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

FORM 10-Q

(Mark One)
☒ QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(D) OF THE SECURITIES EXCHANGE ACT OF 1934

For the Quarterly Period Ended July 4, 2021

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: 000-22671

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

Delaware **(State or other jurisdiction of incorporation or organization)**	**77-0188504** **(I.R.S. Employer Identification No.)**

2220 Lundy Avenue, San Jose, CA 95131-1816
(Address of principal executive offices including zip code))

(408) 990-4000
(Registrant's telephone number, including area code)

Securities registered pursuant Section 12(b) of the act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, par value $.001 per share	QUIK	The Nasdaq Capital Market

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

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

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See definition 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 Securities Exchange Act). Yes ☐ No ☒

As of August 12, 2021, there were 11,541,978 shares of registrant’s common stock, par value $0.001 per share, outstanding.

Table of Contents

QUICKLOGIC CORPORATION
FORM 10-Q
July 4, 2021

TABLE OF CONTENTS

PART I. Financial Information

Item 1. Financial Statements

QUICKLOGIC CORPORATION
UNAUDITED CONDENSED CONSOLIDATED BALANCE SHEETS
(in thousands, except par value amount)

	July 4, 2021	January 3, 2021
ASSETS		
Current assets:		
Cash, cash equivalents and restricted cash	$ 18,996	$ 22,748
Accounts receivable, net of allowances for doubtful accounts of $32 and $0, respectively	2,063	1,688
Inventories	2,205	2,688
Other current assets	984	1,066
Total current assets	24,248	28,190
Property and equipment, net	577	548
Capitalized internal-use software, net	1,135	986
Right of use assets	1,483	1,839
Intangible assets	806	860
Goodwill	185	185
Other assets	280	280
TOTAL ASSETS	$ 28,714	$ 32,888
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Revolving line of credit	$ 15,000	$ 15,000
Trade payables	1,316	935
Accrued liabilities	1,606	1,340
Deferred revenue	76	52
Lease liabilities, current	674	685
Total current liabilities	18,672	18,012
Long-term liabilities:		
Notes payable, non-current	—	1,192
Lease liabilities, non-current	884	1,197
Other long-term liabilities	189	—
Total liabilities	19,745	20,401
Commitments and contingencies (see Note 11)		
Stockholders' equity:		
Preferred stock, $0.001 par value; 10,000 shares authorized; no shares issued and outstanding	—	—
Common stock, $0.001 par value; 200,000 authorized; 11,512 and 11,094 shares issued and outstanding as of July 4, 2021 and January 3, 2021, respectively	12	11
Additional paid-in capital	307,117	306,885
Accumulated deficit	(298,160)	(294,409)
Total stockholders' equity	8,969	12,487
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	$ 28,714	$ 32,888

See accompanying Notes to Unaudited Condensed Consolidated Financial Statements.

QUICKLOGIC CORPORATION
UNAUDITED CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(in thousands, except per share amounts)

	Three Months Ended		Six Months Ended	
	July 4, 2021	June 28, 2020	July 4, 2021	June 28, 2020
Revenue	$ 2,882	$ 2,196	$ 5,122	$ 4,354
Cost of revenue	1,416	1,192	2,512	2,235
Gross profit	1,466	1,004	2,610	2,119
Operating expenses:				
Research and development	1,652	2,200	3,539	4,019
Selling, general and administrative	1,794	1,665	3,741	3,544
Restructuring costs	—	34	—	513
Total operating expenses	3,446	3,899	7,280	8,076
Loss from operations	(1,980)	(2,895)	(4,670)	(5,957)
Interest expense	(32)	(183)	(64)	(263)
Gain on forgiveness of debt	—	—	1,192	—
Interest income and other income (expense), net	(45)	72	(52)	67
Loss before income taxes	(2,057)	(3,006)	(3,594)	(6,153)
Provision for (benefit from) income taxes	5	(27)	157	(9)
Net loss	$ (2,062)	$ (2,979)	$ (3,751)	$ (6,144)
Net loss per share:				
Basic and diluted	$ (0.18)	$ (0.35)	$ (0.33)	$ (0.73)
Weighted average shares outstanding:				
Basic and diluted	11,485	8,560	11,374	8,461

Note: Net loss equals comprehensive loss for all periods presented.

See accompanying Notes to Unaudited Condensed Consolidated Financial Statements.

QUICKLOGIC CORPORATION
UNAUDITED CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands)

	Six Months Ended	
	July 4, 2021	June 28, 2020
Cash flows from operating activities:		
Net loss	$ (3,751)	$ (6,144)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	323	490
Stock-based compensation	570	343
Write-down of inventories	229	43
Write-off of equipment	—	4
Gain on forgiveness of debt	(1,192)	—
Allowance for bad debt	32	—
Changes in operating assets and liabilities:		
Accounts receivable	(407)	867
Inventories	254	165
Other assets	82	425
Trade payables	569	574
Accrued liabilities and deferred revenue	290	(345)
Other long-term liabilities	189	—
Net cash used in operating activities	(2,812)	(3,578)
Cash flows from investing activities:		
Capital expenditures for property and equipment	(174)	(40)
Capitalized internal-use software	(273)	(396)
Net cash used in investing activities	(447)	(436)
Cash flows from financing activities:		
Payment of finance lease obligations	(156)	(120)
Proceeds from paycheck protection program loan	—	1,191
Proceeds from line of credit	30,000	27,000
Repayment of line of credit	(30,000)	(27,000)
Proceeds from issuance of common stock, net of issuance costs	148	7,847
Taxes paid related to settlement of equity awards	(485)	(54)
Net cash (used in) provided by financing activities	(493)	8,864
Net (decrease) increase in cash, cash equivalents and restricted cash	(3,752)	4,850
Cash, cash equivalents and restricted cash at beginning of period	22,748	21,548
Cash, cash equivalents and restricted cash at end of period	$ 18,996	$ 26,398

See accompanying Notes to Unaudited Condensed Consolidated Financial Statements.

QUICKLOGIC CORPORATION
CONDENSED CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY
(In thousands)

	Common Stock		Additional Paid-In Capital	Accumulated Deficit	Total Stockholders' Equity
	Shares	Amount			
Balance at January 3, 2021	11,094	$ 11	$ 306,885	$ (294,409)	$ 12,487
Common stock issued under stock plans and employee stock purchase plan	354	—	(484)	—	(484)
Stock-based compensation	—	—	368	—	368
Net loss	—	—	—	(1,689)	(1,689)
Balance at April 4, 2021	11,448	11	306,769	(296,098)	10,682
Common stock issued under stock plans and employee stock purchase plan	64	1	146	—	147
Stock-based compensation	—	—	202	—	202
Net loss	—	—	—	(2,062)	(2,062)
Balance at July 4, 2021	11,512	$ 12	$ 307,117	$ (298,160)	$ 8,969

	Common Stock		Additional Paid-In Capital	Accumulated Deficit	Total Stockholders' Equity
	Shares	Amount			
Balance at December 29, 2019	8,331	$ 8	$ 297,073	$ (283,258)	$ 13,823
Common stock issued under stock plans and employee stock purchase plan	52	—	(25)	—	(25)
Stock-based compensation	—	—	(398)	—	(398)
Net loss	—	—	—	(3,165)	(3,165)
Balance at March 29, 2020	8,383	8	296,650	(286,423)	10,235
Common stock issued under stock plans and employee stock purchase plan	29	—	(31)	—	(31)
Common stock offering, net of issuance costs of $1.1 million	2,500	3	7,653	—	7,656
Stock-based compensation	—	—	741	—	741
Net loss	—	—	—	(2,979)	(2,979)
Balance at June 28, 2020	10,912	$ 11	$ 305,013	$ (289,402)	$ 15,622

See accompanying Notes to Unaudited Condensed Consolidated Financial Statements

NOTES TO UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

Note 1 — The Company and Basis of Presentation

QuickLogic Corporation ("QuickLogic" or "Company") was founded in 1988 and reincorporated in Delaware in 1999. The Company enables Original Equipment Manufacturers ("OEMs") to maximize battery life for highly differentiated, immersive user experiences with Smartphone, Wearable, Hearable, Tablet and Internet-of-Things ("IoT devices"). QuickLogic delivers these benefits through industry leading ultra-low power customer programmable System on Chip ("SoC") semiconductor solutions, embedded software, and algorithm solutions for always-on voice and sensor processing and enhanced visual experiences. The Company is a fabless semiconductor provider of comprehensive, flexible sensor processing solutions, ultra-low power display bridges, and ultra-low power Field Programmable Gate Arrays ("FPGAs"). The Company's wholly owned subsidiary, SensiML Corporation ("SensiML") provides Analytics Toolkit, which is used in many of the applications where the Company's ArcticPro™, eFPGA intellectual property ("IP") plays a critical role. SensiML Analytics toolkit is an end-to-end software suite that provides OEMs a straightforward process for developing pattern matching sensor algorithms using machine learning technology that are optimized for ultra-low power consumption.

The accompanying interim condensed consolidated financial statements are unaudited. In the opinion of the Company's management, these statements have been prepared in accordance with the United States generally accepted accounting principles ("U.S. GAAP"), and include all adjustments, consisting only of normal recurring adjustments, necessary to provide a fair statement of results for the interim periods presented. The Company recommends that these interim Unaudited Condensed Consolidated Financial Statements be read in conjunction with the Company's Form 10-K for the year ended January 3, 2021, which was filed with the Securities and Exchange Commission ("SEC") on March 23, 2021. Operating results for the three and six months ended July 4, 2021 are not necessarily indicative of the results that may be expected for the full year.

QuickLogic's fiscal year ends on the Sunday closest to December 31 and each fiscal quarter ends on the Sunday closest to the end of each calendar quarter. QuickLogic's second fiscal quarters for 2021 and 2020 ended on July 4, 2021 and June 28, 2020, respectively.

COVID-19 - Impact on Business

On January 30, 2020, the World Health Organization ("WHO") declared a global emergency due to the COVID-19 pandemic, and on February 28, 2020, the WHO raised its assessment of the threat from high to very high at a global level. The social and economic impact of the COVID-19 outbreak has continued to increase exponentially since this declaration. The outbreak has resulted in significant governmental measures being implemented to control the spread of COVID-19 and countries across the world continue to manage repeated waves of the pandemic, including variant strains of COVID-19 amid uneven progress toward vaccination. Restrictions on travel, business operations and the movement of people in many regions of the world in which the Company operates, and the imposition of further shelter-in-place or similarly restrictive work-from-home orders would impact many of the Company's offices and employees, including those located in the United States. As a result, the Company has substantially limited the presence of personnel in its offices in several impacted locations, implemented travel restrictions and withdrawn from various industry events. The Company has also experienced some disruption and delays in its supply chain, customer deployment plans, and logistics challenges, including certain limitations on its ability to access customer fulfillment and service sites.

