UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 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: 001-39135

SiTime Corporation
(Exact name of registrant as specified in its charter)

Delaware	**02-0713868**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**
5451 Patrick Henry Drive	
Santa Clara, CA	**95054**
(Address of principal executive offices)	**(Zip Code)**

Registrant's telephone number, including area code: (408) 328-4400

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, $0.0001 par value per share	SITM	The Nasdaq Stock Market LLC

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

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

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

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

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

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

As of July 31, 2020, the registrant had 16,715,995 shares of common stock, $0.0001 par value per share, outstanding.

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PART I—FINANCIAL INFORMATION

Item 1. Financial Statements.

SITIME CORPORATION
CONDENSED CONSOLIDATED BALANCE SHEETS
(Unaudited)

	As of	
	June 30, 2020	December 31, 2019
	(in thousands)	
Assets:		
Current assets:		
Cash and cash equivalents	$ 102,486	$ 63,418
Accounts receivable, net	13,001	17,659
Related party accounts receivable	581	1,073
Inventories	14,781	11,911
Prepaid expenses and other current assets	1,581	5,601
Total current assets	132,430	99,662
Property and equipment, net	10,415	9,288
Intangible assets, net	3,002	4,489
Right-of-use assets, net	9,467	9,790
Other assets	162	162
Total assets	$ 155,476	$ 123,391
Liabilities and Stockholders' Equity:		
Current liabilities:		
Accounts payable	$ 5,004	$ 3,869
Accrued expenses and other current liabilities	8,333	8,442
Loan obligations	35,000	41,000
Total current liabilities	48,337	53,311
Lease liabilities	7,570	7,940
Total liabilities	55,907	61,251
Commitments and contingencies (Note 10)		
Stockholders' equity:		
Common stock, $0.0001 par value - 200,000 shares authorized; 16,716 and 14,968 shares issued and outstanding at June 30, 2020 and December 31, 2019	2	2
Additional paid-in capital	164,287	116,162
Accumulated deficit	(64,720)	(54,024)
Total stockholders' equity	99,569	62,140
Total liabilities and stockholders' equity	$ 155,476	$ 123,391

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

SITIME CORPORATION
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS
(Unaudited)

	Three Months Ended June 30, 2020	Three Months Ended June 30, 2019	Six Months Ended June 30, 2020	Six Months Ended June 30, 2019
	(in thousands, except per share data)			
Revenue	$ 21,473	$ 15,843	$ 43,215	$ 30,660
Cost of revenue	11,490	9,469	23,256	16,697
Gross profit	9,983	6,374	19,959	13,963
Operating expenses:				
Research and development	7,398	6,249	14,422	12,069
Selling, general and administrative	7,856	5,106	15,664	9,297
Total operating expenses	15,254	11,355	30,086	21,366
Loss from operations	(5,271)	(4,981)	(10,127)	(7,403)
Interest expense	(313)	(456)	(616)	(894)
Other income (expense), net	(20)	(11)	48	(21)
Loss before income taxes	(5,604)	(5,448)	(10,695)	(8,318)
Income tax benefit (expense)	1	(1)	(1)	(1)
Net loss	$ (5,603)	$ (5,449)	$ (10,696)	$ (8,319)
Net loss attributable to common stockholders and comprehensive loss	$ (5,603)	$ (5,449)	$ (10,696)	$ (8,319)
Net loss per share attributable to common stockholders, basic and diluted	$ (0.36)	$ (0.54)	$ (0.70)	$ (0.83)
Weighted-average shares used to compute basic and diluted net loss per share	15,371	10,000	15,191	10,000

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

SITIME CORPORATION
CONDENSED CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(Unaudited)

	Common Stock		Additional Paid-in Capital	Accumulated Deficit	Total Stockholders' Equity
	Shares	Amount			
			(in thousands)		
Balances at March 31, 2020	15,061	$ 2	$ 117,129	$ (59,117)	$ 58,014
Stock-based compensation expense	—	—	3,076	—	3,076
Net loss	—	—	—	(5,603)	(5,603)
Issuance of common stock upon follow-on public offering net of underwriting discounts and commissions and other offering costs	1,525	—	45,789		45,789
Issuance of shares upon vesting of restricted stock units, net of tax withholdings	130	—	(1,707)	—	(1,707)
Balances at June 30, 2020	16,716	$ 2	$ 164,287	$ (64,720)	$ 99,569
Balances at March 31, 2019	10,000	1	58,431	(50,287)	8,145
Net loss	—	—	—	(5,449)	(5,449)
Balances at June 30, 2019	10,000	$ 1	$ 58,431	$ (55,736)	$ 2,696
Balances at December 31, 2019	14,968	$ 2	$ 116,162	$ (54,024)	$ 62,140
Stock-based compensation expense	—	—	5,831	—	5,831
Net loss	—	—	—	(10,696)	(10,696)
Issuance of common stock upon follow-on public offering net of underwriting discounts and commissions and other offering costs	1,525	—	45,789	—	45,789
Issuance of shares upon vesting of restricted stock units, net of tax withholdings	223	—	(3,495)	—	(3,495)
Balances at June 30, 2020	16,716	$ 2	$ 164,287	$ (64,720)	$ 99,569
Balances at December 31, 2018	10,000	1	58,431	(47,417)	11,015
Net loss	—	—	—	(8,319)	(8,319)
Balances at June 30, 2019	10,000	$ 1	$ 58,431	$ (55,736)	$ 2,696

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

SITIME CORPORATION
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(Unaudited)

	Six Months Ended June 30,	
	2020	2019
	(in thousands)	
Cash flows from operating activities:		
Net loss	$ (10,696)	$ (8,319)
Adjustments to reconcile net loss to net cash provided by operating activities		
Depreciation and amortization expense	3,696	4,057
Non-cash operating lease cost	826	435
Stock-based compensation expense	5,831	—
Impairment of internal-use software	173	—
Changes in assets and liabilities:		
Accounts receivable, net	4,658	7,704
Related party accounts receivable	492	795
Inventories	(3,054)	3,446
Prepaid expenses and other assets	4,019	(151)
Accounts payable	491	(1,548)
Accrued expenses and other liabilities	758	(593)
Lease liabilities	(1,539)	(650)
Net cash provided by operating activities	5,655	5,176
Cash flows from investing activities		
Purchase of property and equipment	(1,675)	(354)
Cash paid for intangibles	(1,206)	(988)
Net cash used in investing activities	(2,881)	(1,342)
Cash flows from financing activities		
Proceeds from public offering, net of underwriting discounts and commissions and other offering costs	45,789	(62)
Tax withholding paid on behalf of employees for net share settlement	(3,495)	—
Proceeds from loans from financial institutions	35,000	—
Principal payments on loan to financial institutions	(41,000)	—
Net cash provided by (used in) financing activities	36,294	(62)
Net increase in cash and cash equivalents	39,068	3,772
Cash and cash equivalents		
Beginning of period	63,418	7,889
End of period	$ 102,486	$ 11,661
Supplemental disclosure of cash flow information		
Interest paid during the period	604	700
Income taxes paid	1	1
Supplemental disclosure of noncash flow information		
Unpaid property and equipment	1,279	94
Unpaid deferred offering costs	—	1,187
Right-of-use assets acquired under operating leases	300	7,585

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

Note 1. The Company and Basis of Presentation

SiTime Corporation (the "Company"), was incorporated in the State of Delaware in December 2003. The Company is a provider of silicon timing systems. The Company primarily supplies oscillator products that are comprised of a MEMS resonator and clock IC that is integrated into a package, as well as standalone resonators. The Company has also started to sample clock ICs. The Company's products are designed to address a wide range of applications across a broad array of end markets. The Company operates a fabless business model and leverages its global network of distributors and resellers to address the broad set of end markets that it serves.

In the opinion of management, the accompanying unaudited condensed consolidated financial statements contain all adjustments of a normal, recurring nature, which are necessary to state fairly the financial information included therein. These financial statements should be read in conjunction with the audited consolidated financial statements and related notes thereto included in SiTime Corporation's Annual Report on Form 10-K for the fiscal year ended December 31, 2019. The year-end condensed balance sheet data was derived from audited financial statements, but does not include all disclosures required by GAAP.

The Company was a wholly-owned subsidiary of MegaChips Corporation ("MegaChips"), a fabless semiconductor company based in Japan and traded on the Tokyo Stock Exchange until the Company completed its initial public offering in November 2019. On June 16, 2020, the Company completed its follow-on public offering, in which 4,025,000 shares of its common stock (including the full exercise of the underwriters' over-allotment option to purchase an additional 525,000 shares) were sold at $32.00 per share. MegaChips sold 2,500,000 shares of common stock and the Company issued and sold 1,525,000 shares of common stock in the offering., resulting in net proceeds to the Company of $45.8 million after deducting underwriting discounts and commissions of $2.7 million and deferred offering costs of $0.3 million. MegaChips remains the largest stockholder of the Company and held approximately 44.9% of the Company's outstanding common stock as of June 30, 2020.

Outbreak of Coronavirus Disease 2019 ("the COVID-19 pandemic")

On March 11, 2020, the World Health Organization characterized the outbreak of the coronavirus disease known as COVID-19 as a global pandemic and recommended containment and mitigation measures. On March 13, 2020, the United States declared a national emergency concerning the outbreak, and several states and municipalities have declared public health emergencies. To combat the spread of the COVID-19 pandemic, the United States and other foreign countries in which the Company operates have imposed measures such as quarantines and "shelter-in-place" orders that are restricting business operations and travel and requiring individuals to work from home ("WFH"), which has impacted all aspects of the Company's business as well as those of the third-parties we rely upon for our manufacturing, assembly, testing, shipping and other operations.

The Company anticipates the global health crisis caused by the COVID-19 pandemic will negatively impact business activity across the globe and the Company's results of operations. The inputs into the Company's judgments and estimates consider the economic implications of the COVID-19 pandemic, as the Company knows them, on the Company's critical and significant accounting estimates. The extent to which the COVID-19 pandemic may impact the Company's business will depend on future developments, which are highly uncertain and as such, the Company is not able to estimate the effects of the COVID-19 outbreak on its results of operations, financial condition, or liquidity for fiscal year 2020.

Reporting Calendar

The Company's fiscal year begins on January 1 of the year stated and ends on December 31 of the same year. The Company reports its results on a calendar year basis.

Principles of Consolidation

The condensed consolidated financial statements include the accounts of the Company and its wholly-owned subsidiaries. All intercompany transactions and balances have been eliminated in consolidation.

Significant Accounting Policies

The Company's significant accounting policies are disclosed in the Company's Annual Report on Form 10-K for the year ended December 31, 2019. There had been no changes to these accounting policies except for the recently adopted accounting guidance as discussed below.

Recently Adopted Accounting Guidance

In August 2018, the Financial Accounting Standard Board ("FASB") issued Accounting Standard Update ("ASU") 2018-15, Intangibles-Goodwill and Other-Internal-Use Software (Subtopic 350-40): Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract, which aligns the requirements for capitalizing implementation costs incurred in a cloud computing arrangement that is a service contract with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use-software. The adoption of this standard on January 1, 2020 did not have any impact on the Company's consolidated financial position, results of operations and cash flows.

In August 2018, the FASB issued ASU 2018-13, Fair Value Measurement (Topic 820): Disclosure Framework—Changes to the Disclosure Requirements for Fair Value Measurement, which modifies the disclosure requirements in Topic 820. The adoption of this standard on January 1, 2020 did not have any impact on the Company's disclosures.

New Accounting Pronouncements Not Yet Adopted

In December 2019, the FASB issued ASU 2019-12, Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes, which eliminates certain exceptions related to the approach for intraperiod tax allocation, the methodology for calculating income taxes in an interim period and the recognition of deferred tax liabilities for outside basis differences. It also clarifies and simplifies other aspects of the accounting for income taxes. The new standard will be effective for fiscal years beginning after December 15, 2020. The Company is currently evaluating the impact of the adoption of this standard on its consolidated financial position, results of operations and cash flows.

In June 2016, the FASB issued ASU 2016-13, Financial Instruments – Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments, which changes the credit loss model from an incurred loss approach to an expected loss approach. It requires the application of a current expected credit loss ("CECL") impairment model to financial assets measured at amortized cost (including trade accounts receivable) and certain off-balance-sheet credit exposures. Under the CECL model, lifetime expected credit losses on such financial assets are measured and recognized at each reporting date based on historical, current, and forecasted information. The standard also changes the impairment model for available-for-sale debt securities, eliminating the concept of other than temporary impairment and requiring credit losses to be recorded through an allowance for credit losses. The amount of the allowance for credit losses for available-for-sale debt securities is limited to the amount by which fair value is below amortized cost. The standard is effective for interim and annual periods beginning after December 15, 2022. A modified retrospective adoption method is required, with a cumulative-effect adjustment to the opening retained earnings balance in the period of adoption. The adoption of this standard is not expected to have a material impact on the Company's consolidated financial position, results of operations and cash flows.

Note 2. Net Loss Per Share

The following table summarizes the computation of basic and diluted net loss per share attributable to common stockholder of the Company:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2020	2019	2020	2019
	(in thousands, except per share data)			
Net loss attributable to common stockholders	$ (5,603)	$ (5,449)	$ (10,696)	$ (8,319)
Weighted-average shares outstanding	15,371	10,000	15,191	10,000
Weighted average shares used to compute basic and diluted net loss per share	15,371	10,000	15,191	10,000
Net loss attributable to common stockholders per share, basic and diluted	$ (0.36)	$ (0.54)	$ (0.70)	$ (0.83)

Note 3. Fair Value Measurements

The carrying amounts of the Company's financial instruments, which include cash equivalents, accounts receivable, accounts payable, accrued liabilities, short-term debt obligations, and other current liabilities, approximate their fair values due to their short maturities.

At June 30, 2020 and December 31, 2019, cash balances in bank checking and savings accounts of $42.4 million and $28.4 million, respectively were valued using Level 1 of the fair value hierarchy. At June 30, 2020 and December 31, 2019, highly liquid money market funds of $60.1 million and $35.0 million, respectively were valued using Level 1, of the fair value hierarchy, quoted prices in active markets for identical assets and are included in cash equivalents.

Note 4. Balance Sheet Components

Accounts Receivable, net

Accounts receivable, net consisted of the following:

	As of	
	June 30, 2020	December 31, 2019
	(in thousands)	
Accounts receivables, gross	$ 13,051	$ 17,788
Allowance for doubtful accounts	(50)	(129)
Accounts receivables, net	$ 13,001	$ 17,659

Inventory

Inventory consisted of the following:

	As of	
	June 30, 2020	December 31, 2019
	(in thousands)	
Raw materials	$ 1,131	$ 304
Work in progress	9,567	8,160
Finished goods	4,083	3,447
Total inventories	$ 14,781	$ 11,911

Prepaid Expenses and Other Current Assets

Prepaid expenses and other current assets consisted of the following:

	As of	
	June 30, 2020	December 31, 2019
	(in thousands)	
Advance to suppliers	$ 13	$ 3,338
Prepaid expenses	853	1,279
Other current assets	715	984
Total prepaid and other current assets	$ 1,581	$ 5,601

Property and Equipment, Net

Property and equipment, net consisted of the following:

	As of	
	June 30, 2020	December 31, 2019
	(in thousands)	
Lab Equipment	$ 19,462	$ 17,376
Computer Equipment	874	800
Furniture and fixtures	241	241
Construction in Progress	921	221
Leasehold improvements	4,083	4,074
	25,581	22,712
Accumulated depreciation	(15,166)	(13,424)
Total property and equipment, net	$ 10,415	$ 9,288

Depreciation expense related to property and equipment was $0.8 million, $1.7 million, $0.9 million, and $1.5 million for the three and six months ended June 30, 2020 and 2019, respectively.

Intangible Assets, Net

Intangible assets, net consisted of the following:

	As of	
	June 30, 2020	December 31, 2019
	(in thousands)	
Internal use software	$ 10,103	$ 10,022
Purchased intangibles	5,160	4,793
	15,263	14,815
Accumulated amortization	(12,261)	(10,326)
Intangible assets, net	$ 3,002	$ 4,489

Amortization expense for intangible assets was $0.9 million, $2.0 million, $1.2 million, and $2.5 million for the three and six months ended June 30, 2020 and 2019, respectively. In the three and six months ended June 30, 2020 the Company recorded impairment charges of $0.2 million related to cost of software that was in process of development for internal use. The related product for which the software was developed to support in production was abandoned as the Company modified and improved the final desired technical specifications of the product. The impairment charge was recorded as research and development expense in the condensed consolidated statement of operations.

As of June 30, 2020, the Company had $1.5 million of intangibles that were still in development stage and were not being amortized. The estimated aggregate future amortization expense for intangible assets in development stage and subject to amortization as of June 30, 2020 is summarized as below:

	(in thousands)
2020 (remainder)	$ 724
2021	1,156
2022	603
2023	421
2024 and beyond	98
	$ 3,002

Accrued Expenses and Other Current Liabilities

Accrued expenses and other current liabilities consisted of the following:

	As of	
	June 30, 2020	December 31, 2019
	(in thousands)	
Accrued payroll and related benefits	$ 2,677	$ 1,880
Price adjustment and other revenue reserves	986	1,222
Short term lease liability	1,195	1,874
Other accrued expenses	3,475	3,466
Total accrued expenses and other current liabilities	$ 8,333	$ 8,442

Note 5. Leases

The Company leases real estate property under operating leases. The Company was also a lessee and a sublessor from an accounting perspective for its Santa Clara lease through March 31, 2019. The Company also leases office space in Michigan, Malaysia, Japan, the Netherlands, and Ukraine all under non-cancellable operating leases with various expiration dates through December 2026. The remaining lease terms vary from a few months to 6 years. For its leases the Company has options to extend the lease term for periods varying from one to five years. These renewal options are not considered in the remaining lease term unless it is reasonably certain that the Company will exercise such options. The Company also has variable lease payments that are primarily comprised of common area maintenance and utility charges.

As of June 30, 2020, the Company did not have any leases that had not yet commenced.

The table below presents the lease-related assets and liabilities recorded on the consolidated balance sheet as of June 30, 2020:

	As of	
	June 30, 2020	December 31, 2019
	(in thousands)	
Right-of-use assets	$ 9,467	$ 9,790
Lease liabilities included in accrued expenses and other current liabilities	1,195	1,874
Lease liabilities - non-current	7,570	7,940
Total operating lease liabilities	$ 8,765	$ 9,814
Weighted-average remaining lease term (years)	6.4	7.1
Weighted-average discount rate	4.2%	4.1%

The table below presents certain information related to the lease costs for operating leases for the three and six months ended June 30, 2020 and 2019:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2020	2019	2020	2019
	(in thousands)			
Operating lease cost	$ 426	$ 347	$ 851	$ 654
Short-term lease cost	80	121	165	128
Variable lease cost	56	71	156	165
Total lease cost	$ 562	$ 539	$ 1,172	$ 947

Cash paid for operating lease liabilities was $0.4 million, $1.6 million, $0.3 million and $0.7 million, respectively for the three and six months ended June 30, 2020 and 2019. The Company sub-leased a portion of its Santa Clara facility through March 31, 2019 and received $0.1 million in sub-lease income for the six months ended June 30, 2019, which was included in the short-term lease cost above.

Undiscounted Cash Flows

The table below reconciles the undiscounted cash flows for each of the first five years and total of the remaining years to the operating lease liabilities recorded on the consolidated balance sheet as of June 30, 2020:

	(in thousands)
2020	$ 646
2021	1,530
2022	1,573
2023	1,489
2024	1,532
2025 and beyond	3,210
Total minimum lease payments	9,980
Less: amount of lease payments representing interest	(1,215)
Present value of future minimum lease payments	8,765
Less: current obligations under leases	(1,195)
Long-term lease liabilities	$ 7,570

Note 6. Stockholders' Equity

On June 16, 2020, the Company completed its follow-on public offering, in which 4,025,000 shares of its common stock (including the full exercise of the underwriters' over-allotment option to purchase an additional 525,000 shares) were sold at $32.00 per share. MegaChips sold 2,500,000 shares of common stock and the Company issued and sold 1,525,000 shares of common stock in the offering.

Equity Incentive Plans

The following table summarizes the restricted stock unit award ("RSU"), activity for the three and six months ended June 30, 2020:

	Shares Outstanding	Grant Date Fair Value per share
Balance at December 31, 2019	2,989,322	$ 13.0
Granted	206,026	20.9
Vested	(149,141)	13.2
Forfeited	(130,939)	13.5
Balance at March 31, 2020	2,915,268	$ 13.5
Granted	135,420	33.4
Vested	(187,200)	14.1
Forfeited	(17,860)	13.8
Balance at June 30, 2020	2,845,628	$ 14.4

In the three and six months ended June 30, 2020, the Company granted 4,780 units of cash based RSUs of which 3,290 units fully vested at the end of the quarter. For the six months ended June 30, 2020, the Company issued 222,918 shares of common stock in connection with the vesting of RSUs. The difference between the number of RSUs vested and the shares of common stock issued is the result of RSUs withheld in satisfaction of minimum tax withholding obligations associated with the vesting.

Stock-Based Compensation

The following table presents the detail of stock-based compensation expense amounts included in the condensed consolidated statement of operations for each of the periods presented:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2020	2019	2020	2019
	(in thousands)			
Cost of revenue	$ 70	$ —	$ 126	$ —
Research and development	1,072	—	2,014	—
Selling, general and administrative	2,126	—	3,883	—
Total stock-based compensation expense	$ 3,268	$ —	$ 6,023	$ —

The total compensation cost for cash based RSUs as reported in the table above was $0.2 million. As of June 30, 2020, there was $38.7 million of unrecognized compensation costs related to RSUs granted. The unrecognized compensation cost is expected to be recognized over a weighted average period of 4.01 years.

Note 7. Income Taxes

The quarterly provision for (benefit from) income taxes is based on applying the estimated annual effective tax rate to the year to date pre-tax income (loss), plus any discrete items. The Company updates its estimate of its annual effective tax rate at the end of each quarterly period. The estimate takes into account annual forecasted income (loss) before income taxes, the geographic mix of income (loss) before income taxes and any significant permanent tax items.

