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: June 30, 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: 0-11412

AMTECH SYSTEMS, INC.

(Exact name of registrant as specified in its charter)

Arizona	86-0411215
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
131 South Clark Drive, Tempe, Arizona	85281
(Address of principal executive offices)	(Zip Code)

Registrant's telephone number, including area code: 480-967-5146

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, par value $0.01 per share	ASYS	NASDAQ.Global Select Market

Indicate by a 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 ☒

At July 31, 2020, there were outstanding 14,048,172 shares of Common Stock.

AMTECH SYSTEMS, INC. AND SUBSIDIARIES

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Cautionary Statement Regarding Forward-Looking Statements

Unless otherwise indicated, the terms "Amtech," the "Company," "we," "us" and "our" refer to Amtech Systems, Inc. together with its subsidiaries.

Our discussion and analysis in this Quarterly Report on Form 10-Q, our Annual Report on Form 10-K, our other reports that we file with the Securities and Exchange Commission (the "SEC"), our press releases and in public statements of our officers and corporate spokespersons contain "forward-looking" statements within the meaning of Section 27A of the Securities Act of 1933, as amended (the "Securities Act"), Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and the Private Securities Litigation Reform Act of 1995. Forward-looking statements give our current expectations or forecasts of future events. You can identify these statements by the fact that they do not relate strictly to historical or current events. We have tried, wherever possible, to identify such statements by using words such as "may," "plan," "anticipate," "seek," "will," "expect," "intend," "estimate," "believe," "continue," "predict," "potential," "project," "should," "would," "likely," "future," "target," "forecast," "goal," "observe," and "strategy" or the negative thereof or variations thereon or similar terminology. Some factors that could cause actual results to differ materially from those anticipated include, among others, future economic conditions, including changes in the markets in which we operate; changes in demand for our services and products; whether continued technological advances and emerging industries will sustain our long-term performance; business interruptions, including those related to the novel strain of coronavirus (COVID-19); the potential impacts of the COVID-19 pandemic on our business operations, financial results and financial position; the severity, magnitude and duration of the COVID-19 pandemic, including impacts of the pandemic and of businesses' and governments' responses to the pandemic on our operations and personnel, and on commercial activity and demand across our and our customers' businesses; difficulties in successfully executing our growth initiatives; our ability to take part in the growth of the SiC industry through investments in capacity, product development and people; our ability to expand our customer base and realize future revenue growth from our 300 mm silicon horizontal thermal reaction product solution; our ability to realize further growth within BTU by making investments in product innovation; our ability to identify strong acquisition targets in the semiconductor and SiC growth environment and successfully execute transactions and integrate such targets; the effects of semiconductor trends on our annual goodwill impairment analysis; the effects of competition in the markets in which we operate, including the adverse impact of competitive product announcements or new entrants into our markets and transfers of resources by competitors into our markets; control of costs and expenses; risks associated with new technologies and the impact on our business; legislative, regulatory, and competitive developments in markets in which we operate; possible future claims, litigation or enforcement actions and the results of any such claim, litigation proceeding, or enforcement action; and other circumstances and risks identified in this Quarterly Report or referenced from time to time in our filings with the SEC. These and many other factors could affect Amtech's future operating results and financial condition and could cause actual results to differ materially from expectations based on forward-looking statements made in this document or elsewhere by Amtech or on its behalf.

You should not place undue reliance on these forward-looking statements. We cannot guarantee that any forward-looking statement will be realized, although we believe that the expectations reflected in the forward-looking statements are reasonable as of the date of this Quarterly Report. Achievement of future results is subject to events out of our control, risks, uncertainties and potentially inaccurate assumptions. The Annual Report on Form 10-K that we filed with the SEC for the year ended September 30, 2019 listed various important factors that could affect Amtech's future operating results and financial condition and could cause actual results to differ materially from historical results and expectations based on forward-looking statements made in this document or elsewhere by Amtech or on its behalf. These factors can be found under the heading "Item 1A. Risk Factors" in the Annual Report on Form 10-K and investors should refer to them as well as the additional risk factors identified in this Quarterly Report. Because it is not possible to predict or identify all such factors, any such list cannot be considered a complete set of all potential risks or uncertainties.

The Company undertakes no obligation to update or publicly revise any forward-looking statement whether as a result of new information, future developments or otherwise. All subsequent written or oral forward-looking statements attributable to the Company or persons acting on its behalf are expressly qualified in their entirety by this paragraph. You are advised, however, to consult any further disclosures we make on related subjects in our subsequently filed Form 10-Q and Form 8-K reports and our other filings with the SEC. As noted above, we provide a cautionary discussion of risks, uncertainties and possibly inaccurate assumptions relevant to our business under "Item 1A. Risk Factors" of our Annual Report on Form 10-K. We note these factors for investors as permitted by the Private Securities Litigation Reform Act of 1995. You should understand it is not possible to predict or identify all such factors.

PART I. FINANCIAL INFORMATION

Item 1. Condensed Consolidated Financial Statements

AMTECH SYSTEMS, INC. AND SUBSIDIARIES
Condensed Consolidated Balance Sheets
(in thousands, except share data)

Assets	June 30, 2020 (Unaudited)	September 30, 2019
Current Assets		
Cash and cash equivalents	$ 46,436	$ 52,982
Restricted cash	—	101
Accounts receivable (less allowance for doubtful accounts of $138 and $172 at June 30, 2020, and September 30, 2019, respectively)	10,297	12,873
Inventories	19,385	17,532
Notes and other receivables	1,250	—
Income taxes receivable	150	—
Held-for-sale assets	—	22,755
Other current assets	3,066	2,027
Total current assets	80,584	108,270
Property, Plant and Equipment - Net	10,438	10,217
Right-of-Use Assets - Net	5,162	—
Intangible Assets - Net	674	870
Goodwill - Net	6,633	6,633
Other Assets	565	487
Total Assets	$ 104,056	$ 126,477
Liabilities and Shareholders' Equity		
Current Liabilities		
Accounts payable	$ 3,933	$ 4,371
Accrued compensation and related taxes	1,983	2,717
Accrued warranty expense	401	556
Other accrued liabilities	1,478	1,274
Current maturities of long-term debt	376	371
Contract liabilities	1,645	1,378
Income taxes payable	—	1,434
Held-for-sale liabilities	—	18,547
Total current liabilities	9,816	30,648
Long-Term Debt	4,894	5,178
Long-Term Lease Liability	5,088	—
Income Taxes Payable	2,007	3,199
Total Liabilities	21,805	39,025
Commitments and Contingencies		
Shareholders' Equity		
Preferred stock; 100,000,000 shares authorized; none issued	—	—
Common stock; $0.01 par value; 100,000,000 shares authorized; shares issued and outstanding: 14,048,172 and 14,268,797 at June 30, 2020 and September 30, 2019, respectively	140	143
Additional paid-in capital	124,289	125,098
Accumulated other comprehensive loss	(1,792)	(11,233)
Retained deficit	(40,386)	(26,556)
Total shareholders' equity	82,251	87,452
Total Liabilities and Shareholders' Equity	$ 104,056	$ 126,477

The accompanying notes are an integral part of these condensed consolidated financial statements.

AMTECH SYSTEMS, INC. AND SUBSIDIARIES
Condensed Consolidated Statements of Operations
(Unaudited)
(in thousands, except per share data)

	Three Months Ended June 30,		Nine Months Ended June 30,	
	2020	2019	2020	2019
Revenues, net of returns and allowances	$ 15,227	$ 21,003	$ 50,379	$ 64,861
Cost of sales	9,276	13,153	30,896	40,064
Gross profit	5,951	7,850	19,483	24,797
Selling, general and administrative	4,804	5,718	16,134	18,137
Research, development and engineering	899	746	2,436	2,325
Restructuring charges	217	35	217	1,072
Operating income	31	1,351	696	3,263
Loss on sale of subsidiary	—	—	(2,793)	—
Interest (expense) income and other, net	(13)	249	512	511
Income (loss) from continuing operations before income taxes	18	1,600	(1,585)	3,774
Income tax provision	90	707	297	1,621
(Loss) income from continuing operations, net of tax	(72)	893	(1,882)	2,153
Income (loss) from discontinued operations, net of tax	—	1,154	(11,816)	(8,113)
Net (loss) income	$ (72)	$ 2,047	$ (13,698)	$ (5,960)
(Loss) Income Per Basic Share:				
Basic (loss) income per share from continuing operations	$ (0.01)	$ 0.06	$ (0.13)	$ 0.15
Basic income (loss) per share from discontinued operations	$ —	$ 0.08	$ (0.83)	$ (0.57)
Net (loss) income per basic share	$ (0.01)	$ 0.14	$ (0.96)	$ (0.42)
(Loss) Income Per Diluted Share:				
Diluted (loss) income per share from continuing operations	$ (0.01)	$ 0.06	$ (0.13)	$ 0.15
Diluted income (loss) per share from discontinued operations	$ —	$ 0.08	$ (0.83)	$ (0.57)
Net (loss) income per diluted share	$ (0.01)	$ 0.14	$ (0.96)	$ (0.42)
Weighted average shares outstanding - basic	14,155	14,245	14,195	14,231
Weighted average shares outstanding - diluted	14,155	14,316	14,195	14,267

The accompanying notes are an integral part of these condensed consolidated financial statements.

AMTECH SYSTEMS, INC. AND SUBSIDIARIES
Condensed Consolidated Statements of Comprehensive Income (Loss)
(Unaudited)
(in thousands)

	Three Months Ended June 30,		Nine Months Ended June 30,	
	2020	2019	2020	2019
Net (loss) income	$ (72)	$ 2,047	$ (13,698)	$ (5,960)
Foreign currency translation adjustment	22	(904)	644	(1,690)
Reclassification adjustment for net foreign currency translation losses included in net (loss) income	—	487	8,797	487
Comprehensive (loss) income	$ (50)	$ 1,630	$ (4,257)	$ (7,163)

The accompanying notes are an integral part of these condensed consolidated financial statements.

