees payable hereunder shall be paid on the dates due, in Dollars (except as otherwise expressly provided in this Section 2.12) and immediately available funds, to the Administrative Agent (or to the Issuing Bank, in the case of fees payable to it) for distribution, in the case of facility fees and participation fees, to the Lenders. Fees paid shall not be refundable under any circumstances.

SECTION 2.13. Interest. (a) The Loans comprising each ABR Borrowing (including each Swingline Loan) shall bear interest at the Alternate Base Rate plus the Applicable Rate.

(b) The Loans comprising each Term Benchmark Borrowing shall bear interest at the Adjusted ~~LIBO~~Term SOFR Rate, the Adjusted EURIBOR Rate or the Adjusted TIBOR Rate, as applicable, for the Interest Period in effect for such Borrowing plus the Applicable Rate.

(c) Each RFR Loan shall bear interest at a rate per annum equal to the applicable Adjusted Daily Simple RFR plus the Applicable Rate.

(d) Notwithstanding the foregoing, if any principal of or interest on any Loan or any fee or other amount payable by the Borrower hereunder is not paid when due, whether at stated maturity, upon acceleration or otherwise, such overdue amount shall bear interest, after as well as before judgment, at a rate per annum equal to (i) in the case of overdue principal of any Loan, 2% plus the rate otherwise applicable to such Loan as provided in the preceding paragraphs of this Section or (ii) in the case of any other amount, 2% plus the rate applicable to ABR Loans as provided in paragraph (a) of this Section.

(e) Accrued interest on each Loan shall be payable in arrears on each Interest Payment Date for such Loan and upon termination of the Commitments; provided that (i) interest accrued pursuant to paragraph (d) of this Section shall be payable on demand, (ii) in the event of any repayment or prepayment of any Loan (other than a prepayment of an ABR Revolving Loan prior to the end of the Availability Period), accrued interest on the principal amount repaid or prepaid shall be payable on the date of such repayment or prepayment and (iii) in the event of any conversion of any Term Benchmark Revolving Loan prior to the end of the current Interest Period therefor, accrued interest on such Loan shall be payable on the effective date of such conversion.

(f) Interest computed by reference to the ~~LIBO~~Alternate Base Rate (except when based on the Prime Rate), the Term SOFR Rate or the EURIBOR Rate or Daily Simple RFR with respect to Dollars hereunder shall be computed on the basis of a year of 360 days. Interest computed by reference to the Daily Simple RFR with respect to Pounds Sterling, the TIBOR Rate or the Alternate Base Rate only at times when the Alternate Base Rate is based on the Prime Rate shall be computed on the basis of a year of 365 days (or 366 days in a leap year). In each case interest shall be payable for the actual number of days elapsed (including the first day but excluding the last day). All interest hereunder on any Loan shall be computed on a daily basis based upon the outstanding principal amount of such Loan as of the applicable date of determination. ~~The~~A determination of the applicable Alternate Base Rate, Adjusted ~~LIBO~~Term SOFR Rate, ~~LIBO~~Term SOFR Rate, Adjusted EURIBOR Rate, EURIBOR Rate, Adjusted

TIBOR Rate, TIBOR Rate, Adjusted Daily Simple RFR or Daily Simple RFR shall be determined by the Administrative Agent, and such determination shall be conclusive absent manifest error.

(g) Notwithstanding anything in this Agreement or any other Loan Document to the contrary, and subject to the requirements of Section 2.16, all Loans with a rate of interest determined by reference to the Adjusted LIBO Rate outstanding under this Agreement immediately preceding the Amendment No. 1 Effective Date shall automatically be converted to Term Benchmark Loans (as defined in this Agreement as amended by Amendment No. 1) with a one month Interest Period as of the Amendment No. 1 Effective Date.

SECTION 2.14. Alternate Rate of Interest.

(a) Subject to clauses (b), (c), (d), (e), and (f) ~~and (g)~~ of this Section 2.14, if:

(i) the Administrative Agent determines (which determination shall be conclusive absent manifest error) (A) prior to the commencement of any Interest Period for a Term Benchmark Borrowing, that adequate and reasonable means do not exist for ascertaining the Adjusted ~~LIBO Rate, the LIBO~~Term SOFR Rate, the Adjusted EURIBOR Rate, ~~the EURIBOR Rate~~ or the Adjusted ~~TIBOR Rate or the~~ TIBOR Rate (including because the Relevant Screen Rate is not available or published on a current basis), for the applicable Agreed Currency and such Interest Period or (B) at any time, that adequate and reasonable means do not exist for ascertaining the applicable Adjusted Daily Simple RFR ~~or RFR~~ for the applicable Agreed Currency; or

(ii) the Administrative Agent is advised by the Required Lenders that (A) prior to the commencement of any Interest Period for a Term Benchmark Borrowing, the Adjusted ~~LIBO Rate, the LIBO~~Term SOFR Rate, the Adjusted EURIBOR Rate~~, the EURIBOR Rate~~ or the Adjusted ~~TIBOR Rate or the~~ TIBOR Rate for the applicable Agreed Currency and such Interest Period will not adequately and fairly reflect the cost to such Lenders (or Lender) of making or maintaining their Loans (or its Loan) included in such Borrowing for the applicable Agreed Currency and such Interest Period or (B) at any time, the applicable Adjusted Daily Simple RFR or RFR for the applicable Agreed Currency will not adequately and fairly reflect the cost to such Lenders (or Lender) of making or maintaining their Loans (or its Loan) included in such Borrowing for the applicable Agreed Currency;

then the Administrative Agent shall give notice thereof to the Borrower and the Lenders by telephone, telecopy or electronic mail as promptly as practicable thereafter and, until (x) the Administrative Agent notifies the Borrower and the Lenders that the circumstances giving rise to such notice no longer exist~~, (A)~~ with respect to the relevant Benchmark and (y) the Borrower delivers a new Interest Election Request in accordance with the terms of Section 2.08 or a new Borrowing Request in accordance with the terms of Section 2.03, (A) for Loans denominated in Dollars, (1) any Interest Election Request that requests the conversion of any ~~Revolving~~ Borrowing to, or continuation of any ~~Revolving~~ Borrowing as, a Term Benchmark Borrowing ~~shall be ineffective, (B) if~~and any Borrowing Request that requests a Term Benchmark ~~Revolving Borrowing in Dollars, such Borrowing shall be made as~~ Borrowing shall instead be deemed to be an Interest Election Request or a Borrowing Request, as applicable, for (x) an RFR Borrowing denominated in Dollars so long as the Adjusted Daily Simple RFR for Dollar Borrowings is not also the subject of Section 2.14(a)(i) or (ii) above or (y) an ABR Borrowing if the Adjusted Daily Simple RFR for Dollar Borrowings also is the subject of Section 2.14(a)(i) or (ii) above and (2) any Borrowing Request that requests an RFR Borrowing shall instead be deemed to be a Borrowing Request, as applicable, for an ABR Borrowing and (~~C) if~~ B) for Loans denominated in a Foreign Currency, any Interest Election Request that requests the conversion of any Borrowing to, or continuation of any Borrowing as, a Term Benchmark Borrowing and any Borrowing Request that requests a Term Benchmark Borrowing or an RFR Borrowing, in each case, for the relevant ~~rate above in an Foreign Currency, then such request shall be~~Benchmark shall be ineffective; provided that if the circumstances giving rise to such notice affect only one Type of Borrowings, then all other Types of Borrowings shall be permitted. Furthermore, if any Term Benchmark Loan or RFR Loan in any Agreed Currency is outstanding on the date of the Borrower's receipt of the notice from the Administrative Agent referred to in this Section 2.14(a) with respect to a Relevant Rate applicable to such Term Benchmark Loan or RFR Loan, then until (x) the Administrative Agent notifies the Borrower and the Lenders that the circumstances giving rise to such notice no longer exist, ~~(i) if such Term Benchmark Loan is~~with respect to the relevant Benchmark and (y) the Borrower delivers a new Interest Election Request in accordance with the terms of Section 2.08 or a new Borrowing Request

in accordance with the terms of Section 2.03, (A) for Loans denominated in Dollars, ~~then~~(1) any Term Benchmark Loan shall on the last day of the Interest Period applicable to such Loan ~~(or the next succeeding Business Day if such day is not a Business Day), such Loan shall~~, be converted by the Administrative Agent to, and shall constitute, ~~an ABR Loan~~(x) an RFR Borrowing denominated in Dollars ~~on such day, (ii) if such~~ so long as the Adjusted Daily Simple RFR for Dollar Borrowings is not also the subject of Section 2.14(a)(i) or (ii) above or (y) an ABR Loan if the Adjusted Daily Simple RFR for Dollar Borrowings also is the subject of Section 2.14(a)(i) or (ii) above, on such day, and (2) any RFR Loan shall on and from such day be converted by the Administrative Agent to, and shall constitute an ABR Loan and (B) for Loans denominated in a Foreign Currency, (1) any Term Benchmark Loan ~~is denominated in any Agreed Currency other than Dollars, then such Loan~~ shall, on the last day of the Interest Period applicable to such Loan ~~(or the next succeeding Business Day if such day is not a Business Day)~~ bear interest at the Central Bank Rate (or in the case of Japanese Yen, the Japanese Prime Rate) for the applicable ~~Agreed~~Foreign Currency plus the ~~Applicable Rate~~CBR Spread; provided, that, if the Administrative Agent determines (which determination shall be conclusive and binding absent manifest error) that the Central Bank Rate (or in the case of Japanese Yen, the Japanese Prime Rate) for the applicable ~~Agreed~~Foreign Currency cannot be determined, any outstanding affected Term Benchmark Loans denominated in any ~~Agreed~~Foreign Currency ~~other than Dollars~~ shall, at the Borrower's election prior to such day: (A) be prepaid by the Borrower on such day or (B) solely for the purpose of calculating the interest rate applicable to such Term Benchmark Loan, such Term Benchmark Loan denominated in any ~~Agreed~~Foreign Currency ~~other than Dollars~~ shall be deemed to be a Term Benchmark Loan denominated in Dollars and shall accrue interest at the same interest rate applicable to Term Benchmark Loans denominated in Dollars at such time ~~or~~, and (~~ii~~2) ~~if such~~any RFR Loan ~~is denominated in any Agreed Currency other than Dollars, then such Loan~~ shall bear interest at the Central Bank Rate (or in the case of Japanese Yen, the Japanese Prime Rate) for the applicable ~~Agreed~~Foreign Currency plus the ~~Applicable Rate~~CBR Spread; provided that, if the Administrative Agent determines (which determination shall be conclusive and binding absent manifest error) that the Central Bank Rate (or in the case of Japanese Yen, the Japanese Prime Rate) for the applicable ~~Agreed~~Foreign Currency cannot be determined, any outstanding affected RFR Loans denominated in any ~~Agreed~~Foreign Currency ~~other than Dollars~~, at the Borrower's election, shall either (A) be converted into ABR Loans denominated in Dollars (in an amount equal to the Dollar Equivalent of such Foreign Currency) immediately or (B) be prepaid in full immediately.

(b) Notwithstanding anything to the contrary herein or in any other Loan Document, if a Benchmark Transition Event~~, an Early Opt-in Election or an Other Benchmark Rate Election, as applicable,~~ and its related Benchmark Replacement Date have occurred prior to the Reference Time in respect of any setting of the then-current Benchmark, then (x) if a Benchmark Replacement is determined in accordance with clause (1) ~~or (2)~~ of the definition of "Benchmark Replacement" with respect to Dollars for such Benchmark Replacement Date, such Benchmark Replacement will replace such Benchmark for all purposes hereunder and under any Loan Document in respect of such Benchmark setting and subsequent Benchmark settings without any amendment to, or further action or consent of any other party to, this Agreement or any other Loan Document and (y) if a Benchmark Replacement is determined in accordance with clause (~~3~~2) of the definition of "Benchmark Replacement" with respect to any Agreed Currency for such Benchmark Replacement Date, such Benchmark Replacement will replace such Benchmark for all purposes hereunder and under any Loan Document in respect of any Benchmark setting at or after 5:00 p.m. (New York City time) on the fifth (5th) Business Day after the date notice of such Benchmark Replacement is provided to the Lenders without any amendment to, or further action or consent of any other party to, this Agreement or any other Loan Document so long as the Administrative Agent has not received, by such time, written notice of objection to such Benchmark Replacement from Lenders comprising the Required Lenders.

~~(c) Notwithstanding anything to the contrary herein or in any other Loan Document and subject to the~~ proviso below in this paragraph, with respect to a Loan denominated in Dollars, if a Term SOFR Transition Event and its related Benchmark Replacement Date have occurred prior to the Reference Time in respect of any setting of the then-current Benchmark, then the applicable Benchmark Replacement will replace the then-current Benchmark for all purposes hereunder or under any Loan Document in respect of such Benchmark setting and subsequent ~~Benchmark settings, without any amendment to, or further action or consent of any other party to, this Agreement or any other Loan Document~~; *provided* ~~that, this clause (c) shall not be effective unless the Administrative Agent has delivered to the Lenders and the Borrower a Term SOFR Notice. For the avoidance of doubt, the Administrative~~ Agent shall not be required to deliver a Term SOFR Notice after the occurrence of a Term SOFR Transition Event ~~and may do so in its sole discretion.~~

(c) ~~(d) In connection with the implementation of a Benchmark Replacement,~~ Notwithstanding anything to the contrary herein or in any other Loan Document, the Administrative Agent will have the right to make Benchmark Replacement Conforming Changes from time to time and, notwithstanding anything to the contrary herein or in any other Loan Document, any amendments implementing such Benchmark Replacement Conforming Changes will become effective without any further action or consent of any other party to this Agreement or any other Loan Document.

(d) ~~(c)~~ The Administrative Agent will promptly notify the Borrower and the Lenders of ~~(i)~~(i) any occurrence of a Benchmark Transition Event, ~~an Early Opt-in Election or an Other Benchmark Rate Election, as applicable, (ii)~~(ii) the implementation of any Benchmark Replacement, ~~(iii)~~(iii) the effectiveness of any Benchmark Replacement Conforming Changes, ~~(iv)~~(iv) the removal or reinstatement of any tenor of a Benchmark pursuant to clause (~~f~~e) below and ~~(v)~~(v) the commencement or conclusion of any Benchmark Unavailability Period. Any determination, decision or election that may be made by the Administrative Agent or, if applicable, any Lender (or group of Lenders) pursuant to this Section 2.14, including any determination with respect to a tenor, rate or adjustment or of the occurrence or non-occurrence of an event, circumstance or date and any decision to take or refrain from taking any action or any selection, will be conclusive and binding absent manifest error and may be made in its or their sole discretion and without consent from any other party to this Agreement or any other Loan Document, except, in each case, as expressly required pursuant to this Section 2.14.

(e) ~~(f)~~ Notwithstanding anything to the contrary herein or in any other Loan Document, at any time (including in connection with the implementation of a Benchmark Replacement), ~~(i)~~(i) if the then-current Benchmark is a term rate (including the Term SOFR~~, LIBO~~ Rate, EURIBOR Rate or TIBOR Rate) and either ~~(A)~~(A) any tenor for such Benchmark is not displayed on a screen or other information service that publishes such rate from time to time as selected by the Administrative Agent in its reasonable discretion or ~~(B)~~(B) the regulatory supervisor for the administrator of such Benchmark has provided a public statement or publication of information announcing that any tenor for such Benchmark is or will be no longer representative, then the Administrative Agent may modify the definition of "Interest Period" for any Benchmark settings at or after such time to remove such unavailable or non-representative tenor and ~~(ii)~~(ii) if a tenor that was removed pursuant to clause (i) above either ~~(A)~~(A) is subsequently displayed on a screen or information service for a Benchmark (including a Benchmark Replacement) or ~~(B)~~(B) is not, or is no longer, subject to an announcement that it is or will no longer be representative for a Benchmark (including a Benchmark Replacement), then the Administrative Agent may modify the definition of "Interest Period" for all Benchmark settings at or after such time to reinstate such previously removed tenor.

(f) ~~(g)~~ Upon the Borrower's receipt of notice of the commencement of a Benchmark Unavailability Period, the Borrower may revoke any request for a Term Benchmark Borrowing or RFR Borrowing of, conversion to or continuation of Term Benchmark Loans or RFR Loans to be made, converted or continued during any Benchmark Unavailability Period and, failing that, either (x) the Borrower will be deemed to have converted any request for (1) a Term Benchmark Borrowing denominated in Dollars into a request for a Borrowing of or conversion to ~~ABR Loans or (y) any~~ (A) an RFR Borrowing denominated in Dollars so long as the Adjusted Daily Simple RFR for Dollar Borrowings is not the subject of a Benchmark Transition Event or (B) an ABR Borrowing if the Adjusted Daily Simple RFR for Dollar Borrowings is the subject of a Benchmark Transition Event or (y) any request relating to a Term Benchmark Borrowing or RFR Borrowing denominated in ~~an~~a Foreign Currency shall be ineffective. During any Benchmark Unavailability Period or at any time that a tenor for the then-current Benchmark is not an Available Tenor, the component of ABR based upon the then-current Benchmark or such tenor for such Benchmark, as applicable, will not be used in any determination of ABR. Furthermore, if any Term Benchmark Loan or RFR Loan in any Agreed Currency is outstanding on the date of the Borrower's receipt of notice of the commencement of a Benchmark Unavailability Period with respect to a Relevant Rate applicable to such Term Benchmark Loan or RFR Loan, then until such time as a Benchmark Replacement for such Agreed Currency is implemented pursuant to this Section 2.14, ~~(i) if such Term Benchmark Loan is~~(A) for Loans denominated in Dollars, ~~then~~(1) any Term Benchmark Loan shall on the last day of the Interest Period applicable to such Loan ~~(or the next succeeding Business Day if such day is not a Business Day), such Loan shall~~, be converted by the Administrative Agent to, and shall constitute, ~~an ABR Loan~~(x) an RFR Borrowing denominated in Dollars ~~on such day, (ii) if such~~ so long as the Adjusted Daily Simple RFR for Dollar Borrowings is not the subject of a Benchmark Transition Event or (y) an ABR Loan if the Adjusted Daily Simple RFR for Dollar Borrowings is the subject of a Benchmark Transition Event, on such day and (2) any RFR Loan shall on and from such day, be converted by the

Administrative Agent to, and shall constitute an ABR Loan and (B) for Loans denominated in any Foreign Currency, (1) any Term Benchmark Loan ~~is denominated in any Agreed Currency other than Dollars, then such Loan~~ shall, on the last day of the Interest Period applicable to such Loan ~~(or the next succeeding Business Day if such day is not a Business Day)~~ bear interest at the Central Bank Rate (or in the case of Japanese Yen, the Japanese Prime Rate) for the applicable ~~Agreed~~Foreign Currency plus the ~~Applicable Rate~~CBR Spread; provided that~~,~~ if the Administrative Agent determines (which determination shall be conclusive and binding absent manifest error) that the Central Bank Rate (or in the case of Japanese Yen, the Japanese Prime Rate) for the applicable ~~Agreed~~Foreign Currency cannot be determined, any outstanding affected Term Benchmark Loans denominated in any ~~Agreed~~Foreign Currency ~~other than Dollars~~ shall, at the Borrower's election prior to such day: ~~(A)~~(A) be prepaid by the Borrower on such day or ~~(B)~~(B) solely for the purpose of calculating the interest rate applicable to such Term Benchmark Loan, such Term Benchmark Loan denominated in any ~~Agreed~~Foreign Currency ~~other than Dollars~~ shall be deemed to be a Term Benchmark Loan denominated in Dollars and shall accrue interest at the same interest rate applicable to Term Benchmark Loans denominated in Dollars at such time ~~or (iii) if such~~and (2) any RFR Loan ~~is denominated in any Agreed Currency other than Dollars, then such Loan~~ shall bear interest at the Central Bank Rate (or in the case of Japanese Yen, the Japanese Prime Rate) for the applicable ~~Agreed~~Foreign Currency plus the ~~Applicable Rate~~CBR Spread; provided that, if the Administrative Agent determines (which determination shall be conclusive and binding absent manifest error) that the Central Bank Rate (or in the case of Japanese Yen, the Japanese Prime Rate) for the applicable ~~Agreed~~Foreign Currency cannot be determined, any outstanding affected RFR Loans denominated in any ~~Agreed~~Foreign Currency, at the Borrower's election, shall either ~~(A)~~(A) be converted into ABR Loans denominated in Dollars (in an amount equal to the Dollar Equivalent of such Foreign Currency) immediately or ~~(B)~~(B) be prepaid in full immediately.

SECTION 2.15. Increased Costs. (a) If any Change in Law shall:

(i) impose, modify or deem applicable any reserve, special deposit, liquidity or similar requirement (including any compulsory loan requirement, insurance charge or other assessment) against assets of, deposits with or for the account of, or credit extended by, any Lender (except any such reserve requirement reflected in the Adjusted ~~LIBO~~Term SOFR Rate, Adjusted EURIBOR Rate or Adjusted TIBOR Rate, as applicable) or the Issuing Bank;

(ii) impose on any Lender or the Issuing Bank or the London or other applicable offshore interbank market for the applicable Agreed Currency any other condition, cost or expense (other than Taxes) affecting this Agreement or Loans made by such Lender or any Letter of Credit or participation therein; or

(iii) subject any Recipient to any Taxes (other than (A) Indemnified Taxes, (B) Taxes described in clauses (b) through (d) of the definition of Excluded Taxes and (C) Connection Income Taxes) on its loans, loan principal, letters of credit, commitments, or other obligations, or its deposits, reserves, other liabilities or capital attributable thereto; and the result of any of the foregoing shall be to increase the cost to such Lender or such other Recipient of making, continuing, converting into or maintaining any Loan or of maintaining its obligation to make any such Loan or to increase the cost to such Lender, the Issuing Bank or such other Recipient of participating in, issuing or maintaining any Letter of Credit or to reduce the amount of any sum received or receivable by such Lender, the Issuing Bank or such other Recipient hereunder, whether of principal, interest or otherwise, then the Borrower will pay to such Lender, the Issuing Bank or such other Recipient, as the case may be, such additional amount or amounts as will compensate such Lender, the Issuing Bank or such other Recipient, as the case may be, for such additional costs incurred or reduction suffered.

(b) If any Lender or the Issuing Bank determines that any Change in Law regarding capital or liquidity requirements has or would have the effect of reducing the rate of return on such Lender's or the Issuing Bank's capital or on the capital of such Lender's or the Issuing Bank's holding company, if any, as a consequence of this Agreement or the Loans made by, or participations in Letters of Credit held by, such Lender, or the Letters of Credit issued by the Issuing Bank, to a level below that which such Lender or the Issuing Bank or such Lender's or the Issuing Bank's holding company could have achieved but for such Change in Law (taking into consideration such Lender's or the Issuing Bank's policies and the policies of such Lender's or the Issuing Bank's holding company with respect to capital adequacy and liquidity), then from time to time the Borrower will pay to such Lender or the Issuing Bank, as the case may be, such additional amount or amounts as will compensate such Lender or the Issuing Bank or such Lender's or the Issuing Bank's holding company for any such reduction suffered.

(c) A certificate of a Lender or the Issuing Bank setting forth the amount or amounts necessary to compensate such Lender or the Issuing Bank or its holding company, as the case may be, as specified in paragraph (a) or (b) of this Section shall be delivered to the Borrower and shall be conclusive absent manifest error. The Borrower shall pay such Lender or the Issuing Bank, as the case may be, the amount shown as due on any such certificate within ten days after receipt thereof.

(d) Failure or delay on the part of any Lender or the Issuing Bank to demand compensation pursuant to this Section shall not constitute a waiver of such Lender's or the Issuing Bank's right to demand such compensation; provided that the Borrower shall not be required to compensate a Lender or the Issuing Bank pursuant to this Section for any increased costs or reductions incurred more than 270 days prior to the date that such Lender or the Issuing Bank, as the case may be, notifies the Borrower of the Change in Law giving rise to such increased costs or reductions and of such Lender's or the Issuing Bank's intention to claim compensation therefor; provided further that, if the Change in Law giving rise to such increased costs or reductions is retroactive, then the 270-day period referred to above shall be extended to include the period of retroactive effect thereof.

SECTION 2.16. Break Funding Payments.