On March 27, 2020, the “Coronavirus Aid, Relief, and Economic Security Act” (“CARES Act”) was signed into law. The new legislation includes a number of income tax provisions applicable to individuals and businesses. Due to historical net operating losses incurred in the U.S., the CARES Act did not have material impacts on the Company’s condensed consolidated financial statements as of June 30, 2020. The Company continues to examine the elements of the CARES Act and the impact it may have on its future business.

The following table presents the provision for income taxes and the effective tax rates for the three and six months ended June 30, 2020 and 2019:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2020	2019	2020	2019
	(in thousands)			
Loss before income taxes	$ (5,604)	$ (5,448)	$ (10,695)	$ (8,318)
Provision (benefit) for income tax	1	(1)	(1)	(1)
Effective tax rate	0%	0%	0%	0%

The Company’s effective tax rate may vary from the U.S. federal statutory tax rate due to the change in the mix of earnings in tax jurisdictions with different statutory rates, benefits related to tax credits and the tax impact of non-deductible expenses, existence of full valuation allowance on its deferred tax assets, and other permanent differences between income before income taxes and taxable income.

A valuation allowance is established or maintained when, based on currently available information and other factors, it is more likely than not that all or a portion of the deferred tax assets will not be realized. The Company regularly assesses its valuation allowance against deferred tax assets on a jurisdiction by jurisdiction basis. The Company considers all available positive and negative evidence, including future reversals of temporary differences, projected future taxable income, tax planning strategies and recent financial results. Based on management’s assessment of the realizability of deferred tax assets, the Company continues to maintain a full valuation reserve on its deferred tax assets as of June 30, 2020.

As of June 30, 2020 and December 31, 2019, the Company had $2.2 million and $2.2 million, respectively, of total unrecognized tax benefits. If the Company is able to eventually recognize these uncertain tax positions, none of the unrecognized benefit would reduce the Company’s effective tax rate due to the full valuation allowance on the Company’s deferred tax assets.

The Company’s policy is to record interest and penalties related to unrecognized tax benefits as income tax expense. For the three and six months ended June 30, 2020 and 2019, the Company had immaterial amounts related to the accrual of interest and penalties.

Note 8. Segment and Geographic Information

The Company operates in one reportable segment related to the design, development, and sale of silicon timing systems solutions.

Revenue by geographic area are presented based upon the ship-to location of the original equipment manufacturers, the contract manufacturers or the distributors who purchased the Company's products. For sales to the distributors, their geographic location may be different from the geographic locations of the ultimate end customers. The following table sets forth revenue by country for countries with 10% or more of the Company's revenue during any of the periods presented:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2020	2019	2020	2019
	(in thousands)			
Taiwan	$ 8,143	$ 7,227	$ 17,973	$ 14,896
Hong Kong	5,878	3,718	10,321	6,605
United States	1,873	1,262	3,675	2,468
Other	5,579	3,636	11,246	6,691
Total	$ 21,473	$ 15,843	$ 43,215	$ 30,660

The Company's long-lived assets in the U.S. attributable to operations as of June 30, 2020 and December 31, 2019 were 97% and 97%, respectively, of total property and equipment and intangible assets.

Note 9. Debt Obligations

The Company has borrowed against the short-term revolving line of credit that it has arranged with The Bank of Tokyo-Mitsubishi UFJ, Ltd. ("MUFG") to fund its operations. The weighted-average interest rate on short-term borrowings outstanding as of June 30, 2020 and December 31, 2019 was 0.79% and 1.42%, respectively.

As of June 30, 2020, the Company was in compliance with all of the financial covenants under all of its debt agreements.

Debt obligations as of June 30, 2020 and December 31, 2019 consisted of the following:

	As of	
	June 30, 2020	December 31, 2019
	(in thousands)	
Revolving line of credit:		
MUFG	$ 35,000	$ 41,000
Balance	35,000	41,000
Less: Current portion of long-term debt	(35,000)	(41,000)
Long-term debt	$ —	$ —

As of June 30, 2020, debt obligations were as follows (dollars in thousands):

Lender	Loan Start Date	Loan Amount	Annual Interest Rate	Maturity Date
MUFG	6/24/2020	$ 23,000	1.45%	7/24/2020
MUFG	3/23/2020	3,000	2.46%	9/21/2020
MUFG	3/24/2020	9,000	2.37%	3/24/2021
		$ 35,000		

As of December 31, 2019, debt obligations were as follows (dollars in thousands):

Lender	Loan Start Date	Loan Amount	Annual Interest Rate	Maturity Date
MUFG	12/19/2019	$ 38,000	2.97%	6/10/2020
MUFG	8/23/2019	3,000	3.10%	2/19/2020
		$ 41,000		

On June 10, 2020, the $38.0 million loan with MUFG matured, at which time the Company renewed the loan for $23.0 million at an interest rate of 1.39% through June 24, 2020. On June 24, 2020, the loan was further extended through July 24, 2020 at an interest rate of 1.45%. Effective June 30, 2020, the MegaChips guarantee for the revolving line of credit with MUFG has been terminated. Upon termination of the guarantee, the Company agreed to maintain a minimum cash balance in its operating cash account equal to its outstanding loan balance with MUFG. The minimum cash balance requirement is a compensating balance arrangement that does not legally restrict any cash amounts that are shown in the condensed consolidated balance sheet.

As of June 30, 2020, the Company had remaining available credit of $15.0 million its revolving line of credit with MUFG, $30.0 million under its revolving line of credit with MegaChips and $20.0 million remaining available credit under its revolving line of credit with Sumitomo Mitsui Banking Corporation. On July 24, 2020, the Company paid down all outstanding loans with MUFG of $35.0 million of which $12.0 million of loans were prepaid with a penalty of $0.1 million. See Note 12, “Subsequent Events” for more information.

Note 10. Commitments and Contingencies

Legal Matters

From time to time, the Company may be a party to various litigation claims in the normal course of business. Legal fees and other costs associated with such actions are expensed as incurred. The Company assesses, in conjunction with legal counsel, the need to record a liability for litigation and contingencies. Accrual estimates are recorded when and if it is determined that such a liability for litigation and contingencies are both probable and reasonably estimable. No accruals for loss contingencies or recognition of actual losses have been recorded in any of the periods presented.

In March 2019, VTT Technical Research Centre of Finland, Ltd. ("VTT") filed suit in the United States District Court for the Northern District of California alleging infringement by the Company of a patent relating to specific combinations of features set forth in U.S. Patent No. 8,558,643. The complaint sought unspecified monetary damages and injunctive relief. On January 22, 2020, the Company participated in a mediation that had been ordered by the Court. The case was not resolved at the mediation. A Markman Hearing was held on May 15, 2020 relating to a number of different disputed claim terms, and on July 9, 2020 the Court issued a Markman Order relating to those disputed claim terms. Among its determinations, the Court found that one of the disputed claim terms was indefinite, as well as any claim that had this claim term in it. On July 17, 2020, the Court issued a judgment finding all claims of U.S. Patent No. 8,558,643 invalid, based upon its Markman Order. VTT currently has until August 17, 2020 to file a Notice of Appeal of the Court's judgment. The Company has not accrued for a loss contingency relating to such matter as the potential loss is currently not probable and reasonably estimable.

Indemnification

The Company is a party to a variety of agreements pursuant to which it may be obligated to indemnify other parties to such agreements with respect to certain matters. Typically, these obligations arise in the context of contracts that the Company has entered into, under which the Company customarily agrees to hold the other party harmless against losses arising from a breach of representations and covenants or terms and conditions related to such matters as the sale and/or delivery of its products, title to assets sold, certain intellectual property claims, defective products, specified environmental matters, and certain income taxes. Further, the Company’s obligations under these agreements may be limited in terms of time, amount, or the scope of its responsibility and in some instances, the Company may have recourse against third-parties for certain payments made under these agreements. It is not possible to predict the maximum potential amount of future payments under these agreements due to the conditional nature of the Company’s obligations and the unique facts and circumstances involved in each particular agreement. Historically, the Company has had no indemnification claims under these agreements.

Note 11. Related Party Transactions

The Company entered into a distribution agreement with MegaChips, whereby the Company appointed MegaChips as the exclusive distributor of its products in Japan. The Company sells products through MegaChips to distributors, resellers, or direct customers in Japan. The Company pays MegaChips a fixed percentage of the revenue as sales commission, which is recorded as commission expense and included in sales and marketing in the consolidated statements of operations and comprehensive loss.

In the six months ended June 30, 2020 the Company entered into an equipment purchase agreement with MegaChips Taiwan Corporation, a wholly-owned subsidiary of MegaChips Corporation.

In the six months ended June 30, 2020 the Company entered into a services and secondment agreement with MegaChips LSI USA Corporation, a wholly-owned subsidiary of MegaChips Corporation.

See Note 9, “Debt Obligations” for more information regarding the Company’s loan agreement with MegaChips.

The following is a summary of significant balances, transactions and payments with the related parties and affiliates.

	As of	
	June 30, 2020	December 31, 2019
	(in thousands)	
MegaChips		
Accounts receivable	$ 581	$ 1,073
Prepaid expenses and other current assets	51	18
Accounts payable	—	220
Accrued expenses and other current liabilities	75	—

	Three Months Ended June 30,		Six Months Ended June 30,	
	2020	2019	2020	2019
	(in thousands)			
MegaChips				
Sales through distribution agreement	$ 1,584	$ 1,059	$ 2,730	$ 1,814
License expense	80	—	148	—
Commission expense	65	42	112	68
Affiliates				
Consulting fees	58	—	175	—

	Three Months Ended June 30,		Six Months Ended June 30,	
	2020	2019	2020	2019
	(in thousands)		(in thousands)	
MegaChips				
Cash paid for commissions	$ 65	$ 42	$ 112	$ 68
Cash paid for licenses	8	—	25	—
Affiliates				
Cash paid for consulting fees	58	—	175	—

Note 12. Subsequent Events

On July 24, 2020, the Company paid down all outstanding loans with MUFG of $35.0 million of which $12.0 million of loans were prepaid with a penalty of $0.1 million.

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

The following discussion should be read in conjunction with the Condensed Consolidated Financial Statements and the related notes that appear elsewhere in this document.

The information in this Quarterly Report on Form 10-Q contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended ("Securities Act"), and Section 21E of the Securities Exchange Act of 1934, as amended ("Exchange Act"), which are subject to the "safe harbor" created by those sections. These forward-looking statements reflect our management's beliefs and views with respect to future events and are based on estimates and assumptions as of the date of this report and are subject to risks and uncertainties. We may, in some cases, use words such as "anticipate," "believe," "could," "continue," "estimate," "expect," "intend," "may," "objective," "plan," "potential," "predict," "project," "should," "will," "would," or the negative of those terms, and similar expressions that convey uncertainty of future events or outcomes to identify these forward-looking statements. Forward-looking statements in this report include, but are not limited to, statements regarding:

- our plans to focus on clock IC and timing sync solutions in the future and to aggressively expand our presence in these two markets;
- the impact of the COVID-19 pandemic on our business, revenue and other operating results, liquidity, and cash flows, and its impact on the businesses of our suppliers and customers, and our anticipated responses thereto;
- our ability to address market and customer demands and to timely develop new or enhanced solutions to meet those demands;
- anticipated trends, challenges and growth in our business and the markets in which we operate, including pricing expectations;
- our expectations regarding our revenue, gross margin, and expenses;
- expected impact of new legistlation and IRS guidance issued in response to the COVID-19 pandemic;
- our belief as to the sufficiency of our existing cash and cash equivalents and funds available for borrowing under our credit facilities to meet our cash needs for at least the next 12 months and our future capital requirements over the longer term, including the potential impact of the COVID-19 pandemic thereon;
- our expectations regarding dependence on our largest customer;
- our customer relationships and our ability to retain and expand our customer relationships and to achieve design wins;
- the success, cost, and timing of new products;
- the size and growth potential of the markets for our solutions, and our ability to serve and expand our presence in those markets;
- our plans to expand sales and marketing efforts through increased collaboration with our distributors, resellers, and contracted sales representatives, and our plans to introduce a self-service web portal as well as digital marketing campaigns for branding and lead generation;
- our goal to become the leading timing solution provider for advanced and challenging applications;
- our positioning of being designed into current systems as well as future products;
- our belief that our advanced packaging designs can fit in the smallest footprints in the industry;
- our expectations regarding competition in our existing and new markets;
- regulatory developments in the United States and foreign countries;
- the performance of, and our relationships with, our third-party suppliers and manufacturers;
- our and our customers' ability to respond successfully to technological or industry developments;
- our ability to attract and retain key management personnel;
- intellectual property and related litigation;
- the adequacy and availability of our leased facilities;
- the accuracy of our estimates regarding capital requirements, expectations regarding renewal of loans, and needs for additional financing;

- our relationship with, and ownership percentage of, MegaChips Corporation (“MegaChips”);
- our expectations regarding the period during which we qualify as an emerging growth company under the JOBS Act; and
- our expectations regarding our ability to obtain, maintain, protect, and enforce intellectual property protection for our technology.

In addition, any statements contained herein that are not statements of historical facts may be deemed to be forward-looking statements. Forward-looking statements are subject to a number of risks and uncertainties that could cause actual results to differ materially from those expected or referenced in these forward-looking statements. These risks and uncertainties include, but are not limited to, those risks discussed in Part II, Item 1A Risk Factors of this report. Moreover, we operate in a very competitive and rapidly changing environment. New risks emerge from time to time. It is not possible for our management to predict all risks, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements we may make. Given these uncertainties, you should not place undue reliance on these forward-looking statements. We qualify all of the forward-looking statements in this report by these cautionary statements.

You should not rely upon forward-looking statements as predictions of future events. Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee that the future results, levels of activity, performance, or events and circumstances reflected in the forward-looking statements will be achieved or occur. Moreover, neither we nor any other person assumes responsibility for the accuracy and completeness of the forward-looking statements. We undertake no obligation to update publicly any forward looking statements for any reason after the date of this report to conform these statements to actual results or to changes in our expectations, except as required by law.

Overview

We are a leading provider of silicon timing solutions. Our timing solutions are the heartbeat of our customers’ electronic systems, solving complex timing problems and enabling industry-leading products. We provide solutions that are differentiated by high performance and reliability, programmability, small size, and low power consumption. Our products have been designed into over 200 applications across our target markets, including enterprise and telecommunications infrastructure, automotive, industrial, IoT and mobile, and aerospace and defense.

We commenced commercial shipments of our first oscillator products in 2006. Substantially all of our revenue to date has been derived from sales of oscillator systems across our target end markets. We intend to introduce products into the clock IC market, which we began sampling in 2019, and to focus on clock IC and timing sync solutions in the future. We seek to aggressively expand our presence in these two markets.

We sell our products primarily through distributors and resellers, who in turn sell to our end customers. Based on sell-through information provided by these distributors, we believe the majority of our end customers are based in the U.S.

We operate a fabless business model, allowing us to focus on the design, sales, and marketing of our products, quickly scale production, and significantly reduce our capital expenditures. We leverage our global network of distributors and resellers to address the broad set of end markets we serve. For our largest accounts, dedicated sales personnel work with the end customer to ensure that our solutions fully address the end customer’s timing needs. Our smaller customers work directly with our distributors to select the optimum timing solution for their needs.

We were acquired by MegaChips in 2014 and were a wholly-owned subsidiary of MegaChips, a fabless semiconductor company based in Japan and traded on the Tokyo Stock Exchange, until November 25, 2019. On November 25, 2019, we completed the initial public offering of shares of our common stock. MegaChips continues to be our largest stockholder and held approximately 44.9% of our common stock as of June 30, 2020. On June 16, 2020, we completed a follow-on public offering, in which we issued and sold 1,525,000 shares of our common stock and MegaChips sold 2,500,000 of our common stock held by them.

Impact of COVID-19 on our Business

The future impact of the global emergence of the COVID-19 pandemic on our business is currently unknown. In an effort to protect the health and safety of our employees, we took proactive actions and adopted social distancing policies at our locations around the world, including WFH, reducing the number of people in our sites at any one time, and suspending employee travel. In an effort to contain the COVID-19 pandemic or slow its spread, governments around the world have also enacted various measures, including orders to close all businesses not deemed “essential,” isolate residents to their homes or places of residence, and practice social distancing when engaging in essential activities. In addition, the United States and other foreign countries in which we operate have imposed measures such as quarantines and “shelter-in-place” orders that are restricting business operations and travel and requiring individuals to work from home (“WFH”), which has impacted all aspects of our business, as well as those of the third-parties we rely upon for our manufacturing, assembly, testing, shipping and other operations.

We anticipate the global health crisis caused by the COVID-19 pandemic will negatively impact business activity across the globe and our results of operations. We believe that the COVID-19 pandemic has caused, and could continue to cause, delay and disruption in the manufacture, shipment, and sales of, and overall demand for, our products. In addition, we believe the production capabilities of our suppliers has been, and may continue to be, impacted as a result of quarantines, closures of production facilities, lack of supplies, or delays caused by restrictions on travel or WFH orders. For example, on March 16, 2020, the government of Malaysia announced measures to restrict movement in that country to suppress the number of COVID-19 cases. The restrictions have been extended currently until August 31, 2020. These restrictions could limit our suppliers' ability to operate their manufacturing facilities in that country. Any delay or disruption in the manufacture, shipment and sales of, or overall demand for, our products in turn may negatively and materially impact our operating and financial results, including revenue, gross margins, operating margins, cash flows and other operating results. Further, the resumption of normal business operations after such disruptions may be delayed and a resurgence of COVID-19 could result in continued disruption to us, our suppliers, and/or our customers. To date, the Company has experienced minimal impact from any supplier disruption. The duration and full magnitude of the COVID-19 pandemic's impact on credit and financial markets is also unknown, which creates uncertainty as to the financial condition of our distributors or customers. In addition, the deterioration in credit markets could limit our ability to obtain external financing to fund our operations and capital expenditures. We may also experience losses on our holdings of cash and investments due to failures of financial institutions and other parties.

We currently have employees, third-party contractors, distributors, and customers in numerous countries throughout the world that have each been impacted by the COVID-19 pandemic. The COVID-19 pandemic has restricted and is expected to continue to restrict travel and use of our facilities and the facilities of our suppliers, customers, or other vendors in our supply chain, which could impact our business, interactions and relationships with our customers, third-party suppliers and contractors, and results of operations. We cannot predict with certainty what other impacts the COVID-19 pandemic may have on our business and results of operations.

There remains a high degree of uncertainty in the global business environment given the impact of the COVID-19 pandemic which creates challenges with visibility beyond the near term. We will continue to actively monitor the situation and may take further actions altering our business operations that we determine are in the best interests of our employees, customers, partners, suppliers, and stakeholders, or as required by federal, state, or local authorities. It is not clear what the potential effects any such alterations or modifications may have on our business, including the effects on our customers, employees, operations, and prospects, or on our financial results for the remainder of fiscal 2020 or beyond. For additional discussion, please see Part II, Item 1A Risk Factors of this report.

Results of Operations

Revenue

We derive revenue primarily from sales of silicon timing products to distributors and resellers who in turn sell to our end customers. We also sell products directly to end customers who integrate our products into their applications. Our sales are made pursuant to standard purchase orders which may be cancelled, reduced, or rescheduled, with little or no notice. We recognize product revenue upon shipment when we satisfy our performance obligations as evidenced by the transfer of control of our products to customers. We measure revenue based on the amount of consideration we expect to be entitled to in exchange for products.

	Three Months Ended June 30,		Change		Six Months Ended June 30,		Change	
	2020	2019	$	%	2020	2019	$	%
	(in thousands except percentage)							
Revenue	$ 21,473	$ 15,843	$ 5,630	36%	$ 43,215	$ 30,660	$ 12,555	41%

Revenue increased by $5.6 million, or 36%, for three months ended June 30, 2020 compared to the same period in the prior year. The revenue from our customers largely in Asia increased $5.2 million primarily from higher sales volume of 17% and an increase in ASP of $0.08 drive by the mix of products. The remaining increase was primarily related to increased revenue of $0.4 million from our largest customer from higher sales volume and higher ASP driven by the change in the mix of the products sold.

Revenue increased by $12.6 million, or 41%, for six months ended June 30, 2020 compared to the same period in the prior year. The revenue from our customers largely in Asia increased $10.8 million primarily from higher sales volume of 39% and an increase in ASP of $0.03. The remaining increase was primarily related to increased revenue of $1.7 million from our largest customer from higher sales volume and higher ASP driven by mix of products sold. The overall average selling price of our products increased by $0.03 year over year driven mostly by mix of products.

For the three and six months ended June 30, 2020, sales attributable to our largest end customer accounted for 26% and 30% of our revenue, respectively. For the three and six months ended June 30, 2020, our top three distributors by revenue together accounted for approximately 51% and 54% of our revenue, respectively. Revenue attributable to our largest ten end customers accounted for 50% and 51% respectively for the three and six months ended June 30, 2020.

Cost of Revenue, Gross Profit, and Gross Margin

Cost of revenue consists of wafers acquired from third-party foundries, assembly, packaging, and test cost of our products paid to third-party contract manufacturers, and personnel and other costs associated with our manufacturing operations. Cost of revenue also includes depreciation of production equipment, inventory write-downs, amortization of internally developed software, shipping and handling costs, and allocation of overhead and facility costs. We also include credits for rebates received from foundries to cost of revenue.

	Three Months Ended June 30,		Change		Six Months Ended June 30,		Change	
	2020	2019	$	%	2020	2019	$	%
	(in thousands except percentage)				(in thousands except percentage)			
Cost of Revenue	$ 11,490	$ 9,469	$ 2,021	21%	$ 23,256	$ 16,697	$ 6,559	39%
Gross Profit	9,983	6,374	3,609	57%	19,959	13,963	5,996	43%
Gross Margin	46%	40%			46%	46%		

Gross profit increased by $3.6 million in the three months ended June 30, 2020 compared to the same period in the prior year. The gross profit for the period ended June 30, 2019 included a benefit of $0.4 million from the sale of previously reserved inventory. Gross profit excluding this benefit of $0.4 million increased $4.0 million year over year mainly from higher sales volume and a slight increase in ASP as other manufacturing costs remained relatively flat.