AMTECH SYSTEMS, INC. AND SUBSIDIARIES
Condensed Consolidated Statements of Shareholders' Equity
(Unaudited)
(in thousands)

	Common Stock		Treasury Stock			Accumulated Other	Retained Earnings	Total
	Shares	Par Value	Shares	Par Value	Additional Paid-In Capital	Comprehensive Income (Loss)	(Accumulated Deficit)	Shareholders' Equity
Balance at September 30, 2018	14,217	$ 142	—	$ —	$ 124,316	$ (9,974)	$ (21,394)	$ 93,090
Net loss	—	—	—	—	—	—	(2,372)	(2,372)
Translation adjustment	—	—	—	—	—	(576)	—	(576)
Stock compensation expense	—	—	—	—	169	—	—	169
Stock options exercised	11	—	—	—	37	—	—	37
Balance at December 31, 2018	14,228	142	—	—	124,522	(10,550)	(23,766)	90,348
Net loss	—	—	—	—	—	—	(5,635)	(5,635)
Translation adjustment	—	—	—	—	—	(210)	—	(210)
Stock compensation expense	—	—	—	—	194	—	—	194
Stock options exercised	—	—	—	—	—	—	—	—
Balance at March 31, 2019	14,228	142	—	—	124,716	(10,760)	(29,401)	84,697
Net income	—	—	—	—	—	—	2,047	2,047
Translation adjustment	—	—	—	—	—	(417)	—	(417)
Stock compensation expense	—	—	—	—	111	—	—	111
Stock options exercised	30	1	—	—	137	—	—	138
Balance at June 30, 2019	14,258	$ 143	—	$ —	$ 124,964	$ (11,177)	$ (27,354)	$ 86,576
Balance at September 30, 2019	14,269	$ 143	—	$ —	$ 125,098	$ (11,233)	$ (26,556)	$ 87,452
Net loss	—	—	—	—	—	—	(1,932)	(1,932)
Translation adjustment	—	—	—	—	—	2,673	—	2,673
Stock compensation expense	—	—	—	—	68	—	—	68
Stock options exercised	117	1	—	—	700	—	—	701
Balance at December 31, 2019	14,386	144	—	—	125,866	(8,560)	(28,488)	88,962
Net loss	—	—	—	—	—	—	(11,694)	(11,694)
Translation adjustment	—	—	—	—	—	6,746	—	6,746
Stock compensation expense	—	—	—	—	65	—	—	65
Stock repurchases	—	—	(366)	(2,000)	—	—	—	(2,000)
Retirement of stock repurchases	(366)	(4)	366	2,000	(1,864)	—	(132)	—
Stock options exercised	21	—	—	—	78	—	—	78
Balance at March 31, 2020	14,041	140	—	—	124,145	(1,814)	(40,314)	82,157
Net loss	—	—	—	—	—	—	(72)	(72)
Translation adjustment	—	—	—	—	—	22	—	22
Stock compensation expense	—	—	—	—	124	—	—	124
Stock options exercised	7	—	—	—	20	—	—	20
Balance at June 30, 2020	14,048	$ 140	—	$ —	$ 124,289	$ (1,792)	$ (40,386)	$ 82,251

The accompanying notes are an integral part of these condensed consolidated financial statements.

AMTECH SYSTEMS, INC. AND SUBSIDIARIES
Condensed Consolidated Statements of Cash Flows
(Unaudited)
(in thousands)

	Nine Months Ended June 30, 2020	Nine Months Ended June 30, 2019
Operating Activities		
Net loss	$ (13,698)	$ (5,960)
Adjustments to reconcile net loss to net cash (used in) provided by operating activities:		
Depreciation and amortization	932	1,280
Write-down of inventory	540	2,991
Deferred income taxes	784	192
Non-cash share-based compensation expense	257	474
Loss (gain) on sales of subsidiaries	13,708	(1,614)
(Reversal of) provision for allowance for doubtful accounts, net	(26)	1,104
Other, net	13	107
Changes in operating assets and liabilities:		
Accounts receivable	2,356	630
Inventories	(2,791)	284
Other assets	(2,376)	12,675
Accounts payable	(2,363)	(3,843)
Accrued income taxes	(2,722)	(1,359)
Accrued and other liabilities	5,346	(5,726)
Contract liabilities	(950)	(814)
Net cash (used in) provided by operating activities	(990)	421
Investing Activities		
Purchases of property, plant and equipment	(860)	(552)
Net cash disposed of in sales of subsidiaries	(9,940)	(1,112)
Net cash used in investing activities	(10,800)	(1,664)
Financing Activities		
Proceeds from the exercise of stock options	799	175
Repurchase of common stock	(2,000)	—
Payments on long-term debt	(285)	(280)
Borrowings on long-term debt	—	9
Net cash used in financing activities	(1,486)	(96)
Effect of Exchange Rate Changes on Cash, Cash Equivalents and Restricted Cash	578	(1,450)
Net Decrease in Cash, Cash Equivalents and Restricted Cash	(12,698)	(2,789)
Cash, Cash Equivalents and Restricted Cash, Beginning of Period*	59,134	62,496
Cash, Cash Equivalents and Restricted Cash, End of Period*	$ 46,436	$ 59,707

* Includes Cash, Cash Equivalents and Restricted Cash that are included in Held-For-Sale Assets on the Condensed Consolidated Balance Sheets for periods prior to January 22, 2020.

The accompanying notes are an integral part of these condensed consolidated financial statements.

1. Basis of Presentation and Significant Accounting Policies

Nature of Operations and Basis of Presentation – Amtech Systems, Inc. (the "Company," "Amtech," "we," "our" or "us") is a leading, global manufacturer of capital equipment, including thermal processing and wafer polishing, and related consumables used in fabricating semiconductor devices, such as silicon carbide (SiC) and silicon power chips, electronic assemblies and light-emitting diodes (LEDs). We sell these products to semiconductor and automotive component manufacturers worldwide, particularly in Asia, North America and Europe.

We serve niche markets in industries that are experiencing technological advances and which historically have been very cyclical. Therefore, our future profitability and growth depend on our ability to develop or acquire and market profitable new products and on our ability to adapt to cyclical trends.

In the second quarter of fiscal 2019, we began the process to divest our solar business. As such, we have classified substantially all of the Solar segment as held for sale in our Condensed Consolidated Balance Sheets and reported its results as discontinued operations in our Condensed Consolidated Statements of Operations. These divestitures were completed in the second quarter of fiscal 2020. For additional information on the divestitures, see Note 4. For additional information on our segments, see Note 10.

The accompanying unaudited condensed consolidated financial statements have been prepared pursuant to the rules and regulations of the U.S. Securities and Exchange Commission (the "SEC"), and consequently do not include all disclosures normally required by accounting principles generally accepted in the United States of America. In the opinion of management, the accompanying unaudited interim condensed consolidated financial statements contain all adjustments necessary, all of which are of a normal and recurring nature, to present fairly our financial position, results of operations and cash flows. Certain information and note disclosures normally included in financial statements have been condensed or omitted pursuant to the rules and regulations of the SEC. The condensed balance sheet at September 30, 2019, has been derived from the audited consolidated financial statements at that date but does not include all of the information and footnotes required by generally accepted accounting principles for complete financial statements. These unaudited condensed consolidated financial statements should be read in conjunction with the audited consolidated financial statements and notes thereto included in our Annual Report on Form 10-K for the fiscal year ended September 30, 2019.

Our fiscal year is from October 1 to September 30. Unless otherwise stated, references to the years 2020 and 2019 relate to the fiscal years ended September 30, 2020 and 2019, respectively.

The consolidated results of operations for the three and nine months ended June 30, 2020, are not necessarily indicative of the results to be expected for the full fiscal year.

Principles of Consolidation – The consolidated financial statements include the accounts of the Company and our wholly-owned subsidiaries. All significant intercompany balances and transactions have been eliminated in consolidation.

Use of Estimates – The preparation of consolidated financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenue and expenses during the reporting period. Actual results could differ from those estimates.

Reclassifications – Certain reclassifications have been made to prior year financial statements to conform to the current year presentation. Results for all periods presented in this report have been reclassified for changes to our reportable segments (Note 10). These reclassifications had no effect on the previously reported consolidated financial statements for any period.

Divestitures – Significant accounting policies associated with a decision to dispose of a business are discussed below:

Discontinued Operations – A business is classified as discontinued operations if the disposal represents a strategic shift that will have a major effect on operations or financial results and meets the criteria to be classified as held for sale or is disposed of by sale or otherwise. Significant judgments are involved in determining whether a business meets the criteria for discontinued operations reporting and the period in which these criteria are met. If a business is reported as a discontinued operation, the results of operations through the date of sale, including any gain or loss recognized on the disposition, are presented on a separate line of the Condensed Consolidated Statements of Operations. Interest on debt directly attributable to the discontinued operation is allocated to discontinued operations.

Assets Held for Sale – An asset or business is classified as held for sale when (i) management commits to a plan to sell and it is actively marketed; (ii) it is available for immediate sale and the sale is expected to be completed within one year; and (iii) it is unlikely significant changes to the plan will be made or that the plan will be withdrawn. In isolated instances, assets held for sale may exceed one year due to events or circumstances beyond our control. The assets and related liabilities are aggregated and reported on separate lines of the Condensed Consolidated Balance Sheets.

Shipping Expense – Shipping expenses of $0.1 million and $0.2 million for the three months ended June 30, 2020 and 2019, respectively, and $0.4 million and $0.6 million for the nine months ended June 30, 2020 and 2019, respectively, are included in selling, general and administrative expenses.

Research, Development and Engineering Expense – The table below shows gross research and development expenses and grants earned, in thousands:

	Three Months Ended June 30,		Nine Months Ended June 30,	
	2020	2019	2020	2019
Research, development and engineering	$ 982	$ 790	$ 2,762	$ 2,369
Grants earned	(83)	(44)	(326)	(44)
Net research, development and engineering	$ 899	$ 746	$ 2,436	$ 2,325

Concentrations of Credit Risk – Our customers consist primarily of semiconductor manufacturers worldwide, as well as the lapping and polishing marketplace. Financial instruments that potentially subject us to significant concentrations of credit risk consist principally of cash and trade accounts receivable. Credit risk is managed by performing ongoing credit evaluations of the customers' financial condition, by requiring significant deposits where appropriate, and by actively monitoring collections. Letters of credit are required of certain customers depending on the size of the order, type of customer or its creditworthiness, and country of domicile.