(a) With respect to Loans that are not RFR Loans, in the event of (i) the payment of any principal of any Term Benchmark Loan other than on the last day of an Interest Period applicable thereto (including as a result of an Event of Default or as a result of any prepayment pursuant to Section 2.11), (ii) the conversion of any Term Benchmark Loan other than on the last day of the Interest Period applicable thereto, (iii) the failure to borrow, convert, continue or prepay any Term Benchmark Loan on the date specified in any notice delivered pursuant hereto (regardless of whether such notice may be revoked under Section 2.11(a) and is revoked in accordance therewith), (iv) the assignment of any Term Benchmark Loan other than on the last day of the Interest Period applicable thereto as a result of a request by the Borrower pursuant to Section 2.19 or (v) the failure by the Borrower to make any payment of any Loan or drawing under any Letter of Credit (or interest due ~~thereof~~thereon) denominated in a Foreign Currency on its scheduled due date or any payment thereof in a different currency then, in any such event, the Borrower shall compensate each Lender for the loss, cost and expense attributable to such event. ~~In the case of a Term Benchmark Loan, such loss, cost or expense to any Lender shall be deemed to include an amount determined by such Lender to be the excess, if any, of (x) the amount of interest which would have accrued on the principal amount of such Loan had such event not occurred, at the Adjusted LIBO Rate, the Adjusted EURIBOR Rate or the Adjusted TIBOR Rate, as applicable, that would have been applicable to such Loan, for the period from the date of such event to the last day of the then current Interest Period therefor (or, in the case of a failure to borrow, convert or continue, for the period that would have been the Interest Period for such Loan), over (y) the amount of interest which would accrue on such principal amount for such period at the interest rate which such Lender would bid were it to bid, at the commencement of such period, for deposits in the relevant currency of a comparable amount and period from other banks in the applicable offshore interbank market for such Agreed Currency, whether or not such Term Benchmark Loan was in fact so funded.~~ A certificate of any Lender setting forth ~~in reasonable detail~~ any amount or amounts that such Lender is entitled to receive pursuant to this Section shall be delivered to the Borrower and shall be conclusive absent manifest error. The Borrower shall pay such Lender the amount shown as due on any such certificate within ten days after receipt thereof.

(b) With respect to RFR Loans, in the event of (i) the payment of any principal of any RFR Loan other than on the Interest Payment Date applicable thereto (including as a result of an Event of Default or an optional or mandatory prepayment of Loans), (ii) the failure to borrow or prepay any RFR Loan on the date specified in any notice delivered pursuant hereto (regardless of whether such notice may be revoked under Section 2.11(~~b~~a) and is revoked in accordance therewith), (iii) the assignment of any RFR Loan other than on the Interest Payment Date applicable thereto as a result of a request by the Borrower pursuant to Section 2.19 or (iv) the failure by the Borrower to make any payment of any Loan or drawing under any Letter of Credit (or interest due thereof) denominated in ~~an~~a Foreign Currency on its scheduled due date or any payment thereof in a different currency, then, in any such event, the Borrower shall compensate each Lender for the loss, cost and expense attributable to such event. A certificate of any Lender setting forth any amount or amounts that such Lender is entitled to receive pursuant to this Section shall be delivered to the Borrower and shall be conclusive absent manifest error. The Borrower shall pay such Lender the amount shown as due on any such certificate within 10 days after receipt thereof.

SECTION 2.17. Taxes. (a) Payments Free of Taxes. Any and all payments by or on account of any obligation of any Loan Party under any Loan Document shall be made without deduction or withholding for any Taxes, except as required by applicable law. If any applicable law (as determined in the good faith discretion of an applicable withholding agent) requires the deduction or withholding of any Tax from any such payment by a withholding agent, then the applicable withholding agent shall be entitled to make such deduction or withholding and shall timely pay the full amount deducted or withheld to the relevant Governmental Authority in accordance with applicable law and, if such Tax is an Indemnified Tax, then the sum payable by the applicable Loan Party shall be increased as necessary so that after such deduction or withholding has been made (including such deductions and withholdings applicable to additional sums payable under this Section 2.17) the applicable Recipient receives an amount equal to the sum it would have received had no such deduction or withholding been made.

(b) Payment of Other Taxes by the Borrower. The Borrower shall timely pay to the relevant Governmental Authority in accordance with applicable law, or at the option of the Administrative Agent timely reimburse it for, Other Taxes.

(c) Evidence of Payments. As soon as practicable after any payment of Taxes by any Loan Party to a Governmental Authority pursuant to this Section 2.17, such Loan Party shall deliver to the Administrative Agent the original or a certified copy of a receipt issued by such Governmental Authority evidencing such payment, a copy of the return reporting such payment or other evidence of such payment reasonably satisfactory to the Administrative Agent.

(d) Indemnification by the Loan Parties. The Loan Parties shall indemnify each Recipient, within ten days after demand therefor, for the full amount of any Indemnified Taxes (including Indemnified Taxes imposed or asserted on or attributable to amounts payable under this Section) payable or paid by such Recipient or required to be withheld or deducted from a payment to such Recipient and any reasonable expenses arising therefrom or with respect thereto, whether or not such Indemnified Taxes were correctly or legally imposed or asserted by the relevant Governmental Authority. A certificate as to the amount of such payment or liability delivered to the Borrower by a Lender (with a copy to the Administrative Agent), or by the Administrative Agent on its own behalf or on behalf of a Lender, shall be conclusive absent manifest error.

(e) Indemnification by the Lenders. Each Lender shall severally indemnify the Administrative Agent, within ten days after demand therefor, for (i) any Indemnified Taxes attributable to such Lender (but only to the extent that any Loan Party has not already indemnified the Administrative Agent for such Indemnified Taxes and without limiting the obligation of the Loan Parties to do so), (ii) any Taxes attributable to such Lender's failure to comply with the provisions of Section 9.04(c) relating to the maintenance of a Participant Register and (iii) any Excluded Taxes attributable to such Lender, in each case, that are payable or paid by the Administrative Agent in connection with any Loan Document, and any reasonable expenses arising therefrom or with respect thereto, whether or not such Taxes were correctly or legally imposed or asserted by the relevant Governmental Authority. A certificate as to the amount of such payment or liability delivered to any Lender by the Administrative Agent shall be conclusive absent manifest error. Each Lender hereby authorizes the Administrative Agent to set off and apply any and all amounts at any time owing to such Lender under any Loan Document or otherwise payable by the Administrative Agent to the Lender from any other source against any amount due to the Administrative Agent under this paragraph (e).

(f) Status of Lenders. (i) Any Lender that is entitled to an exemption from or reduction of withholding Tax with respect to payments made under any Loan Document shall deliver to the Borrower and the Administrative Agent, at the time or times reasonably requested by the Borrower or the Administrative Agent, such properly completed and executed documentation reasonably requested by the Borrower or the Administrative Agent as will permit such payments to be made without withholding or at a reduced rate of withholding. In addition, any Lender, if reasonably requested by the Borrower or the Administrative Agent, shall deliver such other documentation prescribed by applicable law or reasonably requested by the Borrower or the Administrative Agent as will enable the Borrower or the Administrative Agent to determine whether or not such Lender is subject to backup withholding or information reporting requirements. Notwithstanding anything to the contrary in the preceding two sentences, the completion, execution and submission of such documentation (other than such documentation set forth in Section 2.17(f)(ii)(A), (ii)(B), (ii)(D) and (ii)(E) below) shall not be required if in the Lender's reasonable judgment such

completion, execution or submission would subject such Lender to any material unreimbursed cost or expense or would materially prejudice the legal or commercial position of such Lender.

(ii) Without limiting the generality of the foregoing, in the event that the Borrower is a U.S. Person:

(A) any Lender that is a U.S. Person shall deliver to the Borrower and the Administrative Agent on or prior to the date on which such Lender becomes a Lender under this Agreement (and from time to time thereafter upon the reasonable request of the Borrower or the Administrative Agent), executed originals of IRS Form W-9 certifying that such Lender is exempt from U.S. Federal backup withholding tax;

(B) any Foreign Lender shall, to the extent it is legally entitled to do so, deliver to the Borrower and the Administrative Agent (in such number of copies as shall be requested by the Recipient) on or prior to the date on which such Foreign Lender becomes a Lender under this Agreement (and from time to time thereafter upon the reasonable request of the Borrower or the Administrative Agent), whichever of the following is applicable:

(1) in the case of a Foreign Lender claiming the benefits of an income tax treaty to which the United States is a party (x) with respect to payments of interest under any Loan Document, executed originals of IRS Form W-8BEN or IRS Form W-8BEN-E establishing an exemption from, or reduction of, U.S. Federal withholding Tax pursuant to the "interest" article of such tax treaty and (y) with respect to any other applicable payments under any Loan Document, IRS Form W-8BEN or IRS Form W-8BEN-E establishing an exemption from, or reduction of, U.S. Federal withholding Tax pursuant to the "business profits" or "other income" article of such tax treaty;

(2) executed originals of IRS Form W-8ECI;

(3) in the case of a Foreign Lender claiming the benefits of the exemption for portfolio interest under Section 881(c) of the Code, (x) a certificate substantially in the form of Exhibit G-1 to the effect that such Foreign Lender is not a "bank" within the meaning of Section 881(c)(3)(A) of the Code, a "10 percent shareholder" of the Borrower within the meaning of Section 881(c)(3)(B) of the Code, or a "controlled foreign corporation" described in Section 881(c)(3)(C) of the Code (a "U.S. Tax Compliance Certificate") and (y) executed originals of IRS Form W-8BEN or IRS Form W-8BEN-E; or

(4) to the extent a Foreign Lender is not the beneficial owner, executed originals of IRS Form W-8IMY, accompanied by IRS Form W-8ECI, IRS Form W-8BEN or IRS Form W-8BEN-E, a U.S. Tax Compliance Certificate substantially in the form of Exhibit G-2 or Exhibit G-3, IRS Form W-9, and/or other certification documents from each beneficial owner, as applicable; provided that if the Foreign Lender is a partnership and one or more direct or indirect partners of such Foreign Lender are claiming the portfolio interest exemption, such Foreign Lender may provide a U.S. Tax Compliance Certificate substantially in the form of Exhibit G-4 on behalf of each such direct and indirect partner;

(C) any Foreign Lender shall, to the extent it is legally entitled to do so, deliver to the Borrower and the Administrative Agent (in such number of copies as shall be requested by the Recipient) on or prior to the date on which such Foreign Lender becomes a Lender under this Agreement (and from time to time thereafter upon the reasonable request of the Borrower or the Administrative Agent), executed originals of any other form prescribed by applicable law as a basis for claiming exemption from or a reduction in U.S. Federal withholding Tax, duly completed, together with such supplementary documentation as may be prescribed by applicable

law to permit the Borrower or the Administrative Agent to determine the withholding or deduction required to be made;

(D) if a payment made to a Lender under any Loan Document would be subject to U.S. Federal withholding Tax imposed by FATCA if such Lender were to fail to comply with the applicable reporting requirements of FATCA (including those contained in Section 1471(b) or 1472(b) of the Code, as applicable), such Lender shall deliver to the Borrower and the Administrative Agent at the time or times prescribed by law and at such time or times reasonably requested by the Borrower or the Administrative Agent such documentation prescribed by applicable law (including as prescribed by Section 1471(b)(3)(C)(i) of the Code) and such additional documentation reasonably requested by the Borrower or the Administrative Agent as may be necessary for the Borrower and the Administrative Agent to comply with their obligations under FATCA and to determine that such Lender has complied with such Lender's obligations under FATCA or to determine the amount to deduct and withhold from such payment. Solely for purposes of this clause (D), "FATCA" shall include any amendments made to FATCA after the date of this Agreement; and

(E) on or before the date on which any successor or replacement Administrative Agent becomes the Administrative Agent hereunder, it shall deliver to the Borrower two executed copies of either (a) IRS Form W-9 or (b) with respect to amounts received on its own account, IRS Form W-8ECI and with respect to amounts received on account of any Lender, IRS Form W-8IMY certifying that it is a U.S. branch that has agreed to be treated as a U.S. Person for U.S. federal tax purposes or a qualified intermediary that has agreed to assume primary withholding obligations for Chapter 3 and Chapter 4 of the Code with respect to payments received by it from the Borrower in its capacity as Administrative Agent, as applicable.

Each Lender agrees that if any form or certification it previously delivered expires or becomes obsolete or inaccurate in any respect, it shall update such form or certification or promptly notify the Borrower and the Administrative Agent in writing of its legal inability to do so.

(g) Treatment of Certain Refunds. If any party determines, in its sole discretion exercised in good faith, that it has received a refund of any Taxes as to which it has been indemnified pursuant to this Section 2.17 (including by the payment of additional amounts pursuant to this Section 2.17), it shall pay to the indemnifying party an amount equal to such refund (but only to the extent of indemnity payments made under this Section 2.17 with respect to the Taxes giving rise to such refund), net of all out-of-pocket expenses (including Taxes) of such indemnified party and without interest (other than any interest paid by the relevant Governmental Authority with respect to such refund). Such indemnifying party, upon the request of such indemnified party, shall repay to such indemnified party the amount paid over pursuant to this paragraph (g) (plus any penalties, interest or other charges imposed by the relevant Governmental Authority) in the event that such indemnified party is required to repay such refund to such Governmental Authority. Notwithstanding anything to the contrary in this paragraph (g), in no event will the indemnified party be required to pay any amount to an indemnifying party pursuant to this paragraph (g) the payment of which would place the indemnified party in a less favorable net after-Tax position than the indemnified party would have been in if the Tax subject to indemnification and giving rise to such refund had not been deducted, withheld or otherwise imposed and the indemnification payments or additional amounts with respect to such Tax had never been paid. This paragraph shall not be construed to require any indemnified party to make available its Tax returns (or any other information relating to its Taxes that it deems confidential) to the indemnifying party or any other Person.

(h) Survival. Each party's obligations under this Section 2.17 shall survive the resignation or replacement of the Administrative Agent or any assignment of rights by, or the replacement of, a Lender, the termination of the Commitments and the repayment, satisfaction or discharge of all obligations under any Loan Document.

(i) Defined Terms. For purposes of this Section 2.17, the term "Lender" includes the Issuing Bank and the term "applicable law" includes FATCA.

SECTION 2.18. Payments Generally; Pro Rata Treatment; Sharing of Set-offs.

(a) The Borrower shall make each payment required to be made by it hereunder (whether of principal, interest, fees or reimbursement of LC Disbursements, or of amounts payable under Section 2.15, 2.16 or 2.17, or otherwise) prior to (i) in the case of payments denominated in Dollars, 1:00 p.m., New York City time and (ii) in the case of payments denominated in a Foreign Currency, 12:00 noon, Local Time, in the city of the Administrative Agent's Term Benchmark Payment Office for such currency, in each case on the date when due, in immediately available funds, without set-off, recoupment or counterclaim. Any amounts received after such time on any date may, in the discretion of the Administrative Agent, be deemed to have been received on the next succeeding Business Day for purposes of calculating interest thereon. All such payments shall be made (i) in the same currency in which the applicable Credit Event was made (or where such currency has been converted to euro, in euro) and (ii) to the Administrative Agent at its offices at 10 South Dearborn Street, Chicago, Illinois 60603 or, in the case of a Credit Event denominated in a Foreign Currency, the Administrative Agent's Term Benchmark Payment Office for such currency, except payments to be made directly to the Issuing Bank or Swingline Lender as expressly provided herein and except that payments pursuant to Sections 2.15, 2.16, 2.17 and 9.03 shall be made directly to the Persons entitled thereto. The Administrative Agent shall distribute any such payments denominated in the same currency received by it for the account of any other Person to the appropriate recipient promptly following receipt thereof. If any payment hereunder shall be due on a day that is not a Business Day, the date for payment shall be extended to the next succeeding Business Day, and, in the case of any payment accruing interest, interest thereon shall be payable for the period of such extension. Notwithstanding the foregoing provisions of this Section, if, after the making of any Credit Event in any Foreign Currency, currency control or exchange regulations are imposed in the country which issues such currency with the result that the type of currency in which the Credit Event was made (the "Original Currency") no longer exists or the Borrower is not able to make payment to the Administrative Agent for the account of the Lenders in such Original Currency, then all payments to be made by the Borrower hereunder in such currency shall instead be made when due in Dollars in an amount equal to the Dollar Equivalent (as of the date of repayment) of such payment due, it being the intention of the parties hereto that the Borrower takes all risks of the imposition of any such currency control or exchange regulations. Without limiting the generality of the foregoing, the Administrative Agent may require that any payments due under this Agreement be made in the United States.

(b) At any time that payments are not required to be applied in the manner required by Section 7.03, if at any time insufficient funds are received by and available to the Administrative Agent to pay fully all amounts of principal, unreimbursed LC Disbursements, interest and fees then due hereunder, such funds shall be applied (i) first, towards payment of interest and fees then due hereunder, ratably among the parties entitled thereto in accordance with the amounts of interest and fees then due to such parties, and (ii) second, towards payment of principal and unreimbursed LC Disbursements then due hereunder ratably among the parties entitled thereto in accordance with the amounts of principal and unreimbursed LC Disbursements then due to such parties.

(c) At the election of the Administrative Agent, all payments of principal, interest, LC Disbursements, fees, premiums, reimbursable expenses (including, without limitation, all reimbursement for fees and expenses pursuant to Section 9.03), and other sums payable under the Loan Documents, may be paid from the proceeds of Borrowings made hereunder whether made following a request by the Borrower pursuant to Section 2.03 or a deemed request as provided in this Section or may be deducted from any deposit account of the Borrower maintained with the Administrative Agent. The Borrower hereby irrevocably authorizes (i) the Administrative Agent to make a Borrowing for the purpose of paying each payment of principal, interest, fees or any other amount due under the Loan Documents if such amounts are not paid when due and agrees that all such amounts charged shall constitute Loans (including Swingline Loans) and that all such Borrowings shall be deemed to have been requested pursuant to Sections 2.03 or 2.05, as applicable and (ii) the Administrative Agent to charge any deposit account of the Borrower maintained with the Administrative Agent designated by the Borrower for such purpose for each payment of principal, interest and fees as it becomes due hereunder or any other amount due under the Loan Documents.

(d) If any Lender shall, by exercising any right of set-off or counterclaim or otherwise, obtain payment in respect of any principal of or interest on any of its Revolving Loans or participations in LC Disbursements or Swingline Loans resulting in such Lender receiving payment of a greater proportion of the

aggregate amount of its Revolving Loans and participations in LC Disbursements and Swingline Loans and accrued interest thereon than the proportion received by any other Lender, then the Lender receiving such greater proportion shall purchase (for cash at face value) participations in the Revolving Loans and participations in LC Disbursements and Swingline Loans of other Lenders to the extent necessary so that the benefit of all such payments shall be shared by the Lenders ratably in accordance with the aggregate amount of principal of and accrued interest on their respective Revolving Loans and participations in LC Disbursements and Swingline Loans; provided that (i) if any such participations are purchased and all or any portion of the payment giving rise thereto is recovered, such participations shall be rescinded and the purchase price restored to the extent of such recovery, without interest, and (ii) the provisions of this paragraph shall not be construed to apply to any payment made by the Borrower pursuant to and in accordance with the express terms of this Agreement or any payment obtained by a Lender as consideration for the assignment of or sale of a participation in any of its Loans or participations in LC Disbursements and Swingline Loans to any assignee or participant, other than to the Borrower or any Subsidiary or Affiliate thereof (as to which the provisions of this paragraph shall apply). The Borrower consents to the foregoing and agrees, to the extent it may effectively do so under applicable law, that any Lender acquiring a participation pursuant to the foregoing arrangements may exercise against the Borrower rights of set-off and counterclaim with respect to such participation as fully as if such Lender were a direct creditor of the Borrower in the amount of such participation.

(e) Unless the Administrative Agent shall have received notice from the Borrower prior to the date on which any payment is due to the Administrative Agent for the account of the Lenders or the Issuing Bank hereunder that the Borrower will not make such payment, the Administrative Agent may assume that the Borrower has made such payment on such date in accordance herewith and may, in reliance upon such assumption, distribute to the Lenders or the Issuing Bank, as the case may be, the amount due. In such event, if the Borrower has not in fact made such payment, then each of the Lenders or the Issuing Bank, as the case may be, severally agrees to repay to the Administrative Agent forthwith on demand the amount so distributed to such Lender or Issuing Bank with interest thereon, for each day from and including the date such amount is distributed to it to but excluding the date of payment to the Administrative Agent, at the greater of the Overnight Bank Funding Rate and a rate determined by the Administrative Agent in accordance with banking industry rules on interbank compensation (including without limitation the Overnight Foreign Currency Rate in the case of Loans denominated in a Foreign Currency).

(f) If any Lender shall fail to make any payment required to be made by it pursuant to Section 2.05(c), 2.06(d) or (e), 2.07(b), 2.18(e) or 9.03(c), then the Administrative Agent may, in its discretion (notwithstanding any contrary provision hereof), (i) apply any amounts thereafter received by the Administrative Agent for the account of such Lender and for the benefit of the Administrative Agent, the Swingline Lender or the Issuing Bank to satisfy such Lender's obligations to it under such Section until all such unsatisfied obligations are fully paid and/or (ii) hold any such amounts in a segregated account over which the Administrative Agent shall have exclusive control as cash collateral for, and application to, any future funding obligations of such Lender under any such Section; in the case of each of clauses (i) and (ii) above, in any order as determined by the Administrative Agent in its discretion.

SECTION 2.19. Mitigation Obligations; Replacement of Lenders. (a) If any Lender requests compensation under Section 2.15, or the Borrower is required to pay any Indemnified Taxes or additional amounts to any Lender or any Governmental Authority for the account of any Lender pursuant to Section 2.17, then such Lender shall (at the request of the Borrower) use reasonable efforts to designate a different lending office for funding or booking its Loans hereunder or to assign its rights and obligations hereunder to another of its offices, branches or affiliates, if, in the judgment of such Lender, such designation or assignment (i) would eliminate or reduce amounts payable pursuant to Section 2.15 or 2.17, as the case may be, in the future and (ii) would not subject such Lender to any unreimbursed cost or expense and would not otherwise be disadvantageous to such Lender. The Borrower hereby agrees to pay all reasonable costs and expenses incurred by any Lender in connection with any such designation or assignment.

(b) If (i) any Lender requests compensation under Section 2.15, (ii) the Borrower is required to pay any Indemnified Taxes or additional amounts to any Lender or any Governmental Authority for the account of any Lender pursuant to Section 2.17 or (iii) any Lender becomes a Defaulting Lender, then the Borrower may, at its sole expense and effort, upon notice to such Lender and the Administrative Agent, require such Lender to assign and delegate, without recourse (in accordance with and subject to the restrictions contained in Section 9.04), all its interests, rights (other than its existing rights to payments pursuant to Sections 2.15 or 2.17) and obligations under

the Loan Documents to an assignee that shall assume such obligations (which assignee may be another Lender, if a Lender accepts such assignment); provided that (i) the Borrower shall have received the prior written consent of the Administrative Agent (and if a Commitment is being assigned, the Issuing Bank and the Swingline Lender), which consent shall not unreasonably be withheld, (ii) such Lender shall have received payment of an amount equal to the outstanding principal of its Loans and participations in LC Disbursements and Swingline Loans, accrued interest thereon, accrued fees and all other amounts payable to it hereunder, from the assignee (to the extent of such outstanding principal and accrued interest and fees) or the Borrower (in the case of all other amounts) and (iii) in the case of any such assignment resulting from a claim for compensation under Section 2.15 or payments required to be made pursuant to Section 2.17, such assignment will result in a reduction in such compensation or payments. A Lender shall not be required to make any such assignment and delegation if, prior thereto, as a result of a waiver by such Lender or otherwise, the circumstances entitling the Borrower to require such assignment and delegation cease to apply. Each party hereto agrees that (A) an assignment required pursuant to this paragraph may be effected pursuant to an Assignment and Assumption executed by the Borrower, the Administrative Agent and the assignee (or, to the extent applicable, an agreement incorporating an Assignment and Assumption by reference pursuant to an Approved Electronic Platform as to which the Administrative Agent and such parties are participants), and (B) the Lender required to make such assignment need not be a party thereto in order for such assignment to be effective and shall be deemed to have consented to an be bound by the terms thereof; provided that, following the effectiveness of any such assignment, the other parties to such assignment agree to execute and deliver such documents necessary to evidence such assignment as reasonably requested by the applicable Lender; provided that any such documents shall be without recourse to or warranty by the parties thereto.