As such, while COVID-19 has had an impact on the Company's financial results on the three and six months ended July 4, 2021, the COVID-19 pandemic and its potential effects on the Company's business in its fiscal 2021 remain dynamic, and the broader implications for its business and future results of operations remain uncertain and cannot be predicted. These implications could include further disruptions or restrictions on the Company's ability to source, manufacture or distribute its products, including temporary disruptions to the facilities of its contract manufacturers in China, Taiwan, Philippines and Singapore, or the facilities of its suppliers and their contract manufacturers globally. Additionally, multiple countries have imposed and may further impose restrictions on business operations and movement of people and products to limit the spread of COVID-19. Delays in production or delivery of components or raw materials that are part of the Company's global supply chain due to restrictions imposed to limit the spread of COVID-19 could delay or inhibit its ability to obtain the supply of components and finished goods. If COVID-19 becomes more prevalent in the locations where the Company, its customers or suppliers conduct business, or the Company experiences more pronounced disruptions in its operations, the Company may experience constrained supply or curtailed demand that may materially adversely impact its business and results of operations. In addition, any other widespread health crisis that could adversely affect global and regional economies, financial markets and overall demand environment for the Company's products could have a material adverse effect on the Company's business, cash flows or results of operations. It is difficult to accurately predict the full impact that COVID-19 will have on the Company's future results from operations, financial condition, liquidity and cash flows due to numerous uncertainties, including the duration and severity of the pandemic and related containment measures. The Company will continue to closely monitor the pandemic's associated effects on all aspects of the business.

Restructuring

In January 2020, the Company implemented a restructuring plan to lower annual operating expenses. The restructuring plan was approved by the Company's Board of Directors on January 24, 2020. Pursuant to the restructuring plan, the Company recorded $34,000 and $513,000 restructuring costs for the three and six months ended June 28, 2020, respectively, consisting primarily of employee severance related costs and facilities costs. There were no restructuring charges incurred for the three and six months ended July 4, 2021.

Liquidity

The Company has financed its operations and capital investments through sales of common stock, finance and operating leases, a revolving line of credit and cash flows from operations. As of July 4, 2021, the Company's principal sources of liquidity consisted of cash, cash equivalents and restricted cash of $19.0 million, including $15.0 million drawn down from its revolving line of credit with Heritage Bank of Commerce ("Heritage Bank") and $1.2 million loan received under the Paycheck Protection Program ("PPP") which was forgiven in January of 2021.

On December 11, 2020, the Company entered into a Second Amendment (the "Second Amendment") to the Amended and Restated Loan Agreement with Heritage Bank originally entered into on December 21, 2018 (the "Amended and Restated Loan Agreement"). The Second Amendment extended the loan maturity date for one year through September 28 2022, and amended the interest to a rate per annum equal to one half of one percentage point (0.50%) above the prime rate.

The Company was in compliance with all loan covenants as of July 4, 2021. As of July 4, 2021, the Company had $15.0 million of outstanding revolving line of credit with an interest rate of 3.75%.

On May 6, 2020, the Company entered into a loan agreement with Heritage Bank for a loan of $1.2 million pursuant to the PPP under the Coronavirus Aid, Relief, and Economic Security Act enacted on March 27, 2020, or CARES Act. On January 26, 2021, the Company received notice from Heritage Bank that amounts under the loan agreement had been forgiven. See Note 5 to these Unaudited Condensed Consolidated Financial Statements for the details.

On June 22, 2020, the Company closed an underwritten public offering of 2.5 million shares of common stock, $0.001 par value per share at a price of $3.50 per share. The Company received gross proceeds from the offering of approximately $8.8 million and incurred stock issuance costs of approximately $1.1 million. Under the terms of the underwriting agreement, the Company granted the underwriter a 30-day option to purchase up to an additional 375,000 shares of common stock to cover overallotments. On July 21, 2020 the underwriter's partially exercised the option to purchase 141,733 additional shares of common stock in connection with the offering, resulting in additional gross proceeds to the Company of approximately $496,000 and incurred additional stock issuance costs of approximately $52,000. Total gross proceeds received from this offering was approximately $9.3 million and incurred total stock issuance costs of approximately $1.2 million. Net proceeds received from this offering after deducting stock issuance costs was approximately $8.1 million.

The Company currently uses its cash to fund its working capital to accelerate the development of next generation products and for general corporate purposes. Based on past performance and current expectations, the Company believes that its existing cash and cash equivalents, together with available financial resources from the Revolving Facility with Heritage Bank, will be sufficient to fund its operations and capital expenditures and provide adequate working capital for the next twelve months. We continue to monitor our financial performance to ensure sufficient liquidity to fund operations and execute on our business plan.

Various factors can affect the Company's liquidity, including, among others: the level of revenue and gross profit as a result of the cyclicality of the semiconductor industry, the conversion of design opportunities into revenue, the market acceptance of existing and new products including solutions based on its ArcticLink®, PolarPro® platforms, eFPGA, EOS S3 SoC, Quick AI solution, and SensiML software tools, the fluctuations in revenue as a result of product end-of-life, the fluctuations in revenue as a result of the stage in the product life cycle of its customers' products, the costs of securing access to and availability of adequate manufacturing capacity, the levels of inventories and wafer purchase commitments, customer credit terms, the amount and timing of research and development expenditures, the timing of new product introductions, production volumes and product quality, sales and marketing efforts, the value and liquidity of its investment portfolio, changes in operating assets and liabilities, the ability to obtain or renew debt financing and to remain in compliance with the terms of existing credit facilities, the ability to raise funds from the sale of equity in the Company, the ability to capitalize on synergies with our newly acquired subsidiary SensiML; the issuance and exercise of stock options and participation in the Company's employee stock purchase plan and other factors related to the uncertainties of the industry and global economics.

Over the longer term, the Company anticipates that sales generated from its new product offerings and existing cash and cash equivalents, with financial resources from its Revolving Facility with the Heritage Bank and its ability to raise additional capital in the public capital markets, will be sufficient to satisfy its operations and capital expenditures. However, the Company cannot provide any assurance that it will be able to raise additional capital, if required, or that such capital will be available on terms acceptable to the Company. The inability of the Company to generate sufficient sales from its new product offerings and/or raise additional capital if needed could have a material adverse effect on the Company's operations and financial condition, including its ability to maintain compliance with its lender's financial covenants.

Principles of Consolidation

The Unaudited Condensed Consolidated Financial Statements include the accounts of QuickLogic and its wholly owned subsidiaries. All intercompany accounts and transactions have been eliminated.

Foreign Currency

The functional currency of the Company's non-U.S. operations is the U.S. dollar. Accordingly, all monetary assets and liabilities of these foreign operations are translated into U.S. dollars at current period-end exchange rates and non-monetary assets and related elements of expense are translated using historical exchange rates. Income and expense elements are translated to U.S. dollars using the average exchange rates in effect during the period. Gains and losses from the foreign currency transactions of these subsidiaries are recorded as interest income and other income (expense), net in the unaudited condensed consolidated statements of operations.

Uses of Estimates

The preparation of these Unaudited Condensed Consolidated Financial Statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosures of contingent assets and liabilities and the reported amounts of revenue and expenses during the period. Actual results could differ materially from those estimates, particularly in relation to revenue recognition, the allowance for doubtful accounts, sales returns, valuation of long-lived assets including mask sets, valuation of goodwill, capitalized internal-use software and related amortizable lives and intangibles related to the acquisition of SensiML, including the estimated useful lives of acquired intangible assets, valuation of inventories including identification of excess quantities, market value and obsolescence, measurement of stock-based compensation awards, accounting for income taxes and estimating accrued liabilities.

Contracts with customers often include promises to transfer multiple products and services to a customer. Determining whether products and services are considered distinct performance obligations that should be accounted for separately versus together may require significant judgment.

Judgment is required to determine the Stand-alone Selling Price (“SSP”) for each distinct performance obligation. The Company uses a range of amounts to estimate SSP when each of the products and services are sold separately and determines the discount to be allocated based on the relative SSP of the various products and services when products and services sold are bundled. In instances where SSP is not directly observable, such as when the Company does not sell the product or service separately, it determines the SSP using information that may include market conditions and other observable inputs. The Company typically has more thanone SSP for individual products and services due to the stratification of those products and services by customers. In these instances, the Company may use information such as the size of the customer, customer tier, type of the technology used, customer demographics, geographic region and other factors in determining the SSP.

Concentration of Risk

The Company's accounts receivable are denominated in U.S. dollars and are derived primarily from sales to customers located in North America, Asia Pacific, and Europe. The Company performs ongoing credit evaluations of its customers and generally does not require collateral. See Note 10 to the Unaudited Condensed Consolidated Financial Statements for information regarding concentrations associated with accounts receivable.

Note 2 — Significant Accounting Policies

During the sixmonths period ended July 4, 2021, there were no changes in the Company's significant accounting policies from its disclosures in the Annual Report on Form 10-K for the year ended January 3, 2021, except for the new accounting standards adopted during the six months ended July 4, 2021. For a discussion of the significant accounting policies, please see the Annual Report on Form 10-K for the fiscal year ended January 3, 2021, filed with the SEC on March 23, 2021. For a discussion of the new accounting standards adopted during the six months of 2021, see “New Accounting Pronouncements” below.

Fair Value Measurements

The Company's cash, cash equivalents and restricted cash include money market account balance of $19.0 million and $22.7 million as of July 4, 2021, and January 3, 2021, respectively. Fair value of the Company's money market account balance with Heritage Bank equals to book value.

Restricted cash

Cash, cash equivalent and restricted cash includes an amount of $100,000 pledged as cash security related to the use of credit cards as of July 4, 2021, and January 3, 2021.

New Accounting Pronouncements

Recently adopted accounting pronouncements

In December 2019, the FASB issued ASU No. 2019-12, *Simplifying the Accounting for Income Taxes*, which removes certain exceptions to the general principles of ASC 740, in order to reduce the cost and complexity of its application. These changes include elimination to the exceptions for (1) Intra-period tax allocation, (2) Deferred tax liabilities related to outside basis differences, and (3) Year-to-date losses in interim periods. The Company adopted this standard prospectively effective January 4, 2021, with an insignificant impact to the Unaudited Condensed Consolidated Financial Statements.

New accounting pronouncements not yet adopted

In August 2020, the FASB issued ASU No. 2020-06, *Debt—Debt with Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging—Contracts in Entity's Own Equity (Subtopic 815-40)*: Accounting for Convertible Instruments and Contracts in an Entity's Own Equity, which address issues identified as a result of the complexity associated with applying generally accepted accounting principles for certain financial instruments with characteristics of liabilities and equity. This amendment is effective for public business entities that meet the definition of a Securities and Exchange Commission ("SEC") filer, excluding entities eligible to be smaller reporting companies as defined by the SEC, for fiscal years beginning after December 15, 2021, including interim periods within those fiscal years. The Company is currently evaluating the potential impact on its Unaudited Condensed Consolidated Financial Statements.

Note 3 — Net Loss Per Share

Basic loss per share is computed by dividing net loss available to common stockholders by the weighted average number of common shares outstanding during the period. Diluted net loss per share was computed using the weighted average number of common shares outstanding during the period plus potentially dilutive common shares outstanding during the period under the treasury stock method. In computing diluted net loss per share, the weighted average stock price for the period is used in determining the number of shares assumed to be purchased from the exercise of stock options and warrants.