Gross profit increased by $6.0 million in the six months ended June 30, 2020 compared to the same period in the prior year. The gross profit for the period ended June 30, 2019 included a benefit of $1.7 million from the sale of previously reserved inventory. Gross profit excluding this benefit of $1.7 million increased $7.7 million year over year mainly from higher sales volume and an increase in ASP as other manufacturing costs remained relatively flat.

Gross margin was higher by 6% in the three months ended June 30, 2020 when compared to the same period in the prior year. The gross margin for the period ended June 30, 2019 included a benefit of 2% or $0.4 million from sale of previously reserved inventory. The gross margin excluding the benefit to the gross margin from the sale of the previosly reserved inventoy increased by 9% year over year from higher sales volume and a slight increase in ASP as other manufacturing costs remained relatively flat.

Gross margin was flat in the six months ended June 30, 2020 when compared to the same period in the prior year. The gross margin for the period ended June 30, 2019 included a benefit of 6% or $1.7 million from sale of previously reserved inventory. The gross margin excluding the benefit to the gross margin from the sale of the previosly reserved inventoy increased by 6% year over year from higher sales volume and an increase in ASP as other manufacturing costs remained relatively flat.

Operating Expenses

Our operating expenses consist of research and development, sales and marketing, and general and administrative expenses. Personnel costs are the most significant component of our operating expenses and consist of salaries, benefits, bonuses, stock-based compensation, and commissions. Our operating expenses also include consulting costs, allocated costs of facilities, information technology and depreciation. We expect our operating expenses to fluctuate in absolute dollars and as a percentage of revenue over time.

Research and Development

Our research and development efforts are focused on the design and development of next-generation silicon timing systems solutions. Our research and development expense consists primarily of personnel costs, which include stock-based compensation, pre-production engineering mask costs, software license and intellectual property expenses, design tools and prototype-related expenses, facility costs, supplies, professional and consulting fees, and allocated overhead costs. We expense research and development costs as incurred. We believe that continued investment in our products and services is important for our future growth and acquisition of new customers and, as a result, we expect our research and development expenses to continue to increase in absolute dollars. However, we expect our research and development expense to fluctuate as a percentage of revenue from period to period depending on the timing of these expenses.

Sales, General and Administrative

Sales, general and administrative expense consists of personnel costs, including stock-based compensation, professional and consulting fees, accounting and audit fees, legal costs, field application engineering support, travel costs, advertising expenses and allocated overhead costs. We expect sales, general and administrative expense to continue to increase in absolute dollars as we increase our personnel and grow our operations, although it may fluctuate as a percentage of revenue from period to period depending on the timing of these expenses.

	Three Months Ended June 30,		Change		Six Months Ended June 30,		Change	
	2020	2019	$	%	2020	2019	$	%
	(in thousands except percentage)				(in thousands except percentage)			
Operating Expenses:								
Research and development	$ 7,398	$ 6,249	$ 1,149	18%	$ 14,422	$ 12,069	$ 2,353	19%
Selling, general and administrative	7,856	5,106	2,750	54%	15,664	9,297	6,367	68%
Total operating expenses	$ 15,254	$ 11,355	$ 3,899	34%	$ 30,086	$ 21,366	$ 8,720	41%

Research and development expense increased by $1.1 million, or 18%, for the three months ended June 30, 2020 compared to the same period in the prior year, primarily due to an increase in stock-based compensation expense of $1.1 million. This in turn was due to the timing of grants of employee equity awards upon the completion of our initial public offering in November 2019.

Selling, general and administrative expense increased by $2.8 million, or 54%, for the three months ended June 30, 2020 compared to the same period in the prior year, primarily due to higher stock-based compensation expense of $2.1 million, $0.5 million of higher personnel costs largely related to increased headcount and expenses for services related to the requirements of being a public company.

Research and development expense increased by $2.4 million, or 19%, for the six months ended June 30, 2020 compared to the same period in the prior year, primarily due to an increase in stock-based compensation expense of $2.0 million. This in turn was due to the timing of grants of employee equity awards upon the completion of our initial public offering in November 2019.

Selling, general and administrative expense increased by $6.4 million, or 68%, for the six months ended June 30, 2020 compared to the same period in the prior year, primarily due to higher stock-based compensation expense of $3.9 million, higher personnel costs of $0.9 million largely related to increased headcount, $0.5 million of additional legal expenses in connection with our patent litigation matter and due to additional expenses for services related to the requirements of being a public company.

Other Expense

Other income (expense) consists primarily of interest expense on our outstanding debt, foreign exchange gains and losses, and asset dispositions. See Note 7 to our consolidated financial statements under Item 8 for more information about our debt.

	Three Months Ended June 30,		Change		Six Months Ended June 30,		Change	
	2020	2019	$	%	2020	2019	$	%
	(in thousands except percentage)				(in thousands except percentage)			
Interest Expense	$ 313	$ 456	$ (143)	(31%)	$ 616	$ 894	$ (278)	(31%)
Other expense, net	20	11	9	82%	(48)	21	(69)	(329%)
Total other expense	$ 333	$ 467	$ (134)	(29%)	$ 568	$ 915	$ (347)	(38%)

Other expense decreased $0.1 million and $0.3 million for three and six months ended June 30, 2020 compared to the same period in the prior year, primarily as a result of lower interest rates on lower balances on our outstanding revolving short-term debt during 2020 as compared to 2019.

Income Tax Benefit (Expense)

Income tax expense consists primarily of state income taxes and income taxes in certain foreign jurisdictions in which we conduct business. We have a full valuation allowance for deferred tax assets as the realization of the full amount of our deferred tax asset is uncertain, including NOL, carryforwards, and tax credits related primarily to research and development. We expect to maintain this full valuation allowance until realization of the deferred tax assets becomes more likely than not.

On March 27, 2020, the Coronavirus Aid, Relief and Economic Security Act ("CARES Act") was signed into law in the U.S. to provide certain relief as a result of the COVID-19 pandemic. In addition, governments around the world have enacted or implemented various forms of tax relief measures in response to the economic conditions in the wake of the COVID-19 pandemic. As of June 30, 2020, the Company has determined that neither the CARES Act nor changes to income tax laws or regulations in other jurisdictions had a significant impact on the Company's effective tax rate.

	Three Months Ended June 30,		Change		Six Months Ended June 30,		Change	
	2020	2019	$	%	2020	2019	$	%
	(in thousands except percentage)				(in thousands except percentage)			
Income tax benefit (expense)	$ 1	$ (1)	$ 2	(200%)	$ (1)	$ (1)	$ —	0%

Liquidity and Capital Resources

Before our initial public offering in November 2019, we financed our operations primarily through cash generated from product sales and proceeds from our credit facilities, including proceeds from our loan agreement with MegaChips. As of June 30, 2020 and December 31, 2019, we had cash and cash equivalents of $102.5 million and $63.4 million, respectively. Our principal use of cash is to fund our operations to support growth. In June 2020, we completed a follow-on public offering of our shares, resulting in net proceeds to us of $45.8 million after deducting underwriting discounts and commissions and deferred offering costs. On July 24, 2020, the Company paid down all outstanding loans with MUFG of $35.0 million and has initiated the closure of all credit facilities available as of June 30, 2020. As of the reporting date, it is challenging to assess the future impact of the COVID-19 pandemic on the Company. We believe that one impact of the COVID-19 pandemic on the Company may be a decrease in the Company's revenue. We are not currently aware of any other material short-term adverse influences on the Company. However, at this point in time, we cannot predict what other impacts the COVID-19 pandemic may have on the Company. We believe that our existing cash and cash equivalents and funds available after the paydown of our outstanding loans will be sufficient to meet our cash needs for at least the next 12 months. Over the longer term, our future capital requirements will depend on many factors, including our growth rate, the timing and extent of our sales and marketing and research and development expenditures, and the continuing market acceptance of our solutions. In the event that we need to borrow funds or issue additional equity, we cannot provide any assurance that any such additional financing will be available on terms acceptable to us, if at all. If we are unable to raise additional capital when we need it, it would harm our business, results of operations and financial condition.

	Six Months Ended June 30,	
	2020	2019
	(in thousands)	
Net cash provided by operating activities	$ 5,655	$ 5,176
Net cash used in investing activities	(2,881)	(1,342)
Net cash provided by (used in) financing activities	36,294	(62)
Net increase in cash and cash equivalents	$ 39,068	$ 3,772

Operating Activities

In the six months ended June 30, 2020, net cash provided by operating activities of $5.7 million was primarily due to a net loss of $10.7 million offset by non-cash expenses of $10.5 million and an increase in operating assets and liabilities of $5.8 million. Non-cash expenses were mainly related to depreciation and amortization, impairment of internal-use software, stock-based compensation expense, and non-cash operating lease costs. Operating assets and liabilities increased primarily due to lower accounts receivables and related party receivables due to timing of shipments and collections, lower prepaid expenses and other current assets related to advance payments to suppliers for inventory and higher accrued expenses and other liabilities due to timing of payments partially offset by an increase in inventories as we managed our inventory levels and lower lease liabilities due to timing of payments.

In the six months ended June 30, 2019, net cash provided by operating activities of $5.2 million was primarily due to a net loss of $8.3 million offset by non-cash expenses of $4.5 million and an increase in operating assets and liabilities of $9.0 million. The increase in operating assets and liabilities was primarily due to lower accounts receivable and related party receivables due to timing of shipment and collections, a decrease in inventories due to lower purchases primarily to manage our inventory levels, offset by lower accounts payable due to timing of payments, lower accrued expenses and other liabilities and lower lease liabilities. Non-cash items included depreciation and amortization, and non-cash operating lease costs.

Investing Activities

Our investing activities consist primarily of capital expenditures for property and equipment purchases. Our capital expenditures for property and equipment have primarily been for general business purposes, including machinery and equipment, leasehold improvements, acquired software, internally developed software used in production and support of our products, computer equipment used internally, and production masks to manufacture our products.

In six months ended June 30, 2020, cash used in investing activities was $2.9 million and consisted primarily of the purchase of production masks, internally developed software, and other property and equipment for general business purposes.

In six months ended June 30, 2019, cash used in investing activities was approximately $1.3 million and consisted primarily of the purchase of production masks, internally developed software, and other property and equipment for general business purposes.

Financing Activities

Cash provided by financing activities includes proceeds from borrowings under our credit facilities and proceeds from issuance of shares.

In six months ended June 30, 2020, net cash provided by financing activities was $36.3 million, consisting of proceeds from issuance of shares of $45.8 million net of underwriting commissions and discounts of $2.7 million and deferred offering costs of $0.3 million and borrowings of $35.0 million offset by repayments of $41.0 million under our short-term revolving line of credit and $3.5 million payment of tax withholdings paid on behalf of employees for net share settlement at the time of vesting.

In six months ended June 30, 2019 the Company paid $0.1 million in deferred offering costs.

Contractual Obligations and Commitments

Set forth below is information concerning our contractual commitments and obligations as of June 30, 2020:

	Payments due by period				
	Total	**Less than 1 year**	**1-3 years**	**3-5 years**	**More than 5 years**
			(in thousands)		
Debt obligations	$ 35,000	$ 35,000	$ —	$ —	$ —
Operating leases	9,980	646	3,103	3,021	3,210
Purchase obligations	879	879	—	—	—
Total	$ 45,859	$ 36,525	$ 3,103	$ 3,021	$ 3,210

Obligations under contracts that we can cancel without a significant penalty are not included in the table above. The aggregate amount of our obligations under these contracts is approximately $11.4 million as of June 30, 2020.

We signed an operating lease agreement for our corporate headquarters in Santa Clara, California that commenced on October 20, 2016 and will expire on December 31, 2026. The agreement provides for an option to renew for an additional five years and for rent payments through the term of the lease payment. We also lease office space in Michigan, Malaysia, Japan, the Netherlands, and Ukraine, and all under operating leases with various expiration dates through December 2022.

We purchase components and wafers from a variety of suppliers and use several contract manufacturers to provide manufacturing services for our products. A significant portion of our reported purchase commitments arising from these agreements consists of firm, non-cancellable and unconditional purchase commitments once the production has started. In certain instances, these agreements allow us the option to cancel, reschedule, and adjust our requirements based on its business needs prior to firm orders being placed.

Off-Balance Sheet Arrangements

During the periods presented, we did not have any relationships with unconsolidated entities or financial partnerships, such as entities often referred to as structured finance or special purpose entities, which would have been established for the purpose of facilitating off-balance sheet arrangements or other contractually narrow or limited purposes.

Critical Accounting Policies and Estimates

The preparation of our financial statements and accompanying disclosures in conformity with GAAP requires estimates and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosures of contingent assets and liabilities in the consolidated financial statements and the accompanying notes. The Securities and Exchange Commission, or SEC, has defined a company's critical accounting policies as policies that are most important to the portrayal of a company's financial condition and results of operations, and which require a company to make its most difficult and subjective judgments, often as a result of the need to make estimates of matters that are inherently uncertain. Based on this definition, we have identified our most critical accounting policies and estimates to be as follows: (1) revenue recognition; (2) inventory; (3) stock-based compensation; (4) accounting for income taxes and (5) segment reporting. Although we believe that our estimates, assumptions, and judgments are reasonable, they are based upon information not presently available. Actual results may differ significantly from these estimates if the assumptions, judgments, and conditions upon which they are based turn out to be inaccurate. Management believes that there have been no significant changes to the items that we disclosed as our critical accounting policies and estimates in Management's Discussion and Analysis of Financial Condition and Results of Operations, in our Annual Report on Form 10-K for the year ended December 31, 2019 filed with the SEC on March 3, 2020.

Item 3. Quantitative and Qualitative Disclosures About Market Risk.

Foreign Currency Risk

Substantially all of our revenue is denominated in U.S. dollars. Our expenses are generally denominated in the currencies in which our operations are located, which is primarily in the United States and, to a lesser extent, in Malaysia, the Netherlands, France, Taiwan, Japan, and Ukraine. Our results of operations and cash flows are, therefore, subject to fluctuations due to changes in foreign currency exchange rates and may be adversely affected in the future due to changes in foreign exchange rates. The effect of a hypothetical 10% change in foreign currency exchanges rates applicable to our business would not have a material impact on our historical consolidated financial statements. We do not currently have a hedging program with respect to foreign currency exchange risk.

Interest Rate Risk

We had cash and cash equivalents of $102.5 million and $63.4 million as of June 30, 2020 and December 31, 2019, respectively, consisting of bank deposits. Such interest-earning instruments carry a degree of interest rate risk. To date, fluctuations in interest income have not been significant. We also had total outstanding debt of $35.0 million and $41.0 million as of June 30, 2020 and December 31, 2019, respectively, of which all are due within 12 months, and were paid down as of the date of this report.

We do not enter into investments for trading or speculative purposes and have not used any derivative financial instruments to manage our interest rate risk exposure. Our exposure to interest rates relates to the change in the amounts of interest we must pay on our short-term revolving line of credit which changes at time of renewals. The effect of a hypothetical 10% change in interest rates applicable to our business would not have a material impact on our historical consolidated financial statements.

Item 4. Controls and Procedures.

Evaluation of Disclosure Controls and Procedures.

We maintain "disclosure controls and procedures," as such term is defined in Rules 13a-15 (e) and 15d – 15(e) under the Exchange Act, that are designed to provide reasonable assurance that information required to be disclosed by us in reports we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms and that such information is accumulated and communicated to our management, including our Chief Executive Officer (principal executive officer) and Chief Financial Officer (principal financial officer), as appropriate, to allow for timely decisions regarding required disclosure. In designing and evaluating our disclosure controls and procedures, management recognized that disclosure controls and procedures, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the disclosure controls and procedures are met. Our disclosure controls and procedures have been designed to meet reasonable assurance standards. Additionally, in designing disclosure controls and procedures, our management necessarily was required to apply its judgment in evaluating the cost-benefit relationship of possible disclosure controls and procedures. The design of any disclosure controls and procedures also is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions.

Based on their evaluation as of the end of the period covered by this Quarterly Report on Form 10-Q, our Chief Executive Officer and Chief Financial Officer have concluded that, as of such date, our disclosure controls and procedures were effective at the reasonable assurance level.

Changes in Internal Control Over Financial Reporting

There have been no changes in our internal control over financial reporting during the three months ended June 30, 2020 that has materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II—OTHER INFORMATION

Item 1. Legal Proceedings.

The information required by this item is included in Note 10 of the Notes to Condensed Consolidated Financial Statements in Part I Item 1 of this Quarterly Report on Form 10-Q and is incorporated herein by reference.

Item 1A. Risk Factors.

In addition to the factors discussed elsewhere in this Form 10-Q, the following are important factors, the order of which is not necessarily indicative of the level of risk that each poses to us, which could cause actual results or events to differ materially from those contained in any forward-looking statements made by us. Any of these factors could have a material adverse effect on our business, results of operations, financial condition, or stock price. Our operations could also be affected by other factors that are presently unknown to us or not considered significant.

Risks Related to Our Business and Our Industry

The COVID-19 pandemic could adversely affect our business, results of operations, and financial condition.

The effects of the global spread of the disease caused by the COVID-19 pandemic on our business are evolving and difficult to predict. To date, the COVID-19 pandemic has significantly and negatively impacted the global economy and it is unclear how long the pandemic will continue to do so. To combat the spread of COVID-19, the United States and other foreign countries in which we operate have imposed measures such as quarantines and “shelter-in-place” orders that are restricting business operations and travel and requiring individuals to WFH, which has impacted all aspects of our business as well as those of the third-parties we rely upon for our manufacturing, assembly, testing, shipping and other operations. The continuation of WFH and other restrictions for an extended period of time may negatively impact our productivity, product development, operations, sales and support, business and financial results. Among other things, the COVID-19 pandemic may result in:

- a decrease in demand and/or prices for our products;
- a global economic recession or depression that could significantly reduce demand and/or prices for our products;
- reduced productivity in our product development, operations, marketing, sales, and other activities;
- disruptions to our supply chain;
- increased costs resulting from WFH or from our efforts to mitigate the impact of the COVID-19 pandemic;
- reduced access to financing to fund our operations due to a deterioration of credit and financial markets; or
- higher rate of losses on our accounts receivables due to credit defaults

The COVID-19 pandemic has also caused significant uncertainty and volatility in global financial markets and the trading prices for the common stock of technology companies, including us. Due to such volatility, we may not be able to raise additional capital, if needed, on favorable terms, or at all. Further adverse economic events resulting from the COVID-19 pandemic, including a recession, depression, or other sustained economic downturn, could materially and adversely affect our business, access to capital markets and the value of our common stock.

In addition, given the inherent uncertainty surrounding COVID-19 due to rapidly changing governmental directives, public health challenges and economic disruption and the duration of the foregoing, the potential impact that the COVID-19 pandemic could have on the other risk factors described in this “Risk Factors” section remain unclear.

We believe we have experienced some delay and disruption in the manufacture, shipment, and sales of, and overall demand for, our products. In addition, we believe the production capabilities of our suppliers has been, and will likely continue to be, impacted as a result of quarantines, closures of production facilities, lack of supplies, or delays caused by restrictions on travel or WFH orders. The continued disruption in the manufacture, shipment and sales of our products may negatively and materially impact our operating and financial operating results, including revenue, gross margins, operating margins, cash flows and other operating results. The resumption of normal business operations after such disruptions may be delayed and a resurgence of COVID-19 could occur resulting in continued disruption to us, our suppliers, and/or our customers. As a result, the effects of the COVID-19 pandemic could have a material adverse impact on our business, results of operations and financial condition for the remainder of 2020 and beyond.

A downturn in the worldwide economy may harm our business.

The COVID-19 pandemic could cause a further downturn in the worldwide economy, which would likely result in reduced demand for our products our customers’ products. Reduced demand for our products could result in significant decreases in sales and margins. In addition, the deterioration in credit markets could limit our ability to obtain external financing to fund our operations and capital expenditures. We may experience losses on our holdings of cash and investments due to failures of financial institutions and other parties. Adverse economic conditions may also result in a higher rate of losses on our accounts receivables due to credit defaults. As a result, a downturn in the worldwide economy could have a material adverse effect on our business, results of operations, or financial condition.

We currently depend on one end customer for a large portion of our revenue. The loss of, or a significant reduction in orders from our customers, including this end customer, could significantly reduce our revenue and adversely impact our operating results.

We believe that our operating results for the foreseeable future will continue to depend to a significant extent on revenue attributable to Apple, our largest end customer. Sales attributable to this end customer have historically accounted for a large portion of our revenue and accounted for approximately 26%, 30%, 35% and 40% of our revenue for the three and six months ended June 30, 2020 and the years ended December 31, 2019 and 2018, respectively. Revenue attributable to this end customer has decreased in absolute dollars and as a percentage of revenue from 2018 to 2019. We anticipate revenue attributable to this customer will fluctuate from period to period, although we expect to remain dependent on this end customer for a substantial portion of our revenue for the foreseeable future. Although we sell our products to this customer through distributors on a purchase order basis, including Pernas Electronics Co., Ltd. ("Pernas"), Arrow Electronics, Inc. ("Arrow"), and Quantek Technology Corporation ("Quantek"), we have a development and supply agreement, which provides a general framework for our transactions with Apple. This agreement continues until either party terminates for material breach. Under this agreement, we have agreed to develop and deliver new products to this end customer at its request, provided it also meets our business purposes, and have agreed to indemnify it for intellectual property infringement or any injury or damages caused by our products. This end customer does not have any minimum or binding purchase obligations to us under this agreement and could elect to discontinue making purchases from us with little or no notice. If our end customers were to choose to work with other manufacturers or our relationships with our customers is disrupted for any reason, it could have a significant negative impact on our business. Any reduction in sales attributable to our larger customers, including our largest end customer, would have a significant and disproportionate impact on our business, financial condition, and results of operations.

Because our sales are made pursuant to standard purchase orders, orders may be cancelled, reduced, or rescheduled with little or no notice and without penalty. Cancellations of orders could result in the loss of anticipated sales without allowing us sufficient time to reduce our inventory and operating expenses. In addition, changes in forecasts or the timing of orders from our customers expose us to the risks of inventory shortages or excess inventory. This in turn could cause our operating results to fluctuate. For example, in 2018 we incurred approximately $8.0 million in cost of inventory in anticipation of an order that did not materialize. This resulted in an inventory write-down of approximately $8.0 million for 2018. We were able to sell approximately $3.0 million of such inventory in the fourth quarter of 2018 and approximately $2.5 million of such inventory in the year ended December 31, 2019.