As of June 30, 2020, one Semiconductor segment customer individually represented 12% of accounts receivable. As of September 30, 2019, one Semiconductor customer individually represented 15% of accounts receivable.

We maintain our cash, cash equivalents and restricted cash in multiple financial institutions. Balances in the United States, which account for approximately 89% and 79% of total cash balances at our continuing operations as of June 30, 2020 and September 30, 2019, respectively, are primarily invested in U.S. Treasuries or are in financial institutions insured by the Federal Deposit Insurance Corporation ("FDIC"). The remainder of our cash is maintained with financial institutions with reputable credit ratings in China, the United Kingdom, Singapore and Malaysia. We maintain cash in bank accounts in amounts which at times may exceed federally insured limits. We have not experienced any losses on such accounts.

Refer to Note 11 to Condensed Consolidated Financial Statements for information regarding major customers, foreign sales and revenue in other countries subject to fluctuation in foreign currency exchange rates.

Impact of Recently Issued Accounting Pronouncements

Effective October 1, 2019, we adopted the Financial Accounting Standards Board's ("FASB") Accounting Standard Update ("ASU") No. 2016-02—Leases (Topic 842), using the retrospective cumulative effect adjustment transition method. We elected the package of practical expedients permitted under the transition guidance within the new standard, which among other things, allowed us to carry forward the historical lease classification. In addition, we made an accounting policy election not to separate non-lease components from lease components for all existing classes of underlying assets with the exception of land and buildings. We also made an accounting policy election to not record right of use ("ROU") assets and lease liabilities for leases with an initial term of twelve months or less on our condensed consolidated balance sheet.

Adoption of the new standard resulted in the recording of lease ROU assets and lease liabilities of approximately $195,000 and $163,000, respectively, as of October 1, 2019. The standard did not materially impact our consolidated results from operations and had no impact on our cash flows upon adoption. However, during the third quarter of fiscal 2020, we recorded an additional $5.0 million of ROU assets and lease liabilities upon the commencement of our new SiC/LED building lease. Refer to Note 3 to the Condensed Consolidated Financial Statements for further information regarding Topic 842.

There have been no other material changes or additions to the recently issued accounting standards other than those previously reported in Note 1 to our Consolidated Financial Statements in Part II, Item 8 of our Annual Report on Form 10-K for the year ended September 30, 2019 that affect or may affect our consolidated financial statements.

2. Contracts with Customers

The components of contract assets, which are included in other current assets in our condensed consolidated balance sheets, are as follows, in thousands:

	June 30, 2020	September 30, 2019
Unbilled accounts receivable	$ —	$ 36
Contract assets	$ —	$ 36

The components of contract liabilities are as follows, in thousands:

	June 30, 2020	September 30, 2019
Customer deposits	$ 1,645	$ 1,378
Contract liabilities	$ 1,645	$ 1,378

3. Leases

We lease office space, buildings, land, vehicles and equipment. Lease agreements with an initial term of 12 months or less are not recorded on the balance sheet. Instead, we recognize the lease expense as incurred over the lease term.

Certain lease agreements include one or more options to renew, with renewal terms that can extend the lease term from one to five years. The exercise of lease renewal options is at our sole discretion. Some agreements also include options to purchase the leased property. The estimated life of assets and leasehold improvements are limited by the expected lease term, unless there is a transfer of title or purchase option reasonably certain of exercise.

Our lease agreements do not contain any material residual value guarantees or material restrictive covenants.

Significant Accounting Policy

We determine if a contract or arrangement is, or contains, a lease at inception. Balances related to operating leases are included in Right-of-Use assets in our condensed consolidated balance sheet. Balances related to financing leases are immaterial and are included in property and equipment, other current liabilities, and long-term lease liability in our condensed consolidated balance sheet. ROU assets represent our right to use an underlying asset for the lease term and lease liabilities represent our obligation to make lease payments arising from the lease.

ROU assets and liabilities are recognized at commencement date based on the present value of lease payments over the lease term. As none of our leases provide an implicit rate, we use our incremental borrowing rate based on the information available at commencement date in determining the present value of lease payments. The ROU asset includes any prepaid lease payments and additional direct costs and excludes lease incentives. Our lease terms may include options to extend or terminate the lease when it is reasonably certain that we will exercise that option.

The following table provides information about the financial statement classification of our lease balances reported within the condensed consolidated balance sheets as of June 30, 2020 and October 1, 2019, in thousands:

	June 30, 2020	October 1, 2019
Assets		
Operating lease assets	$ 5,162	$ 146
Finance lease assets	29	49
Total lease assets	$ 5,191	$ 195
Liabilities		
Current		
Operating lease liabilities	$ 115	$ 99
Finance lease liabilities	12	22
Non-current		
Operating lease liabilities	5,069	15
Finance lease liabilities	19	27
Total lease liabilities	$ 5,215	$ 163

The following table provides information about the financial statement classification of our lease expenses reported in the condensed consolidated statements of operations for the three and nine months ended June 30, 2020, in thousands:

Lease cost	Classification	Three Months Ended June 30, 2020	Nine Months Ended June 30, 2020
Operating lease cost	Selling, general and administrative expenses	$ 72	$ 187
Finance lease cost	Selling, general and administrative expenses	5	20
Total lease cost		$ 77	$ 207

Future minimum lease payments under non-cancelable leases as of June 30, 2020 are as follows, in thousands:

	Operating leases	Finance Leases	Total
Remainder of 2020	$ 85	$ 4	$ 89
2021	323	12	335
2022	317	8	325
2023	312	7	319
2024	311	2	313
2025	297	—	297
Thereafter	6,944	—	6,944
Total lease payments	8,589	33	8,622
Less: Interest	3,405	2	3,407
Present value of lease liabilities	5,184	31	$ 5,215

Operating lease payments include $3.9 million related to options to extend lease terms that are reasonably certain of being exercised.

The following table provides information about the remaining lease terms and discount rates applied as of June 30, 2020:

	June 30, 2020
Weighted average remaining lease term	
Operating leases	24.33 years
Finance leases	2.89 years
Weighted average discount rate	
Operating leases	4.17 %
Finance leases	4.17 %

4. Assets Held for Sale, Discontinued Operations and Disposals

In April 2019, we announced that our Board of Directors (the "Board") determined that it was in the long-term best interest of the Company to exit the solar business segment and focus our strategic efforts on our semiconductor and silicon carbide/polishing business segments in order to more fully realize the opportunities the Company believes are presented in those areas. The divestitures of our solar business included our Tempress and SoLayTec subsidiaries, which comprised substantially all of our Solar segment. We classified substantially all of the Solar segment as held for sale in our Condensed Consolidated Balance Sheets and reported its results as discontinued operations in our Condensed Consolidated Statements of Operations for periods reported subsequent to the announcement.

On June 7, 2019 ("SoLayTec Sale Date"), we completed the sale of our subsidiary, SoLayTec, to a third party located in the Netherlands. Upon the sale, we recognized a gain of approximately $1.6 million, which we reported as gain on sale of subsidiary in our Consolidated Statements of Operations for the three months ended June 30, 2019. Effective on the SoLayTec Sale Date, SoLayTec is no longer included in our consolidated financial statements. SoLayTec was not material to Amtech's results of operations or financial position.

On December 13, 2019 ("R2D Sale Date"), we finalized the sale of our subsidiary, R2D Automation SAS ("R2D"), to certain members of R2D's management team. Upon the sale, we recognized a loss of approximately $2.8 million, which we reported as loss on sale of subsidiary in our Condensed Consolidated Statements of Operations for the nine months ended June 30, 2020. Effective on the R2D Sale Date, R2D is no longer included in our consolidated financial statements. R2D does not meet the discontinued operations or held-for-sale criteria and is not material to Amtech's results of operations or financial position.

Effective January 22, 2020 ("Tempress Sale Date"), we completed the sale of our subsidiary, Tempress Group Holding B.V. ("Tempress") for nominal consideration to a third party located in the Netherlands. In connection with this sale transaction, we provided an unsecured term loan to Tempress in the principal sum of $2.25 million, to be used to fund Tempress' working capital requirements and to facilitate the restructuring of Tempress' operations. In July 2020, we received the final loan payment of $ 1.25 million. We forgave $0.5 million of the loan in accordance with the terms of the loan agreement. We recorded a pre-tax loss on deconsolidation of approximately $10.9 million, of which approximately $7.2 million was the recognition of previously recorded accumulated foreign currency translation losses. The total pre-tax loss does not have a material effect on our cash balances at our continuing operations. We also recognized a significant tax benefit relating to this loss, which can be carried over to future years. Effective on the Tempress Sale Date, Tempress is no longer included in our consolidated financial statements.

Operating results of our discontinued solar operations were as follows, in thousands:

	Three Months Ended June 30,		Nine Months Ended June 30,	
	2020	2019	2020	2019
Revenues, net of returns and allowances	$ —	$ 5,268	$ 7,442	$ 19,649
Cost of sales	—	4,374	5,969	19,726
Gross profit (loss)	—	894	1,473	(77)
Selling, general and administrative	—	1,735	1,814	7,412
Research, development and engineering	—	736	540	2,647
Restructuring charges	—	(3)	37	598
Operating loss	—	(1,574)	(918)	(10,734)
Gain (loss) on sale of subsidiary	—	1,614	(10,916)	1,614
Interest expense and other, net	—	(143)	(29)	(213)
Loss from discontinued operations before income taxes	—	(103)	(11,863)	(9,333)
Income tax benefit	—	(1,257)	(47)	(1,220)
Net income (loss) from discontinued operations, net of tax	$ —	$ 1,154	$ (11,816)	$ (8,113)

The following table presents a summary of the solar assets and liabilities held for sale included in our Condensed Consolidated Balance Sheets, in thousands:

Assets	September 30, 2019
Total current assets	$ 17,591
Property, plant and equipment - net	5,164
Total assets included in the disposal group	22,755
Total current liabilities	18,272
Long-term debt	275
Total liabilities included in the disposal group	18,547
Net assets included in the disposal group	$ 4,208

Amtech's Condensed Consolidated Statements of Cash Flows combines cash flows from discontinued operations with cash flows from continuing operations within each cash flow statement category. The following table summarizes selected cash flow information for discontinued operations, in thousands:

	Nine Months Ended June 30,	
	2020	2019
Loss from discontinued operations, net of tax	$ (11,816)	$ (8,113)
Depreciation and amortization	$ 180	$ 426
(Reversal of) provision for allowance for doubtful accounts, net	$ (66)	$ 887
(Loss) gain on sale of subsidiary	$ (10,916)	$ 1,614
Purchases of property, plant and equipment	$ 1	$ 118

5. Earnings Per Share

Basic earnings per share ("EPS") is computed by dividing net income (loss) by the weighted average number of common shares outstanding for the period. Diluted EPS is computed similarly to basic EPS except that the denominator is increased to include the number of additional common shares that would have been outstanding if potentially dilutive common shares had been issued. In the case of a net loss, diluted earnings per share is calculated in the same manner as basic EPS.