For the three and six months ended July 4, 2021 and June 28, 2020, 254,895 and 626,178 shares of common stock, respectively, associated with equity awards and the estimated number of shares to be purchased under the current offering period of the 2009 Employee Stock Purchase Plan were outstanding. These shares were not included in the computation of diluted net loss per share, as they were considered anti-dilutive due to the net losses the Company experienced during these periods. Warrants to purchase up to 386,100 shares were issued in connection with May 29, 2018, stock offering were not included in the diluted loss per share calculation of the three and six months ended July 4, 2021 and June 28, 2020, as they were also considered anti-dilutive due to the net loss the Company experienced during these periods.

Note 4 — Balance Sheet Components

The following table provides details relating to certain balance sheet line items as ofJuly 4, 2021, and January 3, 2021 (in thousands):

	July 4, 2021	January 3, 2021
Inventories:		
Raw materials	$ 156	$ 191
Work-in-process	1,380	1,842
Finished goods	669	655
	$ 2,205	$ 2,688
Other current assets:		
Prepaid taxes, royalties and other prepaid expenses	$ 792	$ 884
Other	192	182
	$ 984	$ 1,066
Property and equipment, net:		
Equipment	$ 10,510	$ 10,471
Software	1,889	1,783
Furniture and fixtures	33	33
Leasehold improvements	466	466
	12,898	12,753
Less: Accumulated depreciation and amortization	(12,321)	(12,205)
	$ 577	$ 548
Capitalized internal-use software, net:		
Capitalized internal-use software	$ 1,439	$ 1,166
Less: Accumulated amortization	(304)	(180)
	$ 1,135	$ 986
Accrued liabilities:		
Employee related accruals	$ 931	$ 762
Other	675	578
	$ 1,606	$ 1,340

Note 5 — Debt Obligations

Revolving Line of Credit

As of July 4, 2021 and January 3, 2021, the Company had $15.0 million of revolving debt outstanding with an interest rates of 3.75% per annum. The Bank has a first priority security interest in substantially all of the Company's tangible and intangible assets to secure any outstanding amounts under the Amended and Restated Loan Agreement. The Company was in compliance with all loan covenants under the Amended and Restated Loan Agreement as of the end of the current reporting period. Interest expense recognized were $22,000 and $172,000 for the three months ended July 4, 2021 and June 28, 2020, respectively, and $46,000 and $242,000 for the six months ended July 4, 2021 and June 28, 2020, respectively.

Payroll Protection Program Loan

On May 6, 2020, the Company entered into a $1.2 million PPP loan agreement with Heritage Bank ("PPP Loan") under the CARES Act as implemented by the U.S. Small Business Administration. The PPP Loan was evidenced by a promissory note ("PPP Note") dated May 6, 2020 and matured two years from the disbursement date. The PPP Note bore interest of 1.00% per annum, with the first six months of interest deferred. Principal and interest were payable monthly commencing six months after the disbursement date. The Company applied for loan forgiveness in the fourth quarter of fiscal 2020 in accordance with the terms of the CARES Act. On January 26, 2021, the Company received notice from Heritage Bank that amounts under the PPP Note had been forgiven. The gain related to the loan forgiveness of approximately $1.2 million is reported in other income as gain on forgiveness of debt on the Company's Unaudited Condensed Statements of Operations for the six months ended July 4, 2021.

Note 6 — Leases

The Company entered into operating leases for office space for its headquarters, for its domestic and foreign subsidiaries and for its sales offices. Finance leases are primarily for engineering design software. Operating leases generally have lease terms of one to five years. Finance leases are generally two to three years. As of July 4, 2021, the balance of right-of-use assets was approximately $1.5 million and the lease liability was approximately $1.6 million for operating and finance leases for the headquarters in San Jose and for the operating subsidiaries of SensiML in Oregon and SensiML in India. The lease term of the San Diego facility expired in July 2020 and the office was closed. On July 10, 2020, the Indian subsidiary leased a smaller office premises of approximately1,100 square feet for a period ofeleven months to accommodate the reduced headcount. Effective July 2020, the rental expense of the unused office in India were expensed to restructuring charges. The lease term of the Indian facility expired in July 2021. Total rent expense for the three months ended July 4, 2021 and June 28, 2020 was approximately $106,000 and $158,000, respectively. Total rent expense for the six months ended July 4, 2021 and June 28, 2020 was approximately $213,000 and $305,000, respectively.

The following table provides the expenses related to operating and finance leases (in thousands):

	Three Months Ended		Six Months Ended	
	July 4, 2021	June 28, 2020	July 4, 2021	June 28, 2020
Operating lease costs:				
Fixed	$ 101	$ 153	$ 204	$ 294
Short term	5	5	9	11
Total	$ 106	$ 158	$ 213	$ 305
Finance lease costs:				
Amortization of ROU asset	$ 98	$ 52	$ 513	$ 101
Interest	6	8	52	14
Total	$ 104	$ 60	$ 565	$ 115

The following table provides the details of supplemental cash flow information. The right-of-use assets obtained in exchange for new finance and operating lease liabilities represent the new operating and finance leases entered into during the six months ended July 4, 2021 and June 28, 2020 (in thousands):

	Six Months Ended	
	July 4, 2021	June 28, 2020
Cash paid for amounts included in the measurement of lease liabilities:		
Operating cash flows used for operating leases	$ 202	$ 260
Operating cash flows used for finance leases	5	14
Financing cash flows used for financing leases	156	120
Total	$ 363	$ 394
Right-of-use assets obtained in exchange for finance lease obligations	$ —	$ 773

The following table provides the details of right-of-use assets and lease liabilities as ofJuly 4, 2021 and January 3, 2021 (in thousands):

	July 4, 2021	January 3, 2021
Right-of-use assets:		
Operating leases	$ 974	$ 1,134
Finance leases	509	705
Total right-of-use assets	$ 1,483	$ 1,839
Lease liabilities:		
Operating leases	$ 1,045	$ 1,212
Finance leases	513	670
Total lease liabilities	$ 1,558	$ 1,882

The following table provided the details of future lease payments for operating and finance leases as ofJuly 4, 2021 (in thousands):

	Operating Leases	Finance Leases
2021 (Remaining period)	$ 200	$ 205
2022	409	334
2023	421	—
2024	107	—
Total lease payments	1,137	539
Less: Interest	(92)	(26)
Present value of lease liabilities	$ 1,045	$ 513

The following table provides the details of lease terms and discount rates as of July 4, 2021 and January 3, 2021:

	July 4, 2021	January 3, 2021
Right-of-use assets:		
Weighted-average remaining lease term (years)		
Operating leases	2.75	3.24
Finance leases	1.72	2.21
Weighted-average discount rates:		
Operating leases	6.00%	6.00%
Finance leases	5.50%	5.50%

Note 7 — Employee Stock Plans

2019 Stock Plan

On April 24, 2019, the Company’s Board of Directors and shareholders approved the 2019 Stock Plan (“2019 Plan”) to replace the 2009 Stock Plan. Under the 2019 Plan, 357,143 shares of common stock were made available for grants, plus any shares subject to any outstanding options or other awards granted under the Company’s 2009 Stock Plan that expire, including the 299,070 shares then available, or which are forfeited, cancelled, returned to the Company for failure to satisfy vesting requirements, settled for cash or otherwise terminated without payment being made thereunder.

The 2019 Plan was amended and restated by the Board of Directors on March 5,2020 and approved by the Company’s stockholders on April 22, 2020 to, among other things, reserve an additional 550,000 shares of common stock for issuance under the 2019 Plan. The 2019 Plan was amended and restated by the Board of Directors on March 3, 2021 and approved by the Company’s stockholders on May 12, 2021 to, among other things, reserve an additional 600,000 shares of common stock for issuance under the 2019 Plan. As of July 4, 2021, approximately 1,158,052 shares of the Company’s common stock were available for issuance under the 2019 Plan.

2009 Employee Stock Purchase Plan

The 2009 Employee Stock Purchase Plan (“2009 ESPP”) was adopted in March 2009 and amended by the Board of Directors in January 2015 and in February 2017, and approved by the Company's stockholders on April 23, 2015 and April 26, 2017, to reserve an additional 71,429 and 107,143 shares of common stock, respectively, for issuance under the 2009 ESPP.

The 2009 ESPP was amended and restated by the Board of Directors on March 5, 2020 and approved by the Company’s stockholders on April 22, 2020. The amendment, among other things, extend the term of the plan until March 5, 2029 and reserved an additional 300,000 shares of common stock for issuance under the 2009 ESPP. As of July 4, 2021, approximately 281,859 shares of the Company’s common stock were reserved for issuance under the 2009 ESPP.

Note 8 — Stock-Based Compensation

Stock-based compensation expense included in the Company's consolidated financial statements for the three and six months ended July 4, 2021 and June 28, 2020 was as follows (in thousands):

	Three Months Ended		Six Months Ended	
	July 4, 2021	June 28, 2020	July 4, 2021	June 28, 2020
Cost of revenue	$ 18	$ 31	$ 54	$ 43
Research and development	82	486	239	22
Selling, general and administrative	102	224	277	278
Total	$ 202	$ 741	$ 570	$ 343

During the six months ended June 28, 2020, the Company reversed stock-based compensation expense related to the cancellation of certain unvested performance-based RSUs and restructuring-related terminations. During the second quarter of 2020, the Company issued fully vested RSUs in lieu of cash for variable compensation to certain employees.

No stock-based compensation was capitalized during any period presented above.

No stock options were granted during the three and six months ended July 4, 2021 and June 28, 2020.

Stock-Based Compensation Award Activity

The following table summarizes the activity in the shares available for grant under the 2019 Plan during the six months ended July 4, 2021 (in thousands):

	Shares Available for Grants
Balance at January 3, 2021	320
Authorized shares	600
RSUs granted	(30)
Options cancelled	11
RSUs forfeited or expired	19
PRSUs forfeited or expired	239
Balance at July 4, 2021	1,159

Stock Options

The following table summarizes stock options outstanding and stock option activity under the 2009 Plan and the 2019 Plan, and the related weighted average exercise price, for the six months ended July 4, 2021:

	Number of Shares (in thousands)	Weighted Average Exercise Price	Weighted Average Remaining Term (in years)	Aggregate Intrinsic Value (in thousands)
Balance outstanding at January 3, 2021	121	$ 28.46	3.75	—
Forfeited or expired	(11)	$ 19.59		
Balance outstanding at July 4, 2021	110	$ 29.31	3.16	$ —
Exercisable at July 4, 2021	110	$ 29.31	3.16	$ —
Vested and expected to vest at July 4, 2021	110	$ 29.31	3.16	$ —

No stock options were granted during the three and six months ended July 4, 2021 and June 28, 2020.