Our end customers, or the distributors through which we sell to these customers, may choose to use products in addition to ours, use a different product altogether, or develop an in-house solution. Any of these events could significantly harm our business, financial condition, and results of operations. In addition, if our distributors' relationships with our end customers, including our larger end customers, are disrupted for inability to deliver sufficient products or for any other reason, it could have a significant negative impact on our business, financial condition, and results of operations.

If we are unable to expand or further diversify our customer base, our business, financial condition, and results of operations could suffer.

We sell our products primarily through distributors and resellers, who in turn sell to our end customers. For the three and six months ended June 30, 2020 and the years ended December 31, 2019 and 2018, our top three distributors by revenue together accounted for approximately 51%, 54%. 59% and 65% of our revenue, respectively. Based on our shipment information, we believe that revenue attributable to our ten largest end customers accounted for 50%, 51%, 57%, and 60% of our revenue in the three and six months ended June 30, 2020 and for the years ended December 31, 2019 and 2018, respectively. Sales attributable to our largest end customer accounted for approximately 26%, 30%, 35%, and 40%, of our revenue for the three and six months ended June 30, 2020 and the years ended December 31, 2019 and 2018, respectively. We expect the composition of our largest end customers to vary from period to period, and that revenue attributable to our largest ten end customers in any given period may decline over time. Our relationships with existing customers may deter potential customers who compete with these customers from buying our silicon timing systems solutions. If we are unable to expand or further diversify our customer base, it could harm our business, financial condition, and results of operations.

Because we do not have long-term purchase commitments with our customers, orders may be cancelled, reduced, or rescheduled with little or no notice, which in turn exposes us to inventory risk, and may cause our business and results of operations to suffer.

We sell our products primarily through distributors and resellers, with no long-term or minimum purchase commitments from them or their end customers. Substantially all of our sales to date have been made on a purchase order basis, which orders may be cancelled, changed, or rescheduled with little or no notice or penalty. As a result, our revenue and operating results could fluctuate materially and could be materially and disproportionately impacted by purchasing decisions of our customers, including our larger customers. In the future, our distributors or their end customers may decide to purchase fewer units than they have in the past, may alter their purchasing patterns at any time with limited or no notice, or may decide not to continue to purchase our silicon timing systems solutions at all, any of which could cause our revenue to decline materially and materially harm our business, financial condition, and results of operations. Cancellations of, reductions in, or rescheduling of customer orders could also result in the loss of anticipated sales without allowing us sufficient time to reduce our inventory and operating expenses, as a substantial portion of our expenses are fixed at least in the short term. In addition, changes in forecasts or the timing of orders expose us to the risks of inventory shortages or excess inventory. As we no longer intend to acquire inventory to pre-build custom products, we may not be able to fulfill increased demand, at least in the short term. Any of the foregoing events could materially and adversely affect our business, financial condition, and results of operations.

Our revenue and operating results may fluctuate from period to period, which could cause our stock price to fluctuate.

Our revenue and operating results have fluctuated in the past and may fluctuate from period to period in the future due to a variety of factors, many of which are beyond our control. Factors relating to our business that may contribute to these fluctuations include the following factors, as well as other factors described elsewhere in this report:

- the impact of the COVID-19 pandemic on our business, suppliers, and customers
- customer demand and product life cycles;
- the receipt, reduction, or cancellation of, or changes in the forecasts or timing of, orders by customers;
- fluctuations in the levels of inventories held by our distributors or end customers;
- the gain or loss of significant customers;
- market acceptance of our products and our customers’ products;
- our ability to develop, introduce, and market new products and technologies on a timely basis;
- the timing and extent of product development costs;
- new product announcements and introductions by us or our competitors;
- our research and development costs and related new product expenditures and our ability to achieve cost reductions in a timely or predictable manner;
- seasonality and fluctuations in sales by product manufacturers that incorporate our silicon timing systems solutions into their products;
- end-market demand into which we have limited insight, including cyclicality, seasonality, and the competitive landscape;
- cyclical fluctuations in the semiconductor market;
- fluctuations in our manufacturing yields;
- significant warranty claims, including those not covered by our suppliers;
- changes in our pricing, product cost, and product mix; and
- supply chain disruptions, delays, shortages, and capacity limitations as a result of the COVID-19 pandemic or other reasons.

As a result of these and other factors, you should not rely on the results of any prior quarterly or annual periods, or any historical trends reflected in such results, as indications of our future revenue or operating performance. Fluctuations in our revenue and operating results could cause our stock price to decline and, as a result, you may lose some or all of your investment.

We have an accumulated deficit and have incurred net losses in the past, and we may continue to incur net losses in the future.

As of June 30, 2020, December 31, 2019 and 2018, we had an accumulated deficit of $64.7 million, $54.0 million, and $47.4 million, respectively. We generated net losses of $5.6 million, $10.7 million, $6.6 million, and $9.3 million in the three and six months ended June 30, 2020 and the years ended 2019 and 2018, respectively. The loss in 2018 was primarily attributable to a reduction in revenue from our largest end customer and inventory write-down. The loss in 2019 was primarily due to a decrease in revenue from customers in Asia primarily as a result of lower sales volume, as well as a reduction in revenue from our largest end customer. We may continue to incur net losses in the future.

We expect to continue to make significant investments to support our research and development, sales and marketing and general and administrative functions. As a public company, we also continue to incur significant additional legal, accounting, and other expenses. If our revenue growth does not exceed the growth of these anticipated expenses, we may not be able to achieve or sustain profitability, and our stock price could decline.

Our success and future revenue depend on our ability to achieve design wins and to convince our current and prospective customers to design our products into their product offerings. If we do not continue to win designs or our products are not designed into our customers' product offerings, our results of operations and business will be harmed.

We sell our silicon timing systems solutions to customers who select our solutions for inclusion in their product offerings. This selection process is typically lengthy and may require us to incur significant design and development expenditures and dedicate scarce engineering resources in pursuit of a single design win with no assurance that our solutions will be selected. If we fail to convince our current or prospective customers to include our products in their product offerings or to achieve a consistent number of design wins, our business, financial condition, and results of operations will be harmed.

Because of our extended sales cycle, our revenue in future years is highly dependent on design wins we are awarded in prior years. It is typical that a design win will not result in meaningful revenue until one year or more or later, if at all. If we do not continue to achieve design wins in the short term, our revenue in the following years will deteriorate.

Further, a significant portion of our revenue in any period may depend on a single product design win with a large customer. As a result, the loss of any key design win or any significant delay in the ramp of volume production of the customer's products into which our product is designed could adversely affect our business, financial condition, and results of operations. We may not be able to maintain sales to our key customers or continue to secure key design wins for a variety of reasons, and our customers can stop incorporating our products into their product offerings with limited notice to us and suffer little or no penalty.

If we fail to anticipate or respond to technological shifts or market demands, or to timely develop new or enhanced products or technologies in response to the same, it could result in decreased revenue and the loss of our design wins to our competitors. Due to the interdependence of various components in the systems within which our products and the products of our competitors operate, customers are unlikely to change to another design, once adopted, until the next generation of a technology. As a result, if we fail to introduce new or enhanced products that meet the needs of our customers or penetrate new markets in a timely fashion, and our designs do not gain acceptance, we will lose market share and our competitive position.

The loss of a key customer or design win, a reduction in sales to any key customer, a significant delay or negative development in our customers' product development plans, or our inability to attract new significant customers or secure new key design wins could seriously impact our revenue and materially and adversely affect our business, financial condition, and results of operations.

We may experience difficulties demonstrating the value to customers of newer solutions if they believe existing solutions are adequate to meet end customer expectations. If we are unable to sell new generations of our product, our business would be harmed.

As we develop and introduce new solutions, we face the risk that customers may not value or be willing to bear the cost of incorporating these newer solutions into their product offerings, particularly if they believe their customers are satisfied with prior offerings. Regardless of the improved features or superior performance of the newer solutions, customers may be unwilling to adopt our new solutions due to design or pricing constraints. Because of the extensive time and resources that we invest in developing new solutions, if we are unable to sell new generations of our solutions, our revenue could decline and our business, financial condition, and results of operations would be negatively affected.

The success of our products is dependent on our customers' ability to develop products that achieve market acceptance, and our customers' failure to do so could negatively affect our business.

The success of our silicon timing systems solutions is heavily dependent on the timely introduction, quality, and market acceptance of our customers' products incorporating our solutions, which are impacted by factors beyond our control. Our customers' products are often very complex and subject to design complexities that may result in design flaws, as well as potential defects, errors, and bugs. We have in the past been subject to delays and project cancellations as a result of design flaws in the products developed by our customers, changing market requirements, such as the customer adding a new feature, or because a customer's product fails their end customer's evaluation or field trial. In other cases, customer products are delayed due to incompatible deliverables from other vendors. We incur significant design and development costs in connection with designing our products for customers' products that may not ultimately achieve market acceptance. If our customers discover design flaws, defects, errors, or bugs in their products, or if they experience changing market requirements, failed evaluations or field trials, or incompatible deliverables from other vendors, they may delay, change, or cancel a project, and we may have incurred significant additional development costs and may not be able to recoup our costs, which in turn would adversely affect our business, financial condition, and results of operations.

Our target customer and product markets may not grow or develop as we currently expect, and if we fail to penetrate new markets and scale successfully within those markets, our revenue and financial condition would be harmed.

Our target markets include the enterprise and telecommunications infrastructure, automotive, industrial, IoT and mobile, and aerospace and defense markets. Substantially all of our revenue for the three and six months ended June 30, 2020 and the years ended December 31, 2019 and 2018 was derived from sales in the IoT and mobile, industrial, and consumer markets. In 2017, we began introducing products for the automotive market. In addition, within the timing market, substantially all of our revenue to date has been attributable to sales of MEMS oscillators. We intend to introduce products into the clock IC market, which we began sampling in the second quarter of 2019, and to focus on clock IC and timing sync solutions in the future. Any deterioration in our target customer or product markets or reduction in capital spending to support these markets could lead to a reduction in demand for our products, which would adversely affect our revenue and results of operations. Further, if our target customer markets, including the 5G communications or IoT and mobile markets, do not grow or develop in ways that we currently expect, demand for our technology may not materialize as expected, which would also negatively impact our business, financial condition, and results of operations.

We may be unable to predict the timing or development of trends in our target markets with any accuracy. If we fail to accurately predict market requirements or market demand for these solutions, our business will suffer. A market shift towards an industry standard that we may not support could significantly decrease the demand for our solutions.

Our future revenue growth, if any, will depend in part on our ability to expand within our existing markets, our ability to continue to penetrate emerging markets, such as the 5G communications market, which we entered in 2019, and our ability to enter into new markets, such as the industrial, medical, and military markets. Each of these markets presents distinct and substantial challenges and risks and, in many cases, requires us to develop new customized solutions to address the particular requirements of that market. Meeting the technical requirements and securing design wins in any of these new markets will require a substantial investment of our time and resources. We cannot assure you that we will secure design wins from these or other new markets, or that we will achieve meaningful revenue from sales in these markets. If any of these markets do not develop as we currently anticipate or if we are unable to penetrate them and scale in them successfully, our revenue could decline.

The average selling prices of our individual products have decreased historically over time and may do so in the future, which could harm our revenue and gross margins.

Although on average selling prices of our products have increased over time as we introduce higher end products, the average selling prices of our individual products generally decrease over time. Our revenue is derived from sales to large distributors and, in some cases, we have agreed in advance to price reductions, generally over a period of time ranging from two months to three years, once the specified product begins to ship in volume. However, our customers may change their purchase orders and demand forecasts at any time with limited notice due in part to fluctuating end-market demand, which can sometimes lead to price renegotiations. Although these price renegotiations can sometimes result in the average selling prices fluctuating over the shorter term, we expect average selling prices generally to decline over the longer term as our products and our end customers' products mature.

We seek to offset the anticipated reductions in our average selling prices by reducing the cost of our products through improvements in manufacturing yields and lower wafer, assembly, and testing costs, developing new products, enhancing lower-cost products on a timely basis, and increasing unit sales. However, if we are unable to offset these anticipated reductions in our average selling prices, our business, financial condition, and results of operations could be negatively affected.

If we are not able to successfully introduce and ship in volume new products in a timely manner, our business and revenue will suffer.

We have developed products that we anticipate will have product life cycles of ten years or more, as well as other products in more volatile high growth or rapidly changing areas, which may have shorter life cycles. Our future success depends, in part, on our ability to develop and introduce new technologies and products that generate new sources of revenue to replace, or build upon, existing revenue streams. If we are unable to repeatedly introduce, in successive years, new products that ship in volume, or if our transition to these new products does not successfully occur prior to any decrease in revenue from our prior products, our revenue will likely decline significantly and rapidly.

Our gross margins may fluctuate due to a variety of factors, which could negatively impact our results of operations and our financial condition.

Our gross margins may fluctuate due to a number of factors, including customer and product mix, market acceptance of our new products, timing and seasonality of the end-market demand, yield, wafer pricing, packaging and testing costs, competitive pricing dynamics, the impact of the COVID-19 pandemic and geographic and market pricing strategies.

To attract new customers or retain existing customers, we have in the past and will in the future offer certain customers favorable prices, which would decrease our average selling prices and likely impact gross margins. Further, we may also offer pricing incentives to our customers on earlier generations of products that inherently have a higher cost structure, which would negatively affect our gross margins. In addition, in the event our customers, including our larger end customers, exert more pressure with respect to pricing and other terms with us, it could put downward pressure on our margins.

Because we do not operate our own manufacturing, assembly, or testing facilities, we may not be able to reduce our costs as rapidly as companies that operate their own facilities, and our costs may even increase, which could further reduce our gross margins. We rely primarily on obtaining yield improvements and volume-based cost reductions to drive cost reductions in the manufacture of existing products, introducing new products that incorporate advanced features and optimize die size, and other price and performance factors that enable us to increase revenue while maintaining gross margins. To the extent that such cost reductions or revenue increases do not occur at a sufficient level and in a timely manner, our business, financial condition, and results of operations could be adversely affected.

In addition, we maintain an inventory of our products at various stages of production and in finished good inventory. We hold these inventories in anticipation of customer orders. If those customer orders do not materialize in a timely manner, we may have excess or obsolete inventory which we would have to reserve or write-down, and our gross margins would be adversely affected.

Our revenue in recent periods may not be indicative of future performance and our revenue may fluctuate over time.

Our recent revenue should not be considered indicative of our future performance. For the three and six months ended June 30, 2020 and the years ended December 31, 2019 and 2018, our revenue was $21.5 million, $43.2 million, $84.1 million, and $85.2 million, respectively. You should not rely on our revenue for any previous quarterly or annual periods as any indication of our revenue for future fiscal periods. As we grow our business, our revenue may fluctuate in future periods due to a number of reasons, which may include slowing demand for our products, increasing competition, the impact of the COVID-19 pandemic, a decrease in the growth of our overall market or market saturation, and challenges and our failure to capitalize on growth opportunities.

If we are unable to manage our growth effectively, we may not be able to execute our business plan and our operating results could suffer.

In order to succeed in executing our business plan, we will need to manage our growth effectively as we make significant investments in research and development and sales and marketing and expand our operations and infrastructure both domestically and internationally. If our revenue does not increase to offset these increases in our expenses, we may not achieve or maintain profitability in future periods.

To manage our growth effectively, we must continue to expand our operations, engineering, financial accounting, internal management, and other systems, procedures, and controls. This may require substantial managerial and financial resources, and our efforts may not be successful. Any failure to successfully implement systems enhancements and improvements will likely have a negative impact on our ability to manage our expected growth, as well as our ability to ensure uninterrupted operation of key business systems and compliance with the rules and regulations applicable to public companies. If we are unable to manage our growth effectively, we may not be able to take advantage of market opportunities or develop new silicon timing systems solutions, and we may fail to satisfy customer product or support requirements, maintain the quality of our solutions, execute our business plan or respond to competitive pressures, any of which could negatively affect our business, financial condition, and results of operations.

Our customers require our products and our third-party contractors to undergo a lengthy and expensive qualification process, which does not assure product sales. If we are unsuccessful or delayed in qualifying any of our products with a customer, our business and operating results would suffer.

Prior to purchasing our silicon timing systems solutions, our customers require that both our solutions and our third-party contractors undergo extensive qualification processes, which involve testing of our products in the customers' systems, as well as testing for reliability. This qualification process may continue for several months. However, qualification of a product by a customer does not assure any sales of the product to that customer. Even after successful qualification and sales of a product to a customer, a subsequent revision in our third-party contractors' manufacturing process or our selection of a new supplier may require a new qualification process with our customers, which may result in delays and in our holding excess or obsolete inventory. After our products are qualified, it can take several months or more before the customer commences volume production of components or systems that incorporate our products. Despite these uncertainties, we devote substantial resources, including design, engineering, sales, marketing, and management efforts, to qualifying our products with customers in anticipation of sales. If we are unsuccessful or delayed in qualifying any of our products with a customer, sales of those products to the customer may be precluded or delayed, which would cause our business, financial condition, and results of operations to suffer.

We provide a lifetime warranty on our products and may be subject to warranty or product liability claims, which could result in unexpected expenses and loss of market share.

We provide a lifetime warranty on our products and generally agree to indemnify our customers for defects in our products. We may be subject to warranty or product liability claims. These claims may require us to make significant expenditures to defend those claims, replace our solutions, refund payments, or pay damage awards. This risk is exacerbated by the lifetime warranty of our products, which exposes us to warranty claims for the entire product lifecycle.

Our silicon timing systems solutions have only been incorporated into end products for the past 13 years. Accordingly, the operation of our products and technology has not been validated over longer periods. If a customer's product fails in use, the customer may incur significant monetary damages, including a product recall or associated replacement expenses as well as lost revenue. The customer may claim that a defect in our product caused the product failure and assert a claim against us to recover monetary damages. In certain situations, circumstances might warrant that we consider incurring the costs or expenses related to a recall of one of our products in order to avoid the potential claims that may be raised should a customer reasonably rely upon our product and suffer a failure due to a design or manufacturing process defect. In addition, the cost of defending these claims and satisfying any arbitration award or judgment with respect to these claims would result in unexpected expenses, which could be substantial, and could harm our business, financial condition, and results of operations. Although we carry product liability insurance, this insurance is subject to significant deductibles and may not adequately cover our costs arising from defects in our products or otherwise.

Defects in our products could harm our relationships with our customers and damage our reputation.

Defects in our products may cause our customers to be reluctant to buy our products, which could harm our ability to retain existing customers and attract new customers and adversely impact our reputation. The process of identifying a defective or potentially defective product in systems that have been widely distributed may be lengthy and require significant resources. Further, if we are unable to determine the root cause of a problem or find an appropriate solution, we may delay shipment to customers. As a result, we may incur significant replacement costs and contract damage claims from our customers, and our reputation, business, financial condition, and results of operations may be adversely affected.

If we fail to accurately anticipate and respond to rapid technological change in the industries in which we operate, our ability to attract and retain customers could be impaired and our competitive position could be harmed.

We operate in industries characterized by rapidly changing technologies as well as technological obsolescence. The introduction of new products by our competitors, the delay or cancellation of any of our customers' product offerings for which our silicon timing systems solutions are designed, the market acceptance of products based on new or alternative technologies, or the emergence of new industry standards could render our existing or future products uncompetitive, obsolete, and otherwise unmarketable. Our failure to anticipate or timely develop new or enhanced products or technologies in response to changing market demand, whether due to technological shifts or otherwise, could result in the loss of customers and decreased revenue and have an adverse effect on our business, financial condition, and results of operations.

If our products do not conform to, or are not compatible with, existing or emerging industry standards, demand for our existing solutions may decrease, which in turn would harm our business and operating results.

We design certain of our products to conform to current industry standards. Some industry standards may not be widely adopted or implemented uniformly, and competing standards may emerge that may be preferred by our distributors or our end customers.

Our ability to compete in the future will depend on our ability to identify and ensure compliance with evolving industry standards in our target markets, as well as in the timing IC industry. The emergence of new industry standards could render our products incompatible with products developed by third-party suppliers or make it difficult for our products to meet the requirements of certain OEMs. If our customers or our third-party suppliers adopt new or competing industry standards with which our solutions are not compatible, or if industry groups fail to adopt standards with which our solutions are compatible, our products would become less desirable to our current or prospective customers. As a result, our sales would suffer, and we could be required to make significant expenditures to develop new products. Although we believe our products are compliant with applicable industry standards, proprietary enhancements may not in the future result in conformance with existing industry standards under all circumstances. If our products do not conform to, or are not compatible with, existing or emerging standards, it would harm our business, financial condition, and results of operations.

We may be unable to make the substantial investments that are required to remain competitive in our business.

The semiconductor industry requires substantial and continuous investment in research and development in order to bring to market new and enhanced solutions. We expect our research and development expenditures to increase in the future as part of our strategy to increase demand for our solutions in our current markets and to expand into additional markets. We are a smaller company with limited resources, and we may not have sufficient resources to maintain the level of investment in research and development required to remain competitive. In addition, we cannot assure you that the technologies, which are the focus of our research and development expenditures, will become commercially successful or generate any revenue.

If we fail to compete effectively, we may lose or fail to gain market share, which could negatively impact our operating results and our business.