For the three and nine months ended June 30, 2020, options for 695,000 and 652,000 weighted average shares, respectively, were excluded from the diluted EPS calculations because they were anti-dilutive. For the three and nine months ended June 30, 2019, options for 819,000 and 1,062,000 weighted average shares, respectively, were excluded from the diluted EPS calculations because they were anti-dilutive. These shares could become dilutive in the future.

A reconciliation of the denominators of the basic and diluted EPS calculations follows (in thousands, except per share amounts):

	Three Months Ended June 30,		Nine Months Ended June 30,	
	2020	2019	2020	2019
Numerator:				
Net (loss) income from continuing operations	$ (72)	$ 893	$ (1,882)	$ 2,153
Net income (loss) from discontinued operations	$ —	$ 1,154	$ (11,816)	$ (8,113)
Net (loss) income	$ (72)	$ 2,047	$ (13,698)	$ (5,960)
Denominator:				
Weighted-average shares used to compute basic EPS	14,155	14,245	14,195	14,231
Common stock equivalents (1)	—	71	—	36
Weighted-average shares used to compute diluted EPS	14,155	14,316	14,195	14,267
Basic (loss) income per share from continuing operations	$ (0.01)	$ 0.06	$ (0.13)	$ 0.15
Basic income (loss) per share from discontinued operations	$ —	$ 0.08	$ (0.83)	$ (0.57)
Net (loss) income per basic share	$ (0.01)	$ 0.14	$ (0.96)	$ (0.42)
Diluted (loss) income per share from continuing operations	$ (0.01)	$ 0.06	$ (0.13)	$ 0.15
Diluted income (loss) per share from discontinued operations	$ —	$ 0.08	$ (0.83)	$ (0.57)
Net (loss) income per diluted share	$ (0.01)	$ 0.14	$ (0.96)	$ (0.42)

(1) The number of common stock equivalents is calculated using the treasury method and the average market price during the period.

6. Inventory

The components of inventories are as follows, in thousands:

	June 30, 2020	September 30, 2019
Purchased parts and raw materials	$ 15,908	$ 15,192
Work-in-process	4,004	4,215
Finished goods	4,107	3,183
	24,019	22,590
Excess and obsolete reserves	(4,634)	(5,058)
	$ 19,385	$ 17,532

7. Equity and Stock-Based Compensation

Stock-based compensation expense was $0.1 million in each of the three months ended June 30, 2020 and 2019, and was $0.3 million and $0.5 million in the nine months ended June 30, 2020 and 2019, respectively. Stock-based compensation expense is included in selling, general and administrative expenses.

The following table summarizes our stock option activity during the nine months ended June 30, 2020:

	Options	Weighted Average Exercise Price
Outstanding at beginning of period	1,068,665	$ 7.04
Granted	32,500	5.34
Exercised	(145,375)	5.50
Forfeited	(215,894)	7.65
Outstanding at end of period	739,896	$ 7.08
Exercisable at end of period	630,773	$ 7.36
Weighted average fair value of options granted during the period	$ 2.89	

The fair value of options was estimated at the applicable grant date using the Black-Scholes option pricing model with the following assumptions:

	Nine Months Ended June 30, 2020
Risk free interest rate	1%
Expected life	6 years
Dividend rate	—%
Volatility	58%

On November 29, 2018, we announced that our Board approved a stock repurchase program, pursuant to which we may repurchase up to $5 million of our outstanding common stock, par value $0.01 per share ("Common Stock"), over a one-year period. Repurchases under the program were to be made in open market transactions at prevailing market prices, in privately negotiated transactions, or by other means in compliance with the rules and regulations of the SEC; however, we had no obligation to repurchase shares and the timing, actual number, and value of shares to be repurchased was subject to management's discretion and depended on the Company's stock price and other market conditions. Our Board could have terminated the repurchase program at any time while it was in effect. We intended to retire any repurchased shares. The term of our repurchase program expired as of the quarter ended December 31, 2019. There were no shares repurchased under this plan.

On February 4, 2020, the Board approved a new stock repurchase program, pursuant to which the Company may repurchase up to $4 million of its outstanding Common Stock over a one-year period, commencing on February 10, 2020. Repurchases under the program will be made in open market transactions at prevailing market prices, in privately negotiated transactions, or by other means in compliance with the rules and regulations of the SEC; however, the Company has no obligation to repurchase shares and the timing, actual number, and value of shares to be repurchased is subject to management's discretion and will depend on the Company's stock price and other market conditions. The Company may, in the sole discretion of the Board, terminate the repurchase program at any time while it is in effect. During the quarter ended March 31, 2020, we repurchased 366,000 shares of our Common Stock on the open market at a total cost of approximately $2.0 million (an average price of $5.46 per share).

8. Income Taxes

For the three months ended June 30, 2020 and 2019, we recorded income tax expense at our continuing operations of $0.1 million and $0.7 million, respectively. For the nine months ended June 30, 2020 and 2019, we recorded income tax expense of $0.3 million and $1.6 million, respectively. In the three months ended June 30, 2019, we recorded income tax benefit of $1.3 million in our discontinued operations. In the nine months ended June 30, 2020 and 2019, we recorded income tax benefit of $47,000 and $1.2 million, respectively, in our discontinued operations. The tax benefit in the prior year is due to the tax treatment relating to the sale of SoLayTec. The quarterly income tax provision is calculated using an estimated annual effective tax rate, based upon expected annual income, permanent items, statutory rates and planned tax strategies in the various jurisdictions in which we operate. However, losses in certain jurisdictions and discrete items are treated separately.

We are assessing the impact of the Coronavirus Aid, Relief, and Economic Security Act (the "CARES Act") which was signed into law on March 27, 2020, on our income tax positions. As the Company is still gathering information necessary to make decisions to apply the provisions in the CARES Act, including five-year carryback of net operating losses, the income tax provision as of and for the three months and nine months ended June 30, 2020, does not reflect such impact.

Deferred tax assets and liabilities reflect the tax effects of temporary differences between the carrying value of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. We record a valuation allowance if, based on the weight of available evidence, it is more likely than not that some portion or all of a deferred tax asset will not be realized. Our expectations regarding realization of our deferred tax assets is based upon the weight of all available evidence, including such factors as our recent earnings history, expected future taxable income and available tax planning strategies. We established valuation allowances on substantially all net deferred tax assets, after considering all of the available objective evidence, both positive and negative, historical and prospective, with greater weight given to historical evidence, and determined it is not more likely than not that these assets will be realized. We will continue to monitor our cumulative income and loss positions in the U.S. and foreign jurisdictions to determine whether full valuation allowances on net deferred tax assets are appropriate.

We classify all of our uncertain tax positions as income taxes payable long-term. At June 30, 2020 and September 30, 2019, the total amount of unrecognized tax benefits was approximately $1.2 million and $1.3 million, respectively. Income taxes payable long-term includes other items, primarily withholding taxes that are not due until the related intercompany service fees are paid.

We classify interest and penalties related to unrecognized tax benefits as income tax expense. As of both June 30, 2020 and September 30, 2019, we had an accrual for potential interest and penalties of approximately $0.8 million classified with income taxes payable long-term.

Amtech and one or more of our subsidiaries file income tax returns in China and other foreign jurisdictions, as well as in the U.S. and various states in the U.S. We have not signed any agreements with the Internal Revenue Service, any state or foreign jurisdiction to extend the statute of limitations for any fiscal year. As such, the number of open years is the number of years dictated by statute in each of the respective taxing jurisdictions, which generally is from 3 to 5 years.

9. Commitments and Contingencies

Purchase Obligations – As of June 30, 2020, we had unrecorded purchase obligations at our continuing operations in the amount of $4.8 million compared to $4.4 million as of September 30, 2019. These purchase obligations consist of outstanding purchase orders for goods and services. While the amount represents purchase agreements, the actual amounts to be paid may be less in the event that any agreements are renegotiated, canceled or terminated.

Legal Proceedings and Other Claims – From time to time, we are a party to claims and actions for matters arising out of our business operations. We regularly evaluate the status of the legal proceedings and other claims in which we are involved to assess whether a loss is probable or there is a reasonable possibility that a loss, or an additional loss, may have been incurred and determine if accruals are appropriate. If accruals are not appropriate, we further evaluate each legal proceeding to assess whether an estimate of possible loss or range of possible loss can be made for disclosure. Although the outcome of claims and litigation is inherently unpredictable, we believe that we have adequate provisions for any probable and estimable losses. It is possible, nevertheless, that our consolidated financial position, results of operations or liquidity could be materially and adversely affected in any particular period by the resolution of a claim or legal proceeding. Legal expenses related to defense, negotiations, settlements, rulings and advice of outside legal counsel are expensed as incurred.

Employment Contracts and Change in Control Agreements – We have employment contracts and change in control agreements with, and severance plans covering, certain officers and management employees under which severance payments would become payable in the event of specified terminations without cause or terminations under certain circumstances after a change in control. If severance payments under the current employment contracts or severance plans were to become payable, the severance payments would generally range from twelve to thirty-six months of salary.