Total stock-based compensation related to stock options was approximately $0 and $14,000 for the three months ended July 4, 2021 and June 28, 2020 respectively, and $0 and $28,000 for the six months ended July 4, 2021 and June 28, 2020, respectively. As of July 4, 2021, the fair value of unvested stock options, net of forfeitures, was $0.

Restricted Stock Units

The Company grants restricted stock units ("RSUs") and performance restricted stock units ("PRSUs") to employees and directors with various vesting terms. RSUs entitle the holder to receive, at no cost, one common share for each RSU as it vests. In general, the Company's policy is to withhold shares in settlement of employee tax withholding obligations upon the vesting of RSUs. The stock-based compensation expense related to RSUs and PRSUs was approximately $165,920 and $719,000 for the three months ended July 4, 2021 and June 28, 2020 respectively, and $503,943 and $306,000 for the six months ended July 4, 2021 and June 28, 2020 respectively. Due to the cancellation of certain performance based RSUs and cancellations relating to restructuring, which was implemented in January 2020, the Company reversed stock-based compensation previously recorded resulting in a credit to the stock-based compensation during the six months ended June 28, 2020.

As of July 4, 2021 and June 28, 2020, there was approximately $225,011 and $1.7 million, respectively, in unrecognized compensation expense related to RSUs. The remaining unrecognized stock-based compensation expense as of July 4, 2021 is expected to be recorded over a weighted average period of 1.17 years.

A summary of activity for the Company's RSUs and PRSUs for the six months ended July 4, 2021 is as follows:

	RSUs & PRSUs Outstanding	
	Number of Shares (in thousands)	Weighted Average Grant Date Fair Value
Nonvested at January 3, 2021	800	$ 4.99
Granted	30	5.11
Vested	(458)	4.88
Forfeited	(258)	4.98
Nonvested at July 4, 2021	114	$ 5.46

Employee Stock Purchase Plan

Total stock-based compensation related to the Company's ESPP was approximately $36,000 and $8,000 for the three months ended July 4, 2021 and June 28, 2020, respectively, and $66,000 and $8,000 for the six months ended July 4, 2021 and June 28, 2020, respectively.

Note 9 — Income Taxes

The Company recorded a net income tax expense of $5,000 and a net income benefit of $27,000 for the three months ended July 4, 2021 and June 28, 2020, respectively, and a net income tax expense of $157,000 and a net income tax benefit of $9,000 for the six months ended July 4, 2021 and June 28, 2020, respectively.

A majority of the income tax expense for the first quarter of 2021 relates to the Company's foreign subsidiaries, which are cost-plus entities and withholding tax of $125,000 related to one-time distribution resulting from restructuring in India. A tax expense resulting from the assessment and statutory closing of prior years' foreign tax returns relates to the Company's foreign subsidiaries, which are cost-plus entities.

The Company believes it is more likely than not that federal and state net deferred tax assets will not be fully realized. In assessing the realizability of deferred tax assets, the Company's management considers whether it is more likely than not that some portion or all of our deferred tax assets will be realized. The ultimate realization of deferred tax assets is dependent upon the generation of future taxable income during the periods in which those temporary differences become deductible. A valuation allowance is recorded for loss carryforwards and other deferred tax assets where it is more likely than not that such deferred tax assets will not be realized. Accordingly, the Company continues to maintain a valuation allowance against all of U.S. and certain foreign net deferred tax assets as of July 4, 2021. The Company continues to maintain a full valuation allowance against net federal, state and certain foreign deferred tax assets until there is sufficient evidence to support recoverability of the Company's deferred tax assets.

The Company had no unrecognized tax benefits as of July 4, 2021 and January 3, 2021 which would affect the Company's effective tax rate. The Company does not anticipate any material changes to its unrecognized tax benefits during the next 12 months.

Accrued interest and penalties related to unrecognized tax benefits are recognized as part of the income tax provision in the condensed consolidated statements of operations.

The Company is subject to U.S. federal income tax as well as income taxes in many U.S. states and foreign jurisdictions in which the Company operates. The U.S. tax years from 1999 forward remain effectively open to examination due to the carryover of unused net operating losses and tax credits.

Under the Tax Reform Act of 1986, the amount of and the benefit from net operating loss carryforwards and credit carryforwards may be impaired or limited in certain circumstances. Events which may restrict utilization of a company's net operating loss and credit carryforwards include, but are not limited to, certain ownership change limitations as defined in Internal Revenue Code Section 382 and similar state provisions. In the event the Company has had a change of ownership, utilization of carryforwards could be restricted to an annual limitation. The annual limitation may result in the expiration of net operating loss carryforwards and credit carryforwards before utilization.

The Company has not undertaken a study to determine if its net operating losses are limited. In the event the Company previously experienced an ownership change, or should experience an ownership change in the future, the amount of net operating losses and research and development credit carryovers available in any taxable year could be limited and may expire unutilized.

On March 27, 2020, the United States enacted the Coronavirus Aid, Relief, and Economic Security Act ("CARES Act") as a result of the Coronavirus pandemic. The Act includes provisions relating to loan programs for small businesses ("Paycheck Protection Program" or "PPP"), refundable payroll tax credits, deferment of the employer portion of certain payroll taxes, net operating loss carryback periods, alternative minimum tax credit refunds, modifications of the net interest deduction limitations and technical corrections to tax depreciation methods for qualified improvement property. The Company applied for and received $1.2M of the PPP loan in Q2 2020 and the amount was utilized on qualified business expenses under the guidance of PPP. On December 27, 2020, the President signed the Consolidated Appropriations Act 2021 (the "Bill") into law. The Bill confirms the business expenses paid out of PPP loans maybe deducted for federal income tax purposes and the borrower's tax basis and other attributes of the borrower's assets will not be reduced as a result of the loan forgiveness. The Company applied for the loan forgiveness and the application was approved by the lender on January 26, 2021. The loan was reclassified to gain on forgiveness of debt in Q1 2021 for GAAP and is not taxable for federal purposes according to the CARES Act.

California has issued specific guidance regarding its conformity to the CARES Act. No provisions are expected to have a material impact on the Company, except for that under Assembly Bill 80 ("AB 80"), which was signed into law on April 29, 2021, the business expenses paid out of the PPP loan is not deductible for publicly-traded companies for California tax purposes.

On June 29, 2020, California Governor Gavin Newsom signed Assembly Bill 85 ("AB 85") into law, which temporarily suspends net operating loss deductions for most businesses and limits certain general business credits. These provisions will be applied retroactively to tax years beginning on or after January 1, 2020 through December 31, 2022. However, the law provides for a small business exemption for taxpayers with income subject to tax under $1 million. The Company has evaluated the current legislation and does not anticipate AB 85 to have a material impact on its financial statements.

On December 18, 2019, the FASB issued new guidance ASU 2019-12 that simplifies the accounting for income taxes to reduce complexity in accounting standards which the Company adopted on January 4, 2021. The majority of the key provisions of the ASU 2019-12 does not have a material impact on the Company's consolidated financial statements. We considered the majority of our non-U.S. subsidiaries' undistributed earnings to be permanently reinvested. Therefore no U.S. or foreign income taxes have been recorded on the permanently reinvested amount as of July 4, 2021. Due to potential restructuring plans in India, there may be a one-time distribution in 2021. As a result, we have recorded withholding taxes of approximately $125,000 on the potential one-time distribution. However, the rest of our foreign subsidiaries' earnings continue to be permanently reinvested with no deferred tax liabilities necessary.

We considered the majority of our non-U.S. subsidiaries' undistributed earnings to be permanently reinvested. Therefore no U.S. or foreign income taxes have been recorded on the permanently reinvested amount as of July 4, 2021. Due to potential restructuring plans in India, there may be a one-time distribution in 2021. As a result, we have recorded withholding taxes of approximately $125,000 on the potential one-time distribution. However, the rest of our foreign subsidiaries' earnings continue to be permanently reinvested with no deferred tax liabilities necessary.

Note 10 — Information Concerning Product Lines, Geographic Information and Revenue Concentration

The Company identifies its business segment based on business activities, management responsibility and geographic location. For all periods presented, the Company operated in a single reportable business segment.

The following is a breakdown of revenue by product line (in thousands):

	Three Months Ended		Six Months Ended	
	July 4, 2021	June 28, 2020	July 4, 2021	June 28, 2020
New products	$ 1,262	$ 820	$ 2,337	$ 1,306
Mature products	1,620	1,376	2,785	3,048
Total revenue	$ 2,882	$ 2,196	$ 5,122	$ 4,354

Note: New products include all products manufactured on 180 nanometer or smaller semiconductor processes, eFPGA IP license, Quick AI and SensiML AI software as a service ("SaaS") revenue. Mature products include all products produced on semiconductor processes larger than 180 nanometer and includes related royalty revenue.

The following is a breakdown of revenue by shipment destination (in thousands):

	Three Months Ended		Six Months Ended	
	July 4, 2021	June 28, 2020	July 4, 2021	June 28, 2020
Asia Pacific (1)	$ 1,075	$ 779	$ 1,828	$ 1,185
North America (2)	565	1,282	1,824	2,234
Europe	1,242	135	1,470	935
Total revenue	$ 2,882	$ 2,196	$ 5,122	$ 4,354

(1) Asia Pacific includes revenue from Japan of $917,000, or 32% of total revenue and $771,000 or 35% of total revenue for the quarters ended July 4, 2021 and June 28, 2020, respectively. For the six months ended July 4, 2021 and June 28, 2020, revenue from Japan was $1.6 million, or 32% of total revenue, and $1.2 million, or 27% of total revenue, respectively.

(2) North America includes revenue from the United States of $562,000, or 19% of total revenue, and $1.3 million, or 58% of total revenue, for the three months ended July 4, 2021 and June 28, 2020, respectively. For the six months ended July 4, 2021 and June 28, 2020 revenue from the United States was $1.8 million, or 35% of total revenue, and $2.2 million, or 51% of total revenue, respectively.

The following distributors and customers accounted for 10% or more of the Company's revenue for the periods presented:

	Three Months Ended		Six Months Ended	
	July 4, 2021	June 28, 2020	July 4, 2021	June 28, 2020
Distributor "A"	14%	25%	13%	31%
Distributor "C"	*	*	16%	17%
Distributor "E"	29%	29%	29%	21%
Customer "B"	*	12%	*	13%
Customer "E"	35%	*	20%	*
Customer "F"	29%	29%	29%	21%
Customer "M"	*	12%	*	*

* Represents less than 10% of revenue as of the dates presented.

The following distributors and customers accounted for 10% or more of the Company's accounts receivable as of the dates presented:

	July 4, 2021	January 3, 2021
Distributor "A"	11%	*
Distributor "C"	10%	*
Distributor "E"	22%	*
Distributor "P"	*	67%
Distributor "Q"	*	10%
Distributor "J"	51%	*

* Represents less than 10% of accounts receivable as of the dates presented.

Note 11 — Commitments and Contingencies

Commitments

The Company's manufacturing suppliers require the forecast of wafer starts several months in advance. The Company is required to take delivery of and pay for a portion of this forecasted wafer volume. As of July 4, 2021, and January 3, 2021, the Company had $559,000 and $60,000, respectively, of outstanding commitments for the purchase of wafer and finished goods inventory.