The global semiconductor market in general, and the timing IC market in particular, is highly competitive. We expect competition to increase and intensify as additional semiconductor companies enter our target markets, and as internal silicon design resources of large OEMs grow. Increased competition could result in price pressure, reduced gross margins and loss of market share, any of which could harm our business, financial condition, and results of operations. Our competitors range from large, international companies offering a wide range of semiconductor products to smaller companies specializing in narrow market verticals. In the MEMS-based oscillator market, we primarily compete against Microchip Technology Inc. ("MCHP"). In the analog mixed-signal IC and clocking market, we primarily compete against Renesas Electronics Corporation (through their acquisition of Integrated Device Technology, Inc.), Silicon Laboratories Inc., Texas Instruments Incorporated, Microsemi Corporation (which is owned by MCHP), and Analog Devices, Inc. In the oscillator market, we primarily compete against quartz crystal suppliers such as Rakon Limited, Daishinku, Nihon Dempa Kogyo Co., Ltd., TXC Corporation, Seiko Epson Corporation, and Vectron International (which is owned by MCHP). We expect competition in our current markets to increase in the future as existing competitors improve or expand their product offerings and as new competitors enter these markets. In addition, our future growth will depend in part on our ability to successfully enter and compete in new markets, such as the access market. Some of these markets will likely be served by only a few large, multinational OEMs with substantial negotiating and buying power relative to us and, in some instances, with internally developed silicon solutions that can be competitive to our products.

Our ability to compete successfully depends, in part, on factors that are outside of our control, including industry and general economic trends. Many of our competitors are substantially larger, have greater financial, technical, marketing, distribution, customer support, government support, and other resources, are more established than we are and have significantly better brand recognition and broader product offerings. This in turn may enable them to better withstand adverse economic or market conditions, such as those caused by the current COVID-19 pandemic, in the future and significantly reduce their pricing so as to compete against us. Our ability to compete successfully will depend on a number of factors, including:

- our ability to define, design, and regularly introduce new products that anticipate the functionality and integration needs of our customers' next-generation products and applications;
- our ability to build strong and long-lasting relationships with our customers and other industry participants;
- our ability to capitalize on, and prevent losses due to, vertical integration by significant customers;
- our solutions' performance and cost-effectiveness relative to those of competing products;
- our ability to achieve design wins;
- the effectiveness and success of our customers' products utilizing our solutions within their competitive end markets;
- our research and development capabilities to provide innovative solutions and maintain our product roadmap;
- the strength of our sales and marketing efforts, including those of our distributors, and our brand awareness and reputation;
- our ability to deliver products in volume on a timely basis at competitive prices;
- our ability to withstand or respond to significant price competition;
- our ability to build and expand international operations in a cost-effective manner;
- our ability to obtain, maintain, protect, and enforce our intellectual property rights, including obtaining intellectual property rights from third-parties that may be necessary to meet the evolving demands of the market;
- our ability to defend potential patent infringement claims arising from third-parties;
- our ability to promote and support our customers' incorporation of our solutions into their products; and
- our ability to retain high-level talent, including our management team and engineers.

Our competitors may also establish cooperative relationships among themselves or with third-parties or may acquire companies that provide similar products to ours. As a result, new competitors or alliances may emerge that could capture significant market share. Any of these factors, alone or in combination with others, could harm our business, financial condition, and results of operations and result in a loss of market share and an increase in pricing pressure.

We depend on our executive officers and other key employees, and the loss of one or more of these employees or an inability to attract or retain highly skilled employees could adversely affect our business.

Our success depends largely upon the continued services of our executive officers and other key employees, including our engineering and sales and marketing personnel. From time to time, there may be changes in our executive management team or other key personnel, which could disrupt our business. We do not have employment agreements with our executive officers or other key personnel that require them to continue to work for us for any specified period and, therefore, they could terminate their employment with us at any time. The loss of one or more of our executive officers or other key employees could have an adverse effect on our business.

In addition, to execute our growth plan, we must attract and retain highly qualified personnel. Competition for these personnel in the San Francisco Bay Area, where our headquarters is located, and in other locations where we maintain offices, is intense, especially for engineers with MEMS technology and advanced clock IC design expertise. We have from time to time experienced, and we expect to continue to experience, difficulty in hiring and retaining employees with appropriate qualifications. Many of the companies with which we compete for experienced personnel have greater resources than we have. If we hire employees from competitors or other companies, their former employers may attempt to assert that these employees or we have breached legal obligations, resulting in a diversion of our time and resources. In addition, job candidates and existing employees often consider the value of the equity awards they receive in connection with their employment. If the perceived value of our equity awards declines, it may adversely affect our ability to recruit and retain highly skilled employees. Further, changes in immigration policies may negatively impact our ability to attract and retain personnel, including personnel with specialized technical expertise. If we fail to attract new personnel or fail to retain or motivate our current personnel, our business and future growth prospects could be adversely affected.

Our company culture has contributed to our success and if we cannot maintain this culture as we grow, our business could be harmed.

We believe that our company culture, which promotes innovation, open communication, and teamwork, has been critical to our success. We face a number of challenges that may affect our ability to sustain our corporate culture, including:

- failure to identify, attract, reward, and retain people in leadership positions in our organization who share and further our culture, values, and mission;
- the increasing size and geographic diversity of our workforce;
- competitive pressures to move in directions that may divert us from our mission, vision, and values;
- the continued challenges of a rapidly-evolving industry; and
- the increasing need to develop expertise in new areas of business that affect us.
- If we are not able to maintain our culture, our business, financial condition, and results of operations could be adversely affected.

We depend on third parties for our wafer fabrication, assembly, and testing operations, which exposes us to certain risks that may harm our business.

We operate an outsourced manufacturing business model. As a result, we rely on third parties for all of our manufacturing operations, including wafer fabrication, assembly, and testing. Although we use multiple third-party supplier sources, we depend on these third parties to supply us with material of a requested quantity in a timely manner that meets our standards for yield, cost, and manufacturing quality. Except for our agreement with Robert Bosch LLC ("Bosch") for MEMS wafers, we do not have any long-term supply agreements with any of our other manufacturing suppliers. These third-party manufacturers often serve customers that are larger than us or require a greater portion of their services, which may decrease our relative importance and negotiating leverage with these third parties.

If market demand for wafers or production and assembly materials increases, or if a supplier of our wafers ceases or suspends operations, our supply of wafers and other materials could become limited. We currently have a ten-year supply agreement with Bosch for the fabrication of our MEMS wafers. This agreement expires in 2027 and may be terminated with three years' advance notice beginning in February 2024. We currently rely on Bosch for our MEMS fabrication, and Taiwan Semiconductor Manufacturing Company ("TSMC") for our analog circuits fabrication, and any disruption in their supply of wafers or any increases in their wafer or materials prices could adversely affect our gross margins and our ability to meet customer demands in a timely manner, or at all, and lead to reduced revenue. Moreover, wafers constitute a large portion of our product cost. If we are unable to negotiate volume discounts or otherwise purchase wafers at favorable prices and in sufficient quantities in a timely manner, our gross margins would be adversely affected.

To ensure continued wafer supply, we may be required to establish alternative wafer supply sources, which could require significant expenditures and limit our negotiating leverage. We currently rely on Bosch and TSMC as our primary foundries and suppliers for our MEMS timing devices and analog circuits, respectively, and only a few foundry vendors have the capability to manufacture our most advanced solutions, in particular with respect to our MEMS solution. If we engage alternative supply sources, we may encounter difficulties and incur additional costs. For example, we also have a license agreement with Bosch under which Bosch granted us a license to use certain patents. Under this agreement, we are required to pay a royalty fee to Bosch if we engage third parties to manufacture, or if we decide to manufacture ourselves, certain generations of our MEMS wafers through March 31, 2024. In addition, shipments could be significantly delayed while these sources are qualified for volume production. If we are unable to maintain our relationship with Bosch or TSMC, our ability to produce high-quality products could suffer, which in turn could harm our business, financial condition, and results of operations.

We currently rely on Advanced Semiconductor Engineering, Inc. (“ASE”), Carsem (M) Sdn. Bhd. (“Carsem”), and United Test and Assembly Center Ltd. (“UTAC”) for assembly and testing, as well as Daishinku Corp. (“Daishinku”) and UTAC for ceramic packaging for some of our products. Certain of our manufacturing, packaging, assembly, and testing facilities are located outside of the United States, including Malaysia, Taiwan, and Thailand, where we are subject to increased risk of political and economic instability, difficulties in managing operations, difficulties in enforcing contracts and our intellectual property, severe weather, and employment and labor difficulties. Additionally, public health crises, such as an outbreak of contagious diseases like the COVID-19 pandemic, may affect the production capabilities of our suppliers, including as a result of quarantines, closures of production facilities, lack of supplies, or delays caused by restrictions on travel or work-from-home orders. For example, on March 16, 2020, the government of Malaysia announced measures to restrict movement in that country until March 31, 2020 in an effort to suppress the number of COVID-19 cases. The restrictions have been extended, currently until August 31, 2020. These restrictions could limit our suppliers’ ability to operate their manufacturing facilities in that country.

Although we maintain business disruption insurance, this insurance may not be adequate to cover any losses we may experience as a result of such difficulties. Any of these factors could result in manufacturing and supply problems, and delays in our ability to provide our solutions to our customers on a timely basis, or at all. If we experience manufacturing problems at a particular location, we may be required to transfer manufacturing to a new location or supplier. Converting or transferring manufacturing from a primary location or supplier to a backup facility could be expensive and could take several quarters or more. During such a transition, we would be required to meet customer demand from our then-existing inventory, as well as any partially finished goods that could be modified to the required product specifications. In addition, our end customers may require requalification with a new wafer manufacturer. We typically maintain at least a six-month supply of our MEMS wafers for which Bosch is our primary supplier. We do not otherwise maintain sufficient inventory to address a lengthy transition period. As a result, we may not be able to meet customer needs during such a transition, which could damage our customer relationships.

If one or more of these vendors terminates its relationship with us, or if we encounter any problems with our manufacturing supply chain, our ability to ship our solutions to our customers on time and in the quantity required would be adversely affected, which in turn could cause an unanticipated decline in our sales and loss of customers.

If the foundries with which we contract do not achieve satisfactory yields or quality, our reputation and customer relationships could be harmed.

We depend on satisfactory wafer foundry manufacturing capacity, wafer prices, and production yields, as well as timely wafer delivery to meet customer demand and enable us to maintain gross margins. The fabrication of our products is a complex and technically demanding process. Minor deviations in the manufacturing process can cause substantial decreases in yields and, in some cases, cause production to be suspended. Our foundry vendors may experience manufacturing defects and reduced manufacturing yields from time to time. Further, any new foundry vendors we employ may present additional and unexpected manufacturing challenges that could require significant management time and focus. Changes in manufacturing processes or the inadvertent use of defective or contaminated materials by the foundries that we employ could result in lower than anticipated production yields or unacceptable performance of our devices. Many of these problems are difficult to detect at an early stage of the manufacturing process and may be time-consuming and expensive to correct. Poor production yields from the foundries that we employ, or defects, integration issues, or other performance problems in our solutions could significantly harm our customer relationships and financial results, and give rise to financial or other damages to our customers. Any product liability claim brought against us, even if unsuccessful, would likely be time-consuming and costly to defend.

Manufacturing yields for new products initially tend to be lower as we complete product development and commence volume manufacturing, and typically increase as we bring the product to full production. Our business model includes this assumption of improving manufacturing yields and, as a result, material variances between projected and actual manufacturing yields will have a direct effect on our gross margin and profitability. The difficulty of accurately forecasting manufacturing yields and maintaining cost competitiveness through improving manufacturing yields will continue to be magnified by the increasing process complexity of manufacturing semiconductor products.

Raw material price fluctuations can increase the cost of our products, impact our ability to meet customer commitments, and may adversely affect our results of operations.

The cost of raw materials is a key element in the cost of our products. Our inability to offset material price inflation through increased prices to customers, suppliers, productivity actions, or through commodity hedges could adversely affect our results of operations. Many major components, product equipment items, and raw materials, are procured or subcontracted on a single or sole-source basis. Although we maintain a qualification and performance surveillance process and we believe that sources of supply for raw materials and components are generally adequate, it is difficult to predict what effects shortages or price increases may have in the future. Our inability to fill our supply needs would jeopardize our ability to fulfill obligations under our contracts, which could, in turn, result in reduced sales and profits, contract penalties or terminations, and damage to our customer relationships.

Furthermore, increases in the price of silicon wafers, testing costs, and commodities, which may result in increased production costs, mainly assembly and packaging costs, may result in a decrease in our gross margins. Moreover, our suppliers may pass the increase in raw materials and commodity costs onto us which would further reduce the gross margin of our products. In addition, as we are a fabless company, global market trends such as a shortage of capacity to fulfill our fabrication needs also may increase our raw material costs and thus decrease our gross margin.

We rely on our relationships with industry and technology leaders to enhance our product offerings and our inability to continue to develop or maintain such relationships in the future would harm our ability to remain competitive.

We develop many of our silicon timing systems products for applications in systems that are driven by industry and technology leaders in the communications and computing markets. We work with distributors, resellers, OEMs, and system manufacturers to define industry conventions and standards within our target markets. We believe that these relationships enhance our ability to achieve market acceptance and widespread adoption of our products. If we are unable to continue to develop or maintain these relationships, our silicon timing systems solutions could become less desirable to our customers, our sales could suffer and our competitive position could be harmed.

We are subject to the cyclical nature of the semiconductor industry.

The semiconductor industry is highly cyclical and is characterized by constant and rapid technological change, rapid product obsolescence, price erosion, evolving standards, short product life cycles, and wide fluctuations in product supply and demand. The industry experienced significant downturn during past global recessions and has been experiencing a downturn since 2019, which may be prolonged as a result of the worldwide economic impact of the COVID-19 pandemic. These downturns have been characterized by diminished product demand, production overcapacity, high inventory levels, and accelerated erosion of average selling prices. The current downturn in the semiconductor industry has been attributed to a variety of factors, including the current COVID-19 pandemic, ongoing U.S.-China trade dispute, weakness in demand and pricing for semiconductors across applications, and excess inventory. While this downturn has not directly impacted our business to date, any prolonged or significant downturn in the semiconductor industry could adversely affect our business and reduce demand for our products. Any future downturns in the semiconductor industry could also harm our business, financial condition, and results of operations. Furthermore, any significant upturn in the semiconductor industry could result in increased competition for access to third-party foundry and assembly capacity. We are dependent on the availability of this capacity to manufacture and assemble our products and we can provide no assurance that adequate capacity will be available to us in the future.

Our ability to receive timely payments from or the deterioration of the financial conditions of, our distributors or our end customers could adversely affect our operating results.

Our ability to receive timely payments from or the deterioration of the financial condition of, our distributors or our end customers could adversely impact our collection of accounts receivable, and, as a result, our revenue. We regularly review the collectability and creditworthiness of our customers to determine an appropriate allowance for doubtful accounts. However, the extent of the COVID-19 pandemic’s impact on credit and financial markets is unknown, which creates uncertainty as to the financial condition of our distributors and customers. Based on our review of our customers annually and as of June 30, 2020, substantially all of which are large distributors, resellers, OEMs, and system manufacturers, we had a $0.1 million, $0.1 million and a $0.2 million reserve for doubtful accounts as of June 30, 2020, December 31, 2019 and December 31, 2018, respectively. If our doubtful accounts, however, were to exceed our current or future allowance for doubtful accounts, our business, financial condition, and results of operations would be adversely affected.

In preparing our consolidated financial statements, we make good faith estimates and judgments that may change or turn out to be erroneous, which could adversely affect our operating results for the periods in which we revise our estimates or judgments.

In preparing our consolidated financial statements in conformity with generally accepted accounting principles in the United States (“GAAP”), we must make estimates and judgments in applying our most critical accounting policies. Those estimates and judgments have a significant impact on the results we report in our consolidated financial statements. The most difficult estimates and subjective judgments that we make relate to revenue recognition, inventories, internally developed software capitalization, and income taxes. We base our estimates on historical experience, input from outside experts and on various other assumptions that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. We also have other key accounting policies that are not as subjective, and therefore, their application would not require us to make estimates or judgments that are as difficult, but which nevertheless could significantly affect our financial reporting. Actual results may differ materially from these estimates. If these estimates, judgments, or their related assumptions change, our operating results for the periods in which we revise our estimates, judgments, or assumptions could be adversely and perhaps materially affected.

Changes to financial accounting standards may affect our results of operations and could cause us to change our business practices.

We prepare our consolidated financial statements in accordance with GAAP. These accounting principles are subject to interpretation by the Financial Accounting Standards Board, the SEC, and various bodies formed to interpret and create accounting rules and regulations. Changes in accounting rules can have a significant effect on our reported financial results and may affect our reporting of transactions completed before a change is announced. Changes to those rules or the questioning of current practices may adversely affect our financial results or the way we conduct our business.

Our loan agreements contain certain restrictive covenants that may limit our operating flexibility.

Our loan agreements contain certain restrictive covenants that either limit our ability to, or require a mandatory prepayment in the event that we, incur additional indebtedness, merge with other companies or enter into or consummate certain change of control transactions, acquire other companies, make certain investments, transfer or dispose of assets, amend certain material agreements, or enter into certain other transactions. We may not be able to generate sufficient cash flow or sales to pay the principal and interest under our outstanding debt obligations. Furthermore, our future working capital, borrowings, or equity financing could be unavailable to repay or refinance the amounts outstanding under our current debt obligations. In the event of a liquidation, our existing and any future lenders would be repaid all outstanding principal and interest prior to distribution of assets to unsecured creditors, and the holders of our common stock would receive a portion of any liquidation proceeds only if all of our creditors, including our existing and any future lenders, were first repaid in full.

We may not be able to accurately predict our future capital needs, and we may not be able to obtain additional financing to fund our operations.

We may need to raise additional funds in the future. Any required additional financing may not be available on terms acceptable to us, or at all. If we raise additional funds by issuing equity securities or convertible debt, stockholders may experience significant dilution of their ownership interest, and the newly-issued securities may have rights senior to those of the holders of our common stock. If we raise additional funds by obtaining loans from third parties, the terms of those financing arrangements may include negative covenants or other restrictions on our business that could impair our operational flexibility and would also require us to incur additional interest expense. If additional financing is not available when required or is not available on acceptable terms, we may have to scale back our operations or limit our production activities, and we may not be able to expand our business, develop or enhance our solutions, take advantage of business opportunities, or respond to competitive pressures, which could negatively impact our revenue and the competitiveness of our products.

We recently repaid all of our outstanding indebtedness under our revolving line of credit and may seek, or be required to seek, alternative or additional debt financing in the immediate or near term.

On July 24, 2020 we repaid $35.0 million of outstanding indebtedness under our revolving line of credit agreement with The Bank of Tokyo-Mitsubishi UFJ, Ltd. (“MUFG”). We intend to terminate our $20.0 million revolving line of credit with SMBC. We also intend to terminate our $30.0 million loan agreement with MegaChips. We currently do not have any amounts drawn under either of these two facilities. We may seek, or be required to seek, additional or alternative sources of debt financing, in lieu of, or in addition to, our current facilities. Any required additional financing may not be available on terms acceptable to us, or at all. Further, we may not have the leverage to negotiate terms favorable to us under these arrangements, including with MUFG, as we are no longer a wholly-owned subsidiary of MegaChips. We do not expect MegaChips to provide guarantees of our indebtedness in the future, which may make it more difficult or expensive to borrow funds in the future. In addition, the terms of any financing arrangements may include negative covenants or other restrictions on our business that could impair our operational flexibility and would also require us to incur additional interest expense. If additional financing is not available when required or is not available on acceptable terms, it could harm our liquidity position and we may have to scale back our operations or limit our production activities, which in turn would harm our business, operating results, and financial condition.

We may make acquisitions in the future that could disrupt our business, cause dilution to our stockholders, reduce our financial resources, and harm our business.

In the future, we may acquire other businesses, products, or technologies. Our ability to make acquisitions and successfully integrate personnel, technologies, or operations of any acquired business is unproven. If we complete acquisitions, we may not achieve the combined revenue, cost synergies, or other benefits from the acquisition that we anticipate, strengthen our competitive position, or achieve our other goals in a timely manner, or at all, and these acquisitions may be viewed negatively by our customers, financial markets, or investors. In addition, any acquisitions we make may create difficulties in integrating personnel, technologies, and operations from the acquired businesses and in retaining and motivating key personnel. Acquisitions may disrupt our ongoing operations, divert management from their primary responsibilities, subject us to additional liabilities, increase our expenses, and adversely impact our business, financial condition, and results of operations. Acquisitions may also reduce our cash available for operations and other uses, and could result in an increase in amortization expense related to identifiable assets acquired, potentially dilutive issuances of equity securities, or the incurrence of debt, any of which could harm our business, financial condition, and results of operations.

A portion of our operations is located outside of the United States, which subjects us to additional risks, including increased complexity and costs of managing international operations and geopolitical instability.

We outsource the fabrication and assembly of all of our products to third parties that are primarily located in Germany and Asia. In addition, we conduct research and development activities in the United States, Japan, the Netherlands, Taiwan, and Ukraine and work with third-party contractors in Russia. We also conduct marketing and administrative functions in the United States, China, Taiwan, and Ukraine. In addition, members of our sales force are located in the United States, China, India, France, Taiwan, and Ukraine. In addition, approximately 91%, 92%, 93% and 93%, respectively of our revenue for three and six months ended June 30, 2020 and the years ended December 31, 2019 and 2018, was from distributors with ship-to locations outside the United States, although we believe the majority of our end customers are based in the U.S., based on sell-through information provided by these distributors. As a result of our international focus, we face numerous challenges and risks, including:

- complexity and costs of managing international operations, including manufacturing, assembly, and testing of our products and associated costs;
- geopolitical and economic instability and military conflicts;
- limited protection for, and vulnerability to theft of, our intellectual property rights, including our trade secrets;
- compliance with local laws and regulations and unanticipated changes in local laws and regulations, including tax laws and regulations, including uncertainty surrounding the United Kingdom's exit from the European Union;
- trade and foreign exchange restrictions and higher tariffs, including the recent trade tensions between the U.S. and China that has resulted in higher tariffs on certain semiconductor products; which trade tensions may be exacerbated by China's recent movement toward enacting broader national security powers over Hong Kong;
- timing and availability of import and export licenses and other governmental approvals, permits, and licenses, including export classification requirements;
- foreign currency fluctuations and exchange losses relating to our international operating activities;
- restrictions imposed by the U.S. government or foreign governments on our ability to do business with certain companies or in certain countries as a result of international political conflicts or the COVID-19 pandemic and the complexity of complying with those restrictions;
- transportation delays and other consequences of limited local infrastructure, and disruptions, such as large scale outages or interruptions of service from utilities or telecommunications providers;
- difficulties in staffing international operations;
- changes in immigration policies which may impact our ability to hire personnel;
- local business and cultural factors that differ from our normal standards and practices;
- differing employment practices and labor relations;
- requirements in foreign countries which may impact availability of personnel, such as mandatory military service in countries such as Ukraine;
- heightened risk of terrorist acts;

- regional health issues and the impact of public health epidemics on employees and the global economy, such as the worldwide COVID-19 pandemic;
- power outages and natural disasters; and
- travel, work-from-home or other restrictions or stoppages, like those currently imposed by governments around the world as a result of the COVID-19 pandemic.