10. Business Segment Information

After announcing the planned divestiture of our Solar segment (see Note 4), we conducted an evaluation of our organizational structure. Beginning with the second quarter of fiscal 2019, we made changes to our reportable segments. With the divesture of our Automation segment in the first quarter of fiscal 2020, we further evaluated our organizational structure and concluded that we have two reportable business segments following the divestiture. Prior period amounts have been revised to conform to the current period segment reporting structure. Our two reportable segments are as follows:

Semiconductor – We design, manufacture, sell and service thermal processing equipment and related controls for use by leading semiconductor manufacturers, and in electronics, automotive and other industries.

SiC/LED – We produce consumables and machinery for lapping (fine abrading) and polishing of materials, such as silicon and silicon carbide substrates, sapphire substrates, optical components, numerous types of crystalline materials, ceramics and metal components. We formerly referred to our SiC/LED segment as “Polishing.”

Information concerning our business segments is as follows, in thousands:

	Three Months Ended June 30,		Nine Months Ended June 30,	
	2020	2019	2020	2019
Net Revenues:				
Semiconductor	$ 12,357	$ 16,254	$ 41,581	$ 51,267
SiC/LED	2,870	3,074	8,155	9,330
Non-segment related	—	1,675	643	4,264
	$ 15,227	$ 21,003	$ 50,379	$ 64,861
Operating income (loss):				
Semiconductor	$ 1,058	$ 1,951	$ 3,762	$ 6,428
SiC/LED	241	607	1,196	2,253
Non-segment related	(1,268)	(1,207)	(4,262)	(5,418)
	$ 31	$ 1,351	$ 696	$ 3,263

	June 30, 2020	September 30, 2019
Identifiable Assets:		
Semiconductor	$ 55,374	$ 56,855
SiC/LED	13,337	7,779
Non-segment related*	35,345	39,088
Held-for-sale assets**	—	22,755
	$ 104,056	$ 126,477

* Non-segment related assets include cash, property and other assets.

** See Note 4 for additional information on held-for-sale assets.

Goodwill and other long-lived assets

We review our long-lived assets, including goodwill, for impairment at least annually in our fourth quarter or whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Additional information on impairment testing of long-lived assets, intangible assets and goodwill can be found in Notes 1 and 10 of our Annual Report on Form 10-K for the year ended September 30, 2019.

11. Major Customers and Foreign Sales

During the nine months ended June 30, 2020, no customer represented greater than 10% of net revenues. During the nine months ended June 30, 2019, one Semiconductor segment customer individually represented 11% of our net revenues.

Our net revenues were from customers in the following geographic regions:

	Nine Months Ended June 30,	
	2020	2019
United States	31 %	36 %
Other	6 %	5 %
Total North America	**37 %**	**41 %**
China	25 %	18 %
Malaysia	4 %	5 %
Taiwan	15 %	10 %
Other	7 %	6 %
Total Asia	**51 %**	**39 %**
Germany	3 %	9 %
Other	9 %	11 %
Total Europe	**12 %**	**20 %**
	100 %	**100 %**

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

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our "Condensed Consolidated Financial Statements" in Item 1 of this Quarterly Report on Form 10-Q ("Quarterly Report") and our consolidated financial statements and related notes included in Item 8, "Financial Statements and Supplementary Data" in our Annual Report on Form 10-K for the fiscal year ended September 30, 2019.

Overview

We are a leading, global manufacturer of capital equipment, including thermal processing and wafer polishing and related consumables used in fabricating semiconductor devices, such as silicon carbide (SiC) and silicon power chips, electronic assemblies and light-emitting diodes (LEDs). We sell these products to semiconductor and automotive component manufacturers worldwide, particularly in Asia, North America and Europe.

We operate in two reportable business segments, based primarily on the industry they serve: (i) Semiconductor, and (ii) SiC/LED. In our Semiconductor segment, we supply thermal processing equipment, including solder reflow ovens, diffusion furnaces, and custom high-temp belt furnaces for use by semiconductor and electronics assembly manufacturers. In our SiC/LED segment, we produce substrate consumables and machinery for lapping (fine abrading) and polishing of materials, such as silicon wafers for semiconductor products, sapphire wafers for LED applications, and compound substrates, like silicon carbide wafers, for power device applications.

Our semiconductor customers are primarily manufacturers of integrated circuits, optoelectronics, sensors and discrete (O-S-D) components used in analog, power and radio frequency (RF) devices and photovoltaic solar cells. The semiconductor industry is cyclical and historically has experienced fluctuations. Our revenue is impacted by these broad industry trends. Although semiconductor demand for our products may have reached its cyclical peak in our fiscal year ended September 30, 2018, we believe that continued technological advances and emerging industries, such as silicon carbide power devices, will sustain our long-term performance.

COVID-19

On January 30, 2020, the World Health Organization declared an outbreak of a highly contagious form of an upper respiratory infection caused by COVID-19, a novel coronavirus strain commonly referred to as "coronavirus". In March 2020, the outbreak of COVID-19 was recognized as a pandemic by the World Health Organization, and the outbreak has become increasingly widespread, including in all of the markets in which we operate. The COVID-19 outbreak has had a notable impact on general economic conditions, including but not limited to the temporary closures of many businesses; "shelter in place" and other governmental regulations; and reduced spending due to both job losses and other effects attributable to COVID-19. As noted below, as a key supplier to essential businesses, we have continued to supply our products and services to those businesses deemed essential businesses in the states in which we operate. However, our business is subject to the general health of the economy and federal and local guidelines and restrictions have significantly curtailed the level of economic activity in affected areas, which include the areas in which we conduct our business.

As we navigate the challenges presented by COVID-19, our first priority is the safety and well-being of our employees. We began experiencing challenges relating to the COVID-19 virus early-on in calendar year 2020, when our Shanghai facility remained closed beyond the normal Chinese New Year holiday. This facility reopened in early March and, in a safe and phased approach, we ramped up production while following the Chinese government's requirements for personal protective equipment (PPE), cleaning of the facility, and social distancing, among other measures. As of the date of this Quarterly Report, our Shanghai production levels have returned to near-capacity. Additionally, we continue to closely monitor our supply chain and have increased our safety stock for certain key parts.

Our domestic manufacturing facilities are located in Billerica, Massachusetts and Carlisle, Pennsylvania. In early March, we began implementing work-from-home options for all of our U.S. office personnel, including our corporate staff in Tempe, Arizona. Later in March, the governors of Massachusetts, Pennsylvania and Arizona issued stay-at-home orders for employers that do not provide essential services. With the assistance of legal counsel, we determined that as key suppliers to essential businesses, we could stay open, however we balanced this result with the health and safety of our employees. In Massachusetts, which had a high number of COVID-19 infections, we continued to work on a very limited basis and have gradually increased factory personnel in a safe and phased approach. In Pennsylvania, our direct laborers are working in multiple shifts to decrease the number of employees in the building at any given time. In both facilities, we are providing masks, extra facility cleanings and practicing social distancing. We continue to closely monitor our supply chain for our U.S. operations.

Although we do not yet know the full duration and extent the impact of COVID-19 will have on our operations, we currently expect the negative impact to be a temporary trend. We have implemented procedures to maximize our ability to continue to provide products and services to our customers and to mitigate the effect of the downturn on our results of operations, including minimizing costs where appropriate. There remain many unknowns and we continue to monitor the expected trends and related demand for our products and services and have and will continue to adjust our operations accordingly. Please see additional information in "Item 1a. Risk Factors".

Amtech has a strong financial position with $46.4 million in cash and cash equivalents as of June 30, 2020 and $5.3 million of mortgage-related debt. In addition, while we did not utilize the Paycheck Protection Program (PPP) loan provision of the recently passed Coronavirus Aid, Relief, and Economic Security (CARES) Act, we are pursuing other relief options available to us, such as deferring social security tax payments, payroll tax credits, and utilizing certain changes in tax loss carryback rules to receive refunds for prior tax years. We are reviewing and implementing actions to reduce cash outlays and expenses. As a result of these efforts and our strong balance sheet, we believe we have enough cash to sustain us for at least the next twelve months. However, if the recovery takes longer than expected, we believe we have the ability to make additional adjustments as needed.

Solar and Automation Divestitures

On April 3, 2019, we announced that our Board of Directors (the "Board") determined that it was in the long-term best interest of the Company to exit the solar business segment and focus our strategic efforts on our semiconductor and silicon carbide/polishing business segments in order to more fully realize the opportunities the Company believes are presented in those areas. We completed the sale of our solar subsidiaries, SoLayTec and Tempress, on June 7, 2019, and January 22, 2020, respectively. Additionally, on December 13, 2019, we completed the sale of our automation division, R2D, to certain members of R2D's management team.

Strategy

As we pivot from our solar business and refocus on our Semiconductor and SiC/LED businesses, we have focused on our plans to profitably grow our business and have developed a strategic growth plan and a capital allocation plan that we believe will support our growth objectives. Our strategic growth plan calls for profitable growth as the semi industry recovers, with the following areas of focus:

- *Emerging opportunities in the SiC industry* – We believe we are well-positioned to take part in this significant growth area. We are working closely with our customers to understand their SiC growth plans and opportunities. We are investing in our capacity, next generation product development, and investing in our people. We believe these investments will help fuel our growth in the SiC industry.
- *300 mm Silicon Horizontal Thermal Reactor* – We have a highly successful and proven 300 mm solution for growing power semiconductor applications. Moreover, we have a strong foundation with a key customer, and, in the second half of fiscal 2019, we announced an order to another industry-leading manufacturer. In February 2020, we announced an order for our fully automated SEMI compliant 300mm clustered HTR diffusion furnace from top-tier global power semiconductor customer in Asia. We believe we have a strong opportunity to expand our customer base and future revenue growth.
- As a major revenue contributor, our subsidiary, BTU International, Inc. (BTU), tracks semi industry growth for our semi-packaging and SMT products, and we expect this trend to continue. We believe that through investments in product innovation, BTU is also positioned for future growth.

We project that the required investments to achieve our revenue growthtargets will be in the range of $6.0 - $8.0 million in research and development and capital expenditures. We may also need to make investments in other areas of our business, such as IT systems and capacity expansions atour existing facilities. Additionally, as a capital equipment manufacturer, we will need working capital to support and fuel our future growth. We are and will continue to closely scrutinize these planned investments, in light of the COVID-19 challenges, and we may defer some of ourprojects. However, we intend to continue to invest in our business to support and fuel our future growth.