The Company has purchase obligations with certain suppliers for the purchase of other goods and services entered into in the ordinary course of business. As of July 4, 2021, total outstanding purchase obligations for other goods and services were $945,000 due within the next twelve months.

Litigation

From time to time, the Company may become involved in legal actions arising in the ordinary course of business including, but not limited to, intellectual property infringement and collection matters. Absolute assurance cannot be given that any such third party assertions will be resolved without costly litigation; in a manner that is not adverse to the Company's financial position, results of operations or cash flows; or without requiring royalty or other payments which may adversely impact gross profit. As of July 4, 2021, the Company was not involved in any litigation.

India Transfer Pricing Notice

On January 27, 2021, the Company received an order from the Income Tax Department of the Ministry of Finance in India (the "DRP, or "the Department") disputing the transfer pricing rate the Company used for Assessment Years 2017-18, the result of which may affect later years. It is the intention of the Company to appeal such order as the rate requested by the government of India is not representative of the results of operations of the company, as well as other factors. In addition, on April 30, 2021, the Company filed an appeal with the DRP, citing various issues with the Department's calculations and choice of comparable entities used to arrive at its initial assessment. The Company does not expect a response to such appeal for six to nine months, or more due in part to the complete closure of most governmental offices including the Ministry of Finance related to India's COVID-19 pandemic. The Company is in the process of evaluating the effect such order may have on its foreign tax provision. Such effect, if any, would be to the tax provision and amounts owed under taxes to foreign jurisdictions only.

Note 12 — Subsequent Events

On August 16, 2021, the Company entered into a Third Amendment (the "Third Amendment") to the Amended and Restated Loan Agreement with Heritage Bank. The Third Amendment (a) waived the Company's non-compliance with the minimum cash covenant which obligated the Company to maintain at least $3.0 million of unrestricted cash at all times and (b) amended this obligation such that the Company shall now be required to maintain unrestricted cash in its accounts at the Bank in an amount of at least $3.0 million measured i) immediately prior to the funding of any credit extension, and ii) at all times that any advance is outstanding. In connection with the Third Amendment, the Company was obligated to pay Heritage Bank a waiver and amendment fee equal to $5,000 plus all bank expenses incurred through the date of the Third Amendment.

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

Forward-Looking Statements

The following Management's Discussion and Analysis of Financial Condition and Results of Operations, as well as information contained in "Risk Factors" in Part II, Item 1A and elsewhere in this Quarterly Report on Form 10-Q, contain "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. We intend that these forward-looking statements be subject to the safe harbor created by those provisions. Forward-looking statements are generally written in the future tense and/or are preceded by words such as "will," "may," "should," "forecast," "could," "expect," "suggest," "believe," "anticipate," "intend," "plan," "future," "potential," "target," "seek," "continue," "if" or other similar words. Forward-looking statements include statements regarding our strategies as well as (1) our revenue levels, including the commercial success of our solutions and new products, (2) the conversion of our design opportunities into revenue, (3) our liquidity, (4) our gross profit and breakeven revenue level and factors that affect gross profit and the break-even revenue level, (5) our level of operating expenses, (6) our research and development efforts, (7) our partners and suppliers, (8) industry and market trends, (9) our manufacturing and product development strategies and (10) our competitive position.

The following discussion should be read in conjunction with the attached Unaudited Condensed Consolidated Financial Statements and notes thereto, and with our audited consolidated financial statements and notes thereto for the fiscal year ended January 3, 2021, found in our Annual Report on Form 10-K filed with the Securities and Exchange Commission ("SEC") on March 23, 2021. Although we believe that the assumptions underlying the forward-looking statements contained in this Quarterly Report are reasonable, any of the assumptions could be inaccurate, and therefore there can be no assurance that such statements will be accurate. The risks, uncertainties and assumptions referred to above that could cause our results to differ materially from the results expressed or implied by such forward-looking statements include, but are not limited to, those discussed under the heading "Risk Factors" in Part II, Item 1A hereto and the risks, uncertainties and assumptions discussed from time to time in our other public filings and public announcements. All forward-looking statements included in this document are based on information available to us as of the date hereof. In light of the significant uncertainties inherent in the forward-looking statements included herein, the inclusion of such information should not be regarded as a representation by us or any other person that the results or conditions described in such statements or our objectives and plans will be achieved. Furthermore, past performance in operations and share price is not necessarily indicative of future performance. We disclaim any intention or obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise that may arise after the date of this Quarterly Report on Form 10-Q.

Overview

We develop low power, multi-core semiconductor platforms and IP for AI, voice and sensor processing. The solutions include an eFPGA for hardware acceleration and pre-processing, and heterogeneous multi-core SoCs that integrate eFPGA with other processors and peripherals. The SensiML Analytics Toolkit from our recently acquired wholly owned subsidiary, SensiML completes the "full stack" end-to-end solution with accurate sensor algorithms using AI technology. The full range of platforms, software tools and eFPGA IP enables the practical and efficient adoption of AI, voice and sensor processing across mobile, wearable, hearable, consumer, industrial, edge and endpoint IoT applications.

Our new products include our EOS™, QuickAI™, SensiML Analytics Studio, ArcticLink® III, PolarPro®3, PolarPro II, PolarPro, and Eclipse II products (which together comprise our new product category). Our mature products include primarily FPGA families named pASIC®3 and QuickRAM® as well as programming hardware and design software. In addition to delivering our own semiconductor solutions, we have an IP business that licenses our eFPGA technology for use in other semiconductor companies SoCs. We began delivering our eFPGA IP product ArcticPro™ in 2017, which is included in the new product revenue category. Through the acquisition of SensiML, we now have an IoT AI software platform that includes SaaS subscriptions for development, per unit license fees when deployed in production, and proof-of-concept services – all of which are also included in the new product revenue category.

Our semiconductor solutions typically fall into one of three categories: Sensor Processing, Display and Visual Enhancement, and Smart Connectivity. Our solutions include a unique combination of our silicon platforms, IP cores, software drivers, and in some cases, firmware and application software. All of our silicon platforms are standard devices and must be programmed to be effective in a system. Our IP that enables always-on context-aware sensor applications includes our Flexible Fusion Engine, our Sensor Manager and Communications Manager technologies as well as IP that (i) improves multimedia content, such as our Visual Enhancement Engine, or VEE, technology, and Display Power Optimizer, or DPO, technology; and (ii) implements commonly used mobile system interfaces, such as Low Voltage Differential Signaling, or LVDS, Mobile Industry Processor Interface, or MIPI, and Secure Digital Input Output, or SDIO.

Through the acquisition of SensiML, our core IP also includes the SensiML AI Toolkit that enables OEMs to develop AI software for a broad array of resource-constrained time-series sensor endpoint applications. These include a wide range of consumer and industrial sensing applications.

We also work with mobile processor manufacturers, sensor manufacturers, and voice recognition, sensor fusion and context awareness algorithm developers in the development of reference designs. Through reference designs that incorporate our solutions, we believe mobile processor manufacturers, sensor manufacturers, and sensor and voice algorithm companies can expand the available market for their respective products. Furthermore, should a solution developed for a processor manufacturer or sensor and/or sensor algorithm company be applicable to a set of common OEMs or Original Design Manufacturers, or ODMs, we can amortize our Research and Development, or R&D, investment over that set of OEMs or ODMs. There may also be cases when platform providers that intend to use always-on voice recognition will dictate certain performance requirements for the combined software/hardware solution before the platform provider certifies and/or qualifies our product for use by end customers.

In addition to working directly with our customers, we partner with other companies that are experts in certain technologies to develop additional IP, reference platforms and system software to provide application solutions, particularly in the area of hardware acceleration for AI-type applications. We also work with mobile processor and communications semiconductor device manufacturers and companies that supply sensor, algorithms and applications. For our sensor processing solutions, we collaborate with sensor manufacturers to ensure interface compatibility. We also collaborate with sensor and voice/audio software companies, helping them optimize their software technology on our silicon platforms in terms of performance, power consumption and user experience.

Our ArcticPro eFPGA IP are currently developed on 65nm, 40nm and 22nm process nodes. The licensable IP is generated by a compiler tool that enables licensees to create an eFPGA block that they can integrate into their SoC without significant involvement by QuickLogic. We believe this flow enables a scalable support model for QuickLogic. For our eFPGA strategy, we work with semiconductor manufacturing partners to ensure our eFPGA IP is proven for a given foundry and process node before it is licensed to a SoC company.

In order to grow our revenue from its current level, we depend upon increased revenue from our new products including existing new product platforms, eFPGA IP and platforms currently in development. We expect our business growth to be driven mainly by our silicon solutions, eFPGA IP and SensiML AI Software. Therefore, our revenue growth needs to be strong enough to enable us to sustain profitability while we continue to invest in the development, sales and marketing of our new solution platforms, IP and software. We are expecting revenue growth from EOS S3, SensiML AI SaaS, and eFPGA IP licensing in fiscal year 2021.

We continue to seek to expand our revenue, including pursuing high-volume sales opportunities in our target market segments, by providing solutions incorporating IP, or industry standard interfaces. Our industry is characterized by intense price competition and by lower margins as order volumes increase. While winning large volume sales opportunities will increase our revenue, we believe these opportunities may decrease our gross profit as a percentage of revenue.

During the second quarter of 2021, we generated total revenue of $2.9 million, which represents an increase of 29% compared to the prior quarter and an increase of 31% compared to the same quarter last year. Our new product revenue in the second quarter was $1.3 million, which represents an increase of 17% from the prior quarter and increase of 54% from the second quarter of 2020. Our mature product revenue was $1.6 million in the second quarter of 2021, which was an increase of 39% compared to the prior quarter and an increase of 18% compared to the second quarter of 2020. We expect our mature product revenue to continue to fluctuate over time.

We devote substantially all of our development, sales and marketing efforts to our new sensor processing solutions using our EOS™ S3 platforms, derivative products based on software-driven features, development of additional new products and solution platforms, our new eFPGA IP licensing and QuickAI initiatives. Overall, we reported a net loss of $2.1 million for the second quarter of 2021, an increase of 22% compared with the prior quarter and a decrease of 31% compared with the second quarter of 2020.

We have experienced net losses in the recent years and expect losses to continue through at least fiscal year 2021 as we continue to develop new products, applications and technologies. Whether we can achieve cash flow levels sufficient to support our operations cannot be accurately predicted. Unless such cash flow levels are achieved in addition to the proceeds we received from our recent sale of our equity securities, we may need to borrow additional funds or sell debt or equity securities, or some combination thereof, to provide funding for our operations, and such additional funding may not be available on commercially reasonable terms, or at all.