SECTION 2.20. Expansion Option. The Borrower may from time to time elect to increase the Commitments or enter into one or more tranches of term loans (each, an "Incremental Term Loan"), in each case, in minimum increments of $10,000,000, so long as, after giving effect thereto, (i) the aggregate amount of all such increases and Incremental Term Loans made on or prior to the Effective Date does not exceed $500,000,000 and (ii) the aggregate amount of all such increases and Incremental Term Loans made at any time after the Effective Date does not exceed $600,000,000. The Borrower may arrange for any such increase or tranche to be provided by one or more Lenders (each Lender so agreeing to an increase in its Commitment, or to participate in such Incremental Term Loans, an "Increasing Lender"), or by one or more new banks, financial institutions or other entities (each such new bank, financial institution or other entity, an "Augmenting Lender"; provided that no Ineligible Institution may be an Augmenting Lender), which agree to increase their existing Commitments, or to participate in such Incremental Term Loans, or provide new Commitments, as the case may be; provided that (i) each Augmenting Lender, shall be subject to the approval of the Borrower and the Administrative Agent and (ii) (x) in the case of an Increasing Lender, the Borrower and such Increasing Lender execute an agreement substantially in the form of Exhibit C hereto, and (y) in the case of an Augmenting Lender, the Borrower and such Augmenting Lender execute an agreement substantially in the form of Exhibit D hereto. No consent of any Lender (other than the Lenders participating in the increase or any Incremental Term Loan) shall be required for any increase in Commitments or Incremental Term Loan pursuant to this Section 2.20. Increases and new Commitments and Incremental Term Loans created pursuant to this Section 2.20 shall become effective on the date agreed by the Borrower, the Administrative Agent and the relevant Increasing Lenders or Augmenting Lenders, and the Administrative Agent shall notify each Lender thereof. Notwithstanding the foregoing, no increase in the Commitments (or in the Commitment of any Lender) or tranche of Incremental Term Loans shall become effective under this paragraph unless, (i) on the proposed date of the effectiveness of such increase or Incremental Term Loans, (A) the conditions set forth in paragraphs (a) and (b) of Section 4.02 shall be satisfied or waived by the Required Lenders and the Administrative Agent shall have received a certificate to that effect dated such date and executed by a Financial Officer of the Borrower and (B) the Borrower shall be in compliance (on a pro forma basis) with the covenants contained in Section 6.05 and (ii) the Administrative Agent shall have received documents and opinions consistent with those delivered on the Effective Date as to the organizational power and authority of the Borrower to borrow hereunder after giving effect to such increase (unless such requirements have been waived by the applicable Increasing Lenders and Augmenting Lenders). On the effective date of any increase in the Commitments or any Incremental Term Loans being made, (i) each relevant Increasing Lender and Augmenting Lender shall make available to the Administrative Agent such amounts in immediately available funds as the Administrative Agent shall determine, for the benefit of the other Lenders, as being required in order to cause, after giving effect to such increase and the use of such amounts to make payments to such other Lenders, each Lender's portion of the

outstanding Revolving Loans of all the Lenders to equal its Applicable Percentage of such outstanding Revolving Loans, and (ii) except in the case of any Incremental Term Loans, the Borrower shall be deemed to have repaid and reborrowed all outstanding Revolving Loans as of the date of any increase in the Commitments (with such reborrowing to consist of the Types of Revolving Loans, with related Interest Periods if applicable, specified in a notice delivered by the Borrower, in accordance with the requirements of Section 2.03). The deemed payments made pursuant to clause (ii) of the immediately preceding sentence shall be accompanied by payment of all accrued interest on the amount prepaid and, in respect of each Term Benchmark Loan, shall be subject to indemnification by the Borrower pursuant to the provisions of Section 2.16 if the deemed payment occurs other than on the last day of the related Interest Periods. The Incremental Term Loans (a) shall rank pari passu in right of payment with the Revolving Loans, (b) shall not mature earlier than the Maturity Date (but may have amortization prior to such date) and (c) shall be treated substantially the same as (and in any event no more favorably than) the Revolving Loans; provided that (i) the terms and conditions applicable to any tranche of Incremental Term Loans maturing after the Maturity Date may provide for material additional or different financial or other covenants or prepayment requirements applicable only during periods after the Maturity Date and (ii) the Incremental Term Loans may be priced differently than the Revolving Loans. Incremental Term Loans may be made hereunder pursuant to an amendment or restatement (an "Incremental Term Loan Amendment") of this Agreement and, as appropriate, the other Loan Documents, executed by the Borrower, each Increasing Lender participating in such tranche, each Augmenting Lender participating in such tranche, if any, and the Administrative Agent. The Incremental Term Loan Amendment may, without the consent of any other Lenders, effect such amendments to this Agreement and the other Loan Documents as may be necessary or appropriate, in the reasonable opinion of the Administrative Agent, to effect the provisions of this Section 2.20. Nothing contained in this Section 2.20 shall constitute, or otherwise be deemed to be, a commitment on the part of any Lender to increase its Commitment hereunder, or provide Incremental Term Loans, at any time. In connection with any increase of the Commitments or Incremental Term Loans pursuant to this Section 2.20, any Augmenting Lender becoming a party hereto shall (1) execute such documents and agreements as the Administrative Agent may reasonably request and (2) provide to the Administrative Agent, its name, address, tax identification number and/or such other information as shall be necessary for the Administrative Agent to comply with "know your customer" and anti-money laundering rules and regulations, including without limitation, the Patriot Act.

SECTION 2.21. Judgment Currency. If for the purposes of obtaining judgment in any court it is necessary to convert a sum due from the Borrower hereunder in the currency expressed to be payable herein (the "specified currency") into another currency, the parties hereto agree, to the fullest extent that they may effectively do so, that the rate of exchange used shall be that at which in accordance with normal banking procedures the Administrative Agent could purchase the specified currency with such other currency at the Administrative Agent's main New York City office on the Business Day preceding that on which final, non-appealable judgment is given. The obligations of the Borrower in respect of any sum due to any Lender or the Administrative Agent hereunder shall, notwithstanding any judgment in a currency other than the specified currency, be discharged only to the extent that on the Business Day following receipt by such Lender or the Administrative Agent (as the case may be) of any sum adjudged to be so due in such other currency such Lender or the Administrative Agent (as the case may be) may in accordance with normal, reasonable banking procedures purchase the specified currency with such other currency. If the amount of the specified currency so purchased is less than the sum originally due to such Lender or the Administrative Agent, as the case may be, in the specified currency, the Borrower agrees, to the fullest extent that it may effectively do so, as a separate obligation and notwithstanding any such judgment, to indemnify such Lender or the Administrative Agent, as the case may be, against such loss, and if the amount of the specified currency so purchased exceeds (a) the sum originally due to any Lender or the Administrative Agent, as the case may be, in the specified currency and (b) any amounts shared with other Lenders as a result of allocations of such excess as a disproportionate payment to such Lender under Section 2.18, such Lender or the Administrative Agent, as the case may be, agrees to remit such excess to the Borrower.

SECTION 2.22. Defaulting Lenders. Notwithstanding any provision of this Agreement to the contrary, if any Lender becomes a Defaulting Lender, then the following provisions shall apply for so long as such Lender is a Defaulting Lender:

(a) fees shall cease to accrue on the Commitment of such Defaulting Lender pursuant to Section 2.12(a);

(b) any payment of principal, interest, fees or other amounts received by the Administrative Agent for the account of such Defaulting Lender (whether voluntary or mandatory, at maturity, pursuant to Section 7.03 or otherwise) or received by the Administrative Agent from a Defaulting Lender pursuant to Section 9.08 shall be applied at such time or times as may be determined by the Administrative Agent as follows: first, to the payment of any amounts owing by such Defaulting Lender to the Administrative Agent hereunder; second, to the payment on a pro rata basis of any amounts owing by such Defaulting Lender to the Issuing Bank or Swingline Lender hereunder; third, to cash collateralize LC Exposure with respect to such Defaulting Lender in accordance with this Section; fourth, as the Borrower may request (so long as no Default or Event of Default exists), to the funding of any Loan in respect of which such Defaulting Lender has failed to fund its portion thereof as required by this Agreement, as determined by the Administrative Agent; fifth, if so determined by the Administrative Agent and the Borrower, to be held in a deposit account and released pro rata in order to (x) satisfy such Defaulting Lender's potential future funding obligations with respect to Loans under this Agreement and (y) cash collateralize future LC Exposure with respect to such Defaulting Lender with respect to future Letters of Credit issued under this Agreement, in accordance with this Section; sixth, to the payment of any amounts owing to the Lenders, the Issuing Bank or Swingline Lenders as a result of any judgment of a court of competent jurisdiction obtained by any Lender, the Issuing Bank or Swingline Lenders against such Defaulting Lender as a result of such Defaulting Lender's breach of its obligations under this Agreement or under any other Loan Document; seventh, so long as no Default or Event of Default exists, to the payment of any amounts owing to the Borrower as a result of any judgment of a court of competent jurisdiction obtained by the Borrower against such Defaulting Lender as a result of such Defaulting Lender's breach of its obligations under this Agreement or under any other Loan Document; and eighth, to such Defaulting Lender or as otherwise directed by a court of competent jurisdiction; provided that if (x) such payment is a payment of the principal amount of any Loans or LC Disbursements in respect of which such Defaulting Lender has not fully funded its appropriate share, and (y) such Loans were made or the related Letters of Credit were issued at a time when the conditions set forth in Section 4.02 were satisfied or waived, such payment shall be applied solely to pay the Loans of, and LC Disbursements owed to, all non-Defaulting Lenders on a pro rata basis prior to being applied to the payment of any Loans of, or LC Disbursements owed to, such Defaulting Lender until such time as all Loans and funded and unfunded participations in the Borrower's obligations corresponding to such Defaulting Lender's LC Exposure and Swingline Loans are held by the Lenders pro rata in accordance with the Commitments without giving effect to clause (d) below. Any payments, prepayments or other amounts paid or payable to a Defaulting Lender that are applied (or held) to pay amounts owed by a Defaulting Lender or to post cash collateral pursuant to this Section shall be deemed paid to and redirected by such Defaulting Lender, and each Lender irrevocably consents hereto.

(c) the Commitment and Revolving Credit Exposure of such Defaulting Lender shall not be included in determining whether the Required Lenders have taken or may take any action hereunder (including any consent to any amendment, waiver or other modification pursuant to Section 9.02); provided, that, except as otherwise provided in Section 9.02, this clause (c) shall not apply to the vote of a Defaulting Lender in the case of an amendment, waiver or other modification requiring the consent of such Lender or each Lender directly affected thereby;

(d) if any Swingline Exposure or LC Exposure exists at the time such Lender becomes a Defaulting Lender then:

(i) all or any part of the Swingline Exposure and LC Exposure of such Defaulting Lender shall be reallocated among the non-Defaulting Lenders in accordance with their respective Applicable Percentages but only to the extent that the sum of all non-Defaulting Lenders' Revolving Credit Exposures plus such Defaulting Lender's Swingline Exposure and LC Exposure does not exceed the total of all non-Defaulting Lenders' Commitments;

(ii) if the reallocation described in clause (i) above cannot, or can only partially, be effected, the Borrower shall within one Business Day following notice by the Administrative Agent (x) first, prepay such Swingline Exposure and (y) second, cash collateralize for the benefit of the Issuing Bank only the Borrower's obligations corresponding to such Defaulting Lender's LC Exposure (after giving effect to any partial reallocation pursuant to clause (i) above) in accordance with the procedures set forth in Section 2.06(j) for so long as such LC Exposure is outstanding;

(iii) if the Borrower cash collateralizes any portion of such Defaulting Lender's LC Exposure pursuant to clause (ii) above, the Borrower shall not be required to pay any fees to such Defaulting Lender pursuant to Section 2.12(b) with respect to such Defaulting Lender's LC Exposure during the period such Defaulting Lender's LC Exposure is cash collateralized;

(iv) if the LC Exposure of the non-Defaulting Lenders is reallocated pursuant to clause (i) above, then the fees payable to the Lenders pursuant to Section 2.12(b) shall be adjusted in accordance with such non-Defaulting Lenders' Applicable Percentages; and

(v) if all or any portion of such Defaulting Lender's LC Exposure is neither reallocated nor cash collateralized pursuant to clause (i) or (ii) above, then, without prejudice to any rights or remedies of the Issuing Bank or any other Lender hereunder, all facility fees that otherwise would have been payable to such Defaulting Lender (solely with respect to the portion of such Defaulting Lender's Commitment that was utilized by such LC Exposure) and letter of credit fees payable under Section 2.12(b) with respect to such Defaulting Lender's LC Exposure shall be payable to the Issuing Bank until and to the extent that such LC Exposure is reallocated and/or cash collateralized; and

(e) so long as such Lender is a Defaulting Lender, the Swingline Lender shall not be required to fund any Swingline Loan and the Issuing Bank shall not be required to issue, amend or increase any Letter of Credit, unless it is satisfied that the related exposure and the Defaulting Lender's then outstanding LC Exposure will be 100% covered by the Commitments of the non-Defaulting Lenders and/or cash collateral will be provided by the Borrower in accordance with Section 2.22(d), and participating interests in any such newly made Swingline Loan or any newly issued or increased Letter of Credit shall be allocated among non-Defaulting Lenders in a manner consistent with Section 2.22(d)(i) (and such Defaulting Lender shall not participate therein).

If (i) a Bankruptcy Event or Bail-In Action with respect to a Lender Parent shall occur following the date hereof and for so long as such event shall continue or (ii) the Swingline Lender or the Issuing Bank has a good faith belief that any Lender has defaulted in fulfilling its obligations under one or more other agreements in which such Lender commits to extend credit, the Swingline Lender shall not be required to fund any Swingline Loan and the Issuing Bank shall not be required to issue, amend or increase any Letter of Credit, unless the Swingline Lender or the Issuing Bank, as the case may be, shall have entered into arrangements with the Borrower or such Lender, satisfactory to the Swingline Lender or the Issuing Bank, as the case may be, to defease any risk to it in respect of such Lender hereunder.

In the event that the Administrative Agent, the Borrower, the Swingline Lender and the Issuing Bank each agrees that a Defaulting Lender has adequately remedied all matters that caused such Lender to be a Defaulting Lender, then the Swingline Exposure and LC Exposure of the Lenders shall be readjusted to reflect the inclusion of such Lender's Commitment and on such date such Lender shall purchase at par such of the Loans of the other Lenders (other than Swingline Loans) as the Administrative Agent shall determine may be necessary in order for such Lender to hold such Loans in accordance with its Applicable Percentage.

SECTION 2.23. Extension Offers.

(a) Notwithstanding anything to the contrary in this Agreement, pursuant to an offer (an "Extension Offer") made from time to time by the Borrower to all Lenders having Commitments with a like maturity date on a *pro rata* basis (based on the aggregate principal amount of Commitments with a like maturity date) and on the same terms to each such Lender, the Borrower may up to two times extend the maturity date of the Commitments, in the case of each such Extension Offer, by up to one year, and otherwise modify the terms of the Commitments pursuant to the terms of the relevant Extension Offer (including by increasing the interest rate or fees payable in respect of the Commitments (and related outstandings) (each, an "Extension", and each group of the Commitments as so extended, as well as the original Commitments (in each case not so extended), being a "tranche"). Any Extended Revolving Commitments (as defined below) shall constitute a separate tranche of Commitments from the tranche of Commitments from which they were converted, so long as the following terms are satisfied: (i) there shall be no more than two Extensions made during the term of this Agreement, (ii) no Default or Event of Default shall have occurred and be continuing at the time the offering document in respect of an Extension Offer is delivered to the Lenders, (iii) except as to interest rates, fees and final maturity date (which shall, subject to immediately succeeding clauses (iv) and (v), be determined by the Borrower and set forth in the relevant Extension Offer), the Commitments

of any Lender extended pursuant to any Extension ("Extended Revolving Commitments") shall have the same terms as the tranche of Commitments subject to such Extension Offer, (iv) the final maturity date of any Extended Revolving Commitments shall be no earlier than the Maturity Date extended thereby and no later than one year from the Maturity Date extended thereby, (v) any Extended Revolving Commitments may participate on a *pro rata* basis in any voluntary or mandatory repayments, (vi) if the aggregate outstanding principal amount of Commitments (calculated on the face amount thereof), in respect of which the Lenders shall have accepted the relevant Extension Offer shall exceed the maximum aggregate principal amount of Commitments offered to be extended by the Borrower pursuant to such Extension Offer, then the Commitments of such Lenders shall be extended ratably up to such maximum amount based on the respective principal amounts (but not to exceed actual holdings of record) with respect to which such Lenders have accepted such Extension Offer, (vii) all documentation in respect of such Extension shall be consistent with the foregoing, and (viii) any applicable Minimum Extension Condition (as defined below) shall be satisfied unless waived by the Borrower. For the avoidance of doubt, no Lender shall be required to participate in any Extension.

(b) With respect to all Extensions consummated by the Borrower pursuant to this Section 2.23, (i) such Extensions shall not constitute voluntary or mandatory payments or prepayments for purposes of Section 2.11 and (ii) no Extension Offer is required to be in any minimum amount or any minimum increment; provided, that the Borrower may at its election specify as a condition (a "Minimum Extension Condition") to consummating any such Extension that a minimum amount (to be determined and specified in the relevant Extension Offer in the Borrower's sole discretion and may be waived by the Borrower) of Commitments (as applicable) of any or all applicable tranches be tendered. The Administrative Agent and the Lenders hereby consent to the Extensions and the other transactions contemplated by this Section 2.23 (including, for the avoidance of doubt, payment of any interest, fees or premium in respect of any Extended Revolving Commitments on the such terms as may be set forth in the relevant Extension Offer) and hereby waive the requirements of any provision of this Agreement or any other Loan Document that may otherwise prohibit any such Extension or any other transaction contemplated by this Section 2.23.

(c) The Lenders hereby irrevocably authorize the Administrative Agent (without the consent of any Person other than the Administrative Agent and the Borrower) to enter into amendments to this Agreement and the other Loan Documents as may be necessary or appropriate, in the reasonable opinion of the Administrative Agent and the Borrower, in order to establish new tranches or sub-tranches in respect of the Commitments so extended and such amendments as may be necessary or appropriate in the reasonable opinion of the Administrative Agent and the Borrower in connection with the establishment of such new tranches or sub-tranches, in each case, on terms consistent with this Section 2.23.

(d) In connection with any Extension Offer, the Borrower shall provide the Administrative Agent at least five Business Days' (or such shorter period as may be agreed to by the Administrative Agent) prior written notice thereof, and shall agree to such procedures, if any, as may be established by, or acceptable to, the Administrative Agent in each case, acting reasonably to accomplish the purposes of this Section 2.23.

ARTICLE III

Representations and Warranties

The Borrower represents and warrants to the Lenders that:

SECTION 3.01. Organization; Powers; Subsidiaries. Each of the Borrower and its Subsidiaries is duly organized, validly existing and in good standing under the laws of the jurisdiction of its organization, has all requisite power and authority to carry on its business as now conducted and, except where the failure to do so, individually or in the aggregate, could not reasonably be expected to result in a Material Adverse Effect, is qualified to do business in, and is in good standing in, every jurisdiction where such qualification is required. As of the Effective Date, Schedule 3.01 hereto identifies each Subsidiary, noting whether such Subsidiary is a Material Domestic Subsidiary, the jurisdiction of its incorporation or organization, as the case may be, the percentage of issued and outstanding shares of each class of its capital stock or other equity interests owned by the Borrower and the other Subsidiaries and, if such percentage is not 100% (excluding directors' qualifying shares as required by law), a description of each class issued and outstanding. All of the outstanding shares of capital stock and other

equity interests of each Subsidiary are validly issued and outstanding and fully paid and nonassessable and all such shares and other equity interests indicated on Schedule 3.01 as owned by the Borrower or another Subsidiary are owned, beneficially and of record, by the Borrower or any Subsidiary free and clear of all Liens. There are no outstanding commitments or other obligations of the Borrower or any Subsidiary to issue, and no options, warrants or other rights of any Person to acquire, any shares of any class of capital stock or other equity interests of the Borrower or any Subsidiary, excluding (i) equity awards under employee or director compensation plans, (ii) shares subject to purchase under the Borrower's employee stock purchase plan and (iii) shares issuable upon conversion of the Existing Convertible Notes.

SECTION 3.02. Authorization; Enforceability. The Transactions to which each Loan Party is a party are within such Loan Party's organizational powers and have been duly authorized by all necessary organizational actions and, if required, actions by equity holders. The Loan Documents to which each Loan Party is a party have been duly executed and delivered by such Loan Party and constitute a legal, valid and binding obligation of such Loan Party, enforceable in accordance with their terms, subject to applicable bankruptcy, insolvency, reorganization, moratorium or other laws affecting creditors' rights generally and subject to general principles of equity, regardless of whether considered in a proceeding in equity or at law.

SECTION 3.03. Governmental Approvals; No Conflicts. The Transactions (a) do not require any consent or approval of, registration or filing with, or any other action by, any Governmental Authority, except such as have been obtained or made and are in full force and effect, (b) will not violate any applicable law or regulation or the charter, by-laws or other organizational documents of the Borrower or any other Loan Party or any order of any Governmental Authority, (c) will not violate or result in a default under any material indenture or other material agreement or material instrument binding upon the Borrower or any of its Subsidiaries or its assets, or give rise to a right thereunder to require any payment to be made by the Borrower or any of its Subsidiaries, and (d) will not result in the creation or imposition of any Lien on any asset of the Borrower or any of its Subsidiaries.

SECTION 3.04. Financial Condition; No Material Adverse Change. (a) The Borrower has heretofore furnished to the Lenders or filed for public availability on the SEC's Electronic Data Gathering and Retrieval System its consolidated balance sheet and statements of income, stockholders equity and cash flows (i) as of and for the fiscal year ended June 28, 2020 reported on by Ernst & Young LLP, independent public accountants, and (ii) as of and for the fiscal quarter and the portion of the fiscal year ended March 28, 2021, certified by its chief financial officer. Such financial statements present fairly, in all material respects, the financial position and results of operations and cash flows of the Borrower and its consolidated Subsidiaries as of such dates and for such periods in accordance with GAAP, subject to year-end audit adjustments and the absence of footnotes in the case of the statements referred to in clause (ii) above.

(b) Since June 28, 2020, there has been no material adverse change in the business, assets, operations or condition (financial or otherwise) of the Borrower and its Subsidiaries, taken as a whole.

SECTION 3.05. Properties. (a) Each of the Borrower and its Subsidiaries has good title to, or valid leasehold interests in, all its real and personal property material to the Borrower and its Subsidiaries, taken as a whole, except for defects in title that do not materially interfere with the ability of the Borrower and its Subsidiaries taken as a whole to conduct their business as currently conducted or to utilize such properties for their intended purposes.

(b) Each of the Borrower and its Subsidiaries owns, or is licensed to use, all trademarks, tradenames, copyrights, patents and other intellectual property material to the Borrower and its Subsidiaries, taken as a whole, except where the failure to own, or be licensed to use, such intellectual property material, individually or in the aggregate, could not reasonably be expected to result in a Material Adverse Effect, and the use thereof by the Borrower and its Subsidiaries does not infringe upon the rights of any other Person, except for any such infringements that, individually or in the aggregate, could not reasonably be expected to result in a Material Adverse Effect.

SECTION 3.06. Litigation, Environmental and Labor Matters. (a) Except as set forth on Schedule 3.06, on the Effective Date there are no actions, suits, proceedings or investigations by or before any arbitrator or

Governmental Authority pending against or, to the knowledge of the Borrower, threatened against or affecting the Borrower or any of its Subsidiaries (i) that could reasonably be expected, individually or in the aggregate, to result in a Material Adverse Effect or (ii) that involve this Agreement or the Transactions.

(b) Except with respect to any matters that, individually or in the aggregate, could not reasonably be expected to result in a Material Adverse Effect, neither the Borrower nor any of its Subsidiaries (i) has failed to comply with any Environmental Law or to obtain, maintain or comply with any permit, license or other approval required under any Environmental Law, (ii) has become subject to any Environmental Liability, (iii) has received notice of any claim with respect to any Environmental Liability or (iv) knows of any basis for any Environmental Liability.

(c) There are no strikes, lockouts or slowdowns against the Borrower or any of its Subsidiaries pending and, to their knowledge, none are threatened, in each case, that would be material to the Borrower and its Subsidiaries taken as a whole. The hours worked by and payments made to employees of the Borrower and its Subsidiaries have not been in violation of the Fair Labor Standards Act or any other applicable Federal, state, local or foreign law relating to such matters except as, individually or in the aggregate, could not reasonably be expected to result in a Material Adverse Effect. All material payments due from the Borrower or any of its Subsidiaries, or for which any claim may be made against the Borrower or any of its Subsidiaries, on account of wages and employee health and welfare insurance and other benefits, have been paid or accrued as liabilities on the books of the Borrower or such Subsidiary except as, individually or in the aggregate, could not reasonably be expected to result in a Material Adverse Effect. The consummation of the Transactions will not give rise to any right of termination or right of renegotiation on the part of any union under any collective bargaining agreement under which the Borrower or any of its Subsidiaries is bound.

SECTION 3.07. Compliance with Laws and Agreements. Each of the Borrower and its Subsidiaries is in compliance with all laws, regulations and orders of any Governmental Authority applicable to it or its property and all indentures, agreements and other instruments binding upon it or its property, except where the failure to do so, individually or in the aggregate, could not reasonably be expected to result in a Material Adverse Effect.

SECTION 3.08. Margin Regulations; Investment Company Status. (a) Neither the Borrower nor any of its Subsidiaries is engaged or will engage, principally or as one of its important activities, in the business of purchasing or carrying margin stock (within the meaning of Regulation U issued by the Board), or extending credit for the purpose of purchasing or carrying margin stock.

(b) Neither the Borrower nor any of its Subsidiaries is an "investment company" as defined in, or subject to regulation under, the Investment Company Act of 1940.

SECTION 3.09. Taxes. Each of the Borrower and its Subsidiaries has timely filed or caused to be filed all Tax returns and reports required to have been filed and has paid or caused to be paid all Taxes required to have been paid by it, except (a) Taxes that are being contested in good faith by appropriate proceedings and for which the Borrower or such Subsidiary, as applicable, has set aside on its books adequate reserves or (b) to the extent that the failure to do so could not reasonably be expected to result in a Material Adverse Effect.

SECTION 3.10. ERISA. No ERISA Event has occurred or is reasonably expected to occur that, when taken together with all other such ERISA Events for which liability is reasonably expected to occur, could reasonably be expected to result in a Material Adverse Effect.

SECTION 3.11. Disclosure. Neither the Lender Presentation nor any of the other written reports, financial statements, certificates or other information furnished by or on behalf of the Borrower or any Subsidiary to the Administrative Agent or any Lender in connection with the negotiation of this Agreement or delivered hereunder (as modified or supplemented by other information so furnished) contains any material misstatement of fact or omits to state any material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading; provided that, with respect to projected financial information and other forward-looking

information, the Borrower represents only that such information was prepared in good faith based upon assumptions believed to be reasonable at the time.

SECTION 3.12. Federal Reserve Regulations. No part of the proceeds of any Loan have been used or will be used, whether directly or indirectly, for any purpose that entails a violation of any of the Regulations of the Board, including Regulations T, U and X.

SECTION 3.13. Liens. There are no Liens on any of the real or personal properties of the Borrower or any Subsidiary except for Liens permitted by Section 6.02.

SECTION 3.14. No Default. No Default or Event of Default has occurred and is continuing.

SECTION 3.15. Anti-Corruption Laws and Sanctions. The Borrower has implemented and maintains in effect policies and procedures designed to reasonably ensure compliance by the Borrower, its Subsidiaries and their respective directors, officers, employees and agents with Anti-Corruption Laws and applicable Sanctions in their respective capacities as directors, officers, employees and agents of the Borrower or its Subsidiaries, as applicable, and the Borrower, its Subsidiaries and their respective officers and employees and to the knowledge of the Borrower its directors and agents, are in compliance with Anti-Corruption Laws and applicable Sanctions in all material respects. None of (a) the Borrower, any Subsidiary or to the knowledge of the Borrower or such Subsidiary any of their respective directors, officers or employees, or (b) to the knowledge of the Borrower, any agent of the Borrower or any Subsidiary that will act in any capacity in connection with or benefit from the credit facility established hereby, is a Sanctioned Person. No Borrowing or Letter of Credit, use of proceeds or other Transactions will violate Anti-Corruption Laws or applicable Sanctions.

SECTION 3.16. Affected Financial Institutions. No Loan Party is an Affected Financial Institution.

SECTION 3.17. Plan Assets; Prohibited Transactions. None of the Borrower or any Subsidiary Guarantor is an entity deemed to hold "plan assets" (within the meaning of the Plan Asset Regulation), and, assuming that no portion of the Loans is funded or held with "plan assets" (within the meaning of the Plan Asset Regulations), neither the execution, delivery nor performance of the transactions contemplated under this Agreement, including the making of any Loan and the issuance of any Letter of Credit hereunder, will give rise to a non-exempt prohibited transaction under Section 406(a) of ERISA or Section 4975(c)(1)(A)-(D) of the Code.

ARTICLE IV

Conditions

SECTION 4.01. Effective Date. The obligations of the Lenders to make Loans and of the Issuing Bank to issue Letters of Credit hereunder shall not become effective until the date on which each of the following conditions is satisfied (or waived in accordance with Section 9.02):

(a) The Administrative Agent (or its counsel) shall have received copies of the Loan Documents duly executed by each party thereto (which, subject to Section 9.06(b), may include any Electronic Signatures transmitted by telecopy, emailed pdf. or any other electronic means that reproduces an image of an actual executed signature page).

(b) The Administrative Agent shall have received a customary legal opinion (addressed to the Administrative Agent and the Lenders and dated the Effective Date) of Jones Day, counsel for the Loan Parties, in customary form and substance reasonably satisfactory to the Administrative Agent and the Borrower.

(c) The Administrative Agent shall have received such documents and certificates as the Administrative Agent or its counsel may reasonably request relating to the organization, existence and good standing of the initial Loan Parties, the authorization of the Transactions and any other legal matters relating to such Loan Parties, the Loan Documents or the Transactions, all in form and substance reasonably satisfactory to the Administrative Agent and the Borrower, including a certificate of the Secretary or an Assistant Secretary of each

Loan Party certifying (i) the certificate of incorporation or other charter document of such Loan Party, (ii) the by-laws or other organizational documents of such Loan Party, (iii) the names and true signatures of the officers of such Loan Party and (iv) the resolutions of the Board of Directors or other governing body of such Loan Party authorized to sign this Agreement and each other Loan Document.

(d) The Administrative Agent shall have received a certificate, dated the Effective Date and signed by the President, a Vice President or a Financial Officer of the Borrower, certifying (i) that the representations and warranties contained in Article III are true and correct as of such date and (ii) that no Default or Event of Default has occurred and is continuing as of such date.

(e) The Administrative Agent shall have received, at least three Business Days prior to the Effective Date, all documentation and other information regarding the Loan Parties reasonably requested by it at least ten Business Days in advance of the Effective Date, which documentation or other information is required by bank regulatory authorities under applicable "know-your-customer" and anti-money laundering rules and regulations, including the Patriot Act.

(f) The Administrative Agent shall have received, for the account of the applicable Persons, (i) all fees and other amounts due and payable on or prior to the Effective Date, including, to the extent invoiced, reimbursement or payment of all out of pocket expenses required to be reimbursed or paid by the Borrower hereunder and (ii) payment of all accrued and unpaid interest and fees outstanding immediately prior to the effectiveness of this Agreement and owing to the Administrative Agent and the "Lenders" under the Existing Credit Agreement.

The Administrative Agent shall notify the Borrower and the Lenders of the Effective Date, and such notice shall be conclusive and binding.

SECTION 4.02. Each Credit Event. The obligation of each Lender to make a Loan on the occasion of any Borrowing, and of the Issuing Bank to issue, amend or extend any Letter of Credit, is subject to the satisfaction of the following conditions:

(a) The representations and warranties of the Borrower set forth in this Agreement (excluding the representations and warranties set forth in Sections 3.04(b) and 3.06(a)) shall be true and correct on and as of the date of such Borrowing or the date of issuance, amendment or extension of such Letter of Credit, as applicable.

(b) At the time of and immediately after giving effect to such Borrowing or the issuance, amendment or extension of such Letter of Credit, as applicable, no Default or Event of Default shall have occurred and be continuing.

Each Borrowing and each issuance, amendment or extension of a Letter of Credit shall be deemed to constitute a representation and warranty by the Borrower on the date thereof as to the matters specified in paragraphs (a) and (b) of this Section.

ARTICLE V

Affirmative Covenants

Until the Commitments have expired or been terminated and the principal of and interest on each Loan and all fees payable hereunder shall have been paid in full and all Letters of Credit shall have expired or terminated, in each case, without any pending draw, and all LC Disbursements shall have been reimbursed, the Borrower covenants and agrees with the Lenders that:

SECTION 5.01. Financial Statements and Other Information. The Borrower will furnish to the Administrative Agent and each Lender:

(a) within 90 days after the end of each fiscal year of the Borrower (or, if earlier, by the date that the Annual Report on Form 10-K of the Borrower for such fiscal year would be required to be filed under the rules and regulations of the SEC, giving effect to any automatic extension available thereunder for the filing of such form), its audited consolidated balance sheet and related statements of operations, stockholders' equity and cash flows as of the end of and for such year, setting forth in each case in comparative form the figures for the previous fiscal year, all reported on by Ernst & Young LLP or other independent public accountants of recognized national standing (without a "going concern" or like qualification or exception and without any qualification or exception as to the scope of such audit) to the effect that such consolidated financial statements present fairly in all material respects the financial condition and results of operations of the Borrower and its consolidated Subsidiaries on a consolidated basis in accordance with GAAP consistently applied;

(b) within 60 days after the end of each of the first three fiscal quarters of each fiscal year of the Borrower (or, if earlier, by the date that the Quarterly Report on Form 10-Q of the Borrower for such fiscal quarter would be required to be filed under the rules and regulations of the SEC, giving effect to any automatic extension available thereunder for the filing of such form), its consolidated balance sheet and related statements of operations, stockholders' equity and cash flows as of the end of and for such fiscal quarter and the then elapsed portion of the fiscal year, setting forth in each case in comparative form the figures for the corresponding period or periods of (or, in the case of the balance sheet, as of the end of) the previous fiscal year, all certified by one of its Financial Officers as presenting fairly in all material respects the financial condition and results of operations of the Borrower and its consolidated Subsidiaries on a consolidated basis in accordance with GAAP consistently applied, subject to normal year-end audit adjustments and the absence of footnotes;

(c) concurrently with any delivery of financial statements under clause (a) or (b) above, a certificate of a Financial Officer of the Borrower (i) certifying as to whether a Default has occurred and, if a Default has occurred, specifying the details thereof and any action taken or proposed to be taken with respect thereto, (ii) setting forth reasonably detailed calculations demonstrating compliance with Section 6.05 and (iii) stating whether any change in GAAP or in the application thereof has occurred since the date of the audited financial statements referred to in Section 3.04 and, if any such change has occurred, specifying the effect of such change on the financial statements accompanying such certificate;

(d) promptly after the same become publicly available, copies of all periodic and other reports, proxy statements and other materials filed by the Borrower or any Subsidiary with the SEC, or any Governmental Authority succeeding to any or all of the functions of said Commission, or with any national securities exchange, or distributed by the Borrower to its shareholders generally, as the case may be;

(e) promptly after Moody's or S&P shall have announced a change in the applicable rating established or deemed to have been established for the Index Debt, written notice of such rating change;

(f) promptly following any request therefor, (x) such other information regarding the operations, business affairs and financial condition of the Borrower or any Subsidiary, or compliance with the terms of this Agreement, as the Administrative Agent or any Lender may reasonably request and (y) information and documentation reasonably requested by the Administrative Agent or any Lender for purposes of compliance with applicable "know your customer" and anti-money laundering rules and regulations, including the Patriot Act and the Beneficial Ownership Regulation; and

(g) as soon as available after the end of each Reference Year (but in no event later than 180 days after the end of such Reference Year), commencing with the Reference Year ending December 31, 2021, an ESG Compliance Certificate containing the information and calculations set forth in the ESG Compliance Certificate, as applicable, necessary for determining the Sustainability Metrics for the applicable Sustainability Adjustment Period (subject to re-issuance as provided in the definition of Sustainability Adjustment); provided that, notwithstanding anything in this Agreement to the contrary, any failure to deliver an ESG Compliance Certificate shall not constitute an Event of Default hereunder.

Documents required to be delivered pursuant to clauses (a), (b) and (d) of this Section 5.01 may be delivered electronically and if so delivered, shall be deemed to have been delivered on the date on which such documents are

filed for public availability on the SEC's Electronic Data Gathering and Retrieval System. Notwithstanding anything contained herein, in every instance the Borrower shall be required to provide paper copies of the compliance certificates required by clause (c) of this Section 5.01 to the Administrative Agent. The Administrative Agent shall have no obligation to request the delivery of or to maintain paper copies of the documents referred to above, and in any event shall have no responsibility to monitor compliance by the Borrower with any such request by a Lender for delivery, and each Lender shall be solely responsible for timely accessing posted documents or requesting delivery of paper copies of such document to it and maintaining its copies of such documents.

SECTION 5.02. Notices of Material Events. The Borrower will furnish to the Administrative Agent and each Lender prompt written notice of the following after a Responsible Officer of the Borrower obtains knowledge thereof:

(a) the occurrence of any Default;

(b) the filing or commencement of any Proceeding by or before any arbitrator or Governmental Authority against or affecting the Borrower or any Affiliate thereof that could reasonably be expected to result in a Material Adverse Effect;

(c) the occurrence of any ERISA Event that, alone or together with any other ERISA Events that have occurred, could reasonably be expected to result in a Material Adverse Effect; and

(d) any other development that results in, or could reasonably be expected to result in, a Material Adverse Effect.

Each notice delivered under this Section shall be accompanied by a statement of a Financial Officer or other executive officer of the Borrower setting forth the details of the event or development requiring such notice and any action taken or proposed to be taken with respect thereto.

SECTION 5.03. Existence; Conduct of Business. The Borrower will, and will cause each of its Material Subsidiaries to, do or cause to be done all things necessary to preserve, renew and keep in full force and effect its legal existence and the rights, qualifications, licenses, permits, privileges, franchises, governmental authorizations and intellectual property rights material to the Borrower and its Subsidiaries, taken as a whole, and maintain all requisite authority to conduct its business in each jurisdiction in which its business is conducted except where the failure to do so could not reasonably be expected to result in a Material Adverse Effect; provided that the foregoing shall not prohibit any merger, consolidation, liquidation or dissolution permitted under Section 6.03.

SECTION 5.04. Payment of Obligations. The Borrower will, and will cause each of its Subsidiaries to, pay its obligations, including Tax liabilities, that, if not paid, could reasonably be expected to result in a Material Adverse Effect before the same shall become delinquent or in default, except where (a) the validity or amount thereof is being contested in good faith by appropriate proceedings, (b) the Borrower or such Subsidiary has set aside on its books adequate reserves with respect thereto in accordance with GAAP and (c) the failure to make payment pending such contest could not reasonably be expected to result in a Material Adverse Effect.

SECTION 5.05. Maintenance of Properties; Insurance. The Borrower will, and will cause each of its Subsidiaries to, (a) keep and maintain all property material to the conduct of its business in good working order and condition, ordinary wear and tear excepted except where the failure to do so could not, individually or in the aggregate, reasonably be expected to result in a Material Adverse Effect, and (b) maintain, with financially sound and reputable insurance companies, insurance in such amounts (after giving effect to any self-insurance reasonable for similarly situated Persons engaged in the same or similar businesses as the Borrower and its Subsidiaries) and against such risks as are, in all material respects, customarily maintained by companies engaged in the same or similar businesses operating in the same or similar locations.

SECTION 5.06. Books and Records; Inspection Rights. The Borrower will, and will cause each of its Subsidiaries to, keep proper books of record and account in which customary entries are made of dealings and transactions in relation to its business and activities, which entries will be full, true and correct in all material

respects. The Borrower will, and will cause each of its Subsidiaries to, permit any representatives designated by the Administrative Agent, upon reasonable prior notice, to visit and inspect its properties, to examine and make extracts from its books and records, and to discuss its affairs, finances and condition with its officers and independent accountants, all at such reasonable times and as often as reasonably requested; provided that so long as no Event of Default has occurred and is then continuing, the Borrower shall not be responsible for the costs and expenses of the Administrative Agent for more than one such visit, inspection or examination in any calendar year. The Borrower acknowledges that the Administrative Agent, after exercising its rights of inspection, may prepare and distribute to the Lenders certain reports pertaining to the Borrower and its Subsidiaries' assets for internal use by the Administrative Agent and the Lenders.

SECTION 5.07. Compliance with Laws and Material Contractual Obligations. The Borrower will, and will cause each of its Subsidiaries to, (i) comply with all laws, rules, regulations and orders of any Governmental Authority applicable to it or its property (including without limitation Environmental Laws) and (ii) perform in all material respects its obligations under material agreements to which it is a party, in the case of clauses (i) and (ii), except where the failure to do so, individually or in the aggregate, could not reasonably be expected to result in a Material Adverse Effect. The Borrower will maintain in effect and enforce policies and procedures designed to ensure compliance by the Borrower, its Subsidiaries and their respective directors, officers, employees and agents with Anti-Corruption Laws and applicable Sanctions.

SECTION 5.08. Use of Proceeds. The proceeds of the Loans will be used only to finance the working capital needs, and for general corporate purposes, of the Borrower and its Subsidiaries. No part of the proceeds of any Loan will be used, whether directly or indirectly, for any purpose that entails a violation of any of the Regulations of the Board, including Regulations T, U and X. The Borrower will not request any Borrowing or Letter of Credit, and the Borrower shall not use, and shall maintain in effect and enforce policies and procedures designed to reasonably ensure that its Subsidiaries and its or their respective directors, officers, employees and agents shall not use, the proceeds of any Borrowing or Letter of Credit (i) in furtherance of an offer, payment, promise to pay, or authorization of the payment or giving of money, or anything else of value, to any Person in violation of any Anti-Corruption Laws, (ii) for the purpose of funding, financing or facilitating any activities, business or transaction of or with any Sanctioned Person, or in any Sanctioned Country or (iii) in any manner that would result in the violation of any Sanctions applicable to any party hereto.

SECTION 5.09. Subsidiary Guaranty. As promptly as possible but in any event within 30 days (or such later date as may be agreed upon by the Administrative Agent) after any Person becomes a Material Domestic Subsidiary or any Subsidiary qualifies independently as, or is designated by the Borrower or the Administrative Agent as, a Subsidiary Guarantor pursuant to the definition of "Material Domestic Subsidiary", the Borrower shall provide the Administrative Agent with written notice thereof and shall cause each such Subsidiary which also qualifies as a Material Domestic Subsidiary to deliver to the Administrative Agent the Subsidiary Guaranty (or a joinder to the Subsidiary Guaranty (in the form contemplated thereby) pursuant to which such Subsidiary agrees to be bound by the terms and provisions thereof), such Subsidiary Guaranty to be accompanied by appropriate corporate resolutions, other corporate documentation and legal opinions in form and substance reasonably satisfactory to the Administrative Agent and its counsel.

ARTICLE VI

Negative Covenants

Until the Commitments have expired or terminated and the principal of and interest on each Loan and all fees payable hereunder have been paid in full and all Letters of Credit have expired or terminated, in each case, without any pending draw, and all LC Disbursements shall have been reimbursed, the Borrower covenants and agrees with the Lenders that:

SECTION 6.01. Subsidiary Indebtedness. The Borrower will not permit any Subsidiary to create, incur, assume or permit to exist any Indebtedness, except:

(a) the Obligations;

(b) Indebtedness of any Subsidiary existing on the date hereof and set forth in Schedule 6.01 and extensions, renewals and replacements of any such Indebtedness with Indebtedness that does not increase the outstanding principal amount thereof;

(c) Indebtedness of any Subsidiary to the Borrower or any other Subsidiary;

(d) Guarantees by any Subsidiary of Indebtedness of the Borrower or any other Subsidiary;

(e) Indebtedness of any Subsidiary incurred to finance the acquisition, construction or improvement of any fixed or capital assets, including Capital Lease Obligations and any Indebtedness assumed in connection with the acquisition of any such assets or secured by a Lien on any such assets prior to the acquisition thereof, and extensions, renewals and replacements of any such Indebtedness that do not increase the outstanding principal amount thereof; provided that (i) such Indebtedness is incurred prior to or within 90 days after such acquisition or the completion of such construction or improvement and (ii) the aggregate principal amount of Indebtedness permitted by this clause (e) shall not exceed $150,000,000 at any time outstanding;

(f) Indebtedness of any Subsidiary as an account party in respect of trade letters of credit;

(g) the Novellus Convertible Notes and extensions, renewals and replacements of any such Indebtedness with Indebtedness of a similar type that does not increase the outstanding principal amount thereof;

(h) Indebtedness of any Subsidiary that is a Loan Party so long as, at the time of the incurrence thereof and after giving effect thereto (on a pro forma basis), the Borrower is in pro forma compliance with the Leverage Covenant; and

(i) Indebtedness of any Subsidiary that is not a Loan Party so long as the aggregate outstanding principal amount of such Indebtedness, when aggregated with the aggregate outstanding principal amount of Indebtedness and other obligations permitted by Section 6.02(e), does not exceed 7.5% of Consolidated Total Assets (calculated as of the most recently ended fiscal quarter and determined at the time of the incurrence of such Indebtedness by reference to the Borrower's financial statements most recently delivered pursuant to Section 5.01(a) or (b) or, if prior to the date of the delivery of the first financial statements to be delivered pursuant to Section 5.01(a) or (b), the most recent financial statements referred to in Section 3.04(a)) at any time outstanding.

SECTION 6.02. Liens. The Borrower will not, and will not permit any Subsidiary to, create, incur, assume or permit to exist any Lien on any property or asset now owned or hereafter acquired by it, or assign or sell any income or revenues (including accounts receivable) or rights in respect of any thereof, except:

(a) Permitted Encumbrances;

(b) any Lien on any property or asset of the Borrower or any Subsidiary existing on the date hereof and set forth in Schedule 6.02; provided that (i) such Lien shall not apply to any other property or asset of the Borrower or any Subsidiary and (ii) such Lien shall secure only those obligations which it secures on the date hereof and extensions, renewals and replacements thereof that do not increase the outstanding principal amount thereof;

(c) any Lien existing on any property or asset prior to the acquisition thereof by the Borrower or any Subsidiary or existing on any property or asset of any Person that becomes a Subsidiary after the date hereof prior to the time such Person becomes a Subsidiary; provided that (i) such Lien is not created in contemplation of or in connection with such acquisition or such Person becoming a Subsidiary, as the case may be, (ii) such Lien shall not apply to any other property or assets of the Borrower or any Subsidiary and (iii) such Lien shall secure only those obligations which it secures on the date of such acquisition or the date such Person becomes a Subsidiary, as the case may be, and extensions, renewals and replacements thereof that do not increase the outstanding principal amount thereof;

(d) Liens on fixed or capital assets acquired, constructed or improved by the Borrower or any Subsidiary; provided that (i) in the case of any Subsidiary, such security interests secure Indebtedness permitted by clause (e) of Section 6.01, (ii) such security interests and the Indebtedness secured thereby are incurred prior to or within 90 days after such acquisition or the completion of such construction or improvement, (iii) the Indebtedness secured thereby does not exceed the cost of acquiring, constructing or improving such fixed or capital assets and (iv) such security interests shall not apply to any other property or assets of the Borrower or any Subsidiary; and

(e) Liens on assets of the Borrower and its Subsidiaries not otherwise permitted above so long as the aggregate outstanding principal amount of the Indebtedness and other obligations subject to such Liens, when aggregated with the aggregate outstanding principal amount of Indebtedness permitted by Section 6.01(i), does not at any time exceed 7.5% of Consolidated Total Assets (calculated as of the most recently ended fiscal quarter and determined at the time of the incurrence of such Indebtedness by reference to the Borrower's financial statements most recently delivered pursuant to Section 5.01(a) or (b) or, if prior to the date of the delivery of the first financial statements to be delivered pursuant to Section 5.01(a) or (b), the most recent financial statements referred to in Section 3.04(a)) at any time outstanding.

SECTION 6.03. Fundamental Changes and Asset Sales. (a) The Borrower will not, and will not permit any Subsidiary to, merge into or consolidate with any other Person, or permit any other Person to merge into or consolidate with it, or sell, transfer, lease or otherwise dispose of (in one transaction or in a series of transactions) any of its assets (including pursuant to a Sale and Leaseback Transaction), or any of the Equity Interests of any of its Subsidiaries (in each case, whether now owned or hereafter acquired), or liquidate or dissolve, except that, if at the time thereof and immediately after giving effect thereto no Default shall have occurred and be continuing:

(i) any Person may merge into the Borrower in a transaction in which the Borrower is the surviving corporation;

(ii) any Subsidiary may merge into any Person that either is a Subsidiary or becomes a Subsidiary as a result of such transaction (provided that any such merger involving a Subsidiary that is a Loan Party must result in such Loan Party as the surviving entity and any such merger involving the Borrower must result in the Borrower as the surviving entity);

(iii) (A) any Subsidiary may sell, transfer, lease or otherwise dispose of its assets to a Loan Party; (B) any Loan Party may sell, transfer, lease or otherwise dispose of its assets to another Loan Party; (C) any Subsidiary that is not a Loan Party may sell, transfer, lease or otherwise dispose of its assets to any Domestic Subsidiary; and (D) any Foreign Subsidiary may sell, transfer, lease or otherwise dispose of its assets to any other Foreign Subsidiary;

(iv) the Borrower and its Subsidiaries may (A) sell inventory in the ordinary course of business, (B) effect sales, trade-ins or dispositions of used equipment in the ordinary course of business consistent with past practice, (C) enter into licenses of technology in the ordinary course of business, and (D) make any other sales, transfers, leases or dispositions that, together with all other property of the Borrower and its Subsidiaries previously leased, sold or disposed of as permitted by this clause (D) during any fiscal year of the Borrower, does not exceed 10% of Consolidated Total Assets (calculated as of the most recently ended fiscal quarter and determined at the time of the incurrence of such Indebtedness by reference to the Borrower's financial statements most recently delivered pursuant to Section 5.01(a) or (b) or, if prior to the date of the delivery of the first financial statements to be delivered pursuant to Section 5.01(a) or (b), the most recent financial statements referred to in Section 3.04(a)); and

(v) any Subsidiary that is not a Loan Party may liquidate or dissolve if the Borrower determines in good faith that such liquidation or dissolution is in the best interests of the Borrower and is not materially disadvantageous to the Lenders.