In addition to these investments in our organic growth, another key aspect of our capital allocation policy is our plan to grow through acquisitions. We have the skillset and track record to identify strong acquisition targets in the semi and SiC growth environment and to execute transactions and effectively integrate acquired businesses to provide for accretive, profitable growth in both the short-term and long-term. As of the date of the filing of this Quarterly Report on Form 10-Q, we do not have an agreement to acquire any acquisition target.

Segment Reporting Changes

After announcing the planned divestiture of our Solar segment, we conducted an evaluation of our organizational structure. Beginning with the second quarter of fiscal 2019, we made changes to our reportable segments. With the divestiture of our Automation segment in the first quarter of fiscal 2020, we further evaluated our organization structure and concluded that we have two reportable business segments following the divestiture. Prior period amounts have been revised to conform to the current period segment reporting structure.

Results of Operations

The following table sets forth certain operational data as a percentage of net revenue for the periods indicated:

	Three Months Ended June 30,		Nine Months Ended June 30,	
	2020	2019	2020	2019
Net revenue	100 %	100 %	100 %	100 %
Cost of sales	61 %	63 %	61 %	62 %
Gross margin	39 %	37 %	39 %	38 %
Selling, general and administrative	32 %	27 %	32 %	28 %
Research, development and engineering	6 %	4 %	5 %	4 %
Restructuring charges	1 %	— %	1 %	1 %
Operating income	— %	6 %	1 %	5 %
Loss on sale of subsidiary	— %	— %	(5)%	— %
Interest income and other, net	— %	2 %	1 %	1 %
Income (loss) from continuing operations before income taxes	— %	8 %	(3)%	6 %
Income tax provision	1 %	4 %	1 %	3 %
(Loss) income from continuing operations, net of tax	(1)%	4 %	(4)%	3 %
Income (loss) from discontinued operations, net of tax	— %	6 %	(23)%	(12)%
Net (loss) income	(1)%	10 %	(27)%	(9)%

In the second quarter of 2019, we began the process to divest our solar business. As such, we have classified portions of the Solar segment as held for sale in our Condensed Consolidated Balance Sheets and reported its results as discontinued operations in our Condensed Consolidated Statements of Operations for all periods presented.

Net Revenue

Net revenue consists of revenue recognized upon shipment or installation of equipment, with the exception of products using new technology, for which revenue is recognized upon customer acceptance. Spare parts sales are recognized upon shipment and service revenue is recognized upon completion of the service activity, which is generally ratable over the term of the service contract. Since the majority of our revenue is generated from large system sales, revenue and operating income can be significantly impacted by the timing of system shipments and system acceptances.

Our net revenue by operating segment was as follows (dollars in thousands):

	Three Months Ended June 30,				Nine Months Ended June 30,			
Segment	**2020**	**2019**	**Incr (Decr)**	**% Change**	**2020**	**2019**	**Incr (Decr)**	**% Change**
Semiconductor	$ 12,357	$ 16,254	$ (3,897)	(24)%	$ 41,581	$ 51,267	$ (9,686)	(19)%
SiC/LED	2,870	3,074	$ (204)	(7)%	8,155	9,330	(1,175)	(13)%
Non-segment related	—	1,675	(1,675)	(100)%	643	4,264	(3,621)	(85)%
Total net revenue	$ 15,227	$ 21,003	$ (5,776)	(28)%	$ 50,379	$ 64,861	$ (14,482)	(22)%

Total net revenue for the quarters ended June 30, 2020 and 2019 was $15.2 million and $21.0 million, respectively, a decrease of approximately $5.8 million or 28%. Our semiconductor segment revenues are dependent on our customers' expansions, and our results have been negatively impacted by the uncertainty in the global economy due primarily to the impact of the COVID-19 virus, as well as lingering trade tensions between the U.S. and China. Our SiC/LED revenues were less impacted in this fiscal quarter compared to the prior year quarter, as our consumable sales remained stable. We believe the impact from the COVID-19 virus in both our China and U.S. locations are temporary trends, as we have experienced a return to near-capacity in our China factory during the third fiscal quarter of 2020, however we also believe that we will continue to experience some level of volatility in our bookings and shipments as various states and countries experience resurgences of the virus. We also believe that there remains significant potential in the SiC industry and long-term growth in power semiconductor. Non-segment related revenues relate to R2D, the automation division that we divested in December 2019.

Total net revenue for the nine months ended June 30, 2020 and 2019 was $50.4 million and $64.9 million, respectively, a decrease of approximately $14.5 million or 22%. Revenue from the Semiconductor segment decreased $9.7 million compared to the prior year period. This change is primarily due to COVID-19 effects on our customers and the global economy, as discussed above. Revenue from our SiC/LED segment decreased $1.2 million compared to the prior year period due primarily to lower machine shipments resulting from COVID-19 effects discussed above and lingering trade tensions between the U.S. and China causing uncertainty in the market.

Backlog and Orders

For comparison purposes, we have removed the Automation segment, which was sold effective December 13, 2019, from the tables below.

Our backlog as of June 30, 2020 and 2019 was as follows (dollars in thousands):

	June 30,			
Segment	**2020**	**2019**	**Incr (Decr)**	**% Change**
Semiconductor	$ 13,798	$ 13,931	$ (133)	(1)%
SiC/LED	1,423	2,934	(1,511)	(51)%
Total backlog	$ 15,221	$ 16,865	$ (1,644)	(10)%

New orders booked in the three and nine months ended June 30, 2020 and 2019 were as follows (dollars in thousands):

Segment	Three Months Ended June 30, 2020	Three Months Ended June 30, 2019	Incr (Decr)	% Change	Nine Months Ended June 30, 2020	Nine Months Ended June 30, 2019	Incr (Decr)	% Change
Semiconductor	$ 8,356	$ 12,899	$ (4,543)	(35)%	$ 40,469	$ 44,462	$ (3,993)	(9)%
SiC/LED	2,474	2,697	(223)	(8)%	8,612	9,574	(962)	(10)%
Total new orders	$ 10,830	$ 15,596	$ (4,766)	(31)%	$ 49,081	$ 54,036	$ (4,955)	(9)%

As of June 30, 2020, one Semiconductor customer individually accounted for 19% of our backlog. No other customer accounted for more than 10% of our backlog as of June 30, 2020. The orders included in our backlog are generally credit approved customer purchase orders believed to be firm and are generally expected to ship within the next twelve months. Because our orders are typically subject to cancellation or delay by the customer, our backlog at any particular point in time is not necessarily representative of actual sales for succeeding periods, nor is backlog any assurance that we will realize profit from completing these orders.

Gross Profit and Gross Margin

Gross profit is the difference between net revenue and cost of goods sold. Cost of goods sold consists of purchased material, labor and overhead to manufacture equipment and spare parts and the cost of service and support to customers for installation, warranty and paid service calls. Gross margin is gross profit as a percent of net revenue. Our gross profit and gross margin by operating segment were as follows (dollars in thousands):

	Three Months Ended June 30,					Nine Months Ended June 30,				
Segment	2020	Gross Margin	2019	Gross Margin	Incr (Decr)	2020	Gross Margin	2019	Gross Margin	Incr (Decr)
Semiconductor	$ 4,953	40%	$ 6,566	40%	$ (1,613)	$ 16,552	40%	$ 20,499	40%	$ (3,947)
SiC/LED	998	35%	1,038	34%	(40)	2,922	36%	3,524	38%	(602)
Non-segment related	—	—%	246	15%	(246)	9	1%	774	18%	(765)
Total gross profit	$ 5,951	39%	$ 7,850	37%	$ (1,899)	$ 19,483	39%	$ 24,797	38%	$ (5,314)

Gross profit for the three months ended June 30, 2020 and 2019 was $6.0 million (39% of net revenue) and $7.9 million (37% of net revenue), respectively, a decrease of $1.9 million. Our gross margins can be affected by capacity utilization and the type and volume of machines and consumables sold each quarter. Gross margin on products from our Semiconductor segment was flat on lower revenues compared to the three months ended June 30, 2019, due primarily to favorable product mix. Gross margin on products from our SiC/LED segment increased slightly on less revenue compared to the three months ended June 30, 2019, due primarily to a mix of higher margin consumable sales and less machine sales.

Gross profit for the nine months ended June 30, 2020 and 2019 was $19.5 million (39% of net revenue) and $24.8 million (38% of net revenue), respectively, a decrease of $5.3 million. Gross margin on products from our Semiconductor segment was flat on lower revenue compared to the nine months ended June 30, 2019, due primarily to increased sales of our higher margin products. Gross margin on products from our SiC/LED segment decreased slightly compared to the nine months ended June 30, 2019, due primarily to lower capacity utilization resulting from lower machine sales.

Selling, General and Administrative

Selling, general and administrative expenses (“SG&A”) consists of the cost of employees, consultants and contractors, facility costs, sales commissions, shipping costs, promotional marketing expenses, legal and accounting expenses and bad debt expense.

SG&A expenses for the three months ended June 30, 2020 and 2019 were $4.8 million and $5.7 million, respectively. SG&A decreased compared to the prior year quarter due primarily to payroll tax credits that were part of the CARES Act, no longer having R2D SG&A included in our results, and lower travel due to the COVID-19 pandemic.

SG&A expenses for the nine months ended June 30, 2020 and 2019 were $16.1 million and $18.1 million, respectively. SG&A decreased compared to the prior year period due primarily to lower commissions and freight on lower sales, no longer having R2D SG&A included in our results, lower commissions and freight on lower sales, payroll tax credits that were part of the CARES Act, and lower travel due to the COVID-19 pandemic.

Restructuring Charges

We recorded restructuring charges of $217,000 in the three months ended June 30, 2020. These one-time charges were the result of staff reductions at our Massachusetts operations as we evaluated staffing across our Semiconductor operations. We recorded restructuring charges of $35,000 and $1.1 million in the three and nine months ended June 30, 2019, respectively. The amount in the third quarter of 2019 relates to the consolidation of satellite offices in Asia. For the nine months ended June 30, 2019, the amount is primarily severance expense related to the departure of our former Chief Executive Officer.