COVID-19 Response

The COVID-19 pandemic and its effects on our business in its fiscal 2020, the first quarter of fiscal 2021, and potential effects on the remainder of fiscal 2021 and beyond remain uncertain. There have been further restrictions by the governmental authorities as a result of a surge in COVID-19 cases during the winter of 2020 and continuing into fiscal 2021, as a result of variant strains of COVID-19 amid uneven progress toward vaccination. These restrictions and other impacts from COVID-19 could cause further disruptions or restrictions on our ability to source, manufacture or distribute its products, including temporary disruptions to the facilities of its contract manufacturers in China, Taiwan, Philippines and Singapore, or the facilities of its suppliers and their contract manufacturers globally. Additionally, multiple countries have imposed and may further impose restrictions on business operations and movement of people and products to limit the spread of COVID-19. This might cause delays in production or delivery of components or raw materials that are part of our global supply chain. If COVID-19 cases surge and we experiences more pronounced disruptions in its operations, the Company may experience constrained supply or curtailed demand that may materially adversely impact its business and results of operations.

The extent of the impact of COVID-19 on our operational and financial performance will depend on future developments, including the duration and spread of the pandemic, restrictions on travel, transportation and other containment measures, the success and availability of the recent vaccine, our compliance with these measures and the impact on our employees, customers, contractors and supply chain, all of which are uncertain and cannot be predicted.

Restructuring

In January 2020, we implemented a restructuring plan to lower annual operating expenses. The restructuring plan was approved by our Board of Directors on January 24, 2020. Pursuant to the restructuring plan, we recorded $34,000 and $513,000 of restructuring charges for the three and six months ended June 28, 2020, respectively, consisting primarily of employee severance related costs and facilities costs. There were no restructuring charges incurred for the three and six months ended July 4, 2021.

Our employees and customers

Our top priority during the ongoing COVID-19 pandemic remains the health and safety of our employees and their families, as well as our customers. As global governments institute restrictions on commercial operations, we are working to ensure our compliance while also maintaining business continuity for operations.

Most of our personnel continue to work from home except few personnel, who are required for minimum operations. We only allow employees in our facilities who are essential to the facilities' operations under best practices guidelines on maintaining physical distancing, utilizing enhanced cleaning protocols and usage of personal protective equipment.

We are committed to our customers to enable the support they need to continue providing vital services and tools. Our global offices remain operational to meet customer needs during the pandemic in compliance with the orders and restrictions imposed by local authorities in each of our locations, and we are working with our customers to meet their specific shipment needs. While the pandemic has created delays on the inbound supply chain at our partners and our own facilities and both inbound and outbound logistical challenges, we have been able to identify alternative solutions such that none of the issues have had a material impact on our ability to fulfill demand.

Critical Accounting Estimates

The methodologies, estimates and judgments we use in applying our most critical accounting policies have a significant impact on the results we report in our Unaudited Condensed Consolidated Financial Statements. The SEC has defined critical accounting policies as those that are most important to the portrayal of our financial condition and results of operations and require us to make difficult and subjective judgments, often as a result of the need to make estimates of matters that are inherently uncertain. Based on this definition, our critical policies include revenue recognition, valuation of inventories, including identification of excess quantities and product obsolescence, valuation of investments, valuation of long-lived assets, valuation of goodwill, capitalized internal-use software and related amortizable lives and intangibles related to the acquisition of SensiML, including the estimated useful lives of acquired intangible assets, measurement of stock-based compensation and estimation of accrued liabilities. We believe that we apply judgments and estimates in a consistent manner and that this consistent application results in our financial statements and accompanying notes that fairly represent all periods presented. However, any factual errors or errors in these judgments and estimates may have a material impact on our financial statements. During the three and six months ended July 4, 2021, there were no changes in our critical accounting policies from our disclosure in our Annual Report on Form 10-K for the fiscal year ended January 3, 2021, filed with the SEC on March 23, 2021, except for the new accounting standards adopted in the first quarter of 2021 as described in Note 2 to the Unaudited Condensed Consolidated Financial Statements as of and for the three and six months ended July 4, 2021 filed herewith. For a discussion of critical accounting policies and estimates, please see Item 7 in our Annual Report on Form 10-K for the fiscal year ended January 3, 2021, filed with the SEC on March 23, 2021.

Results of Operations

The following table sets forth the percentage of revenue for certain items in our condensed consolidated statements of operations for the periods indicated:

	Three Months Ended		Six Months Ended	
	July 4, 2021	June 28, 2020	July 4, 2021	June 28, 2020
Revenue	100%	100%	100%	100%
Cost of revenue	49%	54%	49%	51%
Gross profit	51%	46%	51%	49%
Operating expenses:				
Research and development	57%	100%	69%	92%
Selling, general and administrative	62%	76%	73%	81%
Restructuring costs	—%	2%	—%	12%
Loss from operations	(69)%	(132)%	(91)%	(136)%
Interest expense	(1)%	(8)%	(1)%	(6)%
Gain on forgiveness of debt	—%	—%	23%	—%
Interest income and other income (expense), net	(2)%	3%	(1)%	2%
Loss before income taxes	(71)%	(137)%	(70)%	(140)%
Provision for (benefit from) income taxes	—%	(1)%	3%	—%
Net loss	(71)%	(136)%	(73)%	(140)%

Note: Insignificant percentages are rounded to zero percentage (—%) for disclosure

Three Months Ended July 4, 2021 Compared to Three Months Ended June 28, 2020

Revenue

The table below sets forth the changes in revenue for the three months ended July 4, 2021, as compared to the three months ended June 28, 2020 (in thousands, except percentage data):

	Three Months Ended				Change	
	July 4, 2021		June 28, 2020			
	Amount	% of Total Revenues	Amount	% of Total Revenues	Amount	Percentage
New products	$ 1,262	44%	$ 820	37%	$ 442	54%
Mature products	1,620	56%	1,376	63%	244	18%
Total revenue	$ 2,882	100%	$ 2,196	100%	$ 686	31%

Note: For all periods presented - New products include all products manufactured on 180 nanometer or smaller semiconductor processes, eFPGA IP license, QuickAI and SensiML AI SaaS revenues. Mature products include all products produced on semiconductor processes larger than 180 nanometer and includes related royalty revenue.

Product revenue for the second quarter of 2021 compared to the second quarter of 2020 increased $686,000. The net increase of $442,000 in the revenue of new products was primarily due to increases of connectivity and sensor product revenue. The net increase of 18% in mature product revenue compared to the second quarter of 2020 was due primarily to increases in Eclipse ORAM, BAE/CTG, eFPGA license and QECL products, partially offset by an decrease in PASIC3, QPCID and other products.

Gross Profit

The table below sets forth the changes in gross profit for the three months ended July 4, 2021 as compared to the three months ended June 28, 2020 (in thousands, except percentage data):

	Three Months Ended				Change	
	July 4, 2021		June 28, 2020			
	Amount	% of Total Revenues	Amount	% of Total Revenues	Amount	Percentage
Revenue	$ 2,882	100%	$ 2,196	100%	$ 686	31%
Cost of revenue	1,416	49%	1,192	54%	224	19%
Gross profit	$ 1,466	51%	$ 1,004	46%	$ 462	46%

In the second quarter of 2021, gross profit increased $462,000 or 46% as compared to the same quarter in the prior year. This was primarily due to the increase in revenue of 31% and product mix in the second quarter as compared to last year, partially offset by a write down in raw materials inventory of approximately $156,000.

Our semiconductor products have historically had long product life cycles and obsolescence has not been a significant factor in the valuation of inventories. However, as we continue to pursue opportunities in the mobile market and develop new solutions and products, our product life cycle will be shorter and the risk of obsolescence will increase. In general, our standard manufacturing lead times are longer than the binding forecasts we receive from customers.

Operating Expenses

The table below sets forth the changes in operating expenses for the three months ended July 4, 2021, as compared to the three months ended June 28, 2020 (in thousands, except percentage data):

	Three Months Ended				Change	
	July 4, 2021		June 28, 2020			
	Amount	% of Total Revenues	Amount	% of Total Revenues	Amount	Percentage
R&D expense	$ 1,652	57%	$ 2,200	100%	$ (548)	(25)%
SG&A expense	1,794	62%	1,665	76%	129	8%
Restructuring costs	—	—%	34	2%	(34)	(100)%
Total operating expenses	$ 3,446	120%	$ 3,899	178%	$ (453)	(12)%

Research and Development

Our R&D expenses consist primarily of personnel, overhead and other costs associated with System on Chip (SoC) and software development, programmable logic design, AI and eFPGA development. The $548,000 decrease in R&D expenses in the second quarter of 2021, as compared to the second quarter of 2020, was primarily attributable to a decrease in stock-based compensation, salary and related expenses, outside services and depreciation expenses due primarily to our restructuring in 2020 and to reductions in spending caused by the COVID -19 pandemic, offset by other and allocable expenses.

Selling, General and Administrative

Our selling, general and administrative (SG&A) expenses consist primarily of personnel and related overhead costs for sales, marketing, finance, administration, human resources and general management. The $129,000 increase in SG&A expenses in the second quarter of 2021, as compared to the second quarter of 2020 was primarily attributable to outside legal and consulting costs, partially offset by a decrease in stock-based compensation expenses, equipment and supplies and allocable costs.

Restructuring

In January 2020, we implemented a restructuring plan to lower annual operating expenses. The restructuring plan was approved by our Board of Directors on January 24, 2020. Pursuant to the restructuring plan, we recorded restructuring costs of $0 in the second quarter of 2021 as compared to $34,000 in the second quarter of 2020. Restructuring costs consists primarily of employee severance-related costs. See Note 1 to the Unaudited Condensed Consolidated Financial Statements for details.

Interest Expense and Interest Income and Other Income (Expense), Net

The table below sets forth the changes in interest expense and interest income and other income (expense), net for the three months ended July 4, 2021 as compared to the three months ended June 28, 2020 (in thousands, except percentage data):

	Three Months Ended		Change	
	July 4, 2021	June 28, 2020	Amount	Percentage
Interest expense	$ (32)	$ (183)	$ 151	(83)%
Interest income and other income (expense), net	(45)	72	(117)	(163)%
Total interest income and other income (expense), net	$ (77)	$ (111)	$ 34	(31)%

Interest expense relates primarily to our line of credit facility. Interest income and other income (expense), net, relates to the interest earned on our money market accounts and foreign exchange gain or losses recorded. Changes in interest expense related for our revolving loan relate to the variability and timing of our outstanding loan balance. Interest rates for the second quarter of this year as compared to the prior year were significantly lower, accounting for most of the decrease. For the three months ended July 4, 2021Interest income and other income (expense), net for this period was approximately $45,000 as compared to $72,000 foe the three months ended June 28, 2020

Provision for (Benefit from) Income Taxes

The table below sets forth the changes in the provisions for income tax for the three months ended July 4, 2021 as compared to the three months ended June 28, 2020 (in thousands, except percentage data):

	Three Months Ended		Change	
	July 4, 2021	June 28, 2020	Amount	Percentage
Provision for (benefit from) income taxes	$ 5	$ (27)	$ 32	(119)%

The majority of the income tax expense for the quarter ended July 4, 2021 and June 28, 2020 relates to our foreign subsidiaries, which are cost-plus entities.