(b) The Borrower will not, and will not permit any of its Subsidiaries to, engage to any material extent in any business other than (i) businesses of the type conducted by the Borrower and its subsidiaries on the date of

execution of this Agreement, (ii) other technology-related businesses, and (iii) businesses reasonably related to clauses (i) or (ii).

SECTION 6.04. Transactions with Affiliates. The Borrower will not, and will not permit any of its Subsidiaries to, sell, lease or otherwise transfer any property or assets to, or purchase, lease or otherwise acquire any property or assets from, or otherwise engage in any other transactions with, any of its Affiliates, except (a) in the ordinary course of business at prices and on terms and conditions not less favorable to the Borrower or such Subsidiary than could be obtained on an arm's-length basis from unrelated third parties and (b) transactions between or among the Borrower and its wholly owned Subsidiaries not involving any other Affiliate.

SECTION 6.05. Financial Covenant. The Borrower will not permit the ratio, determined as of the end of each of its fiscal quarters ending on and after June 30, 2021, of (i) Consolidated Total Indebtedness to (ii) Consolidated Adjusted EBITDA for the four fiscal quarter period then ended to be greater than 3.50 to 1.00 (the "Leverage Covenant").

ARTICLE VII

Events of Default

SECTION 7.01. If any of the following events (each, an "Event of Default") shall occur:

(a) the Borrower shall fail to pay any principal of any Loan or any reimbursement obligation in respect of any LC Disbursement when and as the same shall become due and payable, whether at the due date thereof or at a date fixed for prepayment thereof or otherwise;

(b) the Borrower shall fail to pay any interest on any Loan or any fee or any other amount (other than an amount referred to in Section 7.01(a)) payable under this Agreement or any other Loan Document, when and as the same shall become due and payable, and such failure shall continue unremedied for a period of three Business Days;

(c) any representation or warranty made or deemed made by or on behalf of the Borrower or any Subsidiary in or in connection with this Agreement or any other Loan Document or any amendment or modification hereof or thereof or waiver hereunder or thereunder, or in any report, certificate, financial statement or other document furnished pursuant to or in connection with this Agreement or any other Loan Document or any amendment or modification thereof or waiver thereunder, shall prove to have been incorrect when made or deemed made;

(d) the Borrower shall fail to observe or perform any covenant, condition or agreement contained in Sections 5.02, 5.03 (with respect to the Borrower's existence), 5.08 or 5.09, in Article VI or in Article X;

(e) the Borrower or any Subsidiary Guarantor, as applicable, shall fail to observe or perform any covenant, condition or agreement contained in this Agreement (other than those specified in Sections 7.01(a), (b) or (d)) or any other Loan Document, and such failure shall continue unremedied for a period of 30 days after notice thereof from the Administrative Agent to the Borrower (which notice will be given at the request of any Lender);

(f) the Borrower or any Subsidiary shall fail to make any payment (whether of principal or interest and regardless of amount) in respect of any Material Indebtedness, when and as the same shall become due and payable;

(g) any event or condition occurs that results in any Material Indebtedness becoming due prior to its scheduled maturity or that enables or permits (with or without the giving of notice, the lapse of time or both) the holder or holders of any Material Indebtedness or any trustee or agent on its or their behalf to cause any Material Indebtedness to become due, or to require the prepayment, repurchase, redemption or defeasance thereof, prior to its scheduled maturity; provided that this clause (g) shall not apply to (x) secured Indebtedness that becomes due as a result of the voluntary sale or transfer of the property or assets securing such Indebtedness or (y) any redemption,

repurchase, conversion or settlement with respect to any Convertible Debt pursuant to its terms unless such redemption, repurchase, conversion or settlement results from a default thereunder or an event of the type that constitutes an Event of Default;

(h) an involuntary proceeding shall be commenced or an involuntary petition shall be filed seeking (i) liquidation, reorganization or other relief in respect of the Borrower or any Subsidiary or its debts, or of a substantial part of its assets, under any Federal, state or foreign bankruptcy, insolvency, receivership or similar law now or hereafter in effect or (ii) the appointment of a receiver, trustee, custodian, sequestrator, conservator or similar official for the Borrower or any Subsidiary or for a substantial part of its assets, and, in any such case, such proceeding or petition shall continue undismissed for 60 days or an order or decree approving or ordering any of the foregoing shall be entered;

(i) the Borrower or any Subsidiary shall (i) voluntarily commence any proceeding or file any petition seeking liquidation, reorganization or other relief under any Federal, state or foreign bankruptcy, insolvency, receivership or similar law now or hereafter in effect, (ii) consent to the institution of, or fail to contest in a timely and appropriate manner, any proceeding or petition described in clause (h) of this Article, (iii) apply for or consent to the appointment of a receiver, trustee, custodian, sequestrator, conservator or similar official for the Borrower or any Subsidiary or for a substantial part of its assets, (iv) file an answer admitting the material allegations of a petition filed against it in any such proceeding, (v) make a general assignment for the benefit of creditors or (vi) take any action for the purpose of effecting any of the foregoing;

(j) the Borrower or any Subsidiary shall become unable, admit in writing its inability or fail generally to pay its debts as they become due;

(k) one or more judgments for the payment of money in an aggregate amount in excess of $150,000,000 shall be rendered against the Borrower, any Subsidiary or any combination thereof and the same shall remain undischarged for a period of 30 consecutive days during which execution shall not be effectively stayed;

(l) an ERISA Event shall have occurred that, in the opinion of the Required Lenders, when taken together with all other ERISA Events that have occurred, could reasonably be expected to result in a Material Adverse Effect;

(m) a Change in Control shall occur;

(n) the occurrence of any "default", as defined in any Loan Document (other than this Agreement) or the breach of any of the terms or provisions of any Loan Document (other than this Agreement), which default or breach continues beyond any period of grace therein provided; or

(o) any material provision of any Loan Document for any reason ceases to be valid, binding and enforceable in accordance with its terms (or the Borrower or any Subsidiary shall challenge the enforceability of any Loan Document or shall assert in writing, or engage in any action or inaction based on any such assertion, that any provision of any of the Loan Documents has ceased to be or otherwise is not valid, binding and enforceable in accordance with its terms).

SECTION 7.02. Remedies. If an Event of Default occurs (other than an event with respect to the Borrower described in Section 7.01(h) or (i)), and at any time thereafter during the continuance of such Event of Default, the Administrative Agent may, and at the request of the Required Lenders shall, by notice to the Borrower, take any or all of the following actions, at the same or different times: (i) terminate the Commitments, and thereupon the Commitments shall terminate immediately, (ii) declare the Loans then outstanding to be due and payable in whole (or in part, in which case any principal not so declared to be due and payable may thereafter be declared to be due and payable), and thereupon the principal of the Loans so declared to be due and payable, together with accrued interest thereon and all fees and other Obligations of the Borrower accrued hereunder and under the other Loan Documents, shall become due and payable immediately, without presentment, demand, protest or other notice of any kind, all of which are hereby waived by the Borrower, (iii) require that the Borrower provide cash collateral as required in Section 2.06(j) and (iv) exercise on behalf of itself, the Lenders and the Issuing Bank all rights and

remedies available to it, the Lenders and the Issuing Bank under the Loan Documents and applicable law. If an Event of Default with respect to the Borrower described in Section 7.01(h) or (i) occurs, the Commitments shall automatically terminate and the principal of the Loans then outstanding, together with accrued interest thereon and all fees and other Obligations accrued hereunder and under the other Loan Documents, shall automatically become due and payable, and the obligation of the Borrower to cash collateralize the LC Exposure as provided in clause (iii) above shall automatically become effective, in each case, without presentment, demand, protest or other notice of any kind, all of which are hereby waived by the Borrower. Upon the occurrence and during the continuance of an Event of Default, the Administrative Agent may, and at the request of the Required Lenders shall, exercise any rights and remedies provided to the Administrative Agent under the Loan Documents or at law or equity.

SECTION 7.03. Application of Payments. Notwithstanding anything herein to the contrary, following the occurrence and during the continuance of an Event of Default, and notice thereof to the Administrative Agent by the Borrower or the Required Lenders:

(a) all payments received on account of the Obligations shall, subject to Section 2.22, be applied by the Administrative Agent as follows:

(i) *first*, to payment of that portion of the Obligations constituting fees, indemnities, expenses and other amounts payable to the Administrative Agent (including fees and disbursements and other charges of counsel to the Administrative Agent payable under Section 9.03 and amounts pursuant to Section 2.12(c) payable to the Administrative Agent in its capacity as such);

(ii) *second*, to payment of that portion of the Obligations constituting fees, expenses, indemnities and other amounts (other than principal, reimbursement obligations in respect of LC Disbursements, interest, Letter of Credit fees and obligations in connection with Swap Agreements and Banking Services Agreements) payable to the Lenders and the Issuing Bank (including fees and disbursements and other charges of counsel to the Lenders and the Issuing Banks payable under Section 9.03) arising under the Loan Documents, ratably among them in proportion to the respective amounts described in this clause (ii) payable to them;

(iii) *third*, to payment of that portion of the Obligations constituting accrued and unpaid Letter of Credit fees and charges and interest on the Loans and unreimbursed LC Disbursements, ratably among the Lenders and the Issuing Bank in proportion to the respective amounts described in this clause (iii) payable to them;

(iv) *fourth*, (A) to payment of that portion of the Obligations constituting unpaid principal of the Loans and unreimbursed LC Disbursements and (B) to cash collateralize that portion of LC Exposure comprising the undrawn amount of Letters of Credit to the extent not otherwise cash collateralized by the Borrower pursuant to Section 2.06 or 2.22, ratably among the Lenders and the Issuing Bank in proportion to the respective amounts described in this clause (iv) payable to them; provided that (x) any such amounts applied pursuant to subclause (B) above shall be paid to the Administrative Agent for the ratable account of the applicable Issuing Bank to cash collateralize Obligations in respect of Letters of Credit, (y) subject to Section 2.06 or 2.22, amounts used to cash collateralize the aggregate amount of Letters of Credit pursuant to this clause (iv) shall be used to satisfy drawings under such Letters of Credit as they occur and (z) upon the expiration of any Letter of Credit (without any pending drawings), the pro rata share of cash collateral shall be distributed to the other Obligations, if any, in the order set forth in this Section 7.03;

(v) *fifth*, to the payment in full of all other Obligations, in each case ratably among the Administrative Agent, the Lenders, the Issuing Bank and Affiliates of the Lenders based upon the respective aggregate amounts of all such Obligations owing to them in accordance with the respective amounts thereof then due and payable; and

(vi) *finally*, the balance, if any, after all Obligations have been indefeasibly paid in full, to the Borrower or as otherwise required by law; and

(b) if any amount remains on deposit as cash collateral after all Letters of Credit have either been fully drawn or expired (without any pending drawings), such remaining amount shall be applied to the other Obligations, if any, in the order set forth above.

Notwithstanding the foregoing, amounts received from any Loan Party shall not be applied to any Excluded Swap Obligation of such Loan Party.

ARTICLE VIII

The Administrative Agent

SECTION 8.01. Authorization and Action. (a) Each Lender and each Issuing Bank hereby irrevocably appoints the entity named as Administrative Agent in the heading of this Agreement and its successors and assigns to serve as the administrative agent under the Loan Documents and each Lender and each Issuing Bank authorizes the Administrative Agent to take such actions as agent on its behalf and to exercise such powers under this Agreement and the other Loan Documents as are delegated to the Administrative Agent under such agreements and to exercise such powers as are reasonably incidental thereto. Without limiting the foregoing, each Lender and each Issuing Bank hereby authorizes the Administrative Agent to execute and deliver, and to perform its obligations under, each of the Loan Documents to which the Administrative Agent is a party, and to exercise all rights, powers and remedies that the Administrative Agent may have under such Loan Documents.

(b) As to any matters not expressly provided for herein and in the other Loan Documents (including enforcement or collection), the Administrative Agent shall not be required to exercise any discretion or take any action, but shall be required to act or to refrain from acting (and shall be fully protected in so acting or refraining from acting) upon the written instructions of the Required Lenders (or such other number or percentage of the Lenders as shall be necessary, pursuant to the terms in the Loan Documents), and, unless and until revoked in writing, such instructions shall be binding upon each Lender and each Issuing Bank; *provided*, *however*, that the Administrative Agent shall not be required to take any action that (i) the Administrative Agent in good faith believes exposes it to liability unless the Administrative Agent receives an indemnification and is exculpated in a manner satisfactory to it from the Lenders and the Issuing Banks with respect to such action or (ii) is contrary to this Agreement or any other Loan Document or applicable law, including any action that may be in violation of the automatic stay under any requirement of law relating to bankruptcy, insolvency or reorganization or relief of debtors or that may effect a forfeiture, modification or termination of property of a Defaulting Lender in violation of any requirement of law relating to bankruptcy, insolvency or reorganization or relief of debtors; *provided*, *further*, that the Administrative Agent may seek clarification or direction from the Required Lenders prior to the exercise of any such instructed action and may refrain from acting until such clarification or direction has been provided. Except as expressly set forth in the Loan Documents, the Administrative Agent shall not have any duty to disclose, and shall not be liable for the failure to disclose, any information relating to the Borrower, any Subsidiary or any Affiliate of any of the foregoing that is communicated to or obtained by the Person serving as Administrative Agent or any of its Affiliates in any capacity. Nothing in this Agreement shall require the Administrative Agent to expend or risk its own funds or otherwise incur any financial liability in the performance of any of its duties hereunder or in the exercise of any of its rights or powers if it shall have reasonable grounds for believing that repayment of such funds or adequate indemnity against such risk or liability is not reasonably assured to it.

(c) In performing its functions and duties hereunder and under the other Loan Documents, the Administrative Agent is acting solely on behalf of the Lenders and the Issuing Banks (except in limited circumstances expressly provided for herein relating to the maintenance of the Register), and its duties are entirely mechanical and administrative in nature. Without limiting the generality of the foregoing:

(i) the Administrative Agent does not assume and shall not be deemed to have assumed any obligation or duty or any other relationship as the agent, fiduciary or trustee of or for any Lender, Issuing Bank or holder of any other obligation other than as expressly set forth herein and in the other Loan Documents, regardless of whether a Default or an Event of Default has occurred and is continuing (and it is understood and agreed that the use of the term "agent" (or any similar term) herein or in any other Loan Document with reference to the Administrative Agent is not intended to connote any fiduciary duty or other implied (or express) obligations arising under agency doctrine of any applicable law, and that such term is

used as a matter of market custom and is intended to create or reflect only an administrative relationship between contracting parties); additionally, each Lender agrees that it will not assert any claim against the Administrative Agent based on an alleged breach of fiduciary duty by the Administrative Agent in connection with this Agreement and/or the transactions contemplated hereby; and

(ii) nothing in this Agreement or any Loan Document shall require the Administrative Agent to account to any Lender for any sum or the profit element of any sum received by the Administrative Agent for its own account;

(d) The Administrative Agent may perform any of its duties and exercise its rights and powers hereunder or under any other Loan Document by or through any one or more sub-agents appointed by the Administrative Agent. The Administrative Agent and any such sub-agent may perform any of their respective duties and exercise their respective rights and powers through their respective Related Parties. The exculpatory provisions of this Article shall apply to any such sub-agent and to the Related Parties of the Administrative Agent and any such sub-agent, and shall apply to their respective activities pursuant to this Agreement. The Administrative Agent shall not be responsible for the negligence or misconduct of any sub-agent except to the extent that a court of competent jurisdiction determines in a final and nonappealable judgment that the Administrative Agent acted with gross negligence or willful misconduct in the selection of such sub-agent.

(e) None of any Syndication Agent, any Documentation Agent or any Arranger shall have obligations or duties whatsoever in such capacity under this Agreement or any other Loan Document and shall incur no liability hereunder or thereunder in such capacity, but all such persons shall have the benefit of the indemnities provided for hereunder.

(f) In case of the pendency of any proceeding with respect to any Loan Party under any Federal, state or foreign bankruptcy, insolvency, receivership or similar law now or hereafter in effect, the Administrative Agent (irrespective of whether the principal of any Loan or any reimbursement obligation in respect of any LC Disbursement shall then be due and payable as herein expressed or by declaration or otherwise and irrespective of whether the Administrative Agent shall have made any demand on the Borrower) shall be entitled and empowered (but not obligated) by intervention in such proceeding or otherwise:

(i) to file and prove a claim for the whole amount of the principal and interest owing and unpaid in respect of the Loans, LC Disbursements and all other Obligations that are owing and unpaid and to file such other documents as may be necessary or advisable in order to have the claims of the Lenders, the Issuing Banks and the Administrative Agent (including any claim under Sections 2.12, 2.13, 2.15, 2.17 and 9.03) allowed in such judicial proceeding; and

(ii) to collect and receive any monies or other property payable or deliverable on any such claims and to distribute the same;

and any custodian, receiver, assignee, trustee, liquidator, sequestrator or other similar official in any such proceeding is hereby authorized by each Lender, each Issuing Bank to make such payments to the Administrative Agent and, in the event that the Administrative Agent shall consent to the making of such payments directly to the Lenders, the Issuing Banks, to pay to the Administrative Agent any amount due to it, in its capacity as the Administrative Agent, under the Loan Documents (including under Section 9.03). Nothing contained herein shall be deemed to authorize the Administrative Agent to authorize or consent to or accept or adopt on behalf of any Lender or Issuing Bank any plan of reorganization, arrangement, adjustment or composition affecting the Obligations or the rights of any Lender or Issuing Bank or to authorize the Administrative Agent to vote in respect of the claim of any Lender or Issuing Bank in any such proceeding.

(g) The provisions of this Article are solely for the benefit of the Administrative Agent, the Lenders and the Issuing Banks, and, except solely to the extent of the Borrower's rights to consent pursuant to and subject to the conditions set forth in this Article, none of the Borrower or any Subsidiary, or any of their respective Affiliates, shall have any rights as a third party beneficiary under any such provisions.

SECTION 8.02. Administrative Agent's Reliance, Limitation of Liability, Etc. (a) Neither the Administrative Agent nor any of its Related Parties shall be (i) liable for any action taken or omitted to be taken by such party, the Administrative Agent or any of its Related Parties under or in connection with this Agreement or the other Loan Documents (x) with the consent of or at the request of the Required Lenders (or such other number or percentage of the Lenders as shall be necessary, or as the Administrative Agent shall believe in good faith to be necessary, under the circumstances as provided in the Loan Documents) or (y) in the absence of its own gross negligence or willful misconduct (such absence to be presumed unless otherwise determined by a court of competent jurisdiction by a final and non-appealable judgment) or (ii) responsible in any manner to any of the Lenders for any recitals, statements, representations or warranties made by any Loan Party or any officer thereof contained in this Agreement or any other Loan Document or in any certificate, report, statement or other document referred to or provided for in, or received by the Administrative Agent under or in connection with, this Agreement or any other Loan Document or for the value, validity, effectiveness, genuineness, enforceability or sufficiency of this Agreement or any other Loan Document (including, for the avoidance of doubt, in connection with the Administrative Agent's reliance on any Electronic Signature transmitted by telecopy, emailed pdf. or any other electronic means that reproduces an image of an actual executed signature page) or for any failure of any Loan Party to perform its obligations hereunder or thereunder.

(b) The Administrative Agent shall be deemed not to have knowledge of any (i) notice of any of the events or circumstances set forth or described in Section 5.02 unless and until written notice thereof stating that it is a "notice under Section 5.02" in respect of this Agreement and identifying the specific clause under said Section is given to the Administrative Agent by the Borrower, or (ii) notice of any Default or Event of Default unless and until written notice thereof (stating that it is a "notice of Default" or a "notice of an Event of Default") is given to the Administrative Agent by the Borrower, a Lender or an Issuing Bank. Further, the Administrative Agent shall not be responsible for or have any duty to ascertain or inquire into (A) any statement, warranty or representation made in or in connection with any Loan Document, (B) the contents of any certificate, report or other document delivered thereunder or in connection therewith, (C) the performance or observance of any of the covenants, agreements or other terms or conditions set forth in any Loan Document or the occurrence of any Default or Event of Default, (D) the sufficiency, validity, enforceability, effectiveness or genuineness of any Loan Document or any other agreement, instrument or document, or (E) the satisfaction of any condition set forth in Article IV or elsewhere in any Loan Document, other than to confirm receipt of items (which on their face purport to be such items) expressly required to be delivered to the Administrative Agent or satisfaction of any condition that expressly refers to the matters described therein being acceptable or satisfactory to the Administrative Agent. Notwithstanding anything herein to the contrary, the Administrative Agent shall not be liable for, or be responsible for any Liabilities, costs or expenses suffered by the Borrower, any Subsidiary, any Lender or any Issuing Bank as a result of, any determination of the Revolving Credit Exposure, any of the component amounts thereof or any portion thereof attributable to each Lender or Issuing Bank, or any Dollar Equivalent.

(c) Without limiting the foregoing, the Administrative Agent (i) may treat the payee of any promissory note as its holder until such promissory note has been assigned in accordance with Section 9.04, (ii) may rely on the Register to the extent set forth in Section 9.04(b), (iii) may consult with legal counsel (including counsel to the Borrower), independent public accountants and other experts selected by it, and shall not be liable for any action taken or omitted to be taken in good faith by it in accordance with the advice of such counsel, accountants or experts, (iv) makes no warranty or representation to any Lender or Issuing Bank and shall not be responsible to any Lender or Issuing Bank for any statements, warranties or representations made by or on behalf of any Loan Party in connection with this Agreement or any other Loan Document, (v) in determining compliance with any condition hereunder to the making of a Loan, or the issuance of a Letter of Credit, that by its terms must be fulfilled to the satisfaction of a Lender or an Issuing Bank, may presume that such condition is satisfactory to such Lender or Issuing Bank unless the Administrative Agent shall have received notice to the contrary from such Lender or Issuing Bank sufficiently in advance of the making of such Loan or the issuance of such Letter of Credit and (vi) shall be entitled to rely on, and shall incur no liability under or in respect of this Agreement or any other Loan Document by acting upon, any notice, consent, certificate or other instrument or writing (which writing may be a fax, any electronic message, Internet or intranet website posting or other distribution) or any statement made to it orally or by telephone and believed by it to be genuine and signed or sent or otherwise authenticated by the proper party or parties (whether or not such Person in fact meets the requirements set forth in the Loan Documents for being the maker thereof).

SECTION 8.03. Posting of Communications. (a) The Borrower agrees that the Administrative Agent may, but shall not be obligated to, make any Communications available to the Lenders and the Issuing Banks by posting the Communications on IntraLinks™, DebtDomain, SyndTrak, ClearPar or any other Electronic System or electronic platform chosen by the Administrative Agent to be its electronic transmission system (the "Approved Electronic Platform").

(b) Although the Approved Electronic Platform and its primary web portal are secured with generally-applicable security procedures and policies implemented or modified by the Administrative Agent from time to time (including, as of the Effective Date, a user ID/password authorization system) and the Approved Electronic Platform is secured through a per-deal authorization method whereby each user may access the Approved Electronic Platform only on a deal-by-deal basis, each of the Lenders, each of the Issuing Banks and the Borrower acknowledges and agrees that the distribution of material through an electronic medium is not necessarily secure, that the Administrative Agent is not responsible for approving or vetting the representatives or contacts of any Lender that are added to the Approved Electronic Platform, and that there may be confidentiality and other risks associated with such distribution. Each of the Lenders, each of the Issuing Banks and the Borrower hereby approves distribution of the Communications through the Approved Electronic Platform and understands and assumes the risks of such distribution.

(c) THE APPROVED ELECTRONIC PLATFORM AND THE COMMUNICATIONS ARE PROVIDED "AS IS" AND "AS AVAILABLE". THE APPLICABLE PARTIES (AS DEFINED BELOW) DO NOT WARRANT THE ACCURACY OR COMPLETENESS OF THE COMMUNICATIONS, OR THE ADEQUACY OF THE APPROVED ELECTRONIC PLATFORM AND EXPRESSLY DISCLAIM LIABILITY FOR ERRORS OR OMISSIONS IN THE APPROVED ELECTRONIC PLATFORM AND THE COMMUNICATIONS. NO WARRANTY OF ANY KIND, EXPRESS, IMPLIED OR STATUTORY, INCLUDING ANY WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, NON-INFRINGEMENT OF THIRD PARTY RIGHTS OR FREEDOM FROM VIRUSES OR OTHER CODE DEFECTS, IS MADE BY THE APPLICABLE PARTIES IN CONNECTION WITH THE COMMUNICATIONS OR THE APPROVED ELECTRONIC PLATFORM. IN NO EVENT SHALL THE ADMINISTRATIVE AGENT, ANY ARRANGER, ANY DOCUMENTATION AGENT, ANY SYNDICATION AGENT OR ANY OF THEIR RESPECTIVE RELATED PARTIES (COLLECTIVELY, "APPLICABLE PARTIES") HAVE ANY LIABILITY TO ANY LOAN PARTY, ANY LENDER, ANY ISSUING BANK OR ANY OTHER PERSON OR ENTITY FOR DAMAGES OF ANY KIND, INCLUDING DIRECT OR INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES, LOSSES OR EXPENSES (WHETHER IN TORT, CONTRACT OR OTHERWISE) ARISING OUT OF ANY LOAN PARTY'S OR THE ADMINISTRATIVE AGENT'S TRANSMISSION OF COMMUNICATIONS THROUGH THE INTERNET OR THE APPROVED ELECTRONIC PLATFORM.

(d) Each Lender and each Issuing Bank agrees that notice to it (as provided in the next sentence) specifying that Communications have been posted to the Approved Electronic Platform shall constitute effective delivery of the Communications to such Lender for purposes of the Loan Documents. Each Lender and Issuing Bank agrees (i) to notify the Administrative Agent in writing (which could be in the form of electronic communication) from time to time of such Lender's or Issuing Bank's (as applicable) email address to which the foregoing notice may be sent by electronic transmission and (ii) that the foregoing notice may be sent to such email address.

(e) Each of the Lenders, each of the Issuing Banks and the Borrower agrees that the Administrative Agent may, but (except as may be required by applicable law) shall not be obligated to, store the Communications on the Approved Electronic Platform in accordance with the Administrative Agent's generally applicable document retention procedures and policies.

(f) Nothing herein shall prejudice the right of the Administrative Agent, any Lender or any Issuing Bank to give any notice or other communication pursuant to any Loan Document in any other manner specified in such Loan Document.

SECTION 8.04. The Administrative Agent Individually. With respect to its Commitment, Loans (including Swingline Loans), Letter of Credit Commitments and Letters of Credit, the Person serving as the

Administrative Agent shall have and may exercise the same rights and powers hereunder and is subject to the same obligations and liabilities as and to the extent set forth herein for any other Lender or Issuing Bank, as the case may be. The terms "Issuing Banks", "Lenders", "Required Lenders" and any similar terms shall, unless the context clearly otherwise indicates, include the Administrative Agent in its individual capacity as a Lender, Issuing Bank or as one of the Required Lenders, as applicable. The Person serving as the Administrative Agent and its Affiliates may accept deposits from, lend money to, own securities of, act as the financial advisor or in any other advisory capacity for and generally engage in any kind of banking, trust or other business with, the Borrower, any Subsidiary or any Affiliate of any of the foregoing as if such Person was not acting as the Administrative Agent and without any duty to account therefor to the Lenders or the Issuing Banks.

SECTION 8.05. Successor Administrative Agent. (a) The Administrative Agent may resign at any time by giving 30 days' prior written notice thereof to the Lenders, the Issuing Banks and the Borrower, whether or not a successor Administrative Agent has been appointed. Upon any such resignation, the Required Lenders shall have the right to appoint a successor Administrative Agent. If no successor Administrative Agent shall have been so appointed by the Required Lenders, and shall have accepted such appointment, within 30 days after the retiring Administrative Agent's giving of notice of resignation, then the retiring Administrative Agent may, on behalf of the Lenders and the Issuing Banks, appoint a successor Administrative Agent, which shall be a bank with an office in New York, New York or an Affiliate of any such bank. In either case, such appointment shall be subject to the prior written approval of the Borrower (which approval may not be unreasonably withheld and shall not be required while an Event of Default has occurred and is continuing). Upon the acceptance of any appointment as Administrative Agent by a successor Administrative Agent, such successor Administrative Agent shall succeed to, and become vested with, all the rights, powers, privileges and duties of the retiring Administrative Agent. Upon the acceptance of appointment as Administrative Agent by a successor Administrative Agent, the retiring Administrative Agent shall be discharged from its duties and obligations under this Agreement and the other Loan Documents. Prior to any retiring Administrative Agent's resignation hereunder as Administrative Agent, the retiring Administrative Agent shall take such action as may be reasonably necessary to assign to the successor Administrative Agent its rights as Administrative Agent under the Loan Documents.

(b) Notwithstanding paragraph (a) of this Section, in the event no successor Administrative Agent shall have been so appointed and shall have accepted such appointment within 30 days after the retiring Administrative Agent gives notice of its intent to resign, the retiring Administrative Agent may give notice of the effectiveness of its resignation to the Lenders, the Issuing Banks and the Borrower, whereupon, on the date of effectiveness of such resignation stated in such notice, (i) the retiring Administrative Agent shall be discharged from its duties and obligations hereunder and under the other Loan Documents; and (ii) the Required Lenders shall succeed to and become vested with all the rights, powers, privileges and duties of the retiring Administrative Agent; *provided* that (A) all payments required to be made hereunder or under any other Loan Document to the Administrative Agent for the account of any Person other than the Administrative Agent shall be made directly to such Person and (B) all notices and other communications required or contemplated to be given or made to the Administrative Agent shall directly be given or made to each Lender and each Issuing Bank. Following the effectiveness of the Administrative Agent's resignation from its capacity as such, the provisions of this Article and Section 9.03, as well as any exculpatory, reimbursement and indemnification provisions set forth in any other Loan Document, shall continue in effect for the benefit of such retiring Administrative Agent, its sub-agents and their respective Related Parties in respect of any actions taken or omitted to be taken by any of them while the retiring Administrative Agent was acting as Administrative Agent.

SECTION 8.06. Acknowledgements of Lenders and Issuing Banks. (a) Each Lender and each Issuing Bank represents and warrants that (i) the Loan Documents set forth the terms of a commercial lending facility, (1) it is engaged in making, acquiring or holding commercial loans and in providing other facilities set forth herein as may be applicable to such Lender or Issuing Bank, in each case in the ordinary course of business, and not for the purpose of purchasing, acquiring or holding any other type of financial instrument (and each Lender and each Issuing Bank agrees not to assert a claim in contravention of the foregoing), (2) it has, independently and without reliance upon the Administrative Agent, any Arranger, any Syndication Agent, any Documentation Agent or any other Lender or Issuing Bank, or any of the Related Parties of any of the foregoing, and based on such documents and information as it has deemed appropriate, made its own credit analysis and decision to enter into this Agreement as a Lender, and to make, acquire or hold Loans hereunder and (3) it is sophisticated with respect to decisions to

make, acquire and/or hold commercial loans and to provide other facilities set forth herein, as may be applicable to such Lender or such Issuing Bank, and either it, or the Person exercising discretion in making its decision to make, acquire and/or hold such commercial loans or to provide such other facilities, is experienced in making, acquiring or holding such commercial loans or providing such other facilities. Each Lender and each Issuing Bank also acknowledges that it will, independently and without reliance upon the Administrative Agent, any Arranger any Syndication Agent, any Documentation Agent or any other Lender or Issuing Bank, or any of the Related Parties of any of the foregoing, and based on such documents and information (which may contain material, non-public information within the meaning of the United States securities laws concerning the Borrower and its Affiliates) as it shall from time to time deem appropriate, continue to make its own decisions in taking or not taking action under or based upon this Agreement, any other Loan Document or any related agreement or any document furnished hereunder or thereunder.

(b) Each Lender, by delivering its signature page to this Agreement on the Effective Date, or delivering its signature page to an Assignment and Assumption or any other Loan Document pursuant to which it shall become a Lender hereunder, shall be deemed to have acknowledged receipt of, and consented to and approved, each Loan Document and each other document required to be delivered to, or be approved by or satisfactory to, the Administrative Agent or the Lenders on the Effective Date.

(c) (i) Each Lender hereby agrees that (x) if the Administrative Agent notifies such Lender that the Administrative Agent has determined in its sole discretion that any funds received by such Lender from the Administrative Agent or any of its Affiliates (whether as a payment, prepayment or repayment of principal, interest, fees or otherwise; individually and collectively, a "Payment") were erroneously transmitted to such Lender (whether or not known to such Lender), and demands the return of such Payment (or a portion thereof), such Lender shall promptly, but in no event later than one Business Day thereafter, return to the Administrative Agent the amount of any such Payment (or portion thereof) as to which such a demand was made in same day funds, together with interest thereon in respect of each day from and including the date such Payment (or portion thereof) was received by such Lender to the date such amount is repaid to the Administrative Agent at the greater of the NYFRB Rate and a rate determined by the Administrative Agent in accordance with banking industry rules on interbank compensation from time to time in effect, and (y) to the extent permitted by applicable law, such Lender shall not assert, and hereby waives, as to the Administrative Agent, any claim, counterclaim, defense or right of set-off or recoupment with respect to any demand, claim or counterclaim by the Administrative Agent for the return of any Payments received, including without limitation any defense based on "discharge for value" or any similar doctrine. A notice of the Administrative Agent to any Lender under this Section 8.06(c) shall be conclusive, absent manifest error.

(ii) Each Lender hereby further agrees that if it receives a Payment from the Administrative Agent or any of its Affiliates (x) that is in a different amount than, or on a different date from, that specified in a notice of payment sent by the Administrative Agent (or any of its Affiliates) with respect to such Payment (a "Payment Notice") or (y) that was not preceded or accompanied by a Payment Notice, it shall be on notice, in each such case, that an error has been made with respect to such Payment. Each Lender agrees that, in each such case, or if it otherwise becomes aware a Payment (or portion thereof) may have been sent in error, such Lender shall promptly notify the Administrative Agent of such occurrence and, upon demand from the Administrative Agent, it shall promptly, but in no event later than one Business Day thereafter, return to the Administrative Agent the amount of any such Payment (or portion thereof) as to which such a demand was made in same day funds, together with interest thereon in respect of each day from and including the date such Payment (or portion thereof) was received by such Lender to the date such amount is repaid to the Administrative Agent at the greater of the NYFRB Rate and a rate determined by the Administrative Agent in accordance with banking industry rules on interbank compensation from time to time in effect.

(iii) The Borrower and each other Loan Party hereby agrees that (x) in the event an erroneous Payment (or portion thereof) are not recovered from any Lender that has received such Payment (or portion thereof) for any reason, the Administrative Agent shall be subrogated to all the rights of such Lender with respect to such amount and (y) an erroneous Payment shall not pay, prepay, repay, discharge or otherwise satisfy any Obligations owed by the Borrower or any other Loan Party.

(iv) Each party's obligations under this Section 8.06(c) shall survive the resignation or replacement of the Administrative Agent or any transfer of rights or obligations by, or the replacement of, a Lender, the termination of the Commitments or the repayment, satisfaction or discharge of all Obligations under any Loan Document.

SECTION 8.07. [Reserved].

SECTION 8.08. [Reserved].

SECTION 8.09. *Certain ERISA Matters*. (a) Each Lender (x) represents and warrants, as of the date such Person became a Lender party hereto, to, and (y) covenants, from the date such Person became a Lender party hereto to the date such Person ceases being a Lender party hereto, for the benefit of, the Administrative Agent, and each Arranger and their respective Affiliates, and not, for the avoidance of doubt, to or for the benefit of the Borrower or any other Loan Party, that at least one of the following is and will be true:

(i) such Lender is not using "plan assets" (within the meaning of the Plan Asset Regulations) of one or more Benefit Plans in connection with the Loans, the Letters of Credit or the Commitments,

(ii) the transaction exemption set forth in one or more PTEs, such as PTE 84-14 (a class exemption for certain transactions determined by independent qualified professional asset managers), PTE 95-60 (a class exemption for certain transactions involving insurance company general accounts), PTE 90-1 (a class exemption for certain transactions involving insurance company pooled separate accounts), PTE 91-38 (a class exemption for certain transactions involving bank collective investment funds) or PTE 96-23 (a class exemption for certain transactions determined by in-house asset managers), is applicable with respect to such Lender's entrance into, participation in, administration of and performance of the Loans, the Letters of Credit, the Commitments and this Agreement,

(iii) (A) such Lender is an investment fund managed by a "Qualified Professional Asset Manager" (within the meaning of Part VI of PTE 84-14), (B) such Qualified Professional Asset Manager made the investment decision on behalf of such Lender to enter into, participate in, administer and perform the Loans, the Letters of Credit, the Commitments and this Agreement, (C) the entrance into, participation in, administration of and performance of the Loans, the Letters of Credit, the Commitments and this Agreement satisfies the requirements of sub-sections (b) through (g) of Part I of PTE 84-14 and (D) to the best knowledge of such Lender, the requirements of subsection (a) of Part I of PTE 84-14 are satisfied with respect to such Lender's entrance into, participation in, administration of and performance of the Loans, the Letters of Credit, the Commitments and this Agreement, or

(iv) such other representation, warranty and covenant as may be agreed in writing between the Administrative Agent, in its sole discretion, and such Lender.

(b) In addition, unless sub-clause (i) in the immediately preceding clause (a) is true with respect to a Lender or such Lender has provided another representation, warranty and covenant as provided in sub-clause (iv) in the immediately preceding clause (a), such Lender further (x) represents and warrants, as of the date such Person became a Lender party hereto, to, and (y) covenants, from the date such Person became a Lender party hereto to the date such Person ceases being a Lender party hereto, for the benefit of, the Administrative Agent, and each Arranger and their respective Affiliates, and not, for the avoidance of doubt, to or for the benefit of the Borrower or any other Loan Party, that none of the Administrative Agent, or any Arranger ,any Syndication Agent, any Documentation Agent or any of their respective Affiliates is a fiduciary with respect to the assets of such Lender (including in connection with the reservation or exercise of any rights by the Administrative Agent under this Agreement, any Loan Document or any documents related to hereto or thereto).

(c) The Administrative Agent, and each Arranger ,Syndication Agent and Documentation Agent hereby informs the Lenders that each such Person is not undertaking to provide investment advice or to give advice in a fiduciary capacity, in connection with the transactions contemplated hereby, and that such Person has a financial interest in the transactions contemplated hereby in that such Person or an Affiliate thereof (i) may receive interest or other payments with respect to the Loans, the Letters of Credit, the Commitments, this Agreement and any other Loan Documents (ii) may recognize a gain if it extended the Loans, the Letters of Credit or the Commitments for an

amount less than the amount being paid for an interest in the Loans, the Letters of Credit or the Commitments by such Lender or (iii) may receive fees or other payments in connection with the transactions contemplated hereby, the Loan Documents or otherwise, including structuring fees, commitment fees, arrangement fees, facility fees, upfront fees, underwriting fees, ticking fees, agency fees, administrative agent or collateral agent fees, utilization fees, minimum usage fees, letter of credit fees, fronting fees, deal-away or alternate transaction fees, amendment fees, processing fees, term out premiums, banker's acceptance fees, breakage or other early termination fees or fees similar to the foregoing.

ARTICLE IX

Miscellaneous

SECTION 9.01. Notices. (a) Except in the case of notices and other communications expressly permitted to be given by telephone (and subject to paragraph (b) below), all notices and other communications provided for herein shall be in writing and shall be delivered by hand or overnight courier service, mailed by certified or registered mail or sent by telecopy, as follows:

(i) if to the Borrower, to it at Lam Research Corporation, 4650 Cushing Parkway, Fremont, California 94538, Attention of Odette Go, Treasurer, (Telecopy No. 510-572-1586; Telephone No. 510-572-5151; electronic mail address: treasuryorg@lamresearch.com);

(ii) if to the Administrative Agent, to JPMorgan Chase Bank, N.A., 10 South Dearborn Street, Chicago, Illinois 60603, Attention of Christopher Jefferson (Telecopy No. 888-292-9533; Telephone No. 312-732-2628; electronic mail address: christopher.jefferson@chase.com and JPM.agency.cri@jpmorgan.com), with a copy to JPMorgan Chase Bank, N.A., 8181 Communications Pkwy, Bldg B, Floor 06, Plano, TX 75024, Attention of Zachary Quan (electronic email address: zachary.quan@chase.com);

(iii) if to the Issuing Bank, to it at its address (or telecopy number) set forth in its Administrative Questionnaire;

(iv) if to the Administrative Agent, to JPMorgan Chase Bank, N.A., 10 South Dearborn Street, Chicago, Illinois 60603, Attention of Christopher Jefferson (Telecopy No. 888-292-9533; Telephone No. 312-732-2628; electronic mail address: christopher.jefferson@chase.com and JPM.agency.cri@jpmorgan.com), with a copy to JPMorgan Chase Bank, N.A., 8181 Communications Pkwy, Bldg B, Floor 06, Plano, TX 75024, Attention of Zachary Quan (electronic email address: zachary.quan@chase.com); and

(v) if to any other Lender, to it at its address (or telecopy number) set forth in its Administrative Questionnaire.

Notices sent by hand or overnight courier service, or mailed by certified or registered mail, shall be deemed to have been given when received; notices sent by facsimile shall be deemed to have been given when sent (except that, if not given during normal business hours for the recipient, shall be deemed to have been given at the opening of business on the next business day for the recipient). Notices delivered through Approved Electronic Platforms, to the extent provided in paragraph (b) below, shall be effective as provided in said paragraph (b).

(b) Notices and other communications to the Lenders and the Issuing Bank hereunder may be delivered or furnished by using Approved Electronic Platforms pursuant to procedures approved by the Administrative Agent; provided that the foregoing shall not apply to notices pursuant to Article II unless otherwise agreed by the Administrative Agent and the applicable Lender. The Administrative Agent or the Borrower may, in its discretion, agree to accept notices and other communications to it hereunder by electronic communications pursuant to procedures approved by it; provided that approval of such procedures may be limited to particular notices or communications.

Unless the Administrative Agent otherwise prescribes, (i) notices and other communications sent to an e-mail address shall be deemed received upon the sender's receipt of an acknowledgement from the intended recipient (such as by the "return receipt requested" function, as available, return e-mail or other written acknowledgement),

and (ii) notices or communications posted to an Internet or intranet website shall be deemed received upon the deemed receipt by the intended recipient, at its e-mail address as described in the foregoing clause (i), of notification that such notice or communication is available and identifying the website address therefor; provided that, for both clauses (i) and (ii) above, if such notice, email or other communication is not sent during the normal business hours of the recipient, such notice or communication shall be deemed to have been sent at the opening of business on the next business day for the recipient.

(c) Any party hereto may change its address or telecopy number for notices and other communications hereunder by notice to the other parties hereto. All notices and other communications given to any party hereto in accordance with the provisions of this Agreement shall be deemed to have been given on the date of receipt.

SECTION 9.02. Waivers; Amendments. (a) No failure or delay by the Administrative Agent, the Issuing Bank or any Lender in exercising any right or power hereunder or under any other Loan Document shall operate as a waiver thereof, nor shall any single or partial exercise of any such right or power, or any abandonment or discontinuance of steps to enforce such a right or power, preclude any other or further exercise thereof or the exercise of any other right or power. The rights and remedies of the Administrative Agent, the Issuing Bank and the Lenders hereunder and under the other Loan Documents are cumulative and are not exclusive of any rights or remedies that they would otherwise have. No waiver of any provision of this Agreement or consent to any departure by the Borrower therefrom shall in any event be effective unless the same shall be permitted by paragraph (b) of this Section, and then such waiver or consent shall be effective only in the specific instance and for the purpose for which given. Without limiting the generality of the foregoing, the making of a Loan or issuance of a Letter of Credit shall not be construed as a waiver of any Default, regardless of whether the Administrative Agent, any Lender or the Issuing Bank may have had notice or knowledge of such Default at the time.

(b) Except as provided in Sections 2.14(c), (c) and (d) and in Section 2.20 with respect to an Incremental Term Loan Amendment, neither this Agreement nor any provision hereof may be waived, amended or modified except pursuant to an agreement or agreements in writing entered into by the Borrower and the Required Lenders or by the Borrower and the Administrative Agent with the consent of the Required Lenders; provided that no such agreement shall (i) increase the Commitment of any Lender without the written consent of such Lender, (ii) reduce the principal amount of any Loan or LC Disbursement or reduce the rate of interest thereon, or reduce any fees payable hereunder, without the written consent of each Lender directly affected thereby, (iii) postpone the scheduled date of payment of the principal amount of any Loan or LC Disbursement, or any interest thereon, or any fees payable hereunder, or reduce the amount of, waive or excuse any such payment, or postpone the scheduled date of expiration of any Commitment, without the written consent of each Lender directly affected thereby, (iv) change Section 2.09(c) or 2.18(b) or (d) in a manner that would alter the ratable reduction of Commitments or the pro rata sharing of payments required thereby, without the written consent of each Lender, (v) change any of the provisions of this Section or the definition of "Required Lenders" or any other provision hereof specifying the number or percentage of Lenders required to waive, amend or modify any rights hereunder or make any determination or grant any consent hereunder, without the written consent of each Lender (it being understood that, solely with the consent of the parties prescribed by Section 2.20 to be parties to an Incremental Term Loan Amendment, Incremental Term Loans may be included in the determination of Required Lenders on substantially the same basis as the Commitments and the Revolving Loans are included on the Effective Date), (vi) release the Borrower from its obligations under Article X or release all or substantially all of the Subsidiary Guarantors from their obligations under the Subsidiary Guaranty, in each case, without the written consent of each Lender or (vii) change the payment waterfall provisions of Section 2.21(b) or 7.03 without the written consent of each Lender; provided further that no such agreement shall amend, modify or otherwise affect the rights or duties of the Administrative Agent, the Issuing Bank or the Swingline Lender hereunder without the prior written consent of the Administrative Agent, the Issuing Bank or the Swingline Lender, as the case may be (it being understood that any change to Section 2.22 shall require the consent of the Administrative Agent, the Issuing Bank and the Swingline Lender). Notwithstanding the foregoing, no consent with respect to any amendment, waiver or other modification of this Agreement shall be required of any Defaulting Lender, except with respect to any amendment, waiver or other modification referred to in clause (i), (ii) or (iii) of the first proviso of this paragraph and then only in the event such Defaulting Lender shall be directly affected by such amendment, waiver or other modification.

(c) Notwithstanding the foregoing, this Agreement and any other Loan Document may be amended (or amended and restated) with the written consent of the Required Lenders, the Administrative Agent and the Borrower (x) to add one or more credit facilities (in addition to the Incremental Term Loans pursuant to an Incremental Term Loan Amendment) to this Agreement and to permit extensions of credit from time to time outstanding thereunder and the accrued interest and fees in respect thereof to share ratably in the benefits of this Agreement and the other Loan Documents with the Revolving Loans, Incremental Term Loans and the accrued interest and fees in respect thereof and (y) to include appropriately the Lenders holding such credit facilities in any determination of the Required Lenders and Lenders.

(d) If, in connection with any proposed amendment, waiver or consent requiring the consent of "each Lender" or "each Lender directly affected thereby," the consent of the Required Lenders is obtained, but the consent of other necessary Lenders is not obtained (any such Lender whose consent is necessary but not obtained being referred to herein as a "Non-Consenting Lender"), then the Borrower may elect to replace a Non-Consenting Lender as a Lender party to this Agreement, provided that, concurrently with such replacement, (i) another bank or other entity which is reasonably satisfactory to the Borrower and the Administrative Agent shall agree, as of such date, to purchase for cash the Loans and other Obligations due to the Non-Consenting Lender pursuant to an Assignment and Assumption and to become a Lender for all purposes under this Agreement and to assume all obligations of the Non-Consenting Lender to be terminated as of such date and to comply with the requirements of clause (b) of Section 9.04, and (ii) the Borrower shall pay to such Non-Consenting Lender in same day funds on the day of such replacement (1) the outstanding principal amount of its Loans and participations in LC Disbursements and all interest, fees and other amounts then accrued but unpaid to such Non-Consenting Lender by the Borrower hereunder to and including the date of termination, including without limitation payments due to such Non-Consenting Lender under Sections 2.15 and 2.17, and (2) an amount, if any, equal to the payment which would have been due to such Lender on the day of such replacement under Section 2.16 had the Loans of such Non-Consenting Lender been prepaid on such date rather than sold to the replacement Lender. Each party hereto agrees that (A) an assignment required pursuant to this paragraph may be effected pursuant to an Assignment and Assumption executed by the Borrower, the Administrative Agent and the assignee (or, to the extent applicable, an agreement incorporating an Assignment and Assumption by reference pursuant to an Approved Electronic Platform as to which the Administrative Agent and such parties are participants), and (B) the Lender required to make such assignment need not be a party thereto in order for such assignment to be effective and shall be deemed to have consented to an be bound by the terms thereof; provided that, following the effectiveness of any such assignment, the other parties to such assignment agree to execute and deliver such documents necessary to evidence such assignment as reasonably requested by the applicable Lender; provided that any such documents shall be without recourse to or warranty by the parties thereto.

(e) Notwithstanding anything to the contrary herein the Administrative Agent may, with the consent of the Borrower only, amend, modify or supplement this Agreement or any of the other Loan Documents to cure any ambiguity, omission, mistake, defect or inconsistency.

SECTION 9.03. Expenses; Indemnity; Damage Waiver; Limitation of Liability. (a) The Borrower shall pay (i) all reasonable out-of-pocket expenses incurred by the Administrative Agent and its Affiliates, including the reasonable fees, charges and disbursements of counsel for the Administrative Agent and the Arrangers, in connection with the syndication and distribution (including, without limitation, via the internet or through a service such as Intralinks) of the credit facilities provided for herein, the preparation and administration of this Agreement and the other Loan Documents or any amendments, modifications or waivers of the provisions hereof or thereof (whether or not the transactions contemplated hereby or thereby shall be consummated), (ii) all reasonable out-of-pocket expenses incurred by the Issuing Bank in connection with the issuance, amendment or extension of any Letter of Credit or any demand for payment thereunder and (iii) all out-of-pocket expenses incurred by the Administrative Agent, the Issuing Bank, any Arranger or any Lender, including the reasonable fees, charges and disbursements of any counsel for the Administrative Agent, the Issuing Bank, any Arranger or any Lender, in connection with the enforcement or protection of its rights in connection with this Agreement and any other Loan Document, including its rights under this Section, or in connection with the Loans made or Letters of Credit issued hereunder, including all such out-of-pocket expenses incurred during any workout, restructuring or negotiations in respect of such Loans or Letters of Credit.

(b) The Borrower shall indemnify the Administrative Agent, each Arranger, each Syndication Agent, each Documentation Agent, the Issuing Bank and each Lender, and each Related Party of any of the foregoing Persons (each such Person being called an "Indemnitee") against, and hold each Indemnitee harmless from, any and all Liabilities and related expenses, including the fees, charges and disbursements of any counsel for any Indemnitee, incurred by or asserted against any Indemnitee arising out of, in connection with, or as a result of (i) the execution or delivery of any Loan Document or any agreement or instrument contemplated thereby, the performance by the parties hereto of their respective obligations thereunder or the consummation of the Transactions or any other transactions contemplated hereby, (ii) any Loan or Letter of Credit or the use of the proceeds therefrom (including any refusal by the Issuing Bank to honor a demand for payment under a Letter of Credit if the documents presented in connection with such demand do not strictly comply with the terms of such Letter of Credit), (iii) any actual or alleged presence or release of Hazardous Materials on or from any property owned or operated by the Borrower or any of its Subsidiaries, or any Environmental Liability related in any way to the Borrower or any of its Subsidiaries, or (iv) any actual or prospective Proceeding relating to any of the foregoing, whether based on contract, tort or any other theory, whether brought by a third party or by the Borrower or any of its Subsidiaries, and regardless of whether any Indemnitee is a party thereto; provided that such indemnity shall not, as to any Indemnitee, be available to the extent that such Liabilities or related expenses (A) are determined by a court of competent jurisdiction by final and nonappealable judgment to have resulted from the gross negligence or willful misconduct of such Indemnitee or (B) result from a claim initiated by the Borrower or any other Loan Party against an Indemnitee for a material breach of such Indemnitee's express obligations hereunder or under any other Loan Document if the Borrower or such Loan Party has obtained a final and nonappealable judgment in its favor on such claim as determined by a court of competent jurisdiction; provided, that any legal expenses shall be limited to one counsel for all Indemnitees taken as a whole and if reasonably necessary, a single local counsel for all Indemnitees taken as a whole in each relevant jurisdiction (which may be a single local counsel acting in multiple jurisdictions) and, solely in the case of an actual or perceived conflict of interest, one additional counsel in each relevant jurisdiction to each group of affected Indemnitees similarly situated taken as a whole. This Section 9.03(b) shall not apply with respect to Taxes other than any Taxes that represent losses, claims or damages arising from any non-Tax claim.

(c) To the extent that the Borrower fails to pay any amount required to be paid by it to the Administrative Agent, the Issuing Bank or the Swingline Lender under paragraph (a) or (b) of this Section, each Lender severally agrees to pay to the Administrative Agent, the Issuing Bank or the Swingline Lender, as the case may be, such Lender's Applicable Percentage (determined as of the time that the applicable unreimbursed expense or indemnity payment is sought) of such unpaid amount (it being understood that the Borrower's failure to pay any such amount shall not relieve the Borrower of any default in the payment thereof); provided that the unreimbursed expense or indemnified loss, claim, damage, liability or related expense, as the case may be, was incurred by or asserted against the Administrative Agent, the Issuing Bank or the Swingline Lender in its capacity as such.

(d) To the extent permitted by applicable law, neither the Borrower nor ~~any Indemnitee~~the Administrative Agent, any Arranger, any Syndication Agent, any Documentation Agent, the Issuing Bank, any Lender or any Related Party of any of the foregoing Persons (each being a "Lender-Related Person") shall assert, and each of the Borrower, the Administrative Agent, the Swingline Lender and the Issuing Bank hereby waives, on its own behalf and on behalf of its Related Parties, any claim against any ~~Indemnitee~~Lender-Related Person (in the case of such waiver by the Borrower) or against the Borrower (in the case of such waiver by any ~~Indemnitee~~Lender-Related Person) for any Liabilities (i) arising from the use by others of information or other materials obtained through telecommunications, electronic or other information transmission systems (including the Internet), or (ii) on any theory of liability, for special, indirect, consequential or punitive damages (as opposed to direct or actual damages) arising out of, in connection with, or as a result of, this Agreement, any other Loan Document or any agreement or instrument contemplated hereby or thereby, the Transactions, any Loan or Letter of Credit or the use of the proceeds thereof; provided that nothing contained in this Section 9.03(d) shall limit the Borrower's indemnification obligations set forth in Section 9.03(b).

(e) All amounts due under this Section shall be payable not later than 15 days after written demand therefor.

SECTION 9.04. Successors and Assigns. (a) The provisions of this Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns permitted hereby (including any Affiliate of the Issuing Bank that issues any Letter of Credit), except that (i) the Borrower may not assign or

otherwise transfer any of its rights or obligations hereunder without the prior written consent of each Lender (and any attempted assignment or transfer by the Borrower without such consent shall be null and void) and (ii) no Lender may assign or otherwise transfer its rights or obligations hereunder except in accordance with this Section. Nothing in this Agreement, expressed or implied, shall be construed to confer upon any Person (other than the parties hereto, their respective successors and assigns permitted hereby (including any Affiliate of the Issuing Bank that issues any Letter of Credit), Participants (to the extent provided in paragraph (c) of this Section) and, to the extent expressly contemplated hereby, the Related Parties of each of the Administrative Agent, the Issuing Bank and the Lenders) any legal or equitable right, remedy or claim under or by reason of this Agreement.

(b) (i) Subject to the conditions set forth in paragraph (b)(ii) below, any Lender may assign to one or more Persons (other than an Ineligible Institution) all or a portion of its rights and obligations under this Agreement (including all or a portion of its Commitment, participations in Letters of Credit and the Loans at the time owing to it) with the prior written consent (such consent not to be unreasonably withheld or delayed) of:

(A) the Borrower (provided that the Borrower shall be deemed to have consented to any such assignment unless it shall object thereto by written notice to the Administrative Agent within five Business Days after having received notice thereof); provided, further, that no consent of the Borrower shall be required for an assignment to a Lender, an Affiliate of a Lender, an Approved Fund or, if an Event of Default has occurred and is continuing, any other assignee;

(B) the Administrative Agent; provided that no consent of the Administrative Agent shall be required for an assignment of any Commitment to an assignee that is a Lender (other than a Defaulting Lender) with a Commitment immediately prior to giving effect to such assignment;

(C) the Issuing Bank; and

(D) the Swingline Lender.

(ii) Assignments shall be subject to the following additional conditions:

(A) except in the case of an assignment to a Lender or an Affiliate of a Lender or an Approved Fund or an assignment of the entire remaining amount of the assigning Lender's Commitment or Loans of any Class, the amount of the Commitment or Loans of the assigning Lender subject to each such assignment (determined as of the date the Assignment and Assumption with respect to such assignment is delivered to the Administrative Agent) shall not be less than $10,000,000 unless each of the Borrower and the Administrative Agent otherwise consent, provided that no such consent of the Borrower shall be required if an Event of Default has occurred and is continuing;

(B) each partial assignment shall be made as an assignment of a proportionate part of all the assigning Lender's rights and obligations under this Agreement, provided that this clause shall not be construed to prohibit the assignment of a proportionate part of all the assigning Lender's rights and obligations in respect of one Class of Commitments or Loans;

(C) the parties to each assignment shall execute and deliver to the Administrative Agent an (x) Assignment and Assumption or (y) to the extent applicable, an agreement incorporating an Assignment and Assumption by reference pursuant to an Approved Electronic Platform as to which the Administrative Agent and the parties to the Assignment and Assumption are participants, together with a processing and recordation fee of $3,500, such fee to be paid by either the assigning Lender or the assignee Lender or shared between such Lenders; and

(D) the assignee, if it shall not be a Lender, shall deliver to the Administrative Agent an Administrative Questionnaire in which the assignee designates one or more credit contacts to whom all syndicate-level information (which may contain material non-public information about the Borrower and its affiliates and their Related Parties or their respective securities) will be made

available and who may receive such information in accordance with the assignee's compliance procedures and applicable laws, including Federal and state securities laws.

For the purposes of this Section 9.04(b), the terms "Approved Fund" and "Ineligible Institution" have the following meanings:

"Approved Fund" means any Person (other than a natural person) that is engaged in making, purchasing, holding or investing in bank loans and similar extensions of credit in the ordinary course of its business and that is administered or managed by (a) a Lender, (b) an Affiliate of a Lender or (c) an entity or an Affiliate of an entity that administers or manages a Lender.

Ineligible Institution" means (a) a natural person, (b) a Defaulting Lender or its Lender Parent, (c) the Borrower, any of its Subsidiaries or any of its Affiliates, or (d) a company, investment vehicle or trust for, or owned and operated for the primary benefit of, a natural person or relative(s) thereof.

(iii) Subject to acceptance and recording thereof pursuant to paragraph (b)(iv) of this Section, from and after the effective date specified in each Assignment and Assumption the assignee thereunder shall be a party hereto and, to the extent of the interest assigned by such Assignment and Assumption, have the rights and obligations of a Lender under this Agreement, and the assigning Lender thereunder shall, to the extent of the interest assigned by such Assignment and Assumption, be released from its obligations under this Agreement (and, in the case of an Assignment and Assumption covering all of the assigning Lender's rights and obligations under this Agreement, such Lender shall cease to be a party hereto but shall continue to be entitled to the benefits of Sections 2.15, 2.16, 2.17 and 9.03). Any assignment or transfer by a Lender of rights or obligations under this Agreement that does not comply with this Section 9.04 shall be treated for purposes of this Agreement as a sale by such Lender of a participation in such rights and obligations in accordance with paragraph (c) of this Section.

(iv) The Administrative Agent, acting for this purpose as a non-fiduciary agent of the Borrower, shall maintain at one of its offices a copy of each Assignment and Assumption delivered to it and a register for the recordation of the names and addresses of the Lenders, and the Commitment of, and principal amount (and stated interest) of the Loans and LC Disbursements owing to, each Lender pursuant to the terms hereof from time to time (the "Register"). The entries in the Register shall be conclusive absent manifest error, and the Borrower, the Administrative Agent, the Issuing Bank and the Lenders shall treat each Person whose name is recorded in the Register pursuant to the terms hereof as a Lender hereunder for all purposes of this Agreement, notwithstanding notice to the contrary. The Register shall be available for inspection by the Borrower, the Issuing Bank and any Lender, at any reasonable time and from time to time upon reasonable prior notice.

(v) Upon its receipt of (x) a duly completed Assignment and Assumption executed by an assigning Lender and an assignee or (y) to the extent applicable, an agreement incorporating an Assignment and Assumption by reference pursuant to an Approved Electronic Platform as to which the Administrative Agent and the parties to the Assignment and Assumption are participants, the assignee's completed Administrative Questionnaire (unless the assignee shall already be a Lender hereunder), the processing and recordation fee referred to in paragraph (b) of this Section and any written consent to such assignment required by paragraph (b) of this Section, the Administrative Agent shall accept such Assignment and Assumption and record the information contained therein in the Register; provided that if either the assigning Lender or the assignee shall have failed to make any payment required to be made by it pursuant to Section 2.05(c), 2.06(d) or (e), 2.07(b), 2.18(e) or 9.03(c), the Administrative Agent shall have no obligation to accept such Assignment and Assumption and record the information therein in the Register unless and until such payment shall have been made in full, together with all accrued interest thereon. No assignment shall be effective for purposes of this Agreement unless it has been recorded in the Register as provided in this paragraph.

(c) Any Lender may, without the consent of the Borrower, the Administrative Agent, the Issuing Bank or the Swingline Lender, sell participations to one or more banks or other entities (a "Participant"), other than an Ineligible Institution, in all or a portion of such Lender's rights and obligations under this Agreement (including all or a portion of its Commitment and the Loans owing to it); provided that (A) such Lender's obligations under this Agreement shall remain unchanged; (B) such Lender shall remain solely responsible to the other parties hereto for

the performance of such obligations; and (C) the Borrower, the Administrative Agent, the Issuing Bank and the other Lenders shall continue to deal solely and directly with such Lender in connection with such Lender's rights and obligations under this Agreement. Any agreement or instrument pursuant to which a Lender sells such a participation shall provide that such Lender shall retain the sole right to enforce this Agreement and to approve any amendment, modification or waiver of any provision of this Agreement; provided that such agreement or instrument may provide that such Lender will not, without the consent of the Participant, agree to any amendment, modification or waiver described in the first proviso to Section 9.02(b) that affects such Participant. The Borrower agrees that each Participant shall be entitled to the benefits of Sections 2.15, 2.16 and 2.17 (subject to the requirements and limitations therein, including the requirements under Section 2.17(f) (it being understood that the documentation required under Section 2.17(f) shall be delivered to the participating Lender)) to the same extent as if it were a Lender and had acquired its interest by assignment pursuant to paragraph (b) of this Section; provided that such Participant (A) agrees to be subject to the provisions of Sections 2.18 and 2.19 as if it were an assignee under paragraph (b) of this Section; and (B) shall not be entitled to receive any greater payment under Sections 2.15 or 2.17, with respect to any participation, than its participating Lender would have been entitled to receive, except to the extent such entitlement to receive a greater payment results from a Change in Law that occurs after the Participant acquired the applicable participation. To the extent permitted by law, each Participant also shall be entitled to the benefits of Section 9.08 as though it were a Lender, provided such Participant agrees to be subject to Section 2.18(d) as though it were a Lender. Each Lender that sells a participation shall, acting solely for this purpose as a non-fiduciary agent of the Borrower, maintain a register on which it enters the name and address of each Participant and the principal amounts (and stated interest) of each Participant's interest in the Loans or other obligations under the Loan Documents (the "Participant Register"); provided that no Lender shall have any obligation to disclose all or any portion of the Participant Register (including the identity of any Participant or any information relating to a Participant's interest in any Commitments, Loans, Letters of Credit or its other obligations under any Loan Document) to any Person except to the extent that such disclosure is necessary to establish that such Commitment, Loan, Letter of Credit or other obligation is in registered form under Section 5f.103-1(c) of the United States Treasury Regulations. The entries in the Participant Register shall be conclusive absent manifest error, and such Lender shall treat each Person whose name is recorded in the Participant Register as the owner of such participation for all purposes of this Agreement notwithstanding any notice to the contrary. For the avoidance of doubt, the Administrative Agent (in its capacity as Administrative Agent) shall have no responsibility for maintaining a Participant Register.

(d) Any Lender may at any time pledge or assign a security interest in all or any portion of its rights under this Agreement to secure obligations of such Lender, including without limitation any pledge or assignment to secure obligations to a Federal Reserve Bank or other central banking authority having jurisdiction over such Lender, and this Section shall not apply to any such pledge or assignment of a security interest; provided that no such pledge or assignment of a security interest shall release a Lender from any of its obligations hereunder or substitute any such pledgee or assignee for such Lender as a party hereto.

SECTION 9.05. Survival. All covenants, agreements, representations and warranties made by the Loan Parties in the Loan Documents and in the certificates or other instruments delivered in connection with or pursuant to this Agreement or any other Loan Document shall be considered to have been relied upon by the other parties hereto and shall survive the execution and delivery of the Loan Documents and the making of any Loans and issuance of any Letters of Credit, regardless of any investigation made by any such other party or on its behalf and notwithstanding that the Administrative Agent, the Issuing Bank or any Lender may have had notice or knowledge of any Default or incorrect representation or warranty at the time any credit is extended hereunder, and shall continue in full force and effect as long as the principal of or any accrued interest on any Loan or any fee or any other amount payable under this Agreement or any other Loan Document is outstanding and unpaid or any Letter of Credit is outstanding and so long as the Commitments have not expired or terminated. The provisions of Sections 2.15, 2.16, 2.17 and 9.03 and Article VIII shall survive and remain in full force and effect regardless of the consummation of the transactions contemplated hereby, the repayment of the Loans, the expiration or termination of the Letters of Credit and the Commitments or the termination of this Agreement or any other Loan Document or any provision hereof or thereof.

SECTION 9.06. Counterparts; Integration; Effectiveness; Electronic Execution. (a) This Agreement may be executed in counterparts (and by different parties hereto on different counterparts), each of which shall constitute an original, but all of which when taken together shall constitute a single contract. This Agreement, the other Loan

Documents and any separate letter agreements with respect to (i) fees payable to the Administrative Agent and (4) the reductions of the Letter of Credit Commitment of any Issuing Bank constitute the entire contract among the parties relating to the subject matter hereof and supersede any and all previous agreements and understandings, oral or written, relating to the subject matter hereof. Except as provided in Section 4.01, this Agreement shall become effective when it shall have been executed by the Administrative Agent and when the Administrative Agent shall have received counterparts hereof which, when taken together, bear the signatures of each of the other parties hereto, and thereafter shall be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns.

(b) Delivery of an executed counterpart of a signature page of (x) this Agreement, (y) any other Loan Document and/or (z) any document, amendment, approval, consent, information, notice (including, for the avoidance of doubt, any notice delivered pursuant to Section 9.01), certificate, request, statement, disclosure or authorization related to this Agreement, any other Loan Document and/or the transactions contemplated hereby and/or thereby (each an "Ancillary Document") that is an Electronic Signature transmitted by telecopy, emailed pdf. or any other electronic means that reproduces an image of an actual executed signature page shall be effective as delivery of a manually executed counterpart of this Agreement, such other Loan Document or such Ancillary Document, as applicable. The words "execution," "signed," "signature," "delivery," and words of like import in or relating to this Agreement, any other Loan Document and/or any Ancillary Document shall be deemed to include Electronic Signatures, deliveries or the keeping of records in any electronic form (including deliveries by telecopy, emailed pdf. or any other electronic means that reproduces an image of an actual executed signature page), each of which shall be of the same legal effect, validity or enforceability as a manually executed signature, physical delivery thereof or the use of a paper-based recordkeeping system, as the case may be; provided that nothing herein shall require the Administrative Agent to accept Electronic Signatures in any form or format without its prior written consent and pursuant to procedures approved by it; provided, further, without limiting the foregoing, (i) to the extent the Administrative Agent has agreed to accept any Electronic Signature, the Administrative Agent and each of the Lenders shall be entitled to rely on such Electronic Signature purportedly given by or on behalf of the Borrower or any other Loan Party without further verification thereof and without any obligation to review the appearance or form of any such Electronic signature and (ii) upon the request of the Administrative Agent or any Lender, any Electronic Signature shall be promptly followed by a manually executed counterpart. Without limiting the generality of the foregoing, the Borrower and each Loan Party hereby (A) agrees that, for all purposes, including without limitation, in connection with any workout, restructuring, enforcement of remedies, bankruptcy proceedings or litigation among the Administrative Agent, the Lenders, the Borrower and the Loan Parties, Electronic Signatures transmitted by telecopy, emailed pdf. or any other electronic means that reproduces an image of an actual executed signature page and/or any electronic images of this Agreement, any other Loan Document and/or any Ancillary Document shall have the same legal effect, validity and enforceability as any paper original, (B) the Administrative Agent and each of the Lenders may, at its option, create one or more copies of this Agreement, any other Loan Document and/or any Ancillary Document in the form of an imaged electronic record in any format, which shall be deemed created in the ordinary course of such Person's business, and destroy the original paper document (and all such electronic records shall be considered an original for all purposes and shall have the same legal effect, validity and enforceability as a paper record), (C) waives any argument, defense or right to contest the legal effect, validity or enforceability of this Agreement, any other Loan Document and/or any Ancillary Document based solely on the lack of paper original copies of this Agreement, such other Loan Document and/or such Ancillary Document, respectively, including with respect to any signature pages thereto and (D) waives any claim against any Lender-Related Person for any Liabilities arising solely from the Administrative Agent's and/or any Lender's reliance on or use of Electronic Signatures and/or transmissions by telecopy, emailed pdf. or any other electronic means that reproduces an image of an actual executed signature page, including any Liabilities arising as a result of the failure of the Borrower and/or any Loan Party to use any available security measures in connection with the execution, delivery or transmission of any Electronic Signature.

SECTION 9.07. Severability. Any provision of any Loan Document held to be invalid, illegal or unenforceable in any jurisdiction shall, as to such jurisdiction, be ineffective to the extent of such invalidity, illegality or unenforceability without affecting the validity, legality and enforceability of the remaining provisions thereof; and the invalidity of a particular provision in a particular jurisdiction shall not invalidate such provision in any other jurisdiction.

SECTION 9.08. Right of Setoff. If an Event of Default shall have occurred and be continuing, each Lender and each of its Affiliates is hereby authorized at any time and from time to time, to the fullest extent permitted by law, to set off and apply any and all deposits (general or special, time or demand, provisional or final and in whatever currency denominated) at any time held and other obligations at any time owing by such Lender or Affiliate to or for the credit or the account of the Borrower or any Subsidiary Guarantor against any of and all of the Obligations held by such Lender, irrespective of whether or not such Lender shall have made any demand under the Loan Documents and although such obligations may be unmatured; provided that in the event that any Defaulting Lender shall exercise any such right of setoff, (x) all amounts so setoff shall be paid over immediately to the Administrative Agent for further application in accordance with the provisions of Section 2.22 and, pending such payment, shall be segregated by such Defaulting Lender from its other funds and deemed held in trust for the benefit of the Administrative Agent, the Issuing Bank, and the Lenders, and (y) the Defaulting Lender shall provide promptly to the Administrative Agent a statement describing in reasonable detail the Obligations owing to such Defaulting Lender as to which it exercised such right of setoff. The rights of each Lender under this Section are in addition to other rights and remedies (including other rights of setoff) which such Lender may have.

SECTION 9.09. Governing Law; Jurisdiction; Consent to Service of Process. (a) This Agreement and the other Loan Documents shall be construed in accordance with and governed by the law of the State of New York.

(b) Each of the Lenders and the Administrative Agent hereby irrevocably and unconditionally agrees that, notwithstanding the governing law provisions of any applicable Loan Document, any claims brought against the Administrative Agent by any Lender relating to this Agreement, any other Loan Document or the consummation or administration of the transactions contemplated hereby or thereby shall be construed in accordance with and governed by the law of the State of New York.

(c) The Borrower hereby irrevocably and unconditionally submits, for itself and its property, to the exclusive jurisdiction of the United States District Court for the Southern District of New York sitting in the Borough of Manhattan (or if such court lacks subject matter jurisdiction, the Supreme Court of the State of New York sitting in the Borough of Manhattan), and any appellate court from any thereof, in any action or proceeding arising out of or relating to any Loan Document, or for recognition or enforcement of any judgment, and each of the parties hereto hereby irrevocably and unconditionally agrees that all claims in respect of any such action or proceeding may (and any such claims, cross-claims or third party claims brought against the Administrative Agent or any of its Related Parties may only) be heard and determined in such federal (to the extent permitted by law) or New York State court. Each of the parties hereto agrees that a final judgment in any such action or proceeding shall be conclusive and may be enforced in other jurisdictions by suit on the judgment or in any other manner provided by law. Nothing in this Agreement or any other Loan Document shall affect any right that the Administrative Agent, the Issuing Bank or any Lender may otherwise have to bring any action or proceeding relating to this Agreement or any other Loan Document against any Loan Party or its properties in the courts of any jurisdiction.

(d) The Borrower hereby irrevocably and unconditionally waives, to the fullest extent it may legally and effectively do so, any objection which it may now or hereafter have to the laying of venue of any suit, action or proceeding arising out of or relating to this Agreement or any other Loan Document in any court referred to in paragraph (b) of this Section. Each of the parties hereto hereby irrevocably waives, to the fullest extent permitted by law, the defense of an inconvenient forum to the maintenance of such action or proceeding in any such court.

(e) Each party to this Agreement irrevocably consents to service of process in the manner provided for notices in Section 9.01. Nothing in this Agreement or any other Loan Document will affect the right of any party to this Agreement to serve process in any other manner permitted by law.

SECTION 9.10. WAIVER OF JURY TRIAL. EACH PARTY HERETO HEREBY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY RIGHT IT MAY HAVE TO A TRIAL BY JURY IN ANY LEGAL PROCEEDING DIRECTLY OR INDIRECTLY ARISING OUT OF OR RELATING TO THIS AGREEMENT, ANY OTHER LOAN DOCUMENT OR THE TRANSACTIONS CONTEMPLATED HEREBY OR THEREBY (WHETHER BASED ON CONTRACT, TORT OR ANY OTHER THEORY). EACH PARTY HERETO (A) CERTIFIES THAT NO REPRESENTATIVE, AGENT OR ATTORNEY OF ANY OTHER PARTY HAS REPRESENTED, EXPRESSLY OR OTHERWISE, THAT SUCH OTHER PARTY WOULD NOT, IN THE EVENT OF LITIGATION, SEEK TO ENFORCE THE FOREGOING WAIVER AND (B)

ACKNOWLEDGES THAT IT AND THE OTHER PARTIES HERETO HAVE BEEN INDUCED TO ENTER INTO THIS AGREEMENT BY, AMONG OTHER THINGS, THE MUTUAL WAIVERS AND CERTIFICATIONS IN THIS SECTION.

SECTION 9.11. Headings. Article and Section headings and the Table of Contents used herein are for convenience of reference only, are not part of this Agreement and shall not affect the construction of, or be taken into consideration in interpreting, this Agreement.

SECTION 9.12. Confidentiality. Each of the Administrative Agent, the Issuing Bank and the Lenders agrees to maintain the confidentiality of the Information (as defined below), except that Information may be disclosed (a) to its and its Affiliates' directors, officers, partners, members, employees and agents, including accountants, legal counsel, independent auditors and other advisors (it being understood that the Persons to whom such disclosure is made will be informed of the confidential nature of such Information and instructed to keep such Information confidential), (b) to the extent requested by any Governmental Authority (including any self-regulatory authority, such as the National Association of Insurance Commissioners), (c) to the extent required by applicable laws or regulations or by any subpoena or similar legal process, (d) to any other party to this Agreement, (e) in connection with the exercise of any remedies under this Agreement or any other Loan Document or any suit, action or proceeding relating to this Agreement or any other Loan Document or the enforcement of rights hereunder or thereunder, (f) subject to an agreement containing provisions substantially the same as those of this Section, to (i) any assignee of or Participant in, or any prospective assignee of or Participant in, any of its rights or obligations under this Agreement, (ii) any actual or prospective counterparty (or its advisors) to any swap or derivative transaction relating to the Borrower and its obligations or (iii) any credit insurance provider relating to the Borrower and its obligations, (g) with the consent of the Borrower or (h) to the extent such Information (i) becomes publicly available other than as a result of a breach of this Section, (ii) becomes available to the Administrative Agent, the Issuing Bank or any Lender on a non-confidential basis from a source other than the Borrower or (iii) was already lawfully in the Lender's possession on a non-confidential basis or is independently developed by the Lender. For the purposes of this Section, "Information" means all information received from the Borrower relating to the Borrower or its business, other than any such information that is available to the Administrative Agent, the Issuing Bank or any Lender on a non-confidential basis prior to disclosure by the Borrower. Any Person required to maintain the confidentiality of Information as provided in this Section shall be considered to have complied with its obligation to do so if such Person has exercised the same degree of care to maintain the confidentiality of such Information as such Person would accord to its own confidential information. In addition, the Administrative Agent, each Arranger, the Issuing Bank and each Lender may disclose the existence of this Agreement and the information about this Agreement to market data collectors, similar services providers to the lending industry, and service providers to the Administrative Agent, each Arranger, the Issuing Bank and the Lenders in connection with the administration and management of this Agreement and the other Loan Documents.

EACH LENDER ACKNOWLEDGES THAT INFORMATION AS DEFINED IN THE IMMEDIATELY PRECEDING PARAGRAPH FURNISHED TO IT PURSUANT TO THIS AGREEMENT MAY INCLUDE MATERIAL NON-PUBLIC INFORMATION CONCERNING THE BORROWER AND ITS RELATED PARTIES OR THEIR RESPECTIVE SECURITIES, AND CONFIRMS THAT IT HAS DEVELOPED COMPLIANCE PROCEDURES REGARDING THE USE OF MATERIAL NON-PUBLIC INFORMATION AND THAT IT WILL HANDLE SUCH MATERIAL NON-PUBLIC INFORMATION IN ACCORDANCE WITH THOSE PROCEDURES AND APPLICABLE LAW, INCLUDING FEDERAL AND STATE SECURITIES LAWS.

ALL INFORMATION, INCLUDING REQUESTS FOR WAIVERS AND AMENDMENTS, FURNISHED BY THE BORROWER OR THE ADMINISTRATIVE AGENT PURSUANT TO, OR IN THE COURSE OF ADMINISTERING, THIS AGREEMENT WILL BE SYNDICATE-LEVEL INFORMATION, WHICH MAY CONTAIN MATERIAL NON-PUBLIC INFORMATION ABOUT THE BORROWER, THE OTHER LOAN PARTIES AND THEIR RELATED PARTIES OR THEIR RESPECTIVE SECURITIES. ACCORDINGLY, EACH LENDER REPRESENTS TO THE BORROWER AND THE ADMINISTRATIVE AGENT THAT IT HAS IDENTIFIED IN ITS ADMINISTRATIVE QUESTIONNAIRE A CREDIT CONTACT WHO MAY RECEIVE INFORMATION THAT MAY CONTAIN MATERIAL NON-PUBLIC

INFORMATION IN ACCORDANCE WITH ITS COMPLIANCE PROCEDURES AND APPLICABLE LAW.

SECTION 9.13. USA PATRIOT Act, Etc.. Each Lender that is subject to the requirements of the Patriot Act and the Beneficial Ownership Regulation hereby notifies each Loan Party that pursuant to the requirements of the Patriot Act and the Beneficial Ownership Regulation, as applicable, it is or may be required to obtain, verify and record information that identifies such Loan Party, which information includes the name and address of such Loan Party and other information that will allow such Lender to identify such Loan Party in accordance with the Patriot Act and includes such ownership information as required under the Beneficial Ownership Regulation, as the case may be.

SECTION 9.14. Releases of Subsidiary Guarantors.

(a) A Subsidiary Guarantor shall automatically be released from its obligations under the Subsidiary Guaranty upon the consummation of any transaction permitted by this Agreement as a result of which such Subsidiary Guarantor ceases to be a Subsidiary; provided that, if so required by this Agreement, the Required Lenders shall have consented to such transaction and the terms of such consent shall not have provided otherwise. In connection with any termination or release pursuant to this Section, the Administrative Agent shall (and is hereby irrevocably authorized by each Lender to) execute and deliver to any Loan Party, at such Loan Party's expense, all documents that such Loan Party shall reasonably request to evidence such termination or release. Any execution and delivery of documents pursuant to this Section shall be without recourse to or warranty by the Administrative Agent.

(b) Further, the Administrative Agent may (and is hereby irrevocably authorized by each Lender to), upon the request of the Borrower, release any Subsidiary Guarantor from its obligations under the Subsidiary Guaranty if such Subsidiary Guarantor is no longer a Material Domestic Subsidiary.

(c) At such time as the principal and interest on the Loans, all LC Disbursements, the fees, expenses and other amounts payable under the Loan Documents and the other Obligations (other than obligations under any Swap Agreement or any Banking Services Agreement, and other Obligations expressly stated to survive such payment and termination) shall have been paid in full in cash, the Commitments shall have been terminated and no Letters of Credit shall be outstanding, the Subsidiary Guaranty and all obligations (other than those expressly stated to survive such termination) of each Subsidiary Guarantor thereunder shall automatically terminate, all without delivery of any instrument or performance of any act by any Person.

SECTION 9.15. Interest Rate Limitation. Notwithstanding anything herein to the contrary, if at any time the interest rate applicable to any Loan, together with all fees, charges and other amounts which are treated as interest on such Loan under applicable law (collectively the "Charges"), shall exceed the maximum lawful rate (the "Maximum Rate") which may be contracted for, charged, taken, received or reserved by the Lender holding such Loan in accordance with applicable law, the rate of interest payable in respect of such Loan hereunder, together with all Charges payable in respect thereof, shall be limited to the Maximum Rate and, to the extent lawful, the interest and Charges that would have been payable in respect of such Loan but were not payable as a result of the operation of this Section shall be cumulated and the interest and Charges payable to such Lender in respect of other Loans or periods shall be increased (but not above the Maximum Rate therefor) until such cumulated amount, together with interest thereon at the greater of the Overnight Bank Funding Rate and a rate determined by the Administrative Agent in accordance with banking industry rules on interbank compensation (including without limitation the Overnight Foreign Currency Rate in the case of Loans denominated in a Foreign Currency) to the date of repayment, shall have been received by such Lender.

SECTION 9.16. No Advisory or Fiduciary Responsibility. In connection with all aspects of each transaction contemplated hereby (including in connection with any amendment, waiver or other modification hereof or of any other Loan Document), the Borrower acknowledges and agrees that: (i) (A) the arranging and other services regarding this Agreement provided by the Arrangers, the Lenders, the Syndication Agents and the Documentation Agents are arm's-length commercial transactions between the Borrower and its Affiliates, on the one hand, and the Arrangers, the Lenders, the Syndication Agents, the Documentation Agents and their respective Affiliates, on the other hand, (B) the Borrower has consulted its own legal, accounting, regulatory and tax advisors

to the extent it has deemed appropriate, and (C) the Borrower is capable of evaluating, and understands and accepts, the terms, risks and conditions of the transactions contemplated hereby and by the other Loan Documents; (ii) (A) each of the Arrangers, the Lenders, the Syndication Agents, the Documentation Agents and their respective Affiliates is and has been acting solely as a principal and, except as expressly agreed in writing by the relevant parties, has not been, is not, and will not be acting as an advisor, agent or fiduciary for the Borrower or any of its Affiliates, or any other Person and (B) no Arranger, Lender, Syndication Agent, Documentation Agent or any of their respective Affiliates has any obligation to the Borrower or any of its Affiliates with respect to the transactions contemplated hereby except, in the case of a Lender, those obligations expressly set forth herein and in the other Loan Documents; and (iii) each of the Arrangers, the Lenders, the Syndication Agents, the Documentation Agents and their respective Affiliates may be engaged in a broad range of transactions that involve interests that differ from those of the Borrower and its Affiliates, and no Arranger, Lender, Syndication Agent, Documentation Agent or any of their respective Affiliates has any obligation to disclose any of such interests to the Borrower or its Affiliates. To the fullest extent permitted by law, the Borrower hereby waives and releases any claims that it may have against each of the Arrangers, the Lenders, the Syndication Agents, the Documentation Agents and their respective Affiliates with respect to any breach or alleged breach of agency or fiduciary duty in connection with any aspect of any transaction contemplated hereby.

SECTION 9.17. Acknowledgement and Consent to Bail-In of Affected Financial Institutions. Notwithstanding anything to the contrary in any Loan Document or in any other agreement, arrangement or understanding among any such parties, each party hereto acknowledges that any liability of any Affected Financial Institution arising under any Loan Document may be subject to the Write-Down and Conversion Powers of the applicable Resolution Authority and agrees and consents to, and acknowledges and agrees to be bound by:

(a) the application of any Write-Down and Conversion Powers by ~~an~~ the applicable Resolution Authority to any such liabilities arising hereunder which may be payable to it by any party hereto that is an Affected Financial Institution; and

(b) the effects of any Bail-In Action on any such liability, including, if applicable:

(i) a reduction in full or in part or cancellation of any such liability;

(ii) a conversion of all, or a portion of, such liability into shares or other instruments of ownership in such Affected Financial Institution, its parent entity, or a bridge institution that may be issued to it or otherwise conferred on it, and that such shares or other instruments of ownership will be accepted by it in lieu of any rights with respect to any such liability under this Agreement or any other Loan Document; or

(iii) the variation of the terms of such liability in connection with the exercise of the Write-Down and Conversion Powers of the applicable Resolution Authority.

SECTION 9.18. Acknowledgement Regarding Any Supported QFCs. To the extent that the Loan Documents provide support, through a guarantee or otherwise, for Swap Agreements or any other agreement or instrument that is a QFC (such support "QFC Credit Support" and each such QFC a "Supported QFC"), the parties acknowledge and agree as follows with respect to the resolution power of the Federal Deposit Insurance Corporation under the Federal Deposit Insurance Act and Title II of the Dodd-Frank Wall Street Reform and Consumer Protection Act (together with the regulations promulgated thereunder, the "U.S. Special Resolution Regimes") in respect of such Supported QFC and QFC Credit Support (with the provisions below applicable notwithstanding that the Loan Documents and any Supported QFC may in fact be stated to be governed by the laws of the State of New York and/or of the United States or any other state of the United States):

In the event a Covered Entity that is party to a Supported QFC (each, a "Covered Party") becomes subject to a proceeding under a U.S. Special Resolution Regime, the transfer of such Supported QFC and the benefit of such QFC Credit Support (and any interest and obligation in or under such Supported QFC and such QFC Credit Support, and any rights in property securing such Supported QFC or such QFC Credit Support) from such Covered Party will be effective to the same extent as the transfer would be effective under the U.S. Special Resolution Regime if the

Supported QFC and such QFC Credit Support (and any such interest, obligation and rights in property) were governed by the laws of the United States or a state of the United States. In the event a Covered Party or a BHC Act Affiliate of a Covered Party becomes subject to a proceeding under a U.S. Special Resolution Regime, Default Rights under the Loan Documents that might otherwise apply to such Supported QFC or any QFC Credit Support that may be exercised against such Covered Party are permitted to be exercised to no greater extent than such Default Rights could be exercised under the U.S. Special Resolution Regime if the Supported QFC and the Loan Documents were governed by the laws of the United States or a state of the United States. Without limitation of the foregoing, it is understood and agreed that rights and remedies of the parties with respect to a Defaulting Lender shall in no event affect the rights of any Covered Party with respect to a Supported QFC or any QFC Credit Support.

ARTICLE X

Borrower Guarantee

In order to induce the Lenders to extend credit to the Borrower hereunder and for other good and valuable consideration (the receipt and sufficiency of which are hereby acknowledged), the Borrower hereby absolutely and irrevocably and unconditionally guarantees to the Administrative Agent (for the benefit of the Lenders and the other holders of Specified Ancillary Obligations), as a primary obligor and not merely as a surety, the payment when and as due of the Specified Ancillary Obligations of the Subsidiaries. The Borrower further agrees that the due and punctual payment of such Specified Ancillary Obligations may be extended or renewed, in whole or in part, without notice to or further assent from it, and that it will remain bound upon its guarantee hereunder notwithstanding any such extension or renewal of any such Specified Ancillary Obligation.

The Borrower represents to the Lenders and the Administrative Agent that as of the date hereof, and on each date on which a Transaction (as defined in any ISDA Agreement or similar agreement entered into between the Lenders or any of their Affiliates and any Subsidiary) is entered into, it is an ECP, and covenants that it will continue to maintain such status until all of its obligations hereunder have been satisfied.

The Borrower waives presentment to, demand of payment from and protest to any Subsidiary of any of the Specified Ancillary Obligations, and also waives notice of acceptance of its obligations and notice of protest for nonpayment. The obligations of the Borrower hereunder shall not be affected by (a) the failure of any applicable Lender (or any of its Affiliates) to assert any claim or demand or to enforce any right or remedy against any Subsidiary under the provisions of any Banking Services Agreement, any Swap Agreement or otherwise; (b) any extension or renewal of any of the Specified Ancillary Obligations; (c) any rescission, waiver, amendment or modification of, or release from, any of the terms or provisions of this Agreement, any other Loan Document, any Banking Services Agreement, any Swap Agreement or other agreement; (d) any default, failure or delay, willful or otherwise, in the performance of any of the Specified Ancillary Obligations; (e) the failure of any applicable Lender (or any of its Affiliates) to take any steps to perfect and maintain any security interest in, or to preserve any rights to, any security or collateral for the Specified Ancillary Obligations, if any; (f) any change in the corporate, partnership or other existence, structure or ownership of any Subsidiary or any other guarantor of any of the Specified Ancillary Obligations; (g) the enforceability or validity of the Specified Ancillary Obligations or any part thereof or the genuineness, enforceability or validity of any agreement relating thereto or with respect to any collateral securing the Specified Ancillary Obligations or any part thereof, or any other invalidity or unenforceability relating to or against any Subsidiary or any other guarantor of any of the Specified Ancillary Obligations, for any reason related to this Agreement, any other Loan Document, any Banking Services Agreement, any Swap Agreement, or any provision of applicable law, decree, order or regulation of any jurisdiction purporting to prohibit the payment by such Subsidiary or any other guarantor of the Specified Ancillary Obligations, of any of the Specified Ancillary Obligations or otherwise affecting any term of any of the Specified Ancillary Obligations; or (h) any other act, omission or delay to do any other act which may or might in any manner or to any extent vary the risk of the Borrower or otherwise operate as a discharge of a guarantor as a matter of law or equity or which would impair or eliminate any right of the Borrower to subrogation.

The Borrower further agrees that its agreement hereunder constitutes a guarantee of payment when due (whether or not any bankruptcy or similar proceeding shall have stayed the accrual or collection of any of the Specified Ancillary Obligations or operated as a discharge thereof) and not merely of collection, and waives any right to require that any resort be had by any applicable Lender (or any of its Affiliates) to any balance of any

deposit account or credit on the books of the Administrative Agent, the Issuing Bank or any Lender in favor of any Subsidiary or any other Person.

The obligations of the Borrower hereunder shall not be subject to any reduction, limitation, impairment or termination for any reason, and shall not be subject to any defense or set-off, counterclaim, recoupment or termination whatsoever (other than payment in full of the Specified Ancillary Obligations), by reason of the invalidity, illegality or unenforceability of any of the Specified Ancillary Obligations, any impossibility in the performance of any of the Specified Ancillary Obligations or otherwise.

The Borrower further agrees that its obligations hereunder shall constitute a continuing and irrevocable guarantee of all Specified Ancillary Obligations now or hereafter existing and shall continue to be effective or be reinstated, as the case may be, if at any time payment, or any part thereof, of any Specified Ancillary Obligation (including a payment effected through exercise of a right of setoff) is rescinded, or is or must otherwise be restored or returned by any applicable Lender (or any of its Affiliates) upon the insolvency, bankruptcy or reorganization of any Subsidiary or otherwise (including pursuant to any settlement entered into by a holder of Specified Ancillary Obligations in its discretion).

In furtherance of the foregoing and not in limitation of any other right which any applicable Lender (or any of its Affiliates) may have at law or in equity against the Borrower by virtue hereof, upon the failure of any Subsidiary to pay any Specified Ancillary Obligation when and as the same shall become due, whether at maturity, by acceleration, after notice of prepayment or otherwise, the Borrower hereby promises to and will, upon receipt of written demand by any applicable Lender (or any of its Affiliates), forthwith pay, or cause to be paid, to such applicable Lender (or any of its Affiliates) in cash an amount equal to the unpaid principal amount of such Specified Ancillary Obligations then due, together with accrued and unpaid interest thereon. The Borrower further agrees that if payment in respect of any Specified Ancillary Obligation shall be due in a currency other than Dollars and/or at a place of payment other than New York, Chicago or any other Term Benchmark Payment Office and if, by reason of any Change in Law, disruption of currency or foreign exchange markets, war or civil disturbance or other event, payment of such Specified Ancillary Obligation in such currency or at such place of payment shall be impossible or, in the reasonable judgment of any applicable Lender (or any of its Affiliates), disadvantageous to such applicable Lender (or any of its Affiliates) in any material respect, then, at the election of such applicable Lender, the Borrower shall make payment of such Specified Ancillary Obligation in Dollars (based upon the applicable Dollar Equivalent in effect on the date of payment) and/or in New York, Chicago or such other Term Benchmark Payment Office as is designated by such applicable Lender (or its Affiliate) and, as a separate and independent obligation, shall indemnify such applicable Lender (and any of its Affiliates) against any losses or reasonable out-of-pocket expenses that it shall sustain as a result of such alternative payment.

Upon payment by the Borrower of any sums as provided above, all rights of the Borrower against any Subsidiary arising as a result thereof by way of right of subrogation or otherwise shall in all respects be subordinated and junior in right of payment to the prior indefeasible payment in full in cash of all the Specified Ancillary Obligations owed by such Subsidiary to the applicable Lender (or its applicable Affiliates).

Nothing shall discharge or satisfy the liability of the Borrower hereunder except the full performance and payment in cash of the Obligations (other than contingent indemnity obligations not yet due and payable).

[Signature Pages Follow]

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be duly executed by their respective authorized officers as of the day and year first above written.

LAM RESEARCH CORPORATION,
as the Borrower

By _____

Name:

Title:

JPMORGAN CHASE BANK, N.A.,
individually as a Lender, as the Swingline
Lender and as Administrative Agent

By: _____

Name:

Title:

[_____], as a Lender

By: _____

Name:

Title:

SCHEDULE 2.01

Commitments

LENDER	COMMITMENT
JPMORGAN CHASE BANK, N.A.	$155,000,000
BNP PARIBAS	$155,000,000
BANK OF AMERICA, N.A.	$155,000,000
GOLDMAN SACHS BANK USA	$155,000,000
CITIBANK, N.A.	$155,000,000
BARCLAYS BANK PLC	$155,000,000
MIZUHO BANK LTD.	$93,750,000
MUFG BANK, LTD.	$93,750,000
DEUTSCHE BANK AG NEW YORK BRANCH	$93,750,000
TRUIST BANK	$93,750,000
HSBC BANK USA, NATIONAL ASSOCIATION	$65,000,000
PNC BANK, NATIONAL ASSOCIATION	$65,000,000
DBS BANK	$65,000,000
AGGREGATE COMMITMENT	**$1,500,000,000**

Exhibit 31.1

RULE 13a-14(a)/15d-14(a) CERTIFICATION (PRINCIPAL EXECUTIVE OFFICER)

I, Timothy M. Archer, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Lam Research Corporation;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

January 30, 2023

/s/ Timothy M. Archer

Timothy M. Archer
President and Chief Executive Officer

Exhibit 31.2

RULE 13a-14(a)/15d-14(a) CERTIFICATION (PRINCIPAL FINANCIAL OFFICER)

I, Douglas R. Bettinger, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Lam Research Corporation;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

January 30, 2023

/s/ Douglas R. Bettinger

Douglas R. Bettinger
Executive Vice President, Chief Financial Officer
(Principal Financial Officer and Principal Accounting Officer)

Exhibit 32.1

SECTION 1350 CERTIFICATION (PRINCIPAL EXECUTIVE OFFICER)

In connection with the Quarterly Report of Lam Research Corporation (the "Company") on Form 10-Q for the fiscal period ending December 25, 2022 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Timothy M. Archer, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, to my knowledge, that:

(1) The Report fully complies with the requirements of section 13(a) or 15(d), as applicable, of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

January 30, 2023

/s/ Timothy M. Archer
Timothy M. Archer
President and Chief Executive Officer

The foregoing certification is being furnished solely pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, and will not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act") or otherwise subject to the liability of that section. Such certification will not be deemed incorporated by reference into any filing under the Securities Act of 1933, as amended, or the Exchange Act, except to the extent that the Company specifically incorporates it by reference.

Exhibit 32.2

SECTION 1350 CERTIFICATION (PRINCIPAL FINANCIAL OFFICER)

In connection with the Quarterly Report of Lam Research Corporation (the "Company") on Form 10-Q for the fiscal period ending December 25, 2022 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Douglas R. Bettinger, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, to my knowledge, that:

(1) The Report fully complies with the requirements of section 13(a) or 15(d), as applicable, of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

January 30, 2023

/s/ Douglas R. Bettinger
Douglas R. Bettinger
Executive Vice President, Chief Financial Officer
(Principal Financial Officer and Principal Accounting Officer)

The foregoing certification is being furnished solely pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, and will not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act") or otherwise subject to the liability of that section. Such certification will not be deemed incorporated by reference into any filing under the Securities Act of 1933, as amended, or the Exchange Act, except to the extent that the Company specifically incorporates it by reference.