These risks could harm our international operations, delay new product releases, increase our operating costs, and hinder our ability to grow our operations and business and, consequently, our business, financial condition, and results of operations could suffer. For example, we rely on TSMC in Taiwan for the fabrication of our analog circuits and have sales force personnel in Taiwan. If political tensions between China and Taiwan were to increase, it could disrupt our business. In addition, if the political and military situation in Russia and Ukraine, or the relationship between Russia and the United States, significantly worsens, or if either Russia or the United States imposes significant new economic sanctions or restrictions on doing business, and we are restricted or precluded from continuing our operations in Russia or Ukraine, our costs could increase, and our product development efforts, business, financial condition, and results of operations could be significantly harmed. Further, the ongoing COVID-19 pandemic has led to travel, work-from-home and other restrictions, which has significantly impacted our domestic and international operations and the operations of our suppliers, distributors, partners, and customers. At this point, the extent to which the COVID-19 pandemic may impact our business is uncertain but it may materially adversely affect our business, financial condition or results of operations.

We face risks related to health epidemics such as the COVID-19 pandemic which could adversely affect our business and results of operations.

Our business could be materially adversely affected by a widespread outbreak of contagious disease, including the recent COVID-19 pandemic. We currently have employees, third-party contractors, distributors, and customers in numerous countries throughout the world that have each been impacted by the COVID-19 pandemic. The COVID-19 pandemic has restricted and is expected to continue to restrict travel and use of our facilities and the facilities of our suppliers, customers, or other vendors in our supply chain, which could impact our business, interactions and relationships with our customers, third-party suppliers and contractors, and results of operations. Although we do not source a significant amount of products or components from China, our third-party suppliers and customers may source materials from China which could indirectly impact our production or demand for our products. In addition to the COVID-19 pandemic, any future outbreak of contagious diseases in the human population could result in a continued widespread health crisis that could adversely affect the economies and financial markets of many countries, resulting in an economic downturn that could reduce the demand for our products and impact our results of operations.

If significant tariffs or other restrictions are placed on Chinese imports or any related counter-measures are taken by China, our revenue and results of operations may be materially harmed.

If significant tariffs or other restrictions are placed on Chinese imports or any related counter-measures are taken by China, our revenue and results of operations may be materially and adversely affected. Between July 2018 and February 2020, the U.S. Trade Representative imposed tariffs on products from China, with current tariff rates between 7.5% and 25%. If the existing tariffs are increased, new tariffs are imposed, or there is a court or governmental agency determination that exposes additional products to the tariffs, we may be required to raise our prices on those products, which may further result in a loss of customers and harm our operating performance. The current U.S. administration has indicated that it may further alter trade agreements and terms between China and the United States, including limiting trade with China and imposing additional tariffs on imports from China. The administration has previously imposed new or additional tariffs on Chinese products with short notice and China has imposed certain retaliatory tariffs. If our products become subject to tariffs or other retaliatory trade measures, it could materially and adversely affect our business and operating results. In the event that these or future tariffs are imposed on imports of our products, or that China or other countries take retaliatory trade measures in response to existing or future tariffs, our business may be impacted and we may be required to raise prices or make changes to our operations, any of which could materially harm our revenue or operating results.

Fluctuations in exchange rates between and among the currencies of the countries in which we do business could adversely affect our results of operations.

Our sales have been historically denominated in U.S. dollars. An increase in the value of the U.S. dollar relative to the currencies of the countries in which our customers operate could impair the ability of our customers to cost-effectively purchase or integrate our solutions into their product offerings, which may materially affect the demand for our solutions and cause these customers to reduce their orders, which in turn would adversely affect our revenue and business. If we increase operations in other currencies in the future, we may experience foreign exchange gains or losses due to the volatility of other currencies compared to the U.S. dollar. Certain of our employees are located in Malaysia, the Netherlands, Taiwan, Japan, and Ukraine, and we have engineering consultants in Russia. Accordingly, a portion of our payroll as well as certain other operating expenses are paid in currencies other than the U.S. dollar. Our results of operations are denominated in U.S. dollars, and the difference in exchange rates in one period compared to another may directly impact period-to-period comparisons of our results of operations. Furthermore, currency exchange rates have been especially volatile in the recent past, and these currency fluctuations may make it difficult for us to predict our results of operations.

Failure to comply with the laws associated with our activities outside of the United States could subject us to penalties and other adverse consequences.

We face significant risks if we fail to comply with anti-corruption laws and anti-bribery laws, including, without limitation, the U.S. Foreign Corrupt Practices Act of 1977, as amended (the "FCPA"), the U.S. Travel Act, and the UK Bribery Act 2010, that prohibit improper payments or offers of payment to foreign governments and political parties by us for the purpose of obtaining or retaining business. In many foreign countries, particularly in countries with developing economies, it may be a local custom that businesses operating in such countries engage in business practices that are prohibited by the FCPA or other applicable laws and regulations. We are in the early stages of implementing our FCPA compliance program and cannot assure you that all of our employees and agents, as well as those companies, to which we outsource certain of our business operations, will not take actions in violation of our policies and applicable law, for which we may be ultimately held responsible. Any violation of these laws could result in severe criminal or civil sanctions and, in the case of the FCPA, suspension or debarment from U.S. government contracting, which could have an adverse effect on our reputation, business, financial condition, and results of operations.

We are subject to government regulation, including import, export and economic sanctions laws and regulations that may expose us to liability and increase our costs.

Our products and technology are subject to U.S. export controls, including the U.S. Department of Commerce's Export Administration Regulations and economic and trade sanctions regulations administered by the U.S. Treasury Department's Office of Foreign Assets Controls. These regulations may limit the export of our products and technology, and provision of our services outside of the United States, or may require export authorizations, including by license, a license exception, or other appropriate government authorizations and conditions, including annual or semi-annual reporting. Export control and economic sanctions laws may also include prohibitions on the sale or supply of certain of our products to embargoed or sanctioned countries, regions, governments, persons, and entities. For example, in May 2019, the U.S. Department of Commerce added Huawei Technologies Co., Ltd. and certain of its affiliates to the Entity List, banning all exports to Huawei and its listed affiliates of items subject to control under the Export Administration Regulations ("EAR"). Certain exports to Huawei have been permitted under a temporary general license issued by the U.S. Commerce Department, which currently is valid through August 13, 2020. Although we have not had any direct sales with Huawei, we believe, based on sell-through information provided by our distributors, that we have had a small amount of revenue attributable to Huawei. However, to the extent this occurred during or after May 2019, we understand the products were not subject to the EAR. In addition, various countries regulate the importation of certain products, through import permitting and licensing requirements, and have enacted laws that could limit our ability to distribute our products. The exportation, re-exportation, and importation of our products and technology and the provision of services, including by our partners, must comply with these laws or else we may be adversely affected through reputational harm, government investigations, penalties, and a denial or curtailment of our ability to export our products and technology. Complying with export control and sanctions laws may be time-consuming and may result in the delay or loss of sales opportunities. Although we take precautions to prevent our products and technology from being provided in violation of such laws, our products and technology may have previously been, and could in the future be, provided inadvertently in violation of such laws, despite the precautions we take. If we are found to be in violation of U.S. sanctions or export control laws, it could result in substantial fines and penalties for us and for the individuals working for us. Changes in export or import laws or sanctions policies may adversely impact our operations, delay the introduction and sale of our products in international markets, or, in some cases, prevent the export or import of our products and technology to certain countries, regions, governments, persons, or entities altogether, which could adversely affect our business, financial condition, and results of operations.

Changes in environmental laws or regulations, including conflict minerals rules, could impair our ability to compete in international markets.

Our product or manufacturing standards could be impacted by new or revised environmental rules and regulations or other social initiatives. For example, the SEC adopted disclosure requirements in 2012 relating to the sourcing of certain minerals from the Democratic Republic of Congo and certain other adjoining countries. These rules, which required reporting starting in 2014, could adversely affect our costs, the availability of minerals used in our products, and our relationships with customers and suppliers. Also, since our supply chain is complex, we may face reputational challenges with our customers, stockholders, and other stakeholders if we are unable to sufficiently verify the origins for any conflict minerals used in the products that we sell.

New or future changes to U.S. and non-U.S. tax laws could materially adversely affect us.

New or future changes in tax laws, regulations, and treaties, or the interpretation thereof, in addition to tax regulations enacted but not in effect, tax policy initiatives and reforms under consideration in the United States or related to the Organisation for Economic Co-operation and Development's ("OECD"), Base Erosion and Profit Shifting ("BEPS"), Project, the European Commission's state aid investigations, and other initiatives could have an adverse effect on the taxation of international businesses. Furthermore, countries where we are subject to taxes, including the United States, are independently evaluating their tax policy and we may see significant changes in legislation and regulations concerning taxation. Certain countries have already enacted legislation, including those related to BEPS Project, which could affect international businesses, and other countries have become more aggressive in their approach to audits and enforcement of their applicable tax laws. On December 22, 2017, the U.S. federal government enacted the Tax Cuts and Jobs Act (the "Tax Act"), which made substantial changes to U.S. tax laws, the consequences of which have not yet been fully determined and may be adverse to our business. In addition, we are unable to predict what future tax reform may be proposed or enacted or what effect such changes would have on our business, but any changes, to the extent they are brought into tax legislation, regulations, policies, or practices, could increase our effective tax rates in the countries where we have operations and have an adverse effect on our overall tax rate, along with increasing the complexity, burden and cost of tax compliance, all of which could impact our business, financial condition, and results of operations.

Tax regulatory authorities may disagree with our positions and conclusions regarding certain tax positions resulting in unanticipated costs or non-realization of expected benefits.

A tax authority may disagree with tax positions that we have taken. For example, the Internal Revenue Service ("IRS"), or another tax authority could challenge our allocation of income by tax jurisdiction and the amounts paid between our affiliated companies pursuant to our intercompany arrangements and transfer pricing policies, including amounts paid with respect to our intellectual property in connection with our intercompany research and development cost sharing arrangement and legal structure. A tax authority may take the position that material income tax liabilities, interest, and penalties are payable by us, in which case, we expect that we might contest such assessment. Contesting such an assessment may be lengthy and costly and if we were unsuccessful in disputing the assessment, the implications could be materially adverse to us and affect our anticipated effective tax rate or operating income, and we could be required to pay substantial penalties and interest where applicable.

Catastrophic events may disrupt our business.

Our corporate headquarters and some of our suppliers and foundry vendors are located in areas that are in active earthquake zones or are subject to power outages, natural disasters, political, social, or economic unrest, and other potentially catastrophic events. In the event of a major earthquake, hurricane, flooding, or other catastrophic event such as fire, power loss, telecommunications failure, cyber-attack, war, terrorist attack, political, social, or economic unrest, or disease outbreak, such as the current COVID-19 pandemic, we may be unable to continue our operations and may endure system interruptions, reputational harm, delays in our product development, breaches of data security, or loss of critical data, any of which could have an adverse effect on our future results of operations.

State, federal, and foreign laws and regulations related to privacy, data use, and security could adversely affect us.

We are subject to state and federal laws and regulations related to privacy, data use, and security. In addition, in recent years, there has been a heightened legislative and regulatory focus on data security, including requiring consumer notification in the event of a data breach. Legislation has been introduced in Congress and there have been several Congressional hearings addressing these issues. From time to time, Congress has considered, and may do so again, legislation establishing requirements for data security and response to data breaches that, if implemented, could affect us by increasing our costs of doing business. In addition, several states have enacted privacy or security breach legislation requiring varying levels of consumer notification in the event of a security breach. For example, California passed the California Consumer Privacy Act ("CCPA"), which enhances consumer protection and privacy rights by granting consumers resident in California new rights with respect to the collection of their personal data and imposing new operational requirements on businesses, went into effect in January 2020. The CCPA includes a statutory damages framework and private rights of action against businesses that fail to comply with certain CCPA terms or implement reasonable security procedures and practices to prevent data breaches. Several other states are considering similar legislation.

Foreign governments are raising similar privacy and data security concerns. In particular, the European Union has enacted a General Data Protection Regulation ("GDPR"), which became effective in May 2018. It is unclear how compliance with GDPR will affect our business. China, Russia, Japan, and other countries in Latin America and Asia are also strengthening their privacy laws and the enforcement of privacy and data security requirements. Complying with such laws and regulations may be time-consuming and require additional resources, and could therefore adversely affect our business, financial condition, and results of operations.

Breaches or other disruptions of our security systems may damage our reputation and adversely affect our business.

Our security systems are designed to protect our customers', suppliers', and employees' confidential information, as well as maintain the physical security of our facilities. We also rely on a number of third-party cloud-based service providers of corporate infrastructure services relating to, among other things, human resources, electronic communication services, and some finance functions, and we are, of necessity, dependent on the security systems of these providers. These technologies are subject to failure, including as a result of an inability to have such technologies properly supported, updated, expanded, or integrated into other technologies. These technologies may also contain open source and third-party software which may unbeknownst to us contain defects or viruses.

Any security breaches or other unauthorized access by third parties to the systems of our cloud-based service providers or the existence of computer viruses in their data or software could expose us to a risk of information loss and misappropriation of confidential information. Accidental or willful security breaches or other unauthorized access by third parties to our information systems or facilities, or the existence of computer viruses in our data or software could expose us to a risk of information loss, misappropriation of proprietary and confidential information, as well as work stoppages or disruptions. Any theft or misuse of this information could result in, among other things, unfavorable publicity, damage to our reputation, difficulty in marketing our products, allegations by our customers that we have not performed our contractual obligations, regulatory fines or penalties, litigation by affected parties and possible financial obligations for liabilities and damages related to the theft or misuse of this information, any of which could have an adverse effect on our business, financial condition, results of operations, reputation, and relationships with our customers and suppliers. Cybersecurity threats, which include computer viruses, spyware, and malware, attempts to access information, denial of service attacks, and other electronic security breaches, are persistent and evolve quickly. Such threats have increased in frequency, scope, and potential impact in recent years. Since the techniques used to obtain unauthorized access or to sabotage systems change frequently and are often not recognized until after they are launched against a target, we may be unable to anticipate these techniques or to implement adequate preventative measures.

Risks Related to Intellectual Property

Our failure to adequately protect our intellectual property rights could impair our ability to compete effectively or defend ourselves from litigation, which could harm our business, financial condition, and results of operations.

Our success depends, in part, on our ability to protect our intellectual property. We rely primarily on patent, copyright, trademark, and trade secret laws, as well as confidentiality and non-disclosure agreements, and other contractual protections, to protect our technologies and proprietary know-how, all of which offer only limited protection. The steps we have taken to protect our intellectual property rights may not be adequate to prevent the misappropriation, infringement, or other violation of our proprietary information or infringement of our intellectual property rights, and our ability to prevent such misappropriation, infringement, or other violation is uncertain, particularly in countries outside of the United States. As of June 30, 2020, we had 66 issued U.S. patents, expiring generally between 2026 and 2038, and 28 pending U.S. patent applications (including three provisional applications). Our issued patents and pending patent applications generally relate to our MEMS fabrication process, MEMS resonators, circuits, packaging, and oscillator systems. We cannot assure you that any patents from any pending patent applications (or from any future patent applications) will be issued, and even if the pending patent applications are granted, the scope of the rights granted to us may not be meaningful or provide us with any commercial advantage. For example, these patents could be opposed, contested, circumvented, designed around by our competitors, be narrowed or declared invalid or unenforceable in judicial or administrative proceedings including re-examination, inter partes review, post-grant review, interference and derivation proceedings and equivalent proceedings in foreign jurisdictions, or be subject to ownership claims by third parties. The failure of our patents to adequately protect our technology might make it easier for our competitors to offer similar products or technologies. Our foreign patent protection is less comprehensive than our U.S. patent protection and may not protect our intellectual property rights in some countries where our products are sold or may be sold in the future. Many U.S.-based companies have encountered substantial third-party intellectual property infringement in foreign countries, including countries where we sell products. Even if foreign patents are granted, effective enforcement in foreign countries may not be available. If such an impermissible use of our intellectual property or trade secrets were to occur, our ability to sell our solutions at competitive prices may be adversely affected and our business, financial condition, and results of operations could be adversely affected.

The legal standards relating to the validity, enforceability, and scope of protection of intellectual property rights are uncertain and evolving. We cannot assure you that others will not develop or patent similar or superior technologies or solutions, or that our patents, trademarks, and other intellectual property will not be challenged, invalidated, or circumvented by others.

We also have a license to certain patents from Bosch relating to the design and manufacture of MEMS-based timing applications. The patent rights obtained under the license agreement expire between 2021 and 2029, and the license agreement expires upon expiration of the last patent licensed under the agreement. If we were to lose the benefit of these patents or other licensed technology used in our business, it could harm our business and our ability to compete.

We believe that the success of our business depends more on proprietary technology, information and processes, and know-how than on our patents or trademarks. Much of our proprietary information and technology related to manufacturing processes is not patented and may not be patentable.

Unauthorized copying or other misappropriation of our proprietary technologies could enable third parties to benefit from our technologies without paying us for doing so, which could harm our business. Monitoring unauthorized use of our intellectual property is difficult and costly. It is possible that unauthorized use of our intellectual property may have occurred or may occur without our knowledge. We cannot assure you that the steps we have taken will prevent unauthorized use of our intellectual property, or that others will not develop technologies similar or superior to our technology or design around our intellectual property. Our failure to effectively protect our intellectual property could reduce the value of our technology in licensing arrangements or in cross-licensing negotiations.

In addition, we also rely on contractual protections with our customers, suppliers, distributors, employees, and consultants, and we implement security measures designed to protect our trade secrets and know-how. However, we cannot assure you that we have entered into such agreements with every such party, that these contractual protections and security measures will not be breached, that we will have adequate remedies for any such breach, or that our customers, suppliers, distributors, employees, or consultants will not assert rights to intellectual property or damages arising out of such contracts.

We may in the future need to initiate infringement claims or litigation in order to try to protect or enforce our intellectual property rights. Litigation, whether we are a plaintiff or a defendant, can be expensive and time-consuming and may divert the efforts of our management and other personnel, which could harm our business, whether or not such litigation results in a determination favorable to us. Litigation also puts our patents at risk of being invalidated or interpreted narrowly and our patent applications at risk of not issuing. Additionally, any enforcement of our patents or other intellectual property may provoke third parties to assert counterclaims against us. If we are unable to meaningfully protect our proprietary rights or if third parties independently develop or gain access to our or similar technologies, our business, financial condition, results of operations, reputation, and competitive position could be harmed.

We may face intellectual property infringement, misappropriation, or other claims, which could be time-consuming and costly to defend or settle and which could result in the loss of significant rights and harm our relationships with our customers and distributors.

The semiconductor industry in which we operate is characterized by companies that hold patents and other intellectual property rights and vigorously pursue, protect, and enforce intellectual property rights. From time to time, third parties may assert against us and our customers and distributors their patent and other intellectual property rights to technologies that are important to our business. For example, in March 2019, VTT Technical Research Centre of Finland, Ltd. filed suit in the United States District Court for the Northern District of California alleging infringement by us of a patent. We have not accrued for a loss contingency relating to this matter. Any litigation, regardless of success or merit, could cause us to incur substantial expenses, reduce our sales, and divert the efforts of our management and other personnel. In the event we receive an adverse result in any litigation, we could be required to pay substantial damages, seek licenses from third parties, which may not be available on reasonable terms or at all, cease sale of products, expend significant resources to develop alternative technology, or discontinue the use of processes requiring the relevant technology. For more information regarding this matter, see Note 10 in Notes to Unaudited Condensed Consolidated Financial Statements in Item 1 of Part I of this Report.

In addition, our commercial success depends upon our ability to manufacture and sell our products without infringing, misappropriating, or otherwise violating the intellectual property rights of others. Claims that our products, processes, or technology infringe, misappropriate, or otherwise violate third-party intellectual property rights, regardless of their merit or resolution, could be costly to defend or settle and could divert the efforts and attention of our management and other personnel. We may in the future, particularly as a public company with an increased profile and visibility, receive communications from others alleging our infringement, misappropriation, or other violation of patents, trade secrets, or other intellectual property rights. We cannot assure you that, if made, these claims will not be successful, and lawsuits resulting from such allegations, even if we believe they are invalid, could subject us to significant liability for damages, invalidate our proprietary rights, and prevent us from selling specific products. Moreover, there could be public announcements of the results of hearings, motions, or other interim proceedings or developments and if securities analysts or investors perceive these results to be negative, it could have a substantial adverse effect on the price of our common stock.

Intellectual property claims could also harm our relationships with our customers or distributors and might deter future customers from doing business with us. We do not know whether we will prevail in any such proceedings given the complex technical issues and inherent uncertainties in intellectual property litigation. If any future proceedings result in an adverse outcome, we could be required to:

- cease the manufacture, use or sale of the applicable products, processes, or technology;
- pay substantial damages for infringement by us or our customers;
- expend significant resources to develop non-infringing products, processes, or technology, which may not be successful;
- license technology from the third-party claiming infringement, which license may not be available on commercially reasonable terms, or at all;
- cross-license our technology to a competitor to resolve an infringement claim, which could weaken our ability to compete with that competitor;
- lose the opportunity to license our technology to others or to collect royalty payments based upon successful protection and assertion of our intellectual property rights against others; or
- pay substantial damages to our customers or end users to discontinue their use of or to replace infringing technology sold to them with non-infringing technology, if available.

Any of the foregoing results could adversely affect our business, financial condition, and results of operations.

Any potential dispute involving patents or other intellectual property could affect our customers, which could trigger our indemnification obligations to them and result in substantial expense to us.

In any potential dispute involving patents or other intellectual property, our customers could also become the target of litigation. Our agreements with customers and other third-parties generally include indemnification or other provisions under which we agree to indemnify or otherwise be liable to them for losses suffered or incurred as a result of claims of intellectual property infringement, damages caused by us to property or persons, or other liabilities relating to or arising from our solutions included in their products. Large indemnity payments or damage claims from contractual breach could harm our business, financial condition, and results of operations. From time to time, customers require us to indemnify or otherwise be liable to them for breach of confidentiality or failure to implement adequate security measures with respect to their intellectual property and trade secrets. Although we normally contractually limit our liability with respect to such obligations, we may still incur substantial liability related to them. Any litigation against our customers could trigger technical support and indemnification obligations under some of our agreements, which could result in substantial expense to us.

In addition, other customers, or end customers with whom we do not have formal agreements requiring us to indemnify them may ask us to indemnify them if a claim is made as a condition to awarding future design wins to us. Because some of our customers are larger than we are and have greater resources than we do, they may be more likely to be the target of an infringement claim by third parties than we would be, which could increase our chances of becoming involved in a future lawsuit. If any such claims were to succeed, we might be forced to pay damages on behalf of our customers that could increase our expenses, disrupt our ability to sell our solutions and reduce our revenue. Any dispute with a customer with respect to such obligations could have adverse effects on our relationship with that customer and other current and prospective customers and reduce demand for our solutions. In addition to the time and expense required for us to supply support or indemnification to our customers, any such litigation could severely disrupt or shut down the business of our customers, which in turn could hurt our relations with our customers and cause the sale of our products to decrease. Any of the foregoing could harm our business, financial condition, and results of operations.

Risks Related to MegaChips Corporation's Ownership Position in Our Common Stock

As long as MegaChips holds a significant amount of our stock, our other shareholders' ability to influence matters requiring stockholder approval will be limited.

MegaChips owns 7,500,000 shares of our common stock, representing approximately 44.9% of our outstanding common stock as of June 30, 2020. For so long as MegaChips, its successors in interest, and its subsidiaries continue to hold the largest ownership position in our outstanding common stock, we expect MegaChips to continue to hold at least one out of seven seats on our board of directors, to be able to elect the members of our board of directors, and could at any time replace our entire board of directors. As long as MegaChips continues to be our largest stockholder, it will continue to have significant influence over us.

For example, as long as MegaChips continues to hold a significant or the largest ownership position in our outstanding common stock, MegaChips may have the ability to control or otherwise affect the outcome of any stockholder vote during this period. As a result, MegaChips will have the ability to exert significant influence over all matters affecting us, including:

- through our board of directors, any determination with respect to our business plans and policies, including the appointment and removal of our officers;
- any determinations with respect to mergers and other business combinations;
- our acquisition or disposition of assets;
- our financing activities;
- the allocation of business opportunities that may be suitable for us and MegaChips;
- the payment of dividends on our common stock; and
- the number of shares available for issuance under our stock plans.

MegaChips' voting control may discourage transactions involving a change of control of us, including transactions in which other holders of our common stock might otherwise receive a premium for their shares over the then current market price.

MegaChips is not prohibited from selling a portion or all of its interest in us to a third party and may do so without our other stockholders' approval and without providing for a purchase of shares of common stock held by our other stockholders. Accordingly, shares of our common stock may be worth less than they would be if MegaChips did not maintain significant voting influence over us.

We may be impacted by risks associated with MegaChips and third parties may seek to hold us responsible for liabilities of MegaChips.

We may be negatively impacted by events affecting MegaChips. For example, if MegaChips were subject to shareholder or other litigation or takeover activity, it could disrupt our business and operations. In addition, third parties may seek to hold us responsible for MegaChips' liabilities, particularly as a public company in the U.S. with an increased profile and visibility. However, if those liabilities are significant and we are ultimately held liable for them, we cannot assure you that we will be able to recover the full amount of our losses from MegaChips. This in turn may adversely affect our business, financial condition, and results of operations. Further, we may also be subject to risks associated with changes in Japanese laws and regulations, which may impact us as a result of MegaChips ownership interest in us.

Our inability to resolve any disputes that arise between us and MegaChips with respect to our past and ongoing relationships may adversely affect our operating results.

Disputes may arise between MegaChips and us in a number of areas relating to our past and ongoing relationships, including:

- labor, tax, employee benefit, indemnification, and other matters arising from our separation from MegaChips;
- employee retention and recruiting;
- business combinations involving us;
- sales or distributions by MegaChips of our products;
- sales or distributions by MegaChips of all or any portion of its ownership interest in us;
- the nature, quality, and pricing of services MegaChips has agreed to provide us; and
- business opportunities that may be attractive to both MegaChips and us.

We may not be able to resolve any potential conflicts, and even if we do, the resolution may be less favorable than if we were dealing with an unaffiliated party.

We currently have a loan agreement with MegaChips. As of June 30, 2020, there is no outstanding balance under this loan (the "MegaChips Loan"). The MegaChips Loan bears interest at a rate equal to the interest rate at which MegaChips procured the funds from Sumitomo Mitsui Banking Corporation ("SMBC"), plus 0.09%. MegaChips has discretion whether to accept our request for a loan. We have also entered into a distribution agreement with MegaChips under which MegaChips has the exclusive right to promote, market, and sell our products in Japan as the exclusive distributor. The agreements we entered into with MegaChips may be amended upon agreement between the parties. Because MegaChips is a major stockholder, we may not have the leverage to negotiate amendments to these agreements on terms as favorable to us compared to those we would negotiate with an unaffiliated third party.

In addition, MegaChips guaranteed our obligations under our revolving line of credit with The Bank of Tokyo-Mitsubishi UFJ, Ltd. ("MUFG"), which has an aggregate principal amount of up to $50.0 million through June 30, 2020, and continues to guarantee our revolving line of credit with SMBC which has an aggregate principal amount of up to $20.0 million. We may not have the leverage to negotiate terms favorable to us under these agreements, as we are no longer a wholly-owned subsidiary of MegaChips.

There could be potential conflicts of interest between us and affiliates of MegaChips, which could impact our business and operating results.

Some of our directors and executive officers own MegaChips' common stock and restricted stock units. In addition, some of our directors have or had affiliations with MegaChips. Ownership of MegaChips securities by our directors and officers and affiliations of directors with MegaChips could create, or appear to create, conflicts of interest with respect to matters involving both us and MegaChips. For example, corporate opportunities may arise that concern both of our businesses, such as the potential acquisition of a particular business or technology that is complementary to both of our businesses. In addition, we have not established at this time any procedural mechanisms to address actual or perceived conflicts of interest of such directors and officers and expect that our board of directors, in the exercise of its fiduciary duties, will determine how to address any actual or perceived conflicts of interest on a case-by-case basis. If any corporate opportunity arises and if our directors and officers do not pursue it on our behalf pursuant to the provisions in our amended and restated certificate of incorporation, we may not become aware of, and may potentially lose, a significant business opportunity.

As long as MegaChips continues to hold a significant, or the largest, ownership position in our outstanding common stock, MegaChips could effectively control or otherwise exert significant influence over our board of directors, which in turn may create issues if and to the extent our interests and those of MegaChips diverge. Under these circumstances, persons who might otherwise accept our invitation to join our board of directors may decline.

We are no longer a "controlled company" within the meaning of the Nasdaq listing rules. As a result, we are no longer exempt from certain corporate governance requirements.

As a result of our June 2020 stock offering, MegaChips' no longer holds more than 50% of the voting power for our board of directors, and therefore we no longer qualify as a "controlled company" within the meaning of the Nasdaq listing rules. Controlled companies are not required to comply with certain corporate governance rules that would otherwise apply to a listed company on Nasdaq, including the requirement that compensation committee and nominating and corporate governance committee be composed entirely of "independent" directors (as defined by the Nasdaq listing rules). Further, a controlled company's board of directors is not required to include a majority of "independent" directors. As a result of our June 2020 stock offering, we ceased to be a controlled company are no longer be exempt from such requirements.

Risks Related to Our Common Stock

Our stock price may be volatile and may decline, resulting in a loss of some or all of your investment.

The trading price and volume of our common stock is likely to be volatile and could fluctuate significantly in response to numerous factors, many of which are beyond our control, including:

- actual or anticipated fluctuations in our results of operations due to, among other things, changes in customer demand, product life cycles, pricing, ordering patterns, and unforeseen operating costs;
- the financial projections we may provide to the public, any changes in these projections or our failure to meet these projections;
- announcements with respect to developments, status, and impact on us, our competition, our constituents, and our suppliers of the COVID 19 global pandemic;
- failure of securities analysts to initiate or maintain coverage of us, changes in financial estimates or ratings by any securities analysts who follow us, or our failure to meet these estimates or the expectations of investors;
- announcements by our significant customers of changes to their product offerings, business plans, or strategies;
- announcements by us or our competitors of significant technical innovations, acquisitions, strategic partnerships, joint ventures, or capital commitments;
- changes in operating performance and stock market valuations of other technology companies generally, or those in the semiconductor industry;
- timing and seasonality of the end-market demand;
- cyclical fluctuations in the semiconductor market;
- price and volume fluctuations in the overall stock market from time to time, including as a result of trends in the economy as a whole;
- actual or anticipated developments in our business or our competitors' businesses or the competitive landscape generally;
- new laws or regulations or new interpretations of existing laws, or regulations applicable to our business;
- any major change in our management;
- lawsuits threatened or filed against us; and
- other events or factors, including those resulting from war, incidents of terrorism, the COVID-19 pandemic, or responses to these events.

In addition, the market for technology stocks and the stock markets in general have experienced extreme price and volume fluctuations. Stock prices of many technology companies have fluctuated in a manner unrelated or disproportionate to the operating performance of those companies. In the past, stockholders have instituted securities class action litigation following periods of market volatility. If we were to become involved in securities litigation, it could subject us to substantial costs, divert resources and the attention of management from our business and adversely affect our business, financial condition, and results of operations.

Substantial future sales of our common stock could cause the market price of our common stock to decline.

The market price of our common stock could decline as a result of substantial sales of our common stock, particularly sales by our directors, executive officers, and significant stockholders, including MegaChips, a large number of shares of our common stock becoming available for sale or the perception in the market that holders of a large number of shares intend to sell their shares. As of July 31, 2020, 16,715,995 shares of common stock were outstanding. Except as described below, all of the shares of common stock are freely transferable without restriction or additional registration under the Securities Act of 1933, as amended, or the Securities Act.

Subject to the restrictions under Rule 144 under the Securities Act, approximately 10,200,000 shares of our common stock became eligible for sale beginning May 19, 2020 upon the expiration of market stand-off provisions or lock-up agreements entered into in connection with our initial public offering. The market price of our common stock could decline if the holders of those shares sell them or are perceived by the market as intending to sell them.

Certain members of our management, including certain of our executive officers, purchased in the aggregate 86,923 shares of our common stock in our initial public offering. Any such shares purchased by individuals who are considered to be our affiliates cannot be freely resold in the public market as a result of restrictions under securities laws, but will be able to be sold following the expiration of the restrictions contained in the lock-up agreements described above that our executive officers and directors have entered into and subject to Rule 144.

As of June 30, 2020, MegaChips holds 7,500,000 shares of our common stock. We have also registered shares of common stock that we may issue under our employee equity incentive plans. These shares may be sold freely in the public market upon issuance, subject to existing market stand-off or lock-up agreements and relevant vesting schedules.

If securities analysts or industry analysts downgrade our common stock, publish negative research or reports, or fail to publish reports about our business, our stock price and trading volume could decline.

The market price and trading market for our common stock will be influenced by the research and reports that industry or securities analysts publish about us, our business, and our market. If one or more analysts adversely change their recommendation regarding our stock or change their recommendation about our competitors' stock, our stock price would likely decline. If one or more analysts cease coverage of us or fail to regularly publish reports on us, we could lose visibility in the financial markets which in turn could cause our stock price or trading volume to decline. In addition, if our operating results fail to meet the expectations created by securities analysts' reports, our stock price could decline.

We do not intend to pay dividends on our common stock so any returns will be limited to changes in the value of our common stock.

We have never declared or paid any cash dividends on our common stock. We currently anticipate that we will retain future earnings for the development, operation, and expansion of our business and do not anticipate declaring or paying any cash dividends for the foreseeable future. Although our existing loan agreements do not contain restrictions on our ability to pay dividends or make distributions, we may in the future amend our existing loan agreements or enter into agreements that contain such restrictions. Any return to stockholders will therefore be limited to the increase, if any, in our stock price, which may never occur.

We might not be able to utilize a significant portion of our net operating loss carryforwards and research and development tax credit carryforwards.

As of December 31, 2019, we had U.S. federal and state net operating loss ("NOL"), carryforwards of approximately $156.5 million and $63.7 million, respectively, and U.S. federal and state research and development tax credit carryforwards of approximately $3.9 million and $3.6 million, respectively. The U.S. federal NOL carryforwards begin to expire in 2025 and the state NOL carryforwards begin to expire in 2028. The U.S. federal research and development tax credit carryforwards begin to expire in 2025 and the state research and development tax credit carryforwards carry forward indefinitely. These net operating loss and U.S. federal tax credit carryforwards could expire unused and/or be unavailable to offset future income tax liabilities. In addition, under Section 382 of the Internal Revenue Code of 1986, as amended (the "Code"), and corresponding provisions of California state law, if a corporation undergoes an "ownership change," which is generally defined as a greater than 50% change, by value, in its equity ownership over a three-year period, the corporation's ability to use its pre-change net operating loss carryforwards and other pre-change tax attributes to offset its post-change income may be limited. We completed a Section 382 analysis and determined an ownership change occurred in 2014 and concluded that it had no impact on U.S. federal and California net operating losses or on U.S. federal research and development credits. Our recent initial public offering did not result in a change in ownership of greater than 50%. We may experience ownership changes in the future as a result of subsequent shifts in our stock ownership, some of which may be outside of our control. If we determine that an ownership change has occurred and our ability to use our historical net operating loss and tax credit carryforwards is materially limited, it would harm our future business, financial condition, and results of operations by effectively increasing our future tax obligations. In addition, under the Tax Act, federal NOLs incurred in 2018 and in future years may be carried forward indefinitely but generally may not be carried back and the deductibility of such NOLs is limited to 80% of taxable income.

On March 27, 2020, the “Coronavirus Aid, Relief, and Economic Security Act” (“CARES Act”) was signed into law as a result of the COVID-19 pandemic. The new legislation includes a number of income tax provisions applicable to individuals and businesses. In addition, governments around the world have enacted or implemented various forms of tax relief measures in response to the economic conditions in the wake of the COVID-19 pandemic. Although, due to our historical net operating losses incurred in the U.S., the CARES Act did not have a material impact on our condensed consolidated financial statements as of June 30, 2020, we continue to examine the elements of the CARES Act and other changes in tax laws and regulations and the impact they may have on us in the future.

Our actual operating results may not meet our guidance and expectations, which would likely cause our stock price to decline.

From time to time, we may release guidance in our earnings releases, earnings conference calls, or otherwise, regarding our future performance that represent our management’s estimates as of the date of release. If given, this guidance, which will include forward-looking statements, will be based on projections prepared by our management. Projections are based upon a number of assumptions and estimates that, while presented with numerical specificity, are inherently subject to significant business, economic, and competitive uncertainties and contingencies, many of which are beyond our control, such as the uncertainty around the impact of the COVID-19 pandemic. The principal reason that we expect to release guidance is to provide a basis for our management to discuss our business outlook with analysts and stockholders. With or without our guidance, analysts, and other third parties may publish expectations regarding our business, financial condition, and results of operations. We do not accept any responsibility for any projections or reports published by any such third parties. Guidance is necessarily speculative in nature, and it can be expected that some or all of the assumptions of the guidance furnished by us will not materialize or will vary significantly from actual results. If our actual performance does not meet or exceed our guidance or expectations, the trading price of our common stock is likely to decline.

We incur increased costs and demands on management as a result of compliance with laws and regulations applicable to public companies, which could harm our operating results.

As a public company we incur significant legal, accounting, and other expenses, including costs associated with public company reporting requirements. Our management team and other personnel will need to devote a substantial amount of time to, and we may not effectively or efficiently manage our transition into a public company.

We intend to hire additional accounting and finance personnel with system implementation experience and expertise regarding compliance with the Sarbanes-Oxley Act. We may be unable to locate and hire qualified professionals with requisite technical and public company experience when and as needed. In addition, new employees will require time and training to learn our business and operating processes and procedures. If we are unable to recruit and retain additional finance personnel or if our finance and accounting team is unable for any reason to respond adequately to the increased demands that will result from being a public company, the quality and timeliness of our financial reporting may suffer, which could result in the identification of material weaknesses in our internal controls. Any consequences resulting from inaccuracies or delays in our reported financial statements could cause our stock price to decline and could harm our business, financial condition, and results of operations.

If we fail to strengthen our financial reporting systems, infrastructure, and internal control over financial reporting to meet the demands required as a public company, including the requirements of the Sarbanes-Oxley Act, we may be unable to report our financial results timely and accurately or prevent fraud. We expect to incur significant expense and devote substantial management effort toward ensuring compliance with Section 404 of the Sarbanes-Oxley Act (“Section 404”).

As a public company we incur significant legal, accounting and other expenses, including costs associated with public company reporting requirements. Our management team and other personnel will need to devote a substantial amount of time to, and we may not effectively or efficiently manage, our new obligations as a public company.

We intend to hire additional accounting and finance personnel with system implementation experience and expertise regarding compliance with the Sarbanes-Oxley Act. We may be unable to locate and hire qualified professionals with requisite technical and public company experience when and as needed. In addition, new employees will require time and training to learn our business and operating processes and procedures. If we are unable to recruit and retain additional finance personnel or if our finance and accounting team is unable for any reason to respond adequately to the increased demands from being a public company, the quality and timeliness of our financial reporting may suffer, which could result in the identification of material weaknesses in our internal controls. Any consequences resulting from inaccuracies or delays in our reported financial statements could cause our stock price to decline and could harm our business, financial condition, and results of operations.

If we fail to strengthen our financial reporting systems, infrastructure, and internal control over financial reporting to meet the demands that will be placed upon us as a public company, including the requirements of the Sarbanes-Oxley Act, we may be unable to report our financial results timely and accurately or prevent fraud. We expect to incur significant expense and devote substantial management effort toward ensuring compliance with Section 404 of the Sarbanes-Oxley Act ("Section 404").

As a public company, we are subject to additional regulatory compliance requirements, including Section 404, and if we fail to maintain an effective system of internal controls, we may not be able to accurately report our financial results or prevent fraud.

Rules and regulations such as the Sarbanes-Oxley Act have increased our legal and finance compliance costs and made some activities more time-consuming and costly. For example, Section 404 requires that our management report on, and our independent auditors attest to, the effectiveness of our internal control structure and procedures for financial reporting. However, our auditors will not be required to formally attest to the effectiveness of our internal control over financial reporting pursuant to Section 404 until we are no longer an "emerging growth company," as defined in the JOBS Act. Effective internal controls are necessary for us to provide reliable financial reports and effectively prevent fraud. Section 404 compliance may divert internal resources and will take a significant amount of time and effort to complete. We may not be able to successfully complete the procedures and certification and attestation requirements of Section 404 by the time we will be required to do so. Implementing these changes may take a significant amount of time and may require specific compliance training of our personnel. In the future, we may discover areas of our internal controls that need improvement. If our auditors or we discover a material weakness or significant deficiency, the disclosure of that fact, even if quickly remedied, could reduce the market's confidence in our consolidated financial statements and harm our stock price. Any inability to provide reliable financial reports or prevent fraud would harm our business. We may not be able to effectively and timely implement necessary control changes and employee training to ensure continued compliance with the Sarbanes-Oxley Act and other regulatory and reporting requirements. If we fail to successfully complete the procedures and certification and attestation requirements of Section 404, or if in the future our Chief Executive Officer, Chief Financial Officer or independent registered public accounting firm determines that our internal controls over financial reporting are not effective as defined under Section 404, we could be subject to investigations or sanctions by Nasdaq, the SEC or other regulatory authorities. Furthermore, perceptions of the company may suffer, and this could cause a decline in the market price of our shares of common stock. We cannot assure you that we will be able to fully comply with the requirements of the Sarbanes-Oxley Act or that management or, when applicable, our auditors will conclude that our internal controls are effective in future periods. Irrespective of compliance with Section 404, any failure of our internal controls could have a material adverse effect on our stated results of operations and harm our reputation.

We are an emerging growth company, and any decision on our part to comply only with certain reduced reporting and disclosure requirements applicable to emerging growth companies could make our common stock less attractive to investors.

We are an "emerging growth company," as defined in the JOBS Act. We intend to take advantage of certain exemptions under the JOBS Act from various public company reporting requirements, including not being required to have our internal control over financial reporting audited by our independent registered public accounting firm pursuant to Section 404(b) of the Sarbanes-Oxley Act, reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements, and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and any golden parachute payments not previously approved. We may take advantage of these exemptions for up to five years or until we are no longer an "emerging growth company," whichever is earlier.

In addition, Section 107 of the JOBS Act also provides that an emerging growth company can take advantage of the extended transition period provided in Section 7(a)(2)(B) of the Securities Act for complying with new or revised accounting standards. An emerging growth company can therefore delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. However, we are choosing to "opt out" of such extended transition period, and, as a result, we will comply with new or revised accounting standards on the relevant dates on which adoption of such standards is required for non-emerging growth companies. Section 107 of the JOBS Act provides that our decision to opt out of the extended transition period for complying with new or revised accounting standards is irrevocable.

We cannot predict if investors will find our common stock less attractive if we choose to rely on any of the exemptions afforded to emerging growth companies. If some investors find our common stock less attractive because we rely on any of these exemptions, there may be a less active trading market for our common stock and the market price of our common stock may be more volatile.

Anti-takeover provisions in our charter documents and under Delaware law could make an acquisition of us more difficult, limit attempts by our stockholders to replace or remove our current management and limit the market price of our common stock.

Provisions in our certificate of incorporation and bylaws may have the effect of delaying or preventing a change of control or changes in our management. Our amended and restated certificate of incorporation and bylaws include provisions that:

- authorize our board of directors to issue, without further action by the stockholders, shares of undesignated preferred stock with terms, rights, and preferences determined by our board of directors that may be senior to our common stock;
- require that any action to be taken by our stockholders be effected at a duly called annual or special meeting and not by written consent;

- specify that special meetings of our stockholders can be called only by our board of directors, the Chairman of our board of directors, or our Chief Executive Officer;
- establish an advance notice procedure for stockholder proposals to be brought before an annual meeting, including proposed nominations of persons for election to our board of directors;
- establish that our board of directors is divided into three classes, with each class serving three-year staggered terms;
- prohibit cumulative voting in the election of directors;
- provide that our directors may be removed only for cause;
- provide that vacancies on our board of directors may be filled by a majority of directors then in office, even if less than a quorum; and
- require the approval of our board of directors or the holders of at least 66 2/3% of our outstanding shares of capital stock to amend our bylaws and certain provisions of our certificate of incorporation.

These provisions may frustrate or prevent any attempts by our stockholders to replace or remove our current management by making it more difficult for stockholders to replace members of our board of directors, which is responsible for appointing the members of our management. In addition, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, which generally prohibits a Delaware corporation from engaging in any of a broad range of business combinations with any interested stockholder for a period of three years following the date on which the stockholder became an interested stockholder. Any delay or prevention of a change of control transaction or changes in our management could cause our stock price to decline.

Our bylaws designate the Court of Chancery of the State of Delaware as the sole and exclusive forum for certain types of actions and proceedings that may be initiated by our stockholders, and federal district courts will be the sole and exclusive forum for Securities Act claims, which could limit our stockholders' ability to obtain what they believe to be a favorable judicial forum for disputes with us or our directors, officers, or other employees.

Our bylaws provide that, unless we consent in writing to the selection of an alternative forum, to the fullest extent permitted by law, the Court of Chancery of the State of Delaware shall be the sole and exclusive forum for (a) any derivative action or proceeding brought on our behalf, (b) any action asserting a claim of breach of a fiduciary duty owed by any of our directors, officers, or other employees to us or our stockholders, (c) any action asserting a claim arising pursuant to any provision of the Delaware General Corporation Law, our certificate of incorporation or our bylaws, or (d) any action asserting a claim against us governed by the internal affairs doctrine. Section 27 of the Securities Exchange Act of 1934, or the Exchange Act, creates exclusive federal jurisdiction over all suits brought to enforce any duty or liability created by the Exchange Act or the rules and regulations thereunder. As a result, the exclusive forum provision will not apply to suits brought to enforce any duty or liability created by the Exchange Act or any other claim for which the federal courts have exclusive jurisdiction. Our bylaws further provide that, unless we consent in writing to the selection of an alternative forum, the federal district courts are the sole and exclusive forum for the resolution of any complaint asserting a cause of action arising under the Securities Act.

Any person or entity purchasing or otherwise acquiring any interest in our capital stock shall be deemed to have notice of and consented to the provisions of our bylaws described above. This choice of forum provision may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or our directors, officers, or other employees, which may discourage such lawsuits against us and our directors, officers, or other employees. Alternatively, if a court were to find these provisions of our bylaws inapplicable to, or unenforceable in respect of, one or more of the specified types of actions or proceedings, we may incur additional costs associated with resolving such matters in other jurisdictions, which could adversely affect our business, financial condition, and results of operations and result in a diversion of the time and resources of our management and board of directors.

Item 5. Other Information.

Executive Bonus and Retention Plan

On August 4, 2020, the Compensation Committee of the Board of Directors approved and adopted the Executive Bonus and Retention Plan (the "***Plan***") and target bonus amounts and performance goals under the Plan applicable for the second half of the Company's 2020 fiscal year (the "***2020 Goals***"). Each of the Company's named executive officers is a participant in the Plan and subject to the 2020 Goals.

General

Under the Plan, for any fiscal year, or portion thereof, the Committee will establish threshold, target, and maximum bonus levels (the "Bonus Targets") and the corresponding threshold, target, and maximum performance goals (the "Performance Goals"). The Performance Goals may include but shall not be limited to: (a) any one or more financial performance metrics, measured either quarterly, semi-annually, annually or cumulatively over a period of years, on an absolute basis or relative to a pre-established target, on a GAAP or non-GAAP basis in the case of certain financial metrics, to previous years' results or to a designated comparison group, in each case as specified and weighted by the Committee; and (b) such other criteria as the Committee may determine are appropriate. The Committee may, in its sole discretion and at any time, (i) increase, reduce or eliminate the amount allocated to the bonus pool, or (ii) modify the Bonus Targets or Performance Goals used in determining the bonus pool. Further, to the extent that the Plan bonus threshold, target or maximum funding and/or performance levels are pre-established with respect to any or all employees, the Committee (or its delegate, as applicable) reserves the discretion to modify the final bonus(es) payable to any or all such employees as determined appropriate in its sole discretion. Bonuses may be payable in cash or awards with respect to shares of Company common stock issued under the Company's 2019 Stock Incentive Plan, including awards subject to additional vesting requirements, and the employee must be employed on the date of payment (and on any subsequent vesting date(s) to the extent applicable) in order to earn any bonus under the Plan.

2020 Goals

Pursuant to the 2020 Goals, the Plan provides each participant with the opportunity to earn a bonus based on the achievement of revenue and Non-GAAP operating profit for the second half of 2020, as well as individual performance goals. Each of these performance goals receives a different weight when the bonus attainment is calculated. All bonuses will be subject to minimum and maximum performance in each performance metric, and each of the performance goals is measured independently of the other. If performance for a particular metric is achieved at target, the bonus for that metric is paid out at target based on its percentage weight. Actual payouts may range from zero to 150% of target, based on performance.

For the second half of 2020, the CEO's target bonus is 50% of his annual base salary and the target bonus is 25% of annual base salary for the other named executive officers. The bonus for each named executive officer will be equal to (1) the applicable target bonus amount multiplied by (2) the percentage achievement applicable to the weighted combination of those goals identified above as achieved for the second half of 2020. Once certified, bonuses will be paid in the form of restricted stock units for shares having a value on the date of grant equal to the certified amount, half of which will vest on February 20, 2021 and half of which will vest on August 20, 2021, subject to continued employment through the applicable vesting date. The Compensation Committee retains discretion to modify the actual bonus payment based on a number of factors, including individual performance.

Item 6. Exhibits.

The documents listed below are filed (or furnished, as noted) as exhibits to this Quarterly Report on Form 10-Q:

Exhibit Number	Description
3.1	Restated Certificate of Incorporation of SiTime Corporate (the "Company") (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed November 26, 2019).
3.2	Amended and Restated Bylaws of the Company (incorporated by reference to Exhibit 3.2 to the Company's Current Report on Form 8-K filed June 9, 2020).
4.1	Form of Common Stock Certificate of the Company ((incorporated by reference to Exhibit 4.1 to the Company's Registration Statement on Form S-1 (File No. 333-234305) (the "S-1")).
4.2	Description of Securities Registered Pursuant to Section 12 of the Securities Exchange Act of 1934 (incorporated by reference to the Company's Annual Report on Form 10-k filed March 2, 2020).
10.1*	Independent Director Compensation Policy.
10.2*	Executive Bonus and Retention Plan.
10.3*†	Asset Purchase Agreement dated August 4, 2020, by and among MegaChips Corporation and SiTime Corporation.
31.1*	Certification of Principal Executive Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2*	Certification of Principal Financial Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1*#	Certification of Principal Executive Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2*#	Certification of Principal Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	XBRL Taxonomy Extension Label Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document

* Filed herewith.

† Schedules and similar attachments have been omitted pursuant to Item 601(a)(5) of Regulation S-K. The registrant hereby undertakes to provide further information regarding such omitted materials to the SEC upon request.

\# In accordance with Item 601(b)(32)(ii) of Regulation S-K and SEC Release No. 34-47986, the certifications furnished in Exhibits 32.1 and 32.2 hereto are deemed to accompany this Form 10-Q and will not be deemed "filed" for purposes of Section 18 of the Exchange Act or deemed to be incorporated by reference into any filing under the Exchange Act or the Securities Act of 1933 except to the extent that the Company specifically incorporates it by reference.

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.

	SiTime Corporation
Date: August 6, 2020	By: /s/ Arthur D. Chadwick
	Arthur D. Chadwick
	Executive Vice President, Chief Financial Officer

Exhibit 10.1

INDEPENDENT DIRECTOR COMPENSATION POLICY

(Approved July 27, 2020)

Non-employee members of the board of directors (the "***Board***") of SiTime Corporation (the "***Company***") shall be eligible to receive cash and equity compensation as set forth in this Independent Director Compensation Policy. The cash compensation and equity grants described in this Independent Director Compensation Policy shall be paid or be made, as applicable, automatically and without further action of the Board, to each member of the Board who is not an employee of the Company or any parent or subsidiary of the Company (each, an "***Independent Director***") who may be eligible to receive such cash compensation or equity grants, unless such Independent Director declines the receipt of such cash compensation or equity grants by written notice to the Company. This Independent Director Compensation Policy shall remain in effect until it is revised or rescinded by further action of the Board. The terms and conditions of this Independent Director Compensation Policy shall supersede any prior cash or equity compensation arrangements between the Company and its directors.

Cash Compensation

<u>Annual Cash Retainer for Board Service</u>. Each Independent Director shall be eligible to receive an annual retainer of $40,000 for service on the Board.

<u>Annual Cash Retainer for Committee Service</u>. In addition, an Independent Director shall be eligible to receive the following additional annual cash retainers for service in the following roles:

Committee Chair:

- Audit: $20,000
- Compensation: $10,000
- Nominating/Governance: $10,000

Committee Member:

- Audit: $8,000
- Compensation: $5,000
- Nominating/Governance: $5,000

Lead Independent Director: $20,000

The annual retainers shall be paid by the Company in quarterly installments or more frequently as deemed advisable by the officers of the Company for administrative or other reasons.

Equity Compensation

The Independent Directors shall be granted the following restricted stock unit ("RSU") awards. The RSUs shall be granted under and shall be subject to the terms and conditions of the Company's 2019 Stock Incentive Plan or its successor (the "Plan") and an RSU agreement, including attached exhibits, in substantially the same form approved by the Board for employee grants subject to the terms specified below.

Annual Awards: On the first business day following the conclusion of each regular annual meeting of the Company's stockholders, commencing with the 2021 annual meeting, each Independent Director who has served on the Board for at least six months and will continue serving as a member of the Board thereafter, shall receive a grant of RSUs ("Annual RSU Award") under the Plan with respect to a number of shares of common stock equal to $175,000 divided by the average closing price of the Company's common stock on The Nasdaq Global Market for the period of twenty (20) trading days ending on the day prior to the date of grant. Each Annual RSU Award shall become fully vested on the February 20, May 20, August 20, or November 20 falling in the one-year anniversary quarter of the annual meeting, provided that (i) if the next years' annual meeting date occurs prior to such vesting date and (ii) such Independent Director's service will not continue following the annual meeting, then the Annual RSU Award for such Independent Director will vest on the day prior to the date of the annual meeting. Notwithstanding the foregoing, each Annual RSU Award shall become 100% vested if a Change in Control as defined in the Plan occurs during such Independent Director's service.

Initial Awards: Each Independent Director who first joins the Board after the date hereof and who was not previously an employee of the Company or a parent or subsidiary thereof shall receive a grant of RSUs ("Initial RSU Award") under the Plan on the date of his or her election to the Board with respect to a number of shares of common stock equal to $250,000 divided by the average closing price of the Company's common stock on The Nasdaq Global Market for the period of twenty (20) trading days ending on the day prior to the date of grant. The Initial RSU Award shall vest annually over a 3-year period on the February 20, May 20, August 20, or November 20 falling in the anniversary quarter of the date of grant at an annual rate of 1/3 of the total number of RSUs subject to such award. Notwithstanding the foregoing, each Initial RSU Award shall become 100% vested if a Change in Control as defined in the Plan occurs during such Independent Director's service.

Annual Limitations

The grant date fair value of all equity awards (as determined in accordance with Financial Accounting Standards Board Accounting Standards Codification Topic 718, or any successor thereto) granted under the Plan, plus the amount of cash compensation paid, to any Independent Director as compensation for services as an Independent Director during any twelve (12)-month period may not exceed $500,000 (provided that such limit shall be increased to $750,000 for the first twelve (12)-month period that the Independent Director serves on the Board).

Exhibit 10.2

SITIME CORPORATION

EXECUTIVE BONUS AND RETENTION PLAN

(Approved August 4, 2020)

1. Purpose.

The purpose of this Executive Bonus and Retention Plan (the "***Plan***") is to attract, motivate and retain executives, including officers, of SiTime Corporation ("***SiTime***" or the "***Company***") to align such individuals' performance with SiTime's corporate goals.

2. Administration.

The Plan shall be administered by the Compensation Committee of the Board of Directors of the Company (the "***Committee***"). The Committee shall have the sole discretion and authority to:

a. administer and interpret the Plan;

b. determine which employees of the Company will be eligible to participate in the Plan in any given fiscal year or portion thereof;

c. prescribe the terms and conditions of any awards granted under the Plan;

d. adopt rules and guidelines for the administration of the Plan that are consistent with the Plan; and

e. interpret, amend or revoke any such rules and guidelines.

With respect to Plan matters not affecting the officers of the Company, the Committee may delegate its administrative powers to any one or more of the officers of the Company. The decisions of the Committee (or its delegate, as applicable) shall in every case be final and binding on all persons having an interest in the Plan.

3. Bonus Pool.

a. The amount available to allocate for payment of bonuses under the Plan in respect of a given fiscal year (or portion thereof) of the Company (the "***Bonus Pool***") shall be determined by the Committee according to the following procedures. For any fiscal year, or portion thereof (the "***Performance Period***") the Committee will establish threshold, target and maximum bonus levels (the "***Bonus Targets***") and the corresponding threshold, target and maximum performance goals (the "***Performance Goals***").

b. The Performance Goals may be different for different employees and may include but shall not be limited to: (a) any one or more financial performance metrics, measured either quarterly, semi-annually, annually or cumulatively over a period of years, on an absolute basis or relative to a pre-established target, on a GAAP or non-GAAP basis in the case of certain financial metrics, to previous years' results or to a designated comparison group, in each case as specified and weighted by the Committee; and (b) such other criteria as the Committee may determine are appropriate to measure the performance of an employee in carrying out his or her assigned duties and responsibilities.

c. As soon as practicable after the end of each Performance Period, the Committee will certify the final Bonus Pool for the Performance Period considering both the Bonus Targets and the level of achievement of the Performance Goals. Notwithstanding any contrary provision of the Plan, the Committee may, in its sole discretion and at any time, (i) increase, reduce or eliminate the amount allocated to the Bonus Pool, or (ii) modify the Bonus Targets or Performance Goals used in determining the Bonus Pool .

4. Bonus Allocation and Payment.

Following certification of the Bonus Pool, the Bonus Pool will be allocated by the Committee (or its delegate, as applicable) and paid out on terms as determined by the Committee. To the extent that the Plan bonus threshold, target or maximum funding and/or performance levels are pre-established with respect to any or all employees, the Committee (or its delegate, as applicable) reserves the discretion to modify the final bonus(es) payable to any or all such employees as determined appropriate in its sole discretion. Bonuses under the Plan shall be payable as soon as practicable following certification of the Bonus Pool in cash or awards with respect to shares of Company common stock issued under the Company’s 2019 Stock Incentive Plan, including awards subject to additional vesting requirements. Bonuses shall be subject to applicable deductions and tax withholdings. An employee must be employed on the date of payment (and on any subsequent vesting date(s) to the extent applicable) in order to earn any bonus under this Plan.

5. Amendment and Termination.

Either the Board of Directors of the Company or the Committee may amend, suspend or terminate the Plan in writing at any time, for any and no reason.

6. Miscellaneous.

a. Nothing in this Plan or any bonus granted hereunder shall interfere with or limit in any way the right of the Company to terminate any individual’s employment or service at any time or for any reason not prohibited by law.

b. Bonuses under the Plan are discretionary. No person is automatically entitled to participate in the Plan in any fiscal year, or portion thereof. At no time prior to actual payment of a bonus shall any person accrue any vested interest or right whatsoever under the Plan. The Committee has no obligation for uniformity of treatment of individuals or bonuses under the Plan.

c. An individual’s right or interest, if any, to receive payment of a bonus under the Plan is not assignable or transferable and shall not inure to any third-party beneficiary.

d. The Plan and all obligations hereunder shall be binding on any successor to the Company, whether the existence of such successor is the result of a direct or indirect purchase, merger, consolidation, sale or otherwise, of all or substantially all the business and/or assets of the Company.

e. The Plan and any bonuses payable hereunder are intended to be exempt to the maximum extent possible from Section 409A of the Internal Revenue Code of 1986, as amended, and all regulations or other guidance promulgated thereunder (collectively, “***Section 409A***”); and to otherwise comply with Section 409A. The Plan shall be interpreted and administered in a manner consistent with this intent.

f. The Plan is intended to be unfunded. Participants are and shall at all times be general unsecured creditors of the Company with respect to their bonuses hereunder, if any. The Company shall bear all expenses and costs in connection with the operation of the Plan.

g. If any provision of this Plan or the application thereof to any individual or circumstance is deemed invalid or unenforceable by a court of competent jurisdiction, then the remainder of the Plan or the application of such term or provisions to individuals or circumstances shall be valid and enforceable to the fullest extent permitted by law.

h. The Plan, all bonuses granted hereunder and all determinations made and actions taken pursuant hereto shall be governed by the laws of the State of California without giving effect to principles of conflicts of law.

i. Bonuses paid under the Plan will be subject to recoupment in accordance with any recoupment policy that the Company adopts or is required to adopt pursuant to the listing standards of any national securities exchange or association on which the Company's securities are listed, the Dodd-Frank Wall Street Reform and Consumer Protection Act, or other applicable law.

Exhibit 10.3

ASSET PURCHASE AGREEMENT

This ASSET PURCHASE AGREEMENT, dated August 4, 2020 (this "Agreement"), is by and between MegaChips Corporation, a company incorporated under the laws of Japan and having its principal place of business at Shin-Osaka Hankyu Building, 1-1-1 Miyahara, Yodogawa-ku, Osaka, 532-0003 Japan ("Seller") and SiTime Corporation, a company incorporated under the laws of the State of Delaware, with its registered office at 5451 Patrick Henry Drive, Santa Clara, CA 95054, U.S.A ("Buyer") (each a "Party" and collectively the "Parties").

In consideration of the respective covenants and agreements hereinafter set forth, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties, intending to be legally bound, hereby agree as follows:

1. Sale and Purchase.

On the terms and subject to the conditions set forth in this Agreement, Buyer shall purchase and acquire from Seller, and Seller shall sell, transfer, assign and convey to Buyer, for the consideration specified in Section 3 below, all of Seller's right, title and interest in and to the assets and properties set forth on Schedule 1.1 hereto (the "Equipment").

2. Delivery.

On August 4, 2020 or any other date agreed upon between the Parties, Seller shall transfer and assign the Equipment to Buyer at Seller's Makuhari office, as located there as it is, and Buyer shall receive the Equipment together with the ownership, right, title and interest therein and thereto.

3. Purchase Price.

The consideration for the sale of the Equipment (the "Purchase Price") shall be JPY14,427,719.

4. Tax.

Buyer and Seller acknowledge and agree that any and all taxes and duties imposed in connection with the transactions contemplated by this Agreement, including consumption tax in Japan, will be excluded from the Purchase Price. Buyer shall bear the responsibility for payment of any and all taxes or duties incurred in connection with the transactions contemplated by this Agreement (excluding, for the avoidance of doubt, any income, capital gains, or other similar taxes).

5. Payment.

Within thirty (30) days after the date of invoice to be issued by Seller following the delivery of Equipment, Buyer shall pay the Purchase Price in the currency of USD calculated by exchange rate of USD and JPY at the time of payment.

6. DISCLAIMER.

THE EQUIPMENT BEARS NO WARRANTIES TO BUYER, WHETHER EXPRESS WARRANTIES OR IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR USE OR NON-INFRINGEMENT, AND SELLER WILL HAVE NO LIABILITY IN CONTRACT OR TORT FOR ANY DAMAGE, LOSS, COST OR EXPENSE (WHETHER DIRECT, INDIRECT, SPECIAL OR CONSEQUENTIAL) SUFFERED OR INCURRED BY BUYER, EVEN IF CAUSED BY NEGLIGENCE OR OTHER FAULT OF SELLER.

IN WITNESS WHEREOF, each of the Parties has executed this Asset Purchase Agreement as of the date first above written.

Seller:

MegaChips Corporation

By: /s/ Shinya Yoshia
Name: Shinya Yoshida
Title: Director, Mixed Signal Design Dept.

Buyer:

SiTime Corporation

By: /s/ Nara Bharath
Name: Nara Bharath
Title: Executive Vice President, Systems

Exhibit 31.1

Certification Pursuant to Rule 13a-14(a) and Rule 15d-14(a)
of the Securities Exchange Act of 1934

I, Rajesh Vashist, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of SiTime Corporation.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

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

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

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

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

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

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

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

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

Date: August 6, 2020

/s/ Rajesh Vashist

Rajesh Vashist
Chief Executive Officer

Exhibit 31.2

Certification Pursuant to Rule 13a-14(a) and Rule 15d-14(a)
of the Securities Exchange Act of 1934

I, Arthur D. Chadwick, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of SiTime Corporation.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

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

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

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

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

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

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

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

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

Date: August 6, 2020

/s/ Arthur D. Chadwick

Arthur D. Chadwick
Executive Vice President, Chief Financial Officer

Exhibit 32.1

CERTIFICATION PURSUANT TO 18 USC SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report of SiTime Corporation. (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, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 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.

Date: August 6, 2020

/s/ Rajesh Vashist

Rajesh Vashist
Chief Executive Officer

Exhibit 32.2

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 SiTime Corporation. (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, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 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.

Date: August 6, 2020

/s/ Arthur D. Chadwick

Arthur D. Chadwick
Executive Vice President, Chief Financial Officer