We are subject to U.S. federal income tax as well as income taxes in many U.S. states and foreign jurisdictions in which we operate. The U.S. tax years from 1999 forward remain effectively open to examination due to the carryover of unused net operating losses and tax credits.

Six Months Ended July 4, 2021 Compared to Six Months Ended June 28, 2020

Revenue

The table below sets forth the changes in revenue for the six months ended July 4, 2021, as compared to the six months ended June 28, 2020 (in thousands, except percentage data):

	Six Months Ended					
	July 4, 2021		June 28, 2020		Change	
	Amount	% of Total Revenues	Amount	% of Total Revenues	Amount	Percentage
New products	$ 2,337	46%	$ 1,306	30%	$ 1,031	79%
Mature products	2,785	54%	3,048	70%	(263)	(9)%
Total revenue	$ 5,122	100%	$ 4,354	100%	$ 768	18%

Note: For all periods presented - New products include all products manufactured on 180 nanometer or smaller semiconductor processes, eFPGA IP license, QuickAI and SensiML AI SaaS revenues. Mature products include all products produced on semiconductor processes larger than 180 nanometer and includes related royalty revenue.

Product revenue for the six months ended July 4, 2021 compared to the six months ended June 28, 2020 increased $768,000. The net increase of $1.0 million in the revenue of new products was primarily due to increases of connectivity and sensor product revenue. The net decrease of $263,000 in mature product revenue compared to the six months ended June 28, 2020 was due primarily to decrease in PASIC 3, QuickRAM, products, partially offset by an increase in ECLP and QECL, BAT/CTG, eFPGA license.

Gross Profit

The table below sets forth the changes in gross profit for the six months ended July 4, 2021 as compared to the six months ended June 28, 2020 (in thousands, except percentage data):

	Six Months Ended					
	July 4, 2021		June 28, 2020		Change	
	Amount	% of Total Revenues	Amount	% of Total Revenues	Amount	Percentage
Revenue	$ 5,122	100%	$ 4,354	100%	$ 768	18%
Cost of revenue	2,512	49%	2,235	51%	277	12%
Gross profit	$ 2,610	51%	$ 2,119	49%	$ 491	23%

In the six months ended July 4, 2021, gross profit increased by $491,000 or 23% as compared to the six months ended June 28, 2020. This was primarily due to an increase in revenue of $768,000 or 18%, and product mix in the first six months of 2021, as compared to same period last year, partially offset by cost variances and write-downs of excess and obsolete inventories.

Our semiconductor products have historically had long product life cycles and obsolescence has not been a significant factor in the valuation of inventories. However, as we continue to pursue opportunities in the mobile market and develop new solutions and products, our product life cycle will be shorter and the risk of obsolescence will increase. In general, our standard manufacturing lead times are longer than the binding forecasts we receive from customers.

Table of Contents

Operating Expenses

The table below sets forth the changes in operating expenses for the six months ended July 4, 2021, as compared to the six months ended June 28, 2020 (in thousands, except percentage data):

	Six Months Ended				Change	
	July 4, 2021		June 28, 2020			
	Amount	% of Total Revenues	Amount	% of Total Revenues	Amount	Percentage
R&D expense	$ 3,539	69%	$ 4,019	92%	$ (480)	(12)%
SG&A expense	3,741	73%	3,544	81%	197	6%
Restructuring expenses	—	—%	513	12%	(513)	100%
Total operating expenses	$ 7,280	142%	$ 8,076	185%	$ (796)	(10)%

Research and Development

Our research and development (R&D) expenses consist primarily of personnel, overhead and other costs associated with System on Chip (SoC) and software development, programmable logic design, AI and eFPGA development. The $480,000 decrease in R&D expenses in the six months ended July 4, 2021as compared to the six months ended June 28, 2020, was primarily attributable to decreases in salary and related expenses, outside services, occupancy costs and lower depreciation due primarily to restructuring in 2020 and to reductions in spending caused by the COVID-19 pandemic, partially offset primarily by an increase in stock-based compensation and allocable expenses.

Selling, General and Administrative

Our selling, general and administrative (SG&A) expenses consist primarily of personnel and related overhead costs for sales, marketing, finance, administration, human resources and general management. The $197,000 increase in SG&A expenses in the six months ended July 4, 2021, as compared to the six months ended June 28, 2020 was primarily attributable to outside legal and consulting costs, offset by a decrease in stock-based compensation, salary and related expenses, and reduced travel and entertainment.

Restructuring

In January 2020, we implemented a restructuring plan to lower annual operating expenses. The restructuring plan was approved by our Board of Directors on January 24, 2020. Pursuant to the restructuring plan, we recorded restructuring costs of $0 in the second quarter of 2021 as compared to $513,000 in the second quarter of 2020. Restructuring costs consists primarily of employee severance-related costs and facilities costs. See Note 1 to the Unaudited Condensed Consolidated Financial Statements for details.

Interest Expense and Interest Income and Other Income (Expense), Net

The table below sets forth the changes in interest expense and interest income and other income (expense), net for the six months ended July 4, 2021 as compared to the six months ended June 28, 2020 (in thousands, except percentage data):

	Six Months Ended		Change	
	July 4, 2021	June 28, 2020	Amount	Percentage
Interest expense	$ (64)	$ (263)	$ 199	(76)%
Gain on forgiveness of debt	1,192	—	1,192	100%
Interest income and other expense, net	(52)	67	(119)	(178)%
	$ 1,076	$ (196)	$ 1,272	(649)%

Interest expense relates primarily to our line of credit facility. Interest income and other income (expense), net, relates to the interest earned on our money market accounts and foreign exchange gain or losses recorded. Changes in interest expense related for our revolving loan relate to the variability and timing of our outstanding loan balance. Interest rates for the first half of this year as compared to the prior year were significantly lower, accounting for most of the decrease. Gain on forgiveness of debt relates to the gain related to the forgiveness of the PPP loan of $1.2 million for the six months ended July 4, 2021. Interest income and other income (expense), net for this period was approximately $52,000 as compared to the six months ended June 28, 2020 of $67,000.

Provision for (Benefit from) Income Taxes

The table below sets forth the changes in the provisions for income tax for the six months ended July 4, 2021 as compared to the six months ended June 28, 2020 (in thousands, except percentage data):

	Six Months Ended		Change	
	July 4, 2021	June 28, 2020	Amount	Percentage
Provision for (benefit from) income taxes	$ 157	$ (9)	$ (166)	1844%

The majority of the income tax expense for the quarter ended July 4, 2021 and June 28, 2020 relates to our foreign subsidiaries, which are cost-plus entities. Included in the provision for the quarter ended July 4, 2021, was a $125,000 deferred tax provision related to a one time repatriation of funds from our India entity.

We are subject to U.S. federal income tax as well as income taxes in many U.S. states and foreign jurisdictions in which we operate. The U.S. tax years from 1999 forward remain effectively open to examination due to the carryover of unused net operating losses and tax credits.

Liquidity and Capital Resources

We have financed our operations and capital investments through sales of common stock, finance and operating leases, a revolving line of credit and cash flows from operations. As of July 4, 2021, our principal sources of liquidity consisted of cash, cash equivalents and restricted cash of $19.0 million, including $15.0 million drawn down from our revolving line of credit with Heritage Bank of Commerce ("Heritage Bank") and $1.2 million loan received under the Paycheck Protection Program ("PPP") which was forgiven in January 2021.

On December 11, 2020, we entered into a Second Amendment (the "Second Amendment") to the Amended and Restated Loan Agreement with Heritage Bank. The Second Amendment extended the loan maturity date for one year through September 28, 2022 and amended the interest to a rate per annum equal to one half of one percentage point (0.50%) above the prime rate.

We were in compliance with all loan covenants as of July 4, 2021. As of July 4, 2021, we had $15.0 million of outstanding revolving line of credit with an interest rate of 3.75%.

On May 6, 2020, we entered into a loan agreement with Heritage Bank for a loan of $1.2 million pursuant to the PPP under the CARES Act enacted on March 27, 2020. On January 26, 2021, we received notice from Heritage Bank that amounts under the loan agreement had been forgiven. See Note 5 to these Unaudited Condensed Consolidated Financial Statements for the details.

On June 22, 2020, the Company closed an underwritten public offering of 2.5 million shares of common stock, $0.001 par value per share at a price of $3.50 per share. The Company received gross proceeds from the offering of approximately $8.8 million and incurred stock issuance costs of approximately $1.1 million. Under the terms of the underwriting agreement, the Company granted the underwriter a 30-day option to purchase up to an additional 375,000 shares of common stock to cover overallotments. On July 21, 2020 the underwriter's partially exercised the option to purchase 141,733 additional shares of common stock in connection with the offering, resulting in additional gross proceeds to the Company of approximately $496,000 and incurred additional stock issuance costs of approximately $52,000. Total gross proceeds received from this offering was approximately $9.3 million and incurred total stock issuance costs of approximately $1.2 million. Net proceeds received from this offering after deducting stock issuance costs was approximately $8.1 million.

We currently use our cash to fund our working capital to accelerate the development of next generation products and for general corporate purposes. Based on past performance and current expectations, we believe that its existing cash and cash equivalents, together with available financial resources from the Revolving Facility with Heritage Bank, will be sufficient to fund its operations and capital expenditures and provide adequate working capital for the next twelve months.

Various factors can affect our liquidity, including, among others: the level of revenue and gross profit as a result of the cyclicality of the semiconductor industry, the conversion of design opportunities into revenue, the market acceptance of existing and new products including solutions based on its ArcticLink®, PolarPro® platforms, eFPGA, EOS S3 SoC, Quick AI solution, and SensiML software tools, the fluctuations in revenue as a result of product end-of-life, the fluctuations in revenue as a result of the stage in the product life cycle of its customers' products, the costs of securing access to and availability of adequate manufacturing capacity, the levels of inventories and wafer purchase commitments, customer credit terms, the amount and timing of research and development expenditures, the timing of new product introductions, production volumes and product quality, sales and marketing efforts, the value and liquidity of its investment portfolio, changes in operating assets and liabilities, the ability to obtain or renew debt financing and to remain in compliance with the terms of existing credit facilities, the ability to raise funds from the sale of equity in the Company, the ability to capitalize on synergies with our newly acquired subsidiary SensiML; the issuance and exercise of stock options and participation in our employee stock purchase plan and other factors related to the uncertainties of the industry and global economics.

Over the longer term, we anticipate that sales generated from our new product offerings and existing cash and cash equivalents, with financial resources from our Revolving Facility with the Heritage Bank and our ability to raise additional capital in the public capital markets, will be sufficient to satisfy our operations and capital expenditures. However, we cannot provide any assurance that we will be able to raise additional capital, if required, or that such capital will be available on terms acceptable to us. The inability of us to generate sufficient sales from our new product offerings and/or raise additional capital if needed could have a material adverse effect on our operations and financial condition, including our ability to maintain compliance with our lender's financial covenants

As of July 4, 2021, most of our cash, cash equivalents and restricted cash were invested in the money market account at Heritage Bank. As of July 4, 2021, our interest-bearing debt consisted of $513,000 outstanding under finance leases and $15.0 million outstanding under our Revolving Facility. See Note 6 and Note 5 to the Unaudited Condensed Consolidated Financial Statements for more details.

Cash balances held at our foreign subsidiaries were approximately $582,000 and $342,000 as of July 4, 2021 and January 3, 2021, respectively. Earnings from our foreign subsidiaries are currently deemed to be indefinitely reinvested. We do not expect such reinvestment to affect our liquidity and capital resources, and we continually evaluate our liquidity needs and ability to meet global cash requirements as a part of our overall capital deployment strategy. Factors that affect our global capital deployment strategy include anticipated cash flows, the ability to repatriate cash in a tax-efficient manner, funding requirements for operations and investment activities, acquisitions and divestitures and capital market conditions.

In summary, our cash flows were as follows (in thousands):

	Six Months Ended	
	July 4, 2021	**June 28, 2020**
Net cash used in operating activities	$ (2,812)	$ (3,578)
Net cash used in investing activities	(447)	(436)
Net cash (used in) provided by financing activities	(493)	8,864

Net cash used in operating activities

For the six months ended July 4, 2021, net cash used in operating activities was $2.8 million, which was primarily due to the net loss of $3.8 million, adjusted for net non-cash charges of $38,000 including the gain recognized from the forgiveness of the PPP loan of $1.2 million. Other non-cash charges consisted primarily of $570,000 of stock-based compensation, depreciation and amortization expenses of $323,000, and inventory write-downs of 229,000. Cash inflows from changes in operating assets and liabilities were approximately $1.0 million, primarily due to a decrease in inventory, and increases in accounts payable and accrued liabilities subject to the variability of the timing of payments, partially offset by an increase in trade receivables due to the increase in revenue during the second quarter.

For the six months ended June 28, 2020, net cash used in operating activities was $3.6 million, which was primarily due to the net loss of $6.1 million, adjusted for non-cash charges of $880,000. Non-cash charges consisted primarily of $343,000 net gain from reversal of stock-based compensation expense of and depreciation and amortization expense of $490,000. The net gain from the reversal of stock-based compensation was a result of the cancellation of certain performance based RSUs, as established goals required for vesting were not achieved and cancellation of RSUs due to restructuring related terminations. Cash inflows from changes in operating assets and liabilities were approximately $1.7 million, primarily due to a decrease in inventory and a decrease in trade receivables.

Net cash used in investing activities

For the six months ended July 4, 2021, cash used in investing activities was $447,000, which was primarily attributable to the capitalized internal-use software and capital expenditure relating to leasehold improvements and computer equipment.

For the six months ended June 28, 2020, cash used in investing activities was $436,000, which was primarily attributable to the capitalized internal-use software.

Net cash (used in) provided by financing activities

Cash flows from financing activities includes the draw-downs and repayments of our line of credit. For the quarter ended of 2021 and 2020, these draw-downs and repayments netted to zero.

For the six months ended July 4, 2021, cash used in financing activities was $493,000, which was primarily attributable to taxes paid relating to stock-based compensation equity awards. We continue to use and repay our revolving line of credit as our cash needs require.

For the six months ended June 28, 2020 cash provided by financing activities was $8.9 million, primarily derived from the net proceeds of $7.9 million from the stock issuance of 2.5 million shares of common stock in June 2020, proceeds from the PPP loan of $1.2 million and scheduled repayments of $120,000 for finance lease obligations.

Contractual Obligations and Commercial Commitments

The following table summarizes our contractual obligations and commercial commitments as of July 4, 2021 and the effect such obligations and commitments are expected to have on our liquidity and cash flows in future fiscal periods (in thousands):

	Payments Due by Period			
	Total	Less than 1 Year	1-3 Years	4-5 Years
Contractual obligations:				
Operating leases	$ 1,137	$ 403	$ 734	$ —
Finance and software lease obligations	513	324	189	—
Wafer purchases (1)	559	559	—	—
Other purchase commitments	1,009	945	64	—
Total contractual obligations	$ 3,218	$ 2,231	$ 987	$ —
Other commercial commitments:				
Revolving line of credit	$ 15,000	$ 15,000	$ —	$ —
Total commercial commitments	15,000	15,000	—	—
Total contractual and commercial obligations	$ 18,218	$ 17,231	$ 987	$ —

(1) Certain of our wafer manufacturers require us to forecast wafer starts several months in advance. We are committed to accept the delivery of and pay for a portion of forecasted wafer volume.

Concentration of Suppliers

We depend on a limited number of contract manufacturers, subcontractors, and suppliers for wafer fabrication, assembly, programming and testing, and for the supply of programming equipment. These services are typically provided by one supplier for each of our devices. We generally purchase these single or limited source services through standard purchase orders. Because we rely on independent subcontractors to perform these services, we cannot directly control product delivery schedules, costs or quality levels. Our future success also depends on the financial viability of our independent subcontractors. The decision not to provide these services to us or the inability to supply these services to us, such as in the case of a natural or financial disaster, would have a significant impact on our business. In addition, these subcontracted manufacturers produce products for other companies and we must place orders up to several months in advance of expected delivery. Increased demand from other companies could result in these subcontract manufacturers allocating available capacity to customers that are larger or have long-term supply contracts in place and we may be unable to obtain adequate foundry and other capacity at acceptable prices, or we may experience delays or interruption in supply. As a result, we have only a limited ability to react to fluctuations in demand for our products, which could cause us to have an excess or a shortage of inventories of a particular product. Additionally, volatility of economic, market, social and political conditions in countries where these suppliers operate may be unpredictable and could result in a reduction in product revenue or increase our cost of revenue and could adversely affect our business, financial condition and results of operations.

Off-Balance Sheet Arrangements

We do not maintain any off-balance sheet partnerships, arrangements or other relationships with unconsolidated entities or others, often referred to as structured finance or special purpose entities, which are established for the purpose of facilitating off-balance sheet arrangements or other contractually narrow or limited purposes.

Recently Issued Accounting Pronouncements

See Note 2 to the Unaudited Condensed Consolidated Financial Statements for a description of recent accounting pronouncements, including the respective dates of adoption and expected effects on the results of our operations and financial condition.

Item 3. Quantitative and Qualitative Disclosures about Market Risk

Not Applicable.

Item 4. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

Based on management's evaluation as of July 4, 2021, our Chief Executive Officer and Principal Financial Officer have concluded that our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended) were effective at the reasonable assurance level to ensure that the information required to be disclosed by us in this Quarterly Report on Form 10-Q was (i) recorded, processed, summarized and reported within the time periods specified in the SEC's rules and regulations and (ii) accumulated and communicated to our management, including our Chief Executive Officer and Interim Chief Accounting Officer, to allow timely decisions regarding required disclosure.

Our management, including our Chief Executive Officer and Interim Chief Accounting Officer, does not expect that our disclosure controls and procedures or our internal controls over financial reporting will prevent all errors and frauds. A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within the Company have been detected.

Changes in Internal Control Over Financial Reporting

There were no changes in our internal control over financial reporting that occurred during the period covered by this Quarterly Report on Form 10-Q that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Part II. Other Information

Item 1. Legal Proceedings

None. See Note 11 of the Unaudited Condensed Consolidated Financial Statements for a description of legal proceedings.

Item 1A. Risk Factors

Except as set forth below, there have been no material changes to the risk factors set forth in our 2020 Annual Report on Form 10-K for the year ended January 3, 2021, filed with the SEC on March 23, 2021, which includes a detailed discussion of our risk factors at Part I, Item 1A, Risk Factors, which discussion is hereby incorporated by reference into this Part II, Item 1A.

[Table of Contents](#)

Item 6. Exhibits

a. Exhibits

The following Exhibits are filed or incorporated by reference into this report:

Exhibit Number	Description	Form	Exhibit	Filing Date
10.1	Third Amendment to Amended and Restated Loan and Security Agreement entered into as of August 16, 2021			
31.1	Certification of Brian C. Faith, Chief Executive Officer, pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.			
31.2	Certification of Anthony Contos, Interim Chief Accounting Officer, pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.			
32.1	Certification of Brian C. Faith, Chief 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 Anthony Contos, Interim Chief Accounting Officer, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.			
101.INS	Inline XBRL Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.			
101.SCH	Inline XBRL Taxonomy Extension Schema Document			
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document			
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document			
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document			
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document			
104	The cover page from the Company’s quarterly report on Form 10-Q for the quarter ended July 4, 2021, has been formatted in Inline XBRL.			

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.

QUICKLOGIC CORPORATION

Date: August 18, 2021

/s/ Anthony Contos
Anthony Contos
Interim Chief Accounting Officer
(as Principal Accounting and Financial Officer and on behalf of the Registrant)

Exhibit 10.1

THIRD AMENDMENT
TO
AMENDED AND RESTATED LOAN AND SECURITY AGREEMENT

This Third Amendment to Loan and Security Agreement is entered into as of August 16, 2021 (the "Amendment"), by and between HERITAGE BANK OF COMMERCE ("Bank") and QUICKLOGlC CORPORATION ("Borrower").

RECITALS

Borrower and Bank are parties to that certain Amended and Restated Loan and Security Agreement dated as of December 21, 2018 and as amended from time to time, including pursuant to that certain First Amendment to Amended and Restated Loan and Security Agreement dated as of November 6, 2019 and that certain Second Amendment to Amended and Restated Loan and Security Agreement dated as of December 11, 2020 (collectively, the "Agreement"). The parties desire to address certain Events of Default that have occurred prior to the date hereof and amend the Agreement in accordance with the terms of this Amendment.

NOW, THEREFORE, the parties agree as follows:

1. Borrower acknowledges that there is an existing Event of Default arising from Borrower's failure to comply with minimum cash covenant set forth in Section 6.9(ii) of the Agreement on July 20, 2021 (the "Covenant Default"). Subject to the conditions contained herein and performance by Borrower of all of the terms of the Agreement after the date hereof, Bank waives the Covenant Default. Bank does not waive Borrower's obligations under such section after the date hereof and as amended herein, and Bank does not waive any other failure by Borrower to perform its obligations under the Loan Documents.

2. Section 6.9 of the Agreement is amended and restated in its entirety to read as follows:

6.9 Financial Covenants.

(a) Borrower shall maintain at all times a balance of unrestricted cash in the Pledged Account not less than the principal amount of all Advances owing from Borrower to Bank.

(b) In addition to the above, Borrower shall maintain additional unrestricted cash in its accounts at Bank in an amount of at least Three Million Dollars ($3,000,000), measured (i) immediately prior to the funding of any Credit Extension and (ii) at all times that any Advance is outstanding.

3. Borrower represents and warrants that the representations and warranties contained in the Agreement are true and correct as of the date of this Amendment , and that no Event of Default has occurred and is continuing (other than the Covenant Default).

4. Unless otherwise defined, all initially capitalized terms in this Amendment shall be as defined in the Agreement. The Agreement , as amended hereby, shall be and remain in full force and effect in accordance with its respective terms and hereby is ratified and confirmed in all respects. Except as expressly set forth herein, the execution, delivery and performance of this Amendment shