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 July 3, 2020
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: 001-35451

MACOM Technology Solutions Holdings, Inc.
(Exact name of registrant as specified in its charter)

Delaware	**27-0306875**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**

100 Chelmsford Street
Lowell, MA 01851
(Address of principal executive offices and zip code)
(978) 656-2500
(Registrant's telephone number, including area code)

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

Title of each class	Trading Symbol(s)	Name of exchange on which registered
Common Stock, par value $0.001 per share	MTSI	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 July 27, 2020, there were 66,885,282 shares of the registrant's common stock outstanding.

MACOM TECHNOLOGY SOLUTIONS HOLDINGS, INC.
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PART I—FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

MACOM TECHNOLOGY SOLUTIONS HOLDINGS, INC.
CONDENSED CONSOLIDATED BALANCE SHEETS
(Unaudited, in thousands)

	July 3, 2020	September 27, 2019
ASSETS		
Current assets:		
Cash and cash equivalents	$ 131,870	$ 75,519
Short-term investments	133,248	101,226
Accounts receivable (less allowances of $3,425 and $5,047, respectively)	60,504	69,790
Inventories	95,576	107,880
Income tax receivable	18,904	16,661
Prepaid and other current assets	10,166	27,506
Total current assets	450,268	398,582
Property and equipment, net	122,000	132,647
Goodwill	314,779	314,727
Intangible assets, net	143,317	181,228
Deferred income taxes	41,648	43,812
Other investments	9,975	23,613
Other long-term assets	39,140	10,965
TOTAL ASSETS	$ 1,121,127	$ 1,105,574
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Current portion of finance lease obligations and other	$ 1,506	$ 1,084
Current portion of long-term debt	6,885	6,885
Accounts payable	25,599	24,822
Accrued liabilities	53,539	39,908
Deferred revenue	7,488	2,137
Total current liabilities	95,017	74,836
Finance lease obligations and other, less current portion	29,351	29,506
Long-term debt, less current portion	652,947	655,272
Warrant liability	27,315	12,364
Deferred income taxes	2,085	632
Other long-term liabilities	41,108	19,068
Total liabilities	847,823	791,678
Stockholders’ equity:		
Common stock	67	66
Treasury stock, at cost	(330)	(330)
Accumulated other comprehensive income	4,281	4,358
Additional paid-in capital	1,126,505	1,101,576
Accumulated deficit	(857,219)	(791,774)
Total stockholders’ equity	273,304	313,896
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	$ 1,121,127	$ 1,105,574

See notes to condensed consolidated financial statements.

MACOM TECHNOLOGY SOLUTIONS HOLDINGS, INC.
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(Unaudited, in thousands, except per share data)

	Three Months Ended		Nine Months Ended	
	July 3, 2020	June 28, 2019	July 3, 2020	June 28, 2019
Revenue	$ 137,267	$ 108,306	$ 382,788	$ 387,460
Cost of revenue	66,391	74,478	190,338	219,678
Gross profit	70,876	33,828	192,450	167,782
Operating expenses:				
Research and development	34,948	42,708	105,936	128,593
Selling, general and administrative	29,982	41,920	94,317	126,437
Impairment charges	—	264,086	—	264,086
Restructuring (benefit) charges	(554)	8,887	1,494	17,047
Total operating expenses	64,376	357,601	201,747	536,163
Income (loss) from operations	6,500	(323,773)	(9,297)	(368,381)
Other expense:				
Warrant liability (expense) gain	(19,511)	1,927	(14,951)	5,788
Interest expense, net	(5,849)	(8,967)	(22,142)	(27,142)
Other (expense) income, net	(4,372)	4,777	(12,464)	(4,233)
Total other expense, net	(29,732)	(2,263)	(49,557)	(25,587)
Loss before income taxes	(23,232)	(326,036)	(58,854)	(393,968)
Income tax expense (benefit)	1,750	(1,322)	4,716	346
Net loss	$ (24,982)	$ (324,714)	$ (63,570)	$ (394,314)
Net loss per share:				
Loss per share - Basic	$ (0.37)	$ (4.93)	$ (0.96)	$ (6.01)
Loss per share - Diluted	$ (0.37)	$ (4.95)	$ (0.96)	$ (6.09)
Weighted average shares used:				
Basic	66,796	65,858	66,512	65,555
Diluted	66,796	65,945	66,512	65,722

See notes to condensed consolidated financial statements.

MACOM TECHNOLOGY SOLUTIONS HOLDINGS, INC.
CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS
(Unaudited, in thousands)

	Three Months Ended		Nine Months Ended	
	July 3, 2020	June 28, 2019	July 3, 2020	June 28, 2019
Net loss	$ (24,982)	$ (324,714)	$ (63,570)	$ (394,314)
Unrealized gain on short term investments, net of tax	1,697	105	400	455
Foreign currency translation gain (loss), net of tax	458	996	(477)	2,256
Other comprehensive income (loss), net of tax	2,155	1,101	(77)	2,711
Total comprehensive loss	$ (22,827)	$ (323,613)	$ (63,647)	$ (391,603)

See notes to condensed consolidated financial statements.

MACOM TECHNOLOGY SOLUTIONS HOLDINGS, INC.
CONDENSED CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(Unaudited, in thousands)

Three Months Ended

	Common Stock		Treasury Stock		Accumulated Other Comprehensive Income	Additional Paid-in Capital	Accumulated Deficit	Total Stockholders' Equity
	Shares	Amount	Shares	Amount				
Balance at April 3, 2020	66,718	$ 67	(23)	$ (330)	$ 2,126	$ 1,116,105	$ (832,237)	$ 285,731
Stock options exercises	23	—	—	—	—	46	—	46
Vesting of restricted common stock and units	72	—	—	—	—	—	—	—
Issuance of common stock pursuant to employee stock purchase plan	112	—	—	—	—	2,467	—	2,467
Shares repurchased for tax withholdings on equity awards	(22)	—	—	—	—	(608)	—	(608)
Share-based compensation	—	—	—	—	—	8,495	—	8,495
Other comprehensive income, net of tax	—	—	—	—	2,155	—	—	2,155
Net loss	—	—	—	—	—	—	(24,982)	(24,982)
Balance at July 3, 2020	66,903	$ 67	(23)	$ (330)	$ 4,281	$ 1,126,505	$ (857,219)	$ 273,304

Nine Months Ended

	Common Stock		Treasury Stock		Accumulated Other Comprehensive Income	Additional Paid-in Capital	Accumulated Deficit	Total Stockholders' Equity
	Shares	Amount	Shares	Amount				
Balance at September 27, 2019	66,177	$ 66	(23)	$ (330)	$ 4,358	$ 1,101,576	$ (791,774)	$ 313,896
Cumulative effect of ASU 2016-02	—	—	—	—	—	—	(1,875)	(1,875)
Stock options exercises	41	—	—	—	—	168	—	168
Vesting of restricted common stock and units	636	1	—	—	—	—	—	1
Issuance of common stock pursuant to employee stock purchase plan	272	—	—	—	—	4,397	—	4,397
Shares repurchased for tax withholdings on equity awards	(223)	—	—	—	—	(6,557)	—	(6,557)
Share-based compensation	—	—	—	—	—	26,921	—	26,921
Other comprehensive loss, net of tax	—	—	—	—	(77)	—	—	(77)
Net loss	—	—	—	—	—	—	(63,570)	(63,570)
Balance at July 3, 2020	66,903	$ 67	(23)	$ (330)	$ 4,281	$ 1,126,505	$ (857,219)	$ 273,304

See notes to condensed consolidated financial statements.

	Three Months Ended							
	Common Stock		Treasury Stock		Accumulated Other Comprehensive Income	Additional Paid-in Capital	Accumulated Deficit	Total Stockholders' Equity
	Shares	Amount	Shares	Amount				
Balance at March 29, 2019	65,723	$ 66	(23)	$ (330)	$ 3,798	$ 1,091,067	$ (477,576)	$ 617,025
Stock options exercises	11	—	—	—	—	22	—	22
Vesting of restricted common stock and units	87	—	—	—	—	—	—	—
Issuance of common stock pursuant to employee stock purchase plan	265	—	—	—	—	3,193	—	3,193
Shares repurchased for tax withholdings on equity awards	(31)	—	—	—	—	(446)	—	(446)
Share-based compensation	—	—	—	—	—	2,814	—	2,814
Other comprehensive income, net of tax	—	—	—	—	1,101	—	—	1,101
Net loss	—	—	—	—	—	—	(324,714)	(324,714)
Balance at June 28, 2019	66,055	$ 66	(23)	$ (330)	$ 4,899	$ 1,096,650	$ (802,290)	$ 298,995

	Nine Months Ended							
	Common Stock		Treasury Stock		Accumulated Other Comprehensive Income	Additional Paid-in Capital	Accumulated Deficit	Total Stockholders' Equity
	Shares	Amount	Shares	Amount				
Balance at September 28, 2018	65,202	$ 65	(23)	$ (330)	$ 2,188	$ 1,074,728	$ (407,976)	$ 668,675
Stock option exercises	23	—	—	—	—	46	—	46
Vesting of restricted common stock and units	632	1	—	—	—	—	—	1
Issuance of common stock pursuant to employee stock purchase plan	421	—	—	—	—	5,585	—	5,585
Shares repurchased for tax withholdings on equity awards	(223)	—	—	—	—	(3,872)	—	(3,872)
Share-based compensation	—	—	—	—	—	20,163	—	20,163
Other comprehensive income, net of tax	—	—	—	—	2,711	—	—	2,711
Net loss	—	—	—	—	—	—	(394,314)	(394,314)
Balance at June 28, 2019	66,055	$ 66	(23)	$ (330)	$ 4,899	$ 1,096,650	$ (802,290)	$ 298,995

See notes to condensed consolidated financial statements.

MACOM TECHNOLOGY SOLUTIONS HOLDINGS, INC.
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(Unaudited, in thousands)

	Nine Months Ended	
	July 3, 2020	June 28, 2019
CASH FLOWS FROM OPERATING ACTIVITIES:		
Net loss	$ (63,570)	$ (394,314)
Adjustments to reconcile net loss to net cash provided by operating activities:		
Depreciation and intangibles amortization	59,751	84,612
Share-based compensation	26,921	20,163
Warrant liability loss (gain)	14,951	(5,788)
Deferred financing cost amortization	3,046	3,046
Deferred income taxes	3,581	59
Impairment and restructuring related charges	—	272,873
Loss on minority equity investment	13,637	3,937
Other adjustments, net	1,193	395
Change in operating assets and liabilities:		
Accounts receivable	9,286	29,291
Inventories	12,304	12,298
Prepaid expenses and other assets	15,489	1,350
Accounts payable	1,058	(3,888)
Accrued and other liabilities	1,242	3,164
Income taxes	(1,895)	1,079
Net cash provided by operating activities	96,994	28,277
CASH FLOWS FROM INVESTING ACTIVITIES:		
Purchases of property and equipment	(12,658)	(31,905)
Proceeds from sales and maturities of short-term investments	165,798	155,281
Purchases of short-term investments	(196,479)	(156,061)
Proceeds from divested business	11,003	—
Acquisition of businesses, net	—	(375)
Sale of assets	366	—
Net cash used in investing activities	(31,970)	(33,060)
CASH FLOWS FROM FINANCING ACTIVITIES:		
Proceeds from stock option exercises and employee stock purchases	4,565	5,631
Payments on long-term debt	(5,163)	(5,163)
Payments on finance leases and other	(1,307)	(809)
Repurchase of common stock - tax withholdings on equity awards	(6,557)	(3,872)
Payments of contingent consideration and other	—	(579)
Net cash used in financing activities	(8,462)	(4,792)
Foreign currency effect on cash	(211)	164
NET CHANGE IN CASH AND CASH EQUIVALENTS	56,351	(9,411)
CASH AND CASH EQUIVALENTS — Beginning of period	75,519	94,676
CASH AND CASH EQUIVALENTS — End of period	$ 131,870	$ 85,265

See notes to condensed consolidated financial statements.

1. BASIS OF PRESENTATION AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Unaudited Interim Financial Information—The accompanying unaudited, condensed consolidated financial statements have been prepared according to the rules and regulations of the United States (the "U.S.") Securities and Exchange Commission (the "SEC") and, in the opinion of management, reflect all adjustments, which include normal recurring adjustments, necessary for a fair statement of the condensed consolidated balance sheets, condensed consolidated statements of operations, comprehensive loss, stockholders' equity and cash flows of MACOM Technology Solutions Holdings, Inc. ("MACOM", the "Company", "us", "we" or "our") for the periods presented. We prepare our interim financial information using the same accounting principles we use for our annual audited consolidated financial statements. Certain information and note disclosures normally included in the annual audited consolidated financial statements have been condensed or omitted in accordance with prescribed SEC rules. We believe that the disclosures made in our condensed consolidated financial statements and the accompanying notes are adequate to make the information presented not misleading.

The condensed consolidated balance sheet as of September 27, 2019 is as reported in our audited consolidated financial statements as of that date. Our accounting policies are described in the notes to our September 27, 2019 consolidated financial statements, which were included in our Annual Report on Form 10-K for our fiscal year ended September 27, 2019 filed with the SEC on November 26, 2019 (the "2019 Annual Report on Form 10-K"). We recommend that the financial statements included in this Quarterly Report on Form 10-Q be read in conjunction with the consolidated financial statements and notes included in our 2019 Annual Report on Form 10-K.

Principles of Consolidation—The accompanying condensed consolidated financial statements include our accounts and the accounts of our majority-owned subsidiaries. All intercompany balances and transactions have been eliminated in consolidation.

We have a 52- or 53-week fiscal year ending on the Friday closest to the last day of September. Fiscal year 2020 includes 53 weeks and fiscal year 2019 includes 52 weeks. To offset the effect of holidays, for fiscal years in which there are 53 weeks, we include the extra week arising in such fiscal years in the first quarter. Our first fiscal quarter ended January 3, 2020 included 14 weeks.

Use of Estimates—The preparation of condensed consolidated financial statements in conformity with U.S. generally accepted accounting principles ("GAAP") requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities during the reporting periods, the reported amounts of revenue and expenses during the reporting periods, and the disclosure of contingent assets and liabilities at the date of the financial statements. On an ongoing basis, we base estimates and assumptions on historical experience, currently available information and various other factors that management believes to be reasonable under the circumstances. Actual results may differ materially from these estimates and assumptions.

Recent Accounting Pronouncements—Our Recent Accounting Pronouncements are described in the 2019 Annual Report on Form 10-K.

Pronouncements Adopted in Fiscal Year 2020

On the first day of our fiscal year 2020, we adopted Accounting Standards Update ("ASU") 2016-02, *Leases (Topic 842)* ("ASC 842"), which requires lease arrangements be presented on the lessee's balance sheet by recording a right-of-use ("ROU") asset and a lease liability equal to the present value of related future minimum lease payments. We adopted the new lease guidance using the modified retrospective approach and the transition method available in accordance with ASU 2018-11, *Leases (Topic 842): Targeted Improvements*, which provides the option to use the effective date as the date of initial application of the guidance. As a result, the comparative information for prior periods has not been adjusted and continues to be reported in accordance with the accounting standards in effect for those periods under the previously applicable guidance. We elected the "practical expedients package of three" permitted under the transition guidance within ASC 842, which permitted us to carry forward our historical assessments of whether contracts contain leases, lease classification, and initial direct costs, for leases in existence prior to September 28, 2019. We evaluated our identified leases and applied the new lease guidance as discussed in *Note 8 - Leases.*

At the effective date, the adoption of ASC 842 resulted in an increase to our total assets of approximately $37.1 million, an increase to our total liabilities of approximately $39.0 million and a decrease to our retained earnings of approximately $1.9 million primarily due to derecognition of financing obligations and associated assets established under ASC 840, *Leases*.

We have operating leases for certain facilities as well as manufacturing and office equipment. Based on the present value of lease payments for the remaining lease term of our existing leases, we recognized $37.7 million and $43.6 million of both operating ROU assets and operating lease liabilities, respectively, on our condensed consolidated balance sheet upon adoption of ASC 842 on September 28, 2019. The difference between the ROU asset and liability represents deferred rent and lease incentives of approximately $5.9 million, recorded as a reduction to our gross ROU assets.

We have finance leases for our corporate headquarters, including our fabrication facility, and to a lesser extent, various manufacturing equipment. Upon the adoption of ASC 842 on September 28, 2019, we derecognized the previous financed assets, recorded financing obligations for our corporate headquarters, and recorded finance lease assets and financing obligations for various manufacturing equipment. On September 28, 2019 we recognized a finance lease ROU asset and finance lease liability of $35.7 million and $31.8 million, respectively, on our condensed consolidated balance sheet. The difference between the ROU asset and liability represents net prepaid rent for our corporate headquarters, which is recorded as part of the finance lease ROU asset and is being amortized on a straight-line basis over the remaining lease term.

The adoption of the new lease guidance did not have a material impact to the condensed consolidated statement of operations or cash flows, or earnings per share for the three and nine months ended July 3, 2020.

Pronouncements for Adoption in Subsequent Periods

In June 2016, the Financial Accounting Standards Board ("FASB") issued ASU 2016-13, *Financial Instruments - Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments*. This ASU introduces a new accounting model known as Credit Expected Credit Losses ("CECL"), which requires earlier recognition of credit losses. The CECL model utilizes a lifetime expected credit loss measurement objective for the recognition of credit losses for receivables at the time the financial asset is originated or acquired, replacing the current incurred loss methodology that delays recognition of credit losses until a probable loss has been incurred. There are other provisions within the standard affecting how impairments of other financial assets may be recorded and presented, as well as expanded disclosures. We plan to adopt this standard on the first day of our fiscal year 2021, October 3, 2020. We are currently evaluating the impact of this standard, although we do not believe the adoption will have a material impact on our consolidated financial statements.

2. REVENUE

Disaggregation of Revenue

We disaggregate revenue from contracts with customers by markets and geography, as we believe it best depicts how the nature, amount, timing and uncertainty of revenue and cash flows are affected by economic factors.

The following tables present our revenue disaggregated by markets and geography (in thousands):

	Three Months Ended		Nine Months Ended	
	July 3, 2020	**June 28, 2019**	**July 3, 2020**	**June 28, 2019**
Revenue by Market:				
Telecommunications	$ 56,800	$ 43,883	$ 154,049	$ 141,379
Industrial & Defense	48,035	46,809	146,586	154,563
Data Center	32,432	17,614	82,153	91,518
Total	$ 137,267	$ 108,306	$ 382,788	$ 387,460

	Three Months Ended		Nine Months Ended	
	July 3, 2020	**June 28, 2019**	**July 3, 2020**	**June 28, 2019**
Revenue by Geographic Region:				
United States	$ 53,633	$ 52,340	$ 163,964	$ 185,172
China	55,886	27,451	133,659	104,491
Asia Pacific, excluding China (1)	19,688	16,371	58,552	60,384
Other Countries (2)	8,060	12,144	26,613	37,413
Total	$ 137,267	$ 108,306	$ 382,788	$ 387,460

(1) Asia Pacific represents Taiwan, Japan, Singapore, India, Thailand, South Korea, Australia, Malaysia, New Zealand and the Philippines.
(2) No country or region represented greater than 10% of our total revenue as of the dates presented, other than the United States, China and Asia Pacific region as presented above.

Contract Balances

We record contract assets or contract liabilities depending on the timing of revenue recognition, billings and cash collections on a contract-by-contract basis. Our contract liabilities primarily relate to deferred revenue, including advanced consideration received from customers for contracts prior to the transfer of control to the customer, and therefore revenue is subsequently recognized upon delivery of products and services.

The following table presents the changes in contract liabilities during the nine months ended July 3, 2020 (in thousands, except percentage):

	July 3, 2020	September 27, 2019	$ Change	% Change
Contract liabilities	$ 11,003	$ 10,653	$ 350	3 %

As of July 3, 2020 and September 27, 2019, approximately $3.5 million and $8.5 million of our contract liabilities, respectively, were recorded as other long-term liabilities on our balance sheet with the remainder recorded as deferred revenue. The increase in contract liabilities during the nine months ended July 3, 2020, as shown in the table above, was primarily from the deferral of revenue for funds received prior to when certain of our customers obtained control of the product or services.

During the three and nine months ended July 3, 2020, we recognized net sales of $0.2 million and $0.4 million, respectively, that were included in the contract liabilities balance at the beginning of the period.

3. INVESTMENTS

Our short-term investments include corporate bonds and commercial paper and are classified as available-for-sale and are summarized in the tables below (in thousands):

	July 3, 2020			
	Amortized Cost	Gross Unrealized Holding Gains	Gross Unrealized Holding Losses	Aggregate Fair Value
Corporate bonds	$ 30,097	$ 354	$ (179)	$ 30,272
Commercial paper	102,749	247	(20)	102,976
Total short-term investments	$ 132,846	$ 601	$ (199)	$ 133,248

	September 27, 2019			
	Amortized Cost	Gross Unrealized Holding Gains	Gross Unrealized Holding Losses	Aggregate Fair Value
Corporate bonds	$ 29,578	$ 112	$ (93)	$ 29,597
Commercial paper	71,646	1	(18)	71,629
Total short-term investments	$ 101,224	$ 113	$ (111)	$ 101,226

The contractual maturities of available-for-sale investments were as follows (in thousands):

	July 3, 2020	September 27, 2019
Less than 1 year	$ 109,156	$ 75,233
Over 1 year	24,092	25,993
Total short-term investments	$ 133,248	$ 101,226

Available-for-sale investments are reported at fair value and as such, their associated unrealized gains and losses are reported as a separate component of stockholders’ equity within accumulated other comprehensive income.

Other Investments — As of July 3, 2020, we held two non-marketable equity investments classified as other long-term investments, which includes an investment in a Series B preferred stock ownership of a privately held manufacturing corporation with preferred liquidation rights over other equity shares. As the equity securities do not have a readily determinable fair value and do not qualify for the practical expedient under ASC 820, *Fair Value Measurement*, we have elected to account for this investment at cost less any impairment. As of July 3, 2020, the cost of this investment was $5.0 million. We evaluate this investment for impairment at each balance sheet date, and through July 3, 2020, no impairment has been recorded for this investment.

Also included in long-term investments, is a minority investment of less than 20% in the outstanding equity of a private company ("Compute") that was acquired in conjunction with our divestiture of the Compute business during our fiscal year 2018. This investment value is updated quarterly based on our proportionate share of the losses or earnings, as well as any changes in Compute's equity, utilizing the equity method. During the three and nine months ended July 3, 2020, we recorded losses of $4.6 million and $13.6 million, respectively, associated with this investment as other expense in our condensed consolidated statements of operations. During the three and nine months ended June 28, 2019, we recorded income of $5.0 million and losses of $3.9 million, respectively, associated with this investment. As of July 3, 2020 and September 27, 2019, the carrying value of this investment was $5.0 million and $18.6 million, respectively.

4. FAIR VALUE

We group our financial assets and liabilities measured at fair value on a recurring basis in three levels, based on the markets in which the assets and liabilities are traded and the reliability of the assumptions used to determine fair value. These levels are:

Level 1 *- Quoted prices in active markets for identical assets or liabilities.*

Level 2 *- Observable inputs other than Level 1 prices, such as quoted prices for similar assets or liabilities, quoted prices in markets with insufficient volume or infrequent transactions (less active markets), or model-driven valuations in which all significant inputs are observable or can be derived principally from, or corroborated with, observable market data.*

Level 3 *- Fair value is derived from valuation techniques in which one or more significant inputs are unobservable, including assumptions and judgments made by us.*

Assets and Liabilities Measured and Recorded at Fair Value on a Recurring Basis

We measure certain assets and liabilities at fair value on a recurring basis such as our financial instruments and derivatives. There have been no transfers between Level 1, 2 or 3 assets or liabilities during the three and nine months ended July 3, 2020.

Assets and liabilities measured at fair value on a recurring basis consist of the following (in thousands):

	July 3, 2020			
	Fair Value	Active Markets for Identical Assets (Level 1)	Observable Inputs (Level 2)	Unobservable Inputs (Level 3)
Assets				
Money market funds	$ 10,375	$ 10,375	$ —	$ —
Commercial paper	102,976	—	102,976	—
Corporate bonds	30,272	—	30,272	—
Total assets measured at fair value	$ 143,623	$ 10,375	$ 133,248	$ —
Liabilities				
Common stock warrant liability	$ 27,315	$ —	$ —	$ 27,315
Total liabilities measured at fair value	$ 27,315	$ —	$ —	$ 27,315

	September 27, 2019			
	Fair Value	Active Markets for Identical Assets (Level 1)	Observable Inputs (Level 2)	Unobservable Inputs (Level 3)
Assets				
Money market funds	$ 261	$ 261	$ —	$ —
Commercial paper	71,629	—	71,629	—
Corporate bonds	29,597	—	29,597	—
Total assets measured at fair value	$ 101,487	$ 261	$ 101,226	$ —
Liabilities				
Common stock warrant liability	$ 12,364	$ —	$ —	$ 12,364
Total liabilities measured at fair value	$ 12,364	$ —	$ —	$ 12,364

As of July 3, 2020 and September 27, 2019, the fair value of the common stock warrants was estimated using a Black-Scholes option pricing model. The quantitative information utilized in the fair value calculation of our Level 3 liabilities is as follows:

			Inputs	
Liabilities	**Valuation Technique**	**Unobservable Input**	**July 3, 2020**	**September 27, 2019**
Warrant liability	Black-Scholes model	Volatility	79.8%	61.4%
		Discount rate	0.14%	1.71%
		Expected life	0.5 years	1.2 years
		Exercise price	$14.05	$14.05
		Stock price	$35.13	$21.68
		Dividend rate	—%	—%

The changes in liabilities with inputs classified within Level 3 of the fair value hierarchy consist of the following (in thousands):

	September 27, 2019	Net Realized/Unrealized Losses Included in Earnings	Purchases and Issuances	Sales and Settlements	July 3, 2020
Common stock warrant liability	$ 12,364	$ 14,951	$ —	$ —	$ 27,315

	September 28, 2018	Net Realized/Unrealized Losses (Gains) Included in Earnings	Purchases and Issuances	Sales and Settlements	June 28, 2019
Contingent consideration	$ 585	$ 65	$ —	$ (650)	$ —
Common stock warrant liability	$ 13,129	$ (5,788)	$ —	$ —	$ 7,341

5. INVENTORIES

Inventories consist of the following (in thousands):

	July 3, 2020	September 27, 2019
Raw materials	$ 53,936	$ 59,184
Work-in-process	11,427	13,799
Finished goods	30,213	34,897
Total inventory, net	$ 95,576	$ 107,880

6. PROPERTY AND EQUIPMENT

Property and equipment consists of the following (in thousands):

	July 3, 2020	September 27, 2019
Construction in process	$ 14,643	$ 24,848
Machinery and equipment	192,835	175,696
Leasehold improvements	18,715	12,962
Furniture and fixtures	3,199	3,716
Computer equipment and software	18,421	18,116
Capital lease and financed assets	—	46,496
Finance lease assets	36,112	—
Total property and equipment	283,925	281,834
Less accumulated depreciation and amortization	(161,925)	(149,187)
Property and equipment, net	$ 122,000	$ 132,647

Depreciation and amortization expense related to property and equipment for the three and nine months ended July 3, 2020 was $7.1 million and $21.8 million, respectively. Depreciation and amortization expense related to property and equipment for the three and nine months ended June 28, 2019 was $7.3 million and $22.4 million, respectively. Accumulated amortization on finance lease assets as of July 3, 2020 was $2.2 million. Accumulated depreciation on capital leases as of September 27, 2019 was $5.3 million.

7. DEBT

As of July 3, 2020, we are party to a credit agreement dated as of May 8, 2014 with a syndicate of lenders and Goldman Sachs Bank USA ("Goldman Sachs"), as administrative agent (as amended on February 13, 2015, August 31, 2016, March 10, 2017, May 19, 2017, May 2, 2018 and May 9, 2018, the "Credit Agreement").

As of July 3, 2020, the Credit Agreement consisted of term loans with an initial aggregate principal amount of $700.0 million (the "Term Loans") and a revolving credit facility with an aggregate borrowing capacity of $160.0 million (the "Revolving Facility"). The Revolving Facility will mature in November 2021 and the Term Loans will mature in May 2024 and bear interest at: (i) for LIBOR loans for any interest period, a rate per annum equal to the LIBOR rate as determined by the administrative agent, plus an applicable margin of 2.25%; and (ii) for base rate loans, a rate per annum equal to the greater of (a) the prime rate quoted in the print edition of the Wall Street Journal, Money Rates Section, (b) the federal funds rate plus one-half of 1.00% and (c) the LIBOR rate applicable to a one-month interest period plus 1.00% (but, in each case, not less than 1.00%), plus an applicable margin of 1.25%.

All principal amounts outstanding and interest rate information as of July 3, 2020, for the Credit Agreement were as follows (in thousands, except rate data):

	Principal Outstanding	LIBOR Rate	Margin	Effective Interest Rate
Term loans	$667,808	0.18%	2.25%	2.43%

As of July 3, 2020, approximately $5.9 million of deferred financing costs remain unamortized, of which $5.5 million is related to the Term Loans and is recorded as a direct reduction of the recognized debt liabilities in our accompanying condensed consolidated balance sheet, and $0.4 million is related to the Revolving Facility and is recorded in other long-term assets in our accompanying condensed consolidated balance sheet.

The Term Loans and Revolving Facility are secured by a first priority lien on substantially all of our assets and provide that we must comply with certain financial and non-financial covenants.

The Term Loans are payable in quarterly principal installments of approximately $1.7 million on the last business day of each calendar quarter, with the remainder due on the maturity date. In the event that we divest a business, the net cash proceeds of the divestment are generally required, subject to certain exceptions, to be applied to repayment of outstanding Term Loans except to the extent we reinvest such proceeds in assets useful for our business within 18 months of receiving the proceeds. If we enter into a binding agreement to reinvest such proceeds within 18 months of receiving them, we have until the later of 18 months following our receipt of the proceeds and six months following the date of such agreement to complete the reinvestment.

As of July 3, 2020, we had $160.0 million of borrowing capacity under our Revolving Facility, of which we may borrow up to $50 million without being subject to certain financial covenants.

As of July 3, 2020, the following remained outstanding on the Term Loans (in thousands):

	July 3, 2020
Principal balance	$ 667,808
Unamortized discount	(2,507)
Unamortized deferred financing costs	(5,469)
Total term loans	659,832
Current portion	6,885
Long-term, less current portion	$ 652,947

As of July 3, 2020, the minimum principal payments under the Term Loans in future fiscal years were as follows (in thousands):

	Amount
2020 (remainder of fiscal year)	$ 1,721
2021	6,885
2022	6,885
2023	6,885
2024	645,432
Total	$ 667,808

The fair value of the Term Loans was estimated to be approximately $617.7 million as of July 3, 2020, and was determined using Level 2 inputs, including a quoted rate from a financial institution.

8. LEASES

We have operating leases for certain facilities, as well as manufacturing and office equipment. We have financing leases for our corporate headquarters, including our fabrication facility, and to a lesser extent, various manufacturing equipment. These leases expire at various dates through 2038, and certain of these leases have renewal options with the longest ranging up to two ten-year periods.

We determine that a contract contains a lease at lease inception if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration. In evaluating whether the right to control an identified asset exists, we assess whether we have the right to direct the use of the identified asset and obtain substantially all of the economic benefit from the use of the identified asset. Leases with a term greater than one year are recognized on the balance sheet as right-of-use assets and lease liabilities. For leases with a term of one year or less, categorized as short-term leases, we elected not to recognize the lease liability for these arrangements and the lease payments are recognized in the condensed consolidated statement of operations on a straight-line basis over the lease term. ROU assets and lease liabilities are recognized at the present value of future minimum lease payments over the lease term on the commencement date. ROU assets are initially measured as the amount of the initial lease liability, adjusted for initial direct costs, lease payments made at or before the commencement date, and reduced by lease incentives received. We include options to renew or terminate when determining the lease term when it is reasonably certain that the option will be exercised. Our lease agreements do not contain any material residual value guarantees or restrictive covenants.

Our leases may contain lease and non-lease components. We elected to account for lease and non-lease components in a contract as part of a single lease component. Fixed payments are considered part of the single lease component and included in the ROU assets and lease liabilities. Additionally, lease contracts typically include variable payments and other costs that do not transfer a separate good or service, such as reimbursement for real estate taxes and insurance, which are expensed as incurred.

Our leases generally do not provide an implicit interest rate. As a result, we utilize our incremental borrowing rates, which are the rates incurred to borrow on a collateralized basis over a similar term and amount equal to the lease payments in a similar economic environment.

Included in our condensed consolidated balance sheets were the following amounts related to operating and finance lease assets and liabilities (in thousands):

	July 3, 2020		September 27, 2019		Consolidated Balance Sheet Classification
Assets:					
Operating lease ROU assets	$	32,157	$	—	Other long-term assets
Finance lease assets		33,919		—	Property and equipment, net
Capital lease and financed assets		—		40,442	Property and equipment, net
Total lease assets	$	66,076	$	40,442	
Liabilities:					
Current:					
Operating lease liabilities	$	7,498	$	—	Accrued liabilities
Finance lease liabilities		1,506		—	Current portion of finance lease obligations and other
Capital lease and financing obligations		—		1,084	Current portion of finance lease obligations and other
Long-term:					
Operating lease liabilities		30,438		—	Other long-term liabilities
Finance lease liabilities		29,351		—	Finance lease obligations and other, less current portion
Capital lease and financing obligations		—		29,506	Finance lease obligations and other, less current portion
Total lease liabilities	$	68,793	$	30,590	

The weighted-average remaining lease terms and weighted-average discount rates for operating and finance leases as of July 3, 2020 were as follows:

	July 3, 2020
Weighted-average remaining lease term (in years):	
Operating leases	6.57
Finance leases	17.07
Weighted-average discount rate:	
Operating leases	6.36 %
Finance leases	6.71 %

The components of lease expense were as follows (in thousands):

	Three Months Ended		Nine Months Ended	
	July 3, 2020			
Finance lease cost:				
Amortization of lease assets	$	747	$	2,193
Interest on lease liabilities		525		1,641
Total finance lease cost	$	1,272	$	3,834
Operating lease cost	$	2,451	$	7,393
Variable lease cost	$	749	$	1,937
Short-term lease cost	$	69	$	339
Sublease income	$	(117)	$	(442)

Cash paid for amounts included in the measurement of lease liabilities were as follows (in thousands):

		Nine Months Ended July 3, 2020
Cash paid for amounts included in measurement of lease liabilities:		
Operating cash flows from operating leases	$	7,027
Operating cash flows from finance leases	$	1,641
Financing cash flows from finance leases	$	1,307
Non-cash activities:		
Operating lease right-of-use assets obtained in exchange for new lease liabilities	$	242
Financing lease assets obtained in exchange for new lease liabilities	$	586

As of July 3, 2020, maturities of lease liabilities by fiscal year were as follows (in thousands):

Fiscal year ending:		Operating Leases		Finance Leases
2020 (remainder of fiscal year)	$	2,527	$	963
2021		9,250		3,394
2022		7,479		2,836
2023		6,012		2,820
2024		5,588		2,856
2025		3,650		2,783
Thereafter		12,284		37,150
Total lease payments		46,790		52,802
Less: interest		8,854		21,945
Present value of lease liabilities	$	37,936	$	30,857

As of September 27, 2019, future minimum lease payments for our operating and capital leases were as follows as determined in accordance with the previous guidance under ASC 840, *Leases* and as previously disclosed in our 2019 Annual Report on Form 10-K (in thousands):

Fiscal year ending:		Operating Leases		Capital Leases
2020	$	9,987	$	3,299
2021		9,233		3,343
2022		7,447		2,884
2023		6,061		2,816
2024		5,564		2,853
Thereafter		16,437		39,927
Total future minimum lease payments	$	54,729		55,122
Less amount representing interest				(26,241)
Present value of net minimum capital lease payments			$	28,881

9. IMPAIRMENTS

During the fiscal quarter ended June 28, 2019, we initiated the 2019 Plan (as defined in *Note 14 - Restructurings*) designed to strategically realign, streamline and improve our operations, including reducing our workforce and exiting certain product offerings and research and development facilities. We also committed to reducing certain development activities for one of our product lines. See *Note 14 - Restructurings* for additional information about the 2019 Plan. As a result of implementing the 2019 Plan, we reassessed our previous estimates for expected future revenue growth. We performed impairment analyses to determine whether our goodwill and long-lived assets, comprised of definite-lived intangible assets and property and equipment, were recoverable. Based on the estimated undiscounted cash flow assessment for long-lived assets, we determined that for an asset group, the cash flows were not sufficient to recover the carrying value of the long-lived assets over their remaining useful lives. Accordingly, we recorded impairment charges of $217.5 million and $33.2 million to our customer relationship intangible assets and acquired technology intangible assets, respectively, in the fiscal quarter ended June 28, 2019, based on the difference between the fair value and the carrying value of the long-lived assets. We will continue to monitor for events or changes in business circumstances that may indicate that the remaining carrying value of the asset group may not be recoverable. We used the income approach to determine the fair value of the definite-lived intangible assets and the cost approach to determine the fair value of its property and equipment.

Additionally, in connection with the 2019 Plan, we determined that certain intangible assets would be abandoned and would not have a future benefit. Accordingly, we recorded impairment charges of $2.4 million and $3.9 million to our customer relationship intangible assets and acquired technology intangible assets, respectively, during the fiscal quarter ended June 28, 2019.

During the fiscal quarter ended June 28, 2019, we also determined that an asset recorded as construction in process would not be able to be placed in service as a productive asset, and therefore had no fair value. Accordingly, we recorded an impairment charge of $7.1 million for this asset during the fiscal quarter ended June 28, 2019.

See *Note 14 - Restructurings* for information related to property and equipment impaired as part of our restructuring actions.

10. INTANGIBLE ASSETS

Amortization expense related to intangible assets is as follows (in thousands):

	Three Months Ended		Nine Months Ended	
	July 3, 2020	June 28, 2019	July 3, 2020	June 28, 2019
Cost of revenue	$ 4,348	$ 8,139	$ 13,115	$ 24,074
Selling, general and administrative	8,071	13,723	24,797	38,115
Total	$ 12,419	$ 21,862	$ 37,912	$ 62,189

Intangible assets consist of the following (in thousands):

	July 3, 2020	September 27, 2019
Acquired technology	$ 179,434	$ 179,682
Customer relationships	245,870	245,870
Trade name (indefinite-lived)	3,400	3,400
Total	428,704	428,952
Less accumulated amortization	(285,387)	(247,724)
Intangible assets — net	$ 143,317	$ 181,228

A summary of the activity in gross intangible assets and goodwill is as follows (in thousands):

	Intangible Assets				
	Total Intangible Assets	Acquired Technology	Customer Relationships	Trade Name	Goodwill
Balance at September 27, 2019	$ 428,952	$ 179,682	$ 245,870	$ 3,400	$ 314,727
Disposal of a fully amortized intangible asset	(248)	(248)	—	—	—
Currency translation adjustment	—	—	—	—	52
Balance at July 3, 2020	$ 428,704	$ 179,434	$ 245,870	$ 3,400	$ 314,779

As of July 3, 2020, our estimated amortization of our intangible assets in future fiscal years was as follows (in thousands):

	2020 Remaining	2021	2022	2023	2024	Thereafter	Total
Amortization expense	$ 12,418	46,213	33,433	26,048	15,410	6,395	$ 139,917

Accumulated amortization for acquired technology and customer relationships were $147.7 million and $137.7 million, respectively, as of July 3, 2020, and $134.8 million and $112.9 million, respectively, as of September 27, 2019.

11. STOCKHOLDERS' EQUITY

We have authorized 10 million shares of $0.001 par value preferred stock and 300 million shares of $0.001 par value common stock as of July 3, 2020.

Common Stock Warrants—In March 2012, we issued warrants to purchase 1,281,358 shares of common stock for $14.05 per share. The warrants expire on December 21, 2020, or earlier as per the terms of the agreement, including immediately following consummation of a sale of all or substantially all assets or capital stock or other equity securities, including by merger, consolidation, recapitalization or similar transactions. We do not currently have sufficient registered and available shares to immediately satisfy a request for registration, if such a request were made. As of July 3, 2020, no exercise of the warrants had occurred, and no request had been made to register the warrants or any underlying securities for resale by the holders.

We record the estimated fair values of the warrants as a long-term liability in the accompanying condensed consolidated financial statements with changes in the estimated fair value being recorded in the accompanying statements of operations. See *Note 4 - Fair Value* for additional information related to the fair value of our warrant liability. See *Note 12 - Earnings (Loss) Per Share* for impact of the common stock warrants on loss per share.

12. EARNINGS (LOSS) PER SHARE

The following table sets forth the computation for basic and diluted net loss per share of common stock (in thousands, except per share data):

	Three Months Ended		Nine Months Ended	
	July 3, 2020	June 28, 2019	July 3, 2020	June 28, 2019
Numerator:				
Net loss	$ (24,982)	$ (324,714)	$ (63,570)	$ (394,314)
Warrant liability gain	—	(1,927)	—	(5,788)
Net loss attributable to common stockholders	$ (24,982)	$ (326,641)	$ (63,570)	$ (400,102)
Denominator:				
Weighted average common shares outstanding-basic	66,796	65,858	66,512	65,555
Dilutive effect of warrants	—	87	—	166
Weighted average common shares outstanding-diluted	66,796	65,945	66,512	65,722
Net loss to common stockholders per share-Basic:	$ (0.37)	$ (4.93)	$ (0.96)	$ (6.01)
Net loss to common stockholders per share-Diluted:	$ (0.37)	$ (4.95)	$ (0.96)	$ (6.09)

As of July 3, 2020, we had warrants outstanding which were reported as a liability on the condensed consolidated balance sheet. During the three and nine months ended June 28, 2019, we recorded warrant liability gains of $1.9 million and $5.8 million, respectively, associated with adjusting the fair value of the warrants in the condensed consolidated statements of operations primarily as a result of changes in our stock price. When calculating earnings per share, we are required to adjust for the dilutive effect of outstanding common stock equivalents, including adjustment to the numerator for the dilutive effect of contracts that must be settled in stock. During the three and nine months ended June 28, 2019, we adjusted the numerator by the warrant gains of $1.9 million and $5.8 million, respectively, and the denominator by the incremental shares of 86,746 and 166,318, respectively, under the treasury stock method. The table above excludes the effects of 1,766,561 and 1,543,686 shares for the three and nine months ended July 3, 2020, respectively, and 80,046 and 129,599 shares for the three and nine months ended June 28, 2019, respectively, of potential shares of common stock issuable upon exercise of stock options, warrants, restricted stock and restricted stock units, as applicable, as the inclusion would be antidilutive.

13. COMMITMENTS AND CONTINGENCIES

From time to time, we may be subject to commercial disputes, employment issues, claims by other companies in the industry that we have infringed their intellectual property rights and other similar claims and litigation. Any such claims may lead to future litigation and material damages and defense costs. We were not involved in any material pending legal proceedings during the fiscal quarter ended July 3, 2020.

14. RESTRUCTURINGS

We have periodically implemented restructuring actions in connection with broader plans to reduce staffing, reduce our internal manufacturing footprint and generally reduce operating costs. The restructuring expenses are primarily comprised of direct and incremental costs related to headcount reductions including severance and outplacement fees for the terminated employees, as well as facility closure costs.

The following is a summary of the restructuring charges incurred under the plans noted below (in thousands):

	Three Months Ended		Nine Months Ended	
	July 3, 2020	June 28, 2019	July 3, 2020	June 28, 2019
Employee related expenses and adjustments	$ (761)	$ 5,135	$ 787	$ 6,742
Facility related expenses	207	3,752	707	10,305
Total restructuring (benefit) charges	$ (554)	$ 8,887	$ 1,494	$ 17,047

The following is a rollforward of the accrued restructuring liabilities for the nine months ended July 3, 2020 (in thousands):

	Employee-Related Expense (1)	Facility-Related Expense (2)	Total
Balance at September 27, 2019	$ 1,549	$ 978	$ 2,527
Charges and adjustments	787	707	1,494
Charges paid/settled/other	(1,460)	(1,492)	(2,952)
Balance at July 3, 2020	$ 876	$ 193	$ 1,069

(1) Primarily includes severance charges associated with the reduction of our workforce in certain facilities.

(2) Primarily includes activities associated with the closure of certain facilities, including any associated asset impairments and contract termination costs.

Ithaca Plan

During the fiscal quarter ended December 28, 2018, we commenced a plan to exit certain production and product lines, primarily related to certain production facilities located in Ithaca, New York (the "Ithaca Plan"). We incurred restructuring charges for the Ithaca Plan of $0.2 million in the three months ended June 28, 2019, including $0.1 million of employee-related costs, and $5.5 million in the nine months ended June 28, 2019, including $1.5 million of employee-related costs and $4.0 million of facility-related costs. This action was completed in fiscal year 2019 and no further costs will be incurred. The remaining charges were paid during the three months ended January 3, 2020.

Details of the Ithaca Plan activities during the nine months ended July 3, 2020 are as follows (in thousands):

	Employee-Related Expense	Facility-Related Expense	Total
Balance at September 27, 2019	$ 13	$ 70	$ 83
Charges and adjustments	—	(40)	(40)
Charges paid/settled	(13)	(30)	(43)
Balance at July 3, 2020	$ —	$ —	$ —

Design Facilities Plan

During the fiscal quarter ended March 29, 2019, we committed to a plan to exit certain design facilities and activities (the "Design Facilities Plan"). We recorded a net benefit of $0.3 million in the three months ended June 28, 2019, including $0.1 million of employee-related costs and $0.4 million of facility-related reimbursements. We incurred restructuring charges of $2.5 million for the nine months ended June 28, 2019, including $0.3 million of employee-related costs and $2.2 million primarily related to impairment of equipment. This action was completed in fiscal year 2019 and no further costs will be incurred. The remaining charges were paid during the three months ended July 3, 2020.

Details of the Design Facilities Plan activities during the nine months ended July 3, 2020 are as follows (in thousands):

	Facility-Related Expense
Balance at September 27, 2019	$ 451
Charges and adjustments	(18)
Charges paid/settled	(433)
Balance at July 3, 2020	$ —

2019 Plan

During the fiscal quarter ended June 28, 2019, we committed to a plan designed to strategically realign, streamline and improve certain of our business and operations, including reducing our workforce by approximately 250 employees, exiting six development facilities in France, Japan, the Netherlands, Florida, Massachusetts and Rhode Island, reducing certain development activities for one of our product lines and no longer investing in the design and development of optical modules and subsystems for Data Center applications (the “2019 Plan”). We incurred a restructuring benefit of $0.6 million in the three months ended July 3, 2020 under the 2019 Plan, including a benefit of $0.8 million for employee-related costs and $0.2 million of other costs, and charges of $1.6 million in the nine months ended July 3, 2020, including $0.8 million of employee-related costs and $0.8 million of other costs. The restructuring net benefit for the three months ended July 3, 2020 includes an adjustment to accrued employee-related costs resulting from a decision during the fiscal third quarter to retain certain employees. We incurred restructuring charges of $9.0 million in the three months ended June 28, 2019 under the 2019 Plan, including $4.9 million of employee-related costs, $4.0 million of impairment expense for fixed assets that will be disposed of and $0.1 million of other costs. We expect to incur additional restructuring costs up to $0.2 million through fiscal year 2020 as we complete this restructuring action.

Details of the 2019 Plan activities during the nine months ended July 3, 2020 are as follows (in thousands):

	Employee-Related Expense	Facility-Related Expense	Total
Balance at September 27, 2019	$ 1,536	$ 457	$ 1,993
Charges and adjustments	787	765	1,552
Charges paid/settled/other	(1,447)	(1,029)	(2,476)
Balance at July 3, 2020	$ 876	$ 193	$ 1,069

15. SHARE-BASED COMPENSATION

Stock Plans

As of July 3, 2020, we had 17.0 million shares available for issuance under our 2012 Omnibus Incentive Plan (as Amended and Restated) (the “2012 Plan”) and 3.6 million shares available for issuance under our Employee Stock Purchase Plan. Under the 2012 Plan, we have the ability to issue incentive stock options (“ISOs”), non-statutory stock options (“NSOs”), performance based non-statutory stock options, stock appreciation rights, restricted stock awards (“RSAs”), restricted stock units (“RSUs”), performance-based restricted stock units (“PRSUs”), performance shares and other equity-based awards to employees, directors and outside consultants. The ISOs and NSOs must be granted at a price per share not less than the fair value of our common stock on the date of grant. Options granted to date primarily vest based on certain market-based and performance-based criteria. Options granted generally have a term of four years to seven years. Certain of the share-based awards granted and outstanding as of July 3, 2020 are subject to accelerated vesting upon a change in control of the Company.

Share-Based Compensation

The following table shows a summary of share-based compensation expense included in the condensed consolidated statements of operations (in thousands):

	Three Months Ended		Nine Months Ended	
	July 3, 2020	June 28, 2019	July 3, 2020	June 28, 2019
Cost of revenue	$ 814	$ 651	$ 2,771	$ 2,165
Research and development	2,921	2,517	9,939	6,540
Selling, general and administrative	4,760	(353)	14,211	11,458
Total share-based compensation expense	$ 8,495	$ 2,815	$ 26,921	$ 20,163

As of July 3, 2020, the total unrecognized compensation costs related to ISOs, RSAs and RSUs, including awards with time-based and performance-based vesting was $53.2 million, which we expect to recognize over a weighted-average period of

2.2 years. As of July 3, 2020, total unrecognized compensation cost related to our Employee Stock Purchase Plan was $0.8 million.

Stock Options

A summary of stock option activity for the nine months ended July 3, 2020 is as follows (in thousands, except per share amounts and contractual term):

	Number of Shares	Weighted-Average Exercise Price per Share	Weighted-Average Remaining Contractual Term (in Years)	Aggregate Intrinsic Value
Options outstanding as of September 27, 2019	376	$ 13.58		
Exercised	(41)	4.12		
Forfeited, canceled or expired	—	19.45		
Options outstanding as of July 3, 2020	335	$ 14.73	7.03	$ 6,834
Options vested & expected to vest as of July 3, 2020	335	14.73	7.03	6,834
Options exercisable as of July 3, 2020	50	$ 14.40	3.07	$ 1,037

Aggregate intrinsic value represents the difference between our closing stock price on July 3, 2020 and the exercise price of outstanding, in-the-money options. The total intrinsic value of options exercised was $0.7 million and $1.0 million for the three and nine months ended July 3, 2020, respectively, and $0.1 million and $0.3 million for the three and nine months ended June 28, 2019, respectively.

Restricted Stock, Restricted Stock Units and Performance-Based Restricted Stock Units

A summary of RSAs, RSUs and PRSUs activity for the nine months ended July 3, 2020 is as follows:

	Number of RSAs, RSUs and PRSUs (in thousands)	Weighted-Average Grate Date Fair Value	Aggregate Intrinsic Value (in thousands)
Balance as of September 27, 2019	2,613	$ 21.81	$ 56,649
Granted	1,203	21.96	
Vested and released	(636)	26.05	
Forfeited, canceled or expired	(364)	22.19	
Balance as of July 3, 2020	2,816	$ 20.86	$ 98,909

RSAs, RSUs and PRSUs that vested during the nine months ended July 3, 2020 and June 28, 2019 had combined fair values of $18.7 million and $10.9 million, respectively, as of the vesting date.

16. INCOME TAXES

We are subject to income tax in the U.S. as well as other tax jurisdictions in which we conduct business. Earnings from non-U.S. activities are subject to local country income tax and may also be subject to current U.S. income tax. For interim periods, we record a tax provision or benefit based upon the estimated effective tax rate expected for the full fiscal year, adjusted for material discrete taxation matters arising during the interim periods. Our quarterly tax provision or benefit, and its quarterly estimate of the annual effective tax rate, are subject to significant variation due to several factors. These factors include variability in accurately predicting pre-tax income/loss, the mix of jurisdictions in which we operate, intercompany transactions, changes in how we do business, tax law developments, and relative changes in permanent tax benefits or expenses.

The provision (benefit) for income taxes and effective income tax rate for the three and nine months ended July 3, 2020 and June 28, 2019 are as follows (in thousands, except percentages):

	Three Months Ended		Nine Months Ended	
	July 3, 2020	June 28, 2019	July 3, 2020	June 28, 2019
Income tax expense (benefit)	$ 1,750	$ (1,322)	$ 4,716	$ 346
Effective income tax rate	(7.5)%	0.4 %	(8.0)%	(0.1)%

The difference between the U.S. federal statutory income tax rate of 21% and our effective tax rates for the three and nine months ended July 3, 2020 and June 28, 2019 was primarily driven by the continuation of a full valuation allowance against any benefit associated with U.S. losses and income taxed in foreign jurisdictions at generally lower tax rates and where we are not in a valuation allowance since it is expected that we will be in a taxable income position.

We recognize deferred tax assets to the extent that we believe that these assets are more likely than not to be realized. In making this determination, we consider available evidence, both positive and negative. We look at factors that may impact the valuation of our deferred tax asset including results of recent operations, future reversals of existing taxable temporary differences, projected future taxable income, and tax-planning strategies. We have significant negative objective evidence in the form of adjusted cumulative losses in the U.S. over the three-year period ended July 3, 2020 that resulted in our continued determination that there was not sufficient objectively verifiable positive evidence to offset this negative objective evidence and we concluded that a full valuation allowance was still appropriate for our U.S. deferred tax assets.

Our deferred income tax asset balance as of July 3, 2020 and September 27, 2019 is primarily attributable to an initial $39.8 million deferred asset generated from an intra-entity transfer of a license for intellectual property during the fiscal quarter ended September 27, 2019. We expect this deferred tax asset to amortize over the life of the intellectual property.

The balance of the unrecognized tax benefits remained at $0.3 million as of July 3, 2020 when compared to the balance as of September 27, 2019. It is our policy to recognize any interest and penalties accrued related to unrecognized tax benefits in income tax expense. During the fiscal quarter ended July 3, 2020, we did not make any accrual or payment of interest and penalties due to our net operating loss carryforward position within the U.S., which would offset any adjustment.

On December 22, 2017, the U.S. Congress enacted comprehensive tax legislation commonly referred to as the Tax Cuts and Jobs Act (the “Tax Act”). The Tax Act enacted a wide range of changes to the U.S. corporate income tax system, many of which differ significantly from the provisions of the previous U.S. tax law. The Tax Act also transitions international taxation from a worldwide system with deferral to a modified territorial system and includes base erosion prevention measures on non-U.S. earnings, which has the effect of subjecting certain earnings of our foreign subsidiaries to U.S. taxation as global intangible low-taxed income. These changes became effective in our fiscal year beginning September 29, 2018.

On March 27, 2020, the U.S. Congress enacted the Coronavirus Aid, Relief and Economic Security Act (the “CARES Act”). The CARES Act made a technical correction to the Tax Act impacting our net operating loss carryforward for the fiscal year ended September 29, 2018 by limiting it to a 20-year carryforward period, rather than having an indefinite life carryforward without the 80% limitation. As a result of this technical correction, we increased our indefinite lived deferred tax liability by $1.4 million during the fiscal quarter ended April 3, 2020, with an offsetting adjustment to tax expense.

17. SUPPLEMENTAL CASH FLOW INFORMATION

As of July 3, 2020 and June 28, 2019, we had $0.5 million and $6.2 million, respectively, in unpaid amounts related to purchases of property and equipment included in accounts payable and accrued liabilities during each period. These amounts have been excluded from the payments for purchases of property and equipment in the accompanying condensed consolidated statements of cash flows until paid.

During the nine months ended June 28, 2019, we capitalized $1.5 million of net construction costs, of which $0.3 million was accounted for as a non-cash transaction as the costs were paid by the developer.

The following is supplemental cash flow information regarding non-cash investing and financing activities (in thousands):

	Nine Months Ended	
	July 3, 2020	June 28, 2019
Cash paid for interest	$ 20,035	$ 25,675
Cash paid (refunded) for income taxes	$ 309	$ (1,713)

18. GEOGRAPHIC AND SIGNIFICANT CUSTOMER INFORMATION

We have one reportable operating segment that designs, develops, manufactures and markets semiconductors and modules. The determination of the number of reportable operating segments is based on the chief operating decision maker’s use of financial information for the purposes of assessing performance and making operating decisions. In evaluating financial performance and making operating decisions, the chief operating decision maker primarily uses consolidated metrics. We evaluate this assessment on an ongoing basis as facts and circumstances change and as of July 3, 2020 there were no changes to our conclusion.

For information about our revenue in different geographic regions, based upon customer locations, see *Note 2 - Revenue*. Information about net property and equipment in different geographic regions is presented below (in thousands):

	July 3, 2020	September 27, 2019
United States	$ 103,389	$ 116,037
Other Countries (1)	18,611	16,610
Total	$ 122,000	$ 132,647

(1) Other than the United States, no country or region represented greater than 10% of the total net property and equipment as of the dates presented.

The following is a summary of customer concentrations as a percentage of revenue and accounts receivable as of and for the periods presented:

	Three Months Ended		Nine Months Ended	
Revenue	July 3, 2020	June 28, 2019	July 3, 2020	June 28, 2019
Customer A	13 %	17 %	14%	15 %
Customer B	14 %	—	11%	—
Customer C	14 %	—	10%	—

Accounts Receivable	July 3, 2020	September 27, 2019
Customer A	18 %	24 %
Customer C	12 %	8 %
Customer D	11 %	10 %

Customers B and C did not represent more than 10% of revenue in the three and nine months ended June 28, 2019. No other customer represented more than 10% of revenue or accounts receivable in the periods presented in the accompanying condensed consolidated financial statements. For the three and nine months ended July 3, 2020 our top ten customers represented 66% and 61%, respectively, of total revenue, and for the three and nine months ended June 28, 2019, our top ten customers represented 54% and 54%, respectively, of total revenue.

19. RELATED-PARTY TRANSACTIONS

During the nine months ended July 3, 2020, we sold $0.2 million of commercial products to Mission Microwave Technologies, LLC ("Mission"), a MACOM customer and an affiliate of directors John and Susan Ocampo. Together, Mr. and Mrs. Ocampo are MACOM's largest stockholders. Stephen G. Daly, MACOM's President and Chief Executive Officer, has an equity interest of less than 1% in Mission.

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion of our financial condition and results of operations should be read in conjunction with the condensed consolidated financial statements and the notes thereto included elsewhere in this Quarterly Report on Form 10-Q and our Annual Report on Form 10-K for the fiscal year ended September 27, 2019 filed with the United States Securities and Exchange Commission ("SEC") on November 26, 2019 (the "2019 Annual Report on Form 10-K").

In this document, the words "Company," "we," "our," "us," and similar terms refer only to MACOM Technology Solutions Holdings, Inc. and its consolidated subsidiaries, and not any other person or entity.

"MACOM," "M/A-COM," "M/A-COM Technology Solutions," "M/A-COM Tech," "Partners in RF & Microwave" and related logos are trademarks of MACOM Technology Solutions Holdings, Inc. All other brands and names listed are trademarks of their respective owners.

Cautionary Note Regarding Forward-Looking Statements

This Item 2, "Management's Discussion and Analysis of Financial Condition and Results of Operations" and other sections of this Quarterly Report on Form 10-Q contain "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. In addition, we may make other written and oral communications from time to time that contain such statements. Forward-looking statements include statements as to our strategic plans and priorities, anticipated drivers of future revenue growth, industry trends, the potential impacts of COVID-19 on our future operations and results, our plans for use of our cash and cash equivalents, short-term investments and revolving credit facility, our ability to meet working capital requirements and other matters that do not relate strictly to historical facts. These statements are often identified by the use of words such as “anticipates,” “believes,” “could,” “continue,” “estimates,” “expects,” “intends,” “may,” “plans,” “potential,” “predicts,” “projects,” “seeks,” “should,” “targets,” “will,” “would” and similar expressions or variations. These statements are based on management's beliefs and assumptions as of the date of this Quarterly Report on Form 10-Q, based on information currently available to us. Such forward-looking statements are subject to risks, uncertainties and other factors that could cause actual results to differ materially from future results expressed or implied by such forward-looking statements. Important factors that could cause actual results to differ materially from the forward-looking statements include, among others, the risks described in the section entitled “Risk Factors” in this Quarterly Report on Form 10-Q, our quarterly report on Form 10-Q for the fiscal quarter ended April 3, 2020 filed with the SEC on April 30, 2020, our quarterly report on Form 10-Q for the fiscal quarter ended January 3, 2020 filed with the SEC on January 29, 2020 and our Annual Report on Form 10-K for the fiscal year ended September 27, 2019 filed with the SEC on November 26, 2019. We caution the reader to carefully consider such factors. Furthermore, such forward-looking statements speak only as of the date of this Quarterly Report on Form 10-Q. Except as required by law, we undertake no obligation to update any forward-looking statements to reflect events or circumstances after the date of such statements.

Overview

We design and manufacture semiconductor products for Telecommunications (“Telecom”), Industrial and Defense (“I&D”) and Data Center applications. Headquartered in Lowell, Massachusetts, we have more than 65 years of application expertise, with silicon, gallium arsenide and indium phosphide fabrication, manufacturing, assembly and test, and operational facilities throughout North America, Europe and Asia. We design, develop and manufacture differentiated, high-value products for customers who demand high performance, quality and reliability. We offer a broad portfolio of thousands of standard and custom devices, which include integrated circuits (“IC”), multi-chip modules (“MCM”), diodes, amplifiers, switches and switch limiters, passive and active components and complete subsystems, across dozens of product lines serving over 6,000 end-customers in three primary markets. Our semiconductor products are electronic components that our customers incorporate into larger electronic systems, such as, wireless basestations, high capacity optical networks, radar, medical systems and test and measurement. Our primary markets are: (1) Telecom, which includes carrier infrastructure such as long-haul/metro, 5G and FTTx/PON, among others; (2) I&D, which includes military and commercial radar, RF jammers, electronic countermeasures, communication data links, satellite communications and multi-market applications, which include industrial, medical, test and measurement and scientific applications; and (3) Data Center, enabled by our broad portfolio of analog ICs and photonic components for high speed optical module customers.

COVID-19 Impact

COVID-19, the disease caused by the most recently discovered coronavirus, has spread throughout areas of the world where we operate and resulted in authorities implementing numerous measures to try to contain the virus. As a result of these measures and the spread of COVID-19, we have modified our business practices and may further modify our practices as required, or as we determine appropriate. While these measures, as well as other disruptions, have impacted our operations, the operations of our customers and those of our respective vendors and suppliers, such impacts did not, as of the nine months ended July 3, 2020, have a material impact on our consolidated operating results.

Given the significant continued economic uncertainty and volatility created by the pandemic, it is difficult to predict the nature and extent of impacts on the demand for our products. The continued spread of COVID-19 could cause an overall economic slowdown or recession and could result in adverse impacts such as increased credit and collectability risks, adverse impacts on our suppliers, asset impairments, declines in the value of our financial instruments and adverse impacts on our capital resources. The degree to which the COVID-19 pandemic impacts our future business, financial condition, results of operations, liquidity and cash flows will depend on future developments, which are highly uncertain and cannot be accurately predicted, including the duration and spread of the outbreak, its severity, actions taken to contain the virus or treat its impact, how quickly and to what extent normal operating conditions can resume, and the economic impact on local, regional, national and international markets.

For additional information on risk factors that could impact our future results, please refer to “Risk Factors” in Part II, Item 1A of this Quarterly Report on Form 10-Q.

Description of Our Revenue

Revenue. Our revenue is derived from sales of high-performance RF, microwave, millimeter wave, optical and photonic semiconductor products. We design, integrate, manufacture and package differentiated, semiconductor-based products that we sell to customers through our direct sales organization, our network of independent sales representatives and our distributors. We believe the primary drivers of our future revenue growth will include:

- continued growth in the demand for high-performance analog, digital and optical semiconductors in our three primary markets;
- introducing new products using advanced technologies, added features, higher levels of integration and improved performance;
- increasing content of our semiconductor solutions in customers' systems through cross-selling our product lines;
- leveraging our core strength and leadership position in standard, catalog products that service all of our end applications; and
- engaging early with our lead customers to develop custom and standard products.

Our core strategy is to develop and innovate high-performance products that address our customers' most difficult technical challenges in our primary markets: Telecom, I&D and Data Center.

We expect our revenue in the Telecom market to be driven by 5G deployments, with continued upgrades and expansion of communications equipment, and increasing adoption of our high-performance RF, millimeter wave, optical and photonic components.

We expect our revenue in the I&D market to be driven by the expanding product portfolio that we offer which services applications such as test and measurement, satellite communications, civil and military radar, industrial, scientific and medical applications, further supported by growth in applications for our multi-market catalog products.

We expect our revenue in the Data Center market to be driven by the adoption of cloud-based services and the upgrade of data center architectures, to 100G, 200G, 400G and 800G interconnects, which we expect will drive adoption of higher speed optical and photonic components.

Critical Accounting Policies and Estimates

Our discussion and analysis of our financial condition and results of operations are based on our condensed consolidated financial statements. The preparation of financial statements, in conformity with U.S. GAAP, requires management to make estimates and judgments that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting period. By their nature, these estimates and judgments are subject to an inherent degree of uncertainty and could be material if our actual or expected experience were to change unexpectedly. On an ongoing basis, we re-evaluate our estimates and judgments.

Due to the COVID-19 pandemic, there has been uncertainty and disruption in the global economy and financial markets. We are not aware of any specific event or circumstance that would require updates to our estimates or judgments or require us to revise the carrying value of our assets or liabilities as of the date of filing of this Quarterly Report on Form 10-Q with the SEC. These estimates may change as new events occur and additional information is obtained. Actual results could differ materially from these estimates under different assumptions or conditions.

We base our estimates and judgments on our historical experience and on other assumptions that we believe are reasonable under the circumstances, the results of which form the basis for making the judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results could differ from those estimates and material effects on our operating results and financial position may result. The accounting policies which our management believes involve the most significant application of judgment or involve complex estimation, are inventories and associated reserves; goodwill and long-lived asset valuations and associated impairment assessments; revenue reserves; and share-based compensation valuations.

Significant management judgment is required in our valuation of long-lived asset groups when assessing for potential impairment. These analyses are based on the creation of forecasts of future operating results that are used in the valuation, including estimation of (i) future cash flows, (ii) the long-term rate of growth for our business, (iii) the useful life over which cash flows will occur, (iv) terminal values, if applicable and (v) the determination of our weighted average cost of capital, which is used to determine the discount rate. It is possible that these forecasts may change and our projections included in our forecasts of future results may prove to be inaccurate. If our actual results, or the forecasts and estimates used in future impairment analyses, are lower than the original estimates used to assess the recoverability of these assets, we could incur impairment charges. Our forecasts could be adversely affected by, but not limited to, a change in strategy, the outcome of development activities or slowdown in our primary markets. The value of our long-lived asset groups could also be impacted by future adverse changes such as a decline in the valuation of technology company stocks, including the valuation of our common stock, or a significant slowdown in the worldwide economy or in the semiconductor industry.

For additional information related to these and other accounting policies refer to *Note 2 - Summary of Significant Accounting Policies* to our Consolidated Financial Statements included in Item 8 of Part II, "Financial Statements and Supplementary Data," of the 2019 Annual Report on Form 10-K and *Note 1 - Basis of Presentation and Summary of Significant Accounting Policies* to our Condensed Consolidated Financial Statements in this Quarterly Report on Form 10-Q.

Results of Operations

The following table sets forth, for the periods indicated, our statements of operations data (in thousands):

	Three Months Ended		Nine Months Ended	
	July 3, 2020	June 28, 2019	July 3, 2020	June 28, 2019
Revenue	$ 137,267	$ 108,306	$ 382,788	$ 387,460
Cost of revenue (1)	66,391	74,478	190,338	219,678
Gross profit	70,876	33,828	192,450	167,782
Operating expenses:				
Research and development (1)	34,948	42,708	105,936	128,593
Selling, general and administrative (1)	29,982	41,920	94,317	126,437
Impairment charges (2)	—	264,086	—	264,086
Restructuring (benefit) charges (3)	(554)	8,887	1,494	17,047
Total operating expenses	64,376	357,601	201,747	536,163
Income (loss) from operations	6,500	(323,773)	(9,297)	(368,381)
Other expense:				
Warrant liability (expense) gain (4)	(19,511)	1,927	(14,951)	5,788
Interest expense	(5,849)	(8,967)	(22,142)	(27,142)
Other (expense) income (5)	(4,372)	4,777	(12,464)	(4,233)
Total other expense, net	(29,732)	(2,263)	(49,557)	(25,587)
Loss before income taxes	(23,232)	(326,036)	(58,854)	(393,968)
Income tax expense (benefit)	1,750	(1,322)	4,716	346
Net loss	$ (24,982)	$ (324,714)	$ (63,570)	$ (394,314)

(1) Includes (a) Amortization expense related to intangible assets arising from acquisitions and (b) Share-based compensation expense included in our condensed consolidated statements of operations as set forth below (in thousands):

	Three Months Ended		Nine Months Ended	
	July 3, 2020	June 28, 2019	July 3, 2020	June 28, 2019
(a) Intangible amortization expense:				
Cost of revenue	$ 4,348	$ 8,139	$ 13,115	$ 24,074
Selling, general and administrative	8,071	13,723	24,797	38,115
(b) Share-based compensation expense:				
Cost of revenue	$ 814	$ 651	$ 2,771	$ 2,165
Research and development	2,921	2,517	9,939	6,540
Selling, general and administrative	4,760	(353)	14,211	11,458

(2) The three and nine months ended June 28, 2019 include impairment charges of $264.1 million for impairment of customer relationship and acquired technology intangible assets as well as equipment.

(3) See *Note 14 - Restructurings* to our Condensed Consolidated Financial Statements in this Quarterly Report on Form 10-Q.

(4) Represents changes in the fair value of common stock warrants recorded as liabilities and adjusted each reporting period to fair value. See *Note 11 - Stockholders' Equity* to our Condensed Consolidated Financial Statements in this Quarterly Report on Form 10-Q for additional information.

(5) Includes $4.6 million and $13.6 million of losses for the three and nine months ended July 3, 2020, respectively, and $5.0 million of income and $3.9 million of losses for the three and nine months ended June 28, 2019, respectively, associated with our equity method

investment. See *Note 3 - Investments* to our Condensed Consolidated Financial Statements in this Quarterly Report on Form 10-Q for additional information.

The following table sets forth, for the periods indicated, our statements of operations data expressed as a percentage of our revenue:

	Three Months Ended		Nine Months Ended	
	July 3, 2020	June 28, 2019	July 3, 2020	June 28, 2019
Revenue	100.0 %	100.0 %	100.0 %	100.0 %
Cost of revenue	48.4	68.8	49.7	56.7
Gross profit	51.6	31.2	50.3	43.3
Operating expenses:				
Research and development	25.5	39.4	27.7	33.2
Selling, general and administrative	21.8	38.7	24.6	32.6
Impairment charges	—	243.8	—	68.2
Restructuring (benefit) charges	(0.4)	8.2	0.4	4.4
Total operating expenses	46.9	330.2	52.7	138.4
Income (loss) from operations	4.7	(298.9)	(2.4)	(95.1)
Other expense:				
Warrant liability (expense) gain	(14.2)	1.8	(3.9)	1.5
Interest expense	(4.3)	(8.3)	(5.8)	(7.0)
Other (expense) income, net	(3.2)	4.4	(3.3)	(1.1)
Total other expense, net	(21.7)	(2.1)	(12.9)	(6.6)
Loss before income taxes	(16.9)	(301.0)	(15.4)	(101.7)
Income tax expense (benefit)	1.3	(1.2)	1.2	0.1
Net loss	(18.2)%	(299.8)%	(16.6)%	(101.8)%

Comparison of the Three and Nine Months Ended July 3, 2020 to the Three and Nine Months Ended June 28, 2019

Revenue. Our revenue increased by $29.0 million, or 26.7%, to $137.3 million for the three months ended July 3, 2020, from $108.3 million for the three months ended June 28, 2019, and our revenue decreased by $4.7 million, or 1.2%, for the nine months ended July 3, 2020, from $387.5 million for the nine months ended June 28, 2019.

Revenue from our primary markets, the percentage of change between the periods presented, and revenue by primary markets expressed as a percentage of total revenue in the periods presented were (in thousands, except percentages):

	Three Months Ended			Nine Months Ended		
	July 3, 2020	June 28, 2019	% Change	July 3, 2020	June 28, 2019	% Change
Telecom	$ 56,800	$ 43,883	29.4 %	$ 154,049	$ 141,379	9.0 %
Industrial & Defense	48,035	46,809	2.6 %	146,586	154,563	(5.2)%
Data Center	32,432	17,614	84.1 %	82,153	91,518	(10.2)%
Total	$ 137,267	$ 108,306	26.7 %	$ 382,788	$ 387,460	(1.2)%
Telecom	41.4 %	40.5 %		40.2 %	36.5 %	
Industrial & Defense	35.0 %	43.2 %		38.3 %	39.9 %	
Data Center	23.6 %	16.3 %		21.5 %	23.6 %	
Total	100.0 %	100.0 %		100.0 %	100.0 %	

In the three and nine months ended July 3, 2020, our Telecom market revenue increased by $12.9 million, or 29.4%, and $12.7 million, or 9.0%, respectively, compared to the three and nine months ended June 28, 2019. The increase for the three and nine months ended July 3, 2020 was primarily driven by increased sales of carrier-based optical semiconductor products including those targeted for 5G applications offset by lower sales of legacy products.

In the three months ended July 3, 2020, our I&D market revenue increased by $1.2 million, or 2.6%, compared to the three months ended June 28, 2019. In the nine months ended July 3, 2020, our I&D market revenue decreased $8.0 million, or 5.2%, compared to the nine months ended June 28, 2019. The decrease in the nine months ended July 3, 2020 was primarily related to the decline in certain defense-related programs and lower sales of certain legacy product lines.

In the three months ended July 3, 2020, our Data Center market revenue increased by $14.8 million, or 84.1%, compared to the three months ended June 28, 2019. The increase in revenue for the three months ended July 3, 2020 was primarily due to increased sales of our high-performance analog Data Center products. In the nine months ended July 3, 2020, our Data Center market revenue decreased by $9.4 million, or 10.2%, compared to the nine months ended June 28, 2019. The decrease in revenue for the nine months ended July 3, 2020 was primarily due to $7.0 million of licensing revenue recognized in the three months ended March 29, 2019.

Gross profit. Gross margin was 51.6% and 31.2% for the three months ended July 3, 2020 and June 28, 2019, respectively, and 50.3% and 43.3% for the nine months ended July 3, 2020 and June 28, 2019, respectively. Gross profit was $70.9 million and $33.8 million for the three months ended July 3, 2020 and June 28, 2019, respectively, and $192.5 million and $167.8 million for the nine months ended July 3, 2020 and June 28, 2019, respectively. Gross profit increased for the three and nine months ended July 3, 2020 as compared to the three and nine months ended June 28, 2019 primarily as a result of the strategic realignment of our business under the 2019 Plan (as defined below), lower compensation-related costs and lower intangible amortization and inventory reserve expenses.

Research and development. Research and development expense decreased by $7.8 million, or 18.2%, to $34.9 million, or 25.5% of our revenue, for the three months ended July 3, 2020, compared with $42.7 million, or 39.4% of our revenue, for the three months ended June 28, 2019. Research and development expense decreased by $22.7 million, or 17.6%, to $105.9 million, or 27.7% of our revenue, for the nine months ended July 3, 2020, compared with $128.6 million, or 33.2% of our revenue, for the nine months ended June 28, 2019. Research and development expense has decreased in the three and nine months ended July 3, 2020 primarily as a result of the strategic realignment of our business and operations under the 2019 Plan, resulting in lower compensation costs and research and development related activity.

Selling, general and administrative. Selling, general and administrative expense decreased by $11.9 million, or 28.5%, to $30.0 million, or 21.8% of our revenue, for the three months ended July 3, 2020, compared with $41.9 million, or 38.7% of our revenue, for the three months ended June 28, 2019. Selling, general and administrative expense decreased by $32.1 million, or 25.4%, to $94.3 million, or 24.6% of our revenue, for the nine months ended July 3, 2020, compared with $126.4 million, or 32.6% of our revenue, for the nine months ended June 28, 2019. Selling, general and administrative expense decreased in the three and nine months ended July 3, 2020 primarily due to lower intangible amortization expense, lower compensation-related costs associated with the 2019 Plan and decreased spending on external services offset by an increase in employee-related share-based compensation expense.

Impairment charges. Impairment charges totaled $264.1 million in the three and nine months ended June 28, 2019. These charges included the $257.0 million impairment of intangible assets, as well as the impairment of $7.1 million of equipment from construction in process that was not placed in service. See *Note 9 - Impairments* for additional information.

Restructuring (benefit) charges. Restructuring totaled a benefit of $0.6 million and charges of $8.9 million for the three months ended July 3, 2020 and June 28, 2019, respectively, and charges of $1.5 million and $17.0 million for the nine months ended July 3, 2020 and June 28, 2019, respectively. During the fiscal quarter ended June 28, 2019, we committed to a plan designed to strategically realign, streamline and improve certain of our business and operations, including reducing our workforce by approximately 250 employees, or 20%, exiting six development facilities, reducing certain development activities for one of our product lines and no longer investing in the design and development of optical modules and subsystems for Data Center applications (the “2019 Plan”). Restructuring (benefit) charges for the three and nine months ended July 3, 2020 are primarily related to the 2019 Plan.

Under the 2019 Plan we incurred a restructuring benefit of $0.6 million in the three months ended July 3, 2020, including a benefit of $0.8 million of employee-related costs and $0.2 million of other costs, and charges of $1.6 million in the nine months ended July 3, 2020, including $0.8 million of employee-related costs and $0.8 million of other costs. The restructuring net benefit for the three months ended July 3, 2020 includes an adjustment to accrued employee-related costs resulting from a decision during the fiscal third quarter to retain certain employees. We incurred restructuring charges of $9.0 million in the three months ended June 28, 2019 under this plan, including $4.9 million of employee-related costs, $4.0 million of impairment expense for fixed assets that will be disposed of and $0.1 million of other costs. We expect to incur restructuring costs up to $0.2 million through fiscal year 2020 as we complete this restructuring action. We expect annual expense savings of approximately $50 million dollars once the 2019 Plan is fully implemented.

Restructuring expense for the three and nine months ended June 28, 2019 primarily related to the 2019 Plan. Restructuring expense for the three and nine months ended June 28, 2019 also included charges related to the Ithaca Plan and Design Facilities Plan actions which were completed in fiscal year 2019 and no further costs will be incurred.

For additional information refer to *Note 14 - Restructurings* to our Condensed Consolidated Financial Statements in this Quarterly Report on Form 10-Q.

Warrant liability. Our warrant liability resulted in an expense of $19.5 million and $15.0 million for the three and nine months ended July 3, 2020, respectively, compared to a gain of $1.9 million and $5.8 million for the three and nine months ended June 28, 2019, respectively. The difference between periods was driven by a change in the estimated fair value of common stock warrants we issued in December 2010, primarily driven by the change in the underlying price of our common stock, which is recorded as a liability at fair value. The warrants expire on December 21, 2020, or earlier as per the terms of the agreement, including immediately following consummation of a sale of all or substantially all assets or capital stock or other equity securities, including by merger, consolidation, recapitalization or similar transactions.

Provision for income taxes. Our income tax expense (benefit) and effective income tax rates for the periods indicated were (in thousands, except percentages):

	Three Months Ended		Nine Months Ended	
	July 3, 2020	June 28, 2019	July 3, 2020	June 28, 2019
Income tax expense (benefit)	1,750	(1,322)	4,716	346
Effective income tax rate	(7.5)%	0.4 %	(8.0)%	(0.1)%

Our estimated annual effective tax rate for the year ended October 2, 2020 is expected to be (13.0)%, adjusted for discrete taxation matters arising during the interim periods.

The difference between the U.S. federal statutory income tax rate of 21% and our effective income tax rate for the three and nine months ended July 3, 2020 and the three and nine months ended June 28, 2019 was primarily driven by the continuation of a full valuation allowance against any benefit associated with U.S. losses and income taxed in foreign jurisdictions at generally lower tax rates, where we are not in a valuation allowance because it is expected that we will be in a taxable income position. For additional information refer to *Note 16 - Income Taxes* to our Condensed Consolidated Financial Statements in this Quarterly Report on Form 10-Q.

Liquidity and Capital Resources

The following table summarizes our cash flow activities (in thousands):

	Nine Months Ended	
	July 3, 2020	June 28, 2019
Cash and cash equivalents, beginning of period	$ 75,519	$ 94,676
Net cash provided by operating activities	96,994	28,277
Net cash used in investing activities	(31,970)	(33,060)
Net cash used in financing activities	(8,462)	(4,792)
Foreign currency effect on cash	(211)	164
Cash and cash equivalents, end of period	$ 131,870	$ 85,265

Cash Flow from Operating Activities

Our cash flow from operating activities for the nine months ended July 3, 2020 of $97.0 million consisted of a net loss of $63.6 million, plus cash provided by operating assets and liabilities of $37.5 million, plus adjustments to reconcile our net loss to cash provided by operating activities of $123.1 million. Adjustments to reconcile our net loss to cash provided by operating activities primarily included depreciation and intangible amortization expense of $59.8 million and share-based compensation expense of $26.9 million, a warrant liability loss of $15.0 million and a loss on minority equity investment of $13.6 million. In addition, cash provided by operating assets and liabilities was $37.5 million for the nine months ended July 3, 2020, primarily driven by a decrease in prepaid expenses and other assets of $15.5 million, a decrease in inventories of $12.3 million and a decrease in accounts receivable of $9.3 million, primarily due to increased revenue in the three months ended July 3, 2020 as compared to the three months ended June 28, 2019.

Our cash flow from operating activities for the nine months ended June 28, 2019 of $28.3 million consisted of a net loss of $394.3 million, plus cash provided by operating assets and liabilities of $43.3 million, plus adjustments to reconcile our net loss to cash provided by operating activities of $379.3 million. Adjustments to reconcile our net loss to cash provided by operating activities primarily included restructuring and impairment-related charges of $272.9 million, depreciation and intangible amortization expense of $84.6 million and share-based compensation expense of $20.2 million, partially offset by a warrant liability gain of $5.8 million. In addition, cash provided by operating assets and liabilities was $43.3 million for the nine months ended June 28, 2019, primarily driven by a decrease in accounts receivable of $29.3 million, an increase in accrued and other liabilities of $3.2 million and a decrease in inventories of $12.3 million, partially offset by a decrease in accounts payable of $3.9 million.

Cash Flow from Investing Activities

Our cash flow used in investing activities for the nine months ended July 3, 2020 consisted primarily of purchases of $196.5 million of short-term investments, capital expenditures of $12.7 million, offset by proceeds of $165.8 million related to the sale and maturity of short-term investments and proceeds of $11.0 million associated with our divestment in May 2018 of certain capital equipment, inventory and other assets associated with our long-range optical subassembly product line in Japan.

Our cash flow used in used in investing activities for the nine months ended June 28, 2019 consisted primarily of capital expenditures of $31.9 million, and purchases of $156.1 million of short-term investments, offset by proceeds of $155.3 million related to the sale and maturity of short-term investments.

Cash Flow from Financing Activities

During the nine months ended July 3, 2020, our cash used in financing activities of $8.5 million was primarily related to $6.6 million of repurchases of stock associated with employee tax withholdings on vested equity awards, $5.2 million of payments on long-term debt, and $1.3 million of payments on financing leases, offset by $4.6 million of proceeds from stock option exercises and employee stock purchases.

During the nine months ended June 28, 2019, our cash used in financing activities of $4.8 million was primarily related to $5.2 million of payments on long-term debt and $3.9 million in purchases of stock associated with employee tax withholdings, partially offset by $5.6 million of proceeds from stock option exercises and employee stock purchases.

Liquidity

As of July 3, 2020, we held $131.9 million of cash and cash equivalents, primarily deposited with financial institutions. Other than the undistributed earnings of our M/A-COM Technology Solutions International Limited and M/A-COM Technology Solutions (UK) Limited subsidiaries, the undistributed earnings of our other foreign subsidiaries are indefinitely reinvested and we do not intend to repatriate such earnings. We believe the decision to reinvest these earnings will not have a significant impact on our liquidity. As of July 3, 2020, cash held by our indefinitely reinvested foreign subsidiaries was $36.5 million, which, along with cash generated from foreign operations, is expected to be used in the support of international growth and working capital requirements as well as the repayment of certain intercompany loans. As of July 3, 2020, we also held $133.2 million of liquid short-term investments and had $160.0 million in borrowing capacity under the Revolving Facility, of which we may borrow up to $50 million without being subject to certain financial covenants.

We plan to use our remaining available cash and cash equivalents, short-term investments, and as deemed appropriate our borrowing capacity under our Revolving Facility for general corporate purposes, including working capital, or for the acquisition of or investment in complementary technologies, design teams, products and businesses. We believe that our cash and cash equivalents, short-term investments, cash generated from operations and borrowing availability under the Revolving Facility will be sufficient to meet our working capital requirements for at least the next 12 months. We may need to raise additional capital from time to time through the issuance and sale of equity or debt securities, and there is no assurance that we will be able do so on favorable terms or at all.

For additional information related to our Liquidity and Capital Resources, see *Note 7 - Debt* to our Condensed Consolidated Financial Statements in this Quarterly Report on Form 10-Q.

Recent Accounting Pronouncements

See *Note 1 - Basis of Presentation and Summary of Significant Accounting Policies* to our Condensed Consolidated Financial Statements in this Quarterly Report on Form 10-Q for information about recent accounting pronouncements.

Off-Balance Sheet Arrangements

We did not have any off-balance sheet arrangements as of July 3, 2020.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We are exposed to market risk in the ordinary course of business, which consists primarily of interest rate risk associated with our cash and cash equivalents, short-term investments and our variable rate debt, as well as foreign exchange rate risk. In addition, the value of our warrant liability is based on the underlying price of our common stock and changes in its value could significantly impact our warrant liability expense.

Interest rate risk. The primary objectives of our investment activity are to preserve principal, provide liquidity and invest excess cash for an average rate of return. To minimize market risk, we maintain our portfolio in cash and diversified investments, which may consist of corporate and agency bonds, bank deposits, money market funds and commercial paper. Certain interest rates are variable and fluctuate with current market conditions. The risk associated with fluctuating interest rates is limited to this investment portfolio. We believe that a 10% change in interest rates would not have a material impact on our financial position or results of operations. We do not enter into financial instruments for trading or speculative purposes.

Our exposure to interest rate risk also relates to the increase or decrease in the amount of interest expense we must pay on the outstanding debt under the Credit Agreement. The interest rates on our term loans and revolving credit facility are variable interest rates based on our lender’s prime rate or a LIBOR rate, in each case plus an applicable margin, which exposes us to market interest rate risk when we have outstanding borrowings under the Credit Agreement. As of July 3, 2020, we had $667.8 million of outstanding borrowings under the Credit Agreement. Assuming our outstanding debt remains constant under the Credit Agreement for an entire year and the applicable annual interest rate increases or decreases by 1%, our annual interest expense would increase or decrease by $6.7 million.

Foreign currency risk. To date, our international customer agreements have been denominated primarily in U.S. dollars. Accordingly, we have limited exposure to foreign currency exchange rates. The functional currency of a majority of our foreign operations continues to be in U.S. dollars with the remaining operations being local currency. Increases in the value of the U.S. dollar relative to other currencies could make our products more expensive, which could negatively impact demand in certain regions. Conversely, decreases in the value of the U.S. dollar relative to other currencies could result in our products being more expensive to certain customers and could reduce or delay orders, or otherwise negatively affect how they do business with us. The effects of exchange rate fluctuations on the net assets of the majority of our operations are accounted for as transaction gains or losses. We believe that a change of 10% in such foreign currency exchange rates would not have a material impact on our financial position or results of operations. In the future, we may enter into foreign currency exchange hedging contracts to reduce our exposure to changes in exchange rates.

ITEM 4. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

As of the end of the period covered by this Quarterly Report on Form 10-Q, we carried out an evaluation of the effectiveness of the design and operation of our disclosure controls and procedures (as defined in Rule 13a-15(e) under the Securities Exchange Act of 1934, as amended (the “Exchange Act”). Based on this evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) were effective as of July 3, 2020.

Changes in Internal Control over Financial Reporting

There were no changes to our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) of the Exchange Act) that occurred during our most recent fiscal quarter that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Limitations on Controls

Our disclosure controls and procedures and internal control over financial reporting are designed to provide reasonable assurance of achieving the desired control objectives. Our management recognizes that any control system, no matter how well designed and operated, is based upon certain judgments and assumptions and cannot provide absolute assurance that its objectives will be met. Similarly, an evaluation of controls cannot provide absolute assurance that misstatements due to error or fraud will not occur or that all control issues and instances of fraud, if any, have been detected.

PART II—OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

See *Note 13 - Commitments and Contingencies* to our Condensed Consolidated Financial Statements in this Quarterly Report on Form 10-Q for information about our legal proceedings.

ITEM 1A. RISK FACTORS

Our business involves a high degree of risk. In addition to the other information set forth in this Quarterly Report on Form 10-Q, you should carefully consider the factors discussed in Part I, “Item 1A. Risk Factors” in our 2019 Annual Report on Form 10-K, which could materially affect our business, financial condition or future results. As of the date of this Quarterly Report on Form 10-Q, there have been no material changes in any of the risk factors described in our 2019 Annual Report on Form 10-K, except as discussed in Part II, "Item 1A. Risk Factors" in our Quarterly Report on Form 10-Qs for the fiscal quarters ended January 3, 2020, as filed with the SEC on January 29, 2020 and April 3, 2020, as filed with the SEC on April 30, 2020.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

Issuer Purchases of Equity Securities

The following table presents information with respect to purchases of common stock we made during the fiscal quarter ended July 3, 2020.

Period	Total Number of Shares (or Units) Purchased [(1)]	Average Price Paid per Share (or Unit)	Total Number of Shares (or Units) Purchased as Part of Publicly Announced Plans or Programs	Maximum Number of Shares (or Units) that May Yet Be Purchased Under the Plans or Programs
April 4, 2020-May 1, 2020	—	$ —	—	—
May 2, 2020-May 29, 2020	21,566	28.18	—	—
May 30, 2020-July 3, 2020	—	—	—	—
Total	21,566	$ 28.18	—	—

(1) We employ “withhold to cover” as a tax payment method for vesting of restricted stock awards for our employees, pursuant to which, we withheld from employees the shares noted in the table above to cover tax withholding related to the vesting of their awards. The average prices listed in the above table are averages of the fair market prices at which we valued shares withheld for purposes of calculating the number of shares to be withheld.

ITEM 6. EXHIBITS

Exhibit Number	Description
3.1	Fifth Amended and Restated Certificate of Incorporation (incorporated by reference to Exhibit 3.1 to our Current Report on Form 8-K filed on June 2, 2016).
3.2	Third Amended and Restated Bylaws (incorporated by reference to Exhibit 3.2 to our Current Report on Form 8-K filed on June 2, 2016).
31.1	Certification of Principal Executive Officer Required Under Rule 13a-14(a) and 15d-14(a) of the Securities Exchange Act of 1934, as amended.
31.2	Certification of Principal Financial Officer Required Under Rule 13a-14(a) and 15d-14(a) of the Securities Exchange Act of 1934, as amended.
32.1	Certification of Principal Executive Officer and Principal Financial Officer Required Under Rule 13a-14(b) of the Securities Exchange Act of 1934, as amended, and 18 U.S.C. §1350.
101	The following material from the Quarterly Report on Form 10-Q of MACOM Technology Solutions Holdings, Inc. for the fiscal quarter ended July 3, 2020, formatted in Inline XBRL: (i) Consolidated Balance Sheets, (ii) Consolidated Statements of Operations, (iii) Consolidated Statements of Comprehensive Loss, (iv) Consolidated Statements of Stockholders' Equity, (v) Consolidated Statements of Cash Flows, (vi) Notes to Consolidated Financial Statements and (vii) document and entity information, tagged as blocks of text and including detailed tags.
104	The cover page for the Quarterly Report on Form 10-Q of MACOM Technology Solutions Holdings, Inc. for the fiscal quarter ended July 3, 2020, formatted in Inline XBRL and included as Exhibit 101

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this Quarterly Report on Form 10-Q to be signed on its behalf by the undersigned thereunto duly authorized.

MACOM TECHNOLOGY SOLUTIONS HOLDINGS, INC.

Dated: July 30, 2020	By:	/s/ Stephen G. Daly
		Stephen G. Daly *President and Chief Executive Officer* *(Principal Executive Officer)*
Dated: July 30, 2020	By:	/s/ John F. Kober
		John F. Kober *Senior Vice President and Chief Financial Officer* *(Principal Accounting and Principal Financial Officer)*

Exhibit 31.1

CERTIFICATION OF THE PRESIDENT AND CEO PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Stephen G. Daly, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of MACOM Technology Solutions Holdings, Inc.;
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(s) 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(s) 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.

Date: July 30, 2020

/s/ Stephen G. Daly

Stephen G. Daly

President and Chief Executive Officer
(Principal Executive Officer)

Exhibit 31.2

CERTIFICATION OF THE CFO PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, John F. Kober, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of MACOM Technology Solutions Holdings, Inc.;
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(s) 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(s) 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.

Date: July 30, 2020

/s/ John F. Kober

John F. Kober
SVP and Chief Financial Officer
(Principal Financial Officer)

Exhibit 32.1

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report of MACOM Technology Solutions Holdings, Inc. (the “Company”) on Form 10-Q for the quarter ended July 3, 2020 as filed with the Securities and Exchange Commission on the date hereof (the “Report”), Stephen G. Daly, as President and Chief Executive Officer of the Company, and John F. Kober, as SVP and Chief Financial Officer of the Company, each hereby certifies, pursuant to and solely for the purpose of 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) 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 for the period covered by the Report.

Date: July 30, 2020

By: /s/ Stephen G. Daly
Stephen G. Daly
President and Chief Executive Officer
(Principal Executive Officer)

By: /s/ John F. Kober
John F. Kober
SVP and Chief Financial Officer
(Principal Financial Officer)