Research, Development and Engineering

Research, development and engineering ("RD&E") expenses consist of the cost of employees, consultants and contractors who design, engineer and develop new products and processes as well as materials and supplies used in producing prototypes. We receive governmental research and development grants which are netted against these expenses when certain conditions have been met.

RD&E expense, net of grants earned, for the three months ended June 30, 2020 and 2019 were $0.9 million and $0.7 million, respectively, and $2.4 million and $2.3 million in the nine months ended June 30, 2020 and 2019, respectively. These increases are due to increased spending in fiscal 2020 related to the development of new products at our SiC/LED segment and product improvement projects at our Semiconductor segment.

Income Taxes

For the three months ended June 30, 2020 and 2019, we recorded income tax expense at our continuing operations of $0.1 million and $0.7 million, respectively. For the nine months ended June 30, 2020 and 2019, we recorded income tax expense of $0.3 million and $1.6 million, respectively. In the three months ended June 30, 2019, we recorded an income tax benefit of $1.3 million in our discontinued operations. In the nine months ended June 30, 2020 and 2019, we recorded an income tax benefit of $47,000 and $1.2 million, respectively, in our discontinued operations. The tax benefit in the prior year is due to the tax treatment relating to the sale of SoLayTec. The income tax provisions are based upon estimates of annual income, annual permanent differences and statutory tax rates in the various jurisdictions in which we operate, except that certain loss jurisdictions and discrete items are treated separately.

Generally accepted accounting principles require that a valuation allowance be established when it is "more likely than not" that all or a portion of deferred tax assets will not be realized. A review of all available positive and negative evidence needs to be considered, including a company's performance, the market environment in which the company operates and the length of carryback and carryforward periods. According to those principles, it is difficult to conclude that a valuation allowance is not needed when the negative evidence includes cumulative losses in recent years. We have concluded that we will maintain a full valuation allowance for all net deferred tax assets in the foreign jurisdictions in which we operate and for the carryforwards of U.S. net operating losses and foreign tax credits, acquired in the merger with BTU International, for which there are limitations on their utilization. We will continue to monitor our cumulative income and loss positions in the U.S. and foreign jurisdictions to determine whether full valuation allowances on net deferred tax assets are appropriate.

Our future effective income tax rate depends on various factors, such as the amount of income (loss) in each tax jurisdiction, tax regulations governing each region, non-tax deductible expenses incurred as a percent of pre-tax income and the effectiveness of our tax planning strategies.

Discontinued Operations

As disclosed previously in the “Solar and Automation Divestitures” section, we announced that our Board determined that it was in the long-term best interest of the Company to exit the solar business segment and focus our strategic efforts on our semiconductor and silicon carbide/polishing business segments in order to more fully realize the opportunities we believe are presented in those areas. The divestitures included our Tempress and SoLayTec subsidiaries, which comprised substantially all of our Solar segment. As such, we classified portions of the Solar segment as held for sale in our Condensed Consolidated Balance Sheet as of September 30, 2019 and reported its results as discontinued operations in our Condensed Consolidated Statements of Operations. SoLayTec was sold effective June 7, 2019, and Tempress was sold effective January 22, 2020 (see Note 4 for additional information).

Liquidity and Capital Resources

The following table sets forth for the periods presented certain consolidated cash flow information (in thousands):

	Nine Months Ended June 30,	
	2020	2019
Net cash (used in) provided by operating activities	$ (990)	$ 421
Net cash used in investing activities	(10,800)	(1,664)
Net cash used in financing activities	(1,486)	(96)
Effect of exchange rate changes on cash	578	(1,450)
Net decrease in cash, cash equivalents and restricted cash	(12,698)	(2,789)
Cash, cash equivalents and restricted cash, beginning of period*	59,134	62,496
Cash, cash equivalents and restricted cash, end of period*	$ 46,436	$ 59,707

* Includes Cash, Cash Equivalents and Restricted Cash that are included in Held-For-Sale Assets on the Condensed Consolidated Balance Sheets for periods prior to January 22, 2020.

Cash and Cash Flow

The decrease in cash, cash equivalents and restricted cash during the first nine months of fiscal 2020 of $12.7 million was primarily due to net cash disposed of in divestitures and cash used for stock repurchases. We maintain a portion of our cash, cash equivalents and restricted cash in RMB at our Chinese operations; therefore, changes in the exchange rates have an impact on our cash balances. Our working capital was $70.8 million as of June 30, 2020 and $77.6 million as of September 30, 2019. The decrease in our working capital occurred primarily due to the divesture of our held-for-sale assets and liabilities. Our ratio of current assets to current liabilities was 8.2:1 as of June 30, 2020, and 3.5:1 as of September 30, 2019. Excluding our held-for-sale assets and liabilities, our ratio of current assets to current liabilities was 7.1:1 as of September 30, 2019.

The success of our growth strategy is dependent upon the availability of additional capital resources on terms satisfactory to management. Our sources of capital in the past have included the sale of equity securities, which includes common stock sold in private transactions and public offerings, long-term debt and customer deposits. There can be no assurance that we can raise such additional capital resources when needed or on satisfactory terms. We believe that our principal sources of liquidity discussed above are sufficient to support operations for at least the next twelve months. We have never paid dividends on our common stock.

Cash Flows from Operating Activities

Cash used in our operating activities was approximately $1.0 million for the nine months ended June 30, 2020, compared to cash provided by operating activities of $0.4 million for the nine months ended June 30, 2019, a decline of approximately $1.4 million. During the nine months ended June 30, 2020, net loss adjusted for non-cash items of $2.5 million was offset by $3.5 million of cash used in operations as a result of changes in operating assets and liabilities. During the nine months ended June 30, 2020, we increased our inventory balances to mitigate risks in our supply chain resulting from the COVID-19 pandemic, as well as in preparation for a large shipment expected in the first quarter of fiscal year 2021. During the nine months ended June 30, 2019, $1.4 million was used in losses from operations adjusted for non-cash items, with an additional $1.8 million of cash provided by operations as a result of changes in operating assets and liabilities.

Cash Flows from Investing Activities

For the nine months ended June 30, 2020 and 2019, cash used in investing activities was $10.8 million compared to $1.7 million in the prior year period. The fiscal 2020 amount reflects the divestiture of our solar business as well as approximately $0.9 million of capital expenditures. We expect capital expenditures to increase in the fourth quarter of fiscal 2020 as we complete the relocation of our SiC/LED business.

Cash Flows from Financing Activities

For the nine months ended June 30, 2020, $1.5 million of cash used in financing activities was comprised of approximately $0.8 million of proceeds received from the exercise of stock options, which was fully offset by $2.0 million used for stock repurchases and payments on long-term debt of $0.3 million. For the nine months ended June 30, 2019, $0.1 million of cash used in financing activities was comprised of $0.2 of proceeds received from the exercise of stock options, which was fully offset by payments on long-term debt of $0.3 million.

Off-Balance Sheet Arrangements

As of June 30, 2020, we had no off-balance sheet arrangements as defined in Item 303(a)(4) of Regulation S-K promulgated by the SEC that have or are reasonably likely to have a current or future effect on financial condition, changes in financial condition, revenues or expenses, results of operations, liquidity, capital expenditures or capital resources that are material to investors.

Contractual Obligations

Unrecorded purchase obligations at our continuing operations were $4.8 million as of June 30, 2020, compared to $4.4 million as of September 30, 2019, an increase of $0.4 million.

There were no other material changes to the contractual obligations included in Part II, Item 7. “Management’s Discussion and Analysis of Financial Condition and Results of Operations” of our Annual Report on Form 10-K for the year ended September 30, 2019.

Critical Accounting Policies

Part I, Item 2. “Management’s Discussion and Analysis of Financial Condition and Results of Operations” of this Quarterly Report discusses our condensed consolidated financial statements that have been prepared in accordance with accounting principles generally accepted in the United States of America. The preparation of these condensed consolidated financial statements requires us to make estimates and assumptions that affect the reported amount of assets and liabilities at the date of the condensed consolidated financial statements, the disclosure of contingent assets and liabilities at the date of the condensed consolidated financial statements and the reported amounts of revenue and expenses during the reporting period.

On an ongoing basis, we evaluate our estimates and judgments, including those related to revenue recognition, inventory valuation, accounts and notes receivable collectability, warranty and impairment of long-lived assets. We base our estimates and judgments on historical experience and on various other factors that we believe to be reasonable under the circumstances. The results of these estimates and judgments form the basis for making conclusions about the carrying value of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

A critical accounting policy is one that is both important to the presentation of our financial position and results of operations, and requires management's most difficult, subjective or complex judgments, often as a result of the need to make estimates about the effect of matters that are inherently uncertain. These uncertainties are discussed in Part I, Item 1A of our Annual Report on Form 10-K for the year ended September 30, 2019. We believe our critical accounting policies relate to the more significant judgments and estimates used in the preparation of our consolidated financial statements.

We believe the critical accounting policies discussed in the section entitled "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations – Critical Accounting Policies" in our Annual Report on Form 10-K for the fiscal year ended September 30, 2019 represent the most significant judgments and estimates used in the preparation of our consolidated financial statements. Other than the Leases policy change disclosed in Note 3 hereto, there have been no significant changes in our critical accounting policies during the nine months ended June 30, 2020.

Impact of Recently Issued Accounting Pronouncements

For discussion of the impact of recently issued accounting pronouncements, see "Part I, Item 1. Financial Information" under "Impact of Recently Issued Accounting Pronouncements."

Item 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

As a smaller reporting company, as defined by Rule 12b-2 of the Exchange Act and in Item 10(f)(1) of Regulation S-K, we are electing scaled disclosure reporting obligations and, therefore, are not required to provide the information requested by this Item.

Item 4. CONTROLS AND PROCEDURES

Disclosure Controls and Procedures

Our management, including our Chief Executive Officer ("CEO") and our Chief Financial Officer ("CFO"), has carried out an evaluation of the effectiveness of our disclosure controls and procedures as of June 30, 2020, pursuant to Exchange Act Rules 13a-15(e) and 15(d)-15(e). Disclosure controls and procedures means controls and other procedures that are designed to ensure that information required to be disclosed by the Company in the reports it files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by the Company in the reports that it files or submits under the Exchange Act is accumulated and communicated to management, including the principal executive and principal financial officer, as appropriate, to allow timely decisions regarding required disclosure. Based upon that evaluation, our CEO and CFO have concluded that as of such date, our disclosure controls and procedures in place were effective.

Changes in Internal Control Over Financial Reporting

There have not been any changes in the Company's internal control over financial reporting (as such term is defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) during the third fiscal quarter to which this report relates that materially affected, or are reasonably likely to materially affect, the internal control over financial reporting of the Company.

PART II. OTHER INFORMATION

Item 1. Legal Proceedings

For discussion of legal proceedings, see Note 9 to our condensed consolidated financial statements under “Part I, Item 1. Financial Information” under “Commitments and Contingencies” of this Quarterly Report.

Item 1A. Risk Factors

We refer you to documents filed by us with the SEC, specifically “Item 1A. Risk Factors” in our Annual Report on Form 10-K for the fiscal year ended September 30, 2019 (the “2019 Form 10-K”), as updated by the information disclosed in “Part II, Item 1A. Risk Factors” in our Quarterly Report on Form 10-Q for the quarter ended March 31, 2020 (the “Second Quarter Form 10-Q”), each of which identify important risk factors that could materially affect our business, financial condition and future results. We also refer you to the factors and cautionary language set forth in the section entitled “Cautionary Statements Regarding Forward-Looking Statements” immediately preceding “Item 1. Condensed Consolidated Financial Statements” of this Quarterly Report on Form 10-Q. This Quarterly Report on Form 10-Q, including the accompanying condensed consolidated financial statements and related notes, should be read in conjunction with such risks and other factors for a full understanding of our operations and financial condition. The risks described in our 2019 Form 10-K, the Second Quarter Form 10-Q and herein are not the only risks facing us. Additional risks and uncertainties not currently known to us or that we currently deem to be immaterial also may materially adversely affect our business, financial condition or operating results.

We have updated our existing risk factors to add the following risk factors related to recent developments. Except for the update set forth below, there have been no material changes in our risk factors from those disclosed in our 2019 Form 10-K, as updated in our Second Quarter Form 10-Q.

Business interruptions, including those related to the novel strain of coronavirus (COVID-19), have had and continue to have an adverse impact on our operations, including among others, our manufacturing and supply chain, sales and product development and could have an adverse impact on our business, financial condition and results of operations in future quarterly periods.

In our Form 10-Q for the quarterly period ended December 31, 2019, we included a risk factor discussing the advent of the novel strain of coronavirus, COVID-19, identified in Wuhan, China in December 2019. This discussion focused primarily on the possible impact of COVID-19 on our operations in China, where this outbreak was initially centered. The spread of COVID-19 from China to other countries has resulted in the World Health Organization declaring the outbreak of COVID-19 as a “pandemic,” or a worldwide spread of a new disease, on March 11, 2020. The outbreak has resulted in government authorities and businesses throughout the world implementing numerous measures intended to contain and limit the spread of COVID-19, including travel bans and restrictions, quarantines, “shelter-in-place” and lock-down orders, and business limitations and shutdowns. These measures have negatively impacted consumer and business spending generally and have significantly contributed to deteriorating macroeconomic conditions. While governments around the world have taken steps to attempt to mitigate some of the more severe anticipated economic effects of COVID-19, there can be no assurance that such steps will be effective or achieve their desired results in a timely fashion.

While we continue to monitor and assess the impact on our business from the spread of COVID-19 and the ever evolving actions implemented by the governments across the globe, our operations in China have returned to near-capacity and we continue to experience an adverse impact of COVID-19 on our operations in the United States. The extent to which the coronavirus continues to impact our operations will depend on future developments, which are highly uncertain and cannot be predicted with confidence, including the duration of the outbreak, new information which may emerge concerning the severity of the coronavirus and the actions to contain the coronavirus or treat its impact, among others. In particular, the continued spread and/or resurgence of the coronavirus globally could result in a widespread health crisis and/or change in consumer behavior that could adversely affect the global economy and financial markets, resulting in an economic downturn, and could also adversely impact our operations, including, without limitation, our manufacturing and supply chain, sales and product development operations, particularly our prospective sales if the Semiconductor and SiC/LED business segments we seek to serve suffer long-term damage. Such an economic downturn could have an adverse impact on the successful implementation of our strategic growth plan and on our business, financial condition results of operations.

Item 2. **Unregistered Sales of Equity Securities and Use of Proceeds**

Issuer Purchases of Equity Securities

On November 29, 2018, we announced that our Board approved a stock repurchase program, pursuant to which we may repurchase up to $4 million of our outstanding common stock, par value $0.01 per share ("Common Stock"), over a one-year period, commencing immediately. Repurchases under the program were to be made in open market transactions at prevailing market prices, in privately negotiated transactions, or by other means in compliance with the rules and regulations of the SEC; however, we had no obligation to repurchase shares and the timing, actual number, and value of shares to be repurchased were subject to management's discretion and depended on the Company's stock price and other market conditions. We could have, in the sole discretion of the Board, terminated the repurchase program at any time while it was in effect. We intended to retire any repurchased shares. The term of our repurchase program expired as of the quarter ended December 31, 2019. There were no shares repurchased under this program.

On February 4, 2020, the Board approved a new stock repurchase program, pursuant to which the Company may repurchase up to $4 million of its outstanding Common Stock over a one-year period, commencing on February 10, 2020. Repurchases under the program will be made in open market transactions at prevailing market prices, in privately negotiated transactions, or by other means in compliance with the rules and regulations of the SEC; however, the Company has no obligation to repurchase shares and the timing, actual number, and value of shares to be repurchased is subject to management's discretion and will depend on the Company's stock price and other market conditions. The Company may, in the sole discretion of the Board, terminate the repurchase program at any time while it is in effect. During the quarter ended March 31, 2020, we repurchased 366,000 shares of our Common Stock on the open market at a total cost of approximately $2.0 million (an average price of $5.46 per share).

During the three months ended June 30, 2020, we did not repurchase any of our equity securities nor did we sell any equity securities that were not registered under the Securities Act of 1933, as amended.

Item 3. **Defaults Upon Senior Securities**

None.

Item 4. **Mine Safety Disclosures**

Not applicable.

Item 5. **Other Information**

None.

Item 6. Exhibits

EXHIBIT NO.	EXHIBIT DESCRIPTION	INCORPORATED BY REFERENCE				FILED HEREWITH
		FORM	FILE NO.	EXHIBIT NO.	FILING DATE	
31.1	Certification Pursuant to Rule 13a-14(a)/15d-14(a) of the Securities Exchange Act of 1934, as Amended					X
31.2	Certification Pursuant to Rule 13a-14(a)/15d-14(a) of the Securities Exchange Act of 1934, as Amended					X
32.1	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002					X
32.2	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002					X
101.INS	Inline XBRL Instance Document – the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.					X
101.SCH	Inline XBRL Taxonomy Extension Schema Document					X
101.PRE	Inline Taxonomy Presentation Linkbase Document					X
101.CAL	Inline XBRL Taxonomy Calculation Linkbase Document					X
101.LAB	Inline XBRL Taxonomy Label Linkbase Document					X
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document					X
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document					X
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)					X

SIGNATURES

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

AMTECH SYSTEMS, INC.

By /s/ Lisa D. Gibbs — Dated: August 6, 2020

Lisa D. Gibbs
Vice President and Chief Financial Officer
(Principal Financial Officer and Duly Authorized Officer)

Exhibit 31.1

AMTECH SYSTEMS, INC. AND ITS SUBSIDIARIES
CERTIFICATION PURSUANT TO RULE 13a-14(a)/15d-14(a)
OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED

I, Michael Whang, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Amtech Systems, Inc. (the “registrant”),

2. Based on my knowledge, this quarterly 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 quarterly 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 quarterly report;

4. The registrant’s other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the registrant’s disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant’s internal control over financial reporting that occurred during the registrant’s most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant’s internal control over financial reporting; and

5. The registrant’s other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant’s auditors and the audit committee of the registrant’s board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant’s ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant’s internal control over financial reporting.

By /s/ Michael Whang
Michael Whang
Chief Executive Officer
Amtech Systems, Inc.

Date: August 6, 2020

Exhibit 31.2

AMTECH SYSTEMS, INC. AND ITS SUBSIDIARIES
CERTIFICATION PURSUANT TO RULE 13a-14(a)/15d-14(a)
OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED

I, Lisa D. Gibbs, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Amtech Systems, Inc. (the "registrant"),

2. Based on my knowledge, this quarterly 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 quarterly 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 quarterly report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

By /s/ Lisa D. Gibbs
Lisa D. Gibbs
Vice President and Chief Financial Officer
Amtech Systems, Inc.

Date: August 6, 2020

Exhibit 32.1

AMTECH SYSTEMS, INC. AND ITS SUBSIDIARIES

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 Amtech Systems, Inc. (the "Company") on Form 10-Q for the period ended June 30, 2020, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Michael Whang, Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. section 1350, as adopted pursuant to section 906 of the Sarbanes-Oxley Act of 2002, that, to the best of my knowledge:

(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.

By /s/ Michael Whang
Michael Whang
Chief Executive Officer
Amtech Systems, Inc.

Date: August 6, 2020

The foregoing certification is being furnished pursuant to 18 U.S.C. Section 1350. It is not being filed for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, and it is not to be incorporated by reference into any filing of the Company, regardless of any general incorporation language in such filing.

Exhibit 32.2

AMTECH SYSTEMS, INC. AND ITS SUBSIDIARIES

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 Amtech Systems, Inc. (the "Company") on Form 10-Q for the period ended June 30, 2020, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Lisa D. Gibbs, Vice President and Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. sections 1350, as adopted pursuant to sections 906 of the Sarbanes-Oxley Act of 2002, that, to the best of my knowledge:

(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.

By /s/ Lisa D. Gibbs
Lisa D. Gibbs
Vice President and Chief Financial Officer
Amtech Systems, Inc.

Date: August 6, 2020

The foregoing certification is being furnished pursuant to 18 U.S.C. Section 1350. It is not being filed for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, and it is not to be incorporated by reference into any filing of the Company, regardless of any general incorporation language in such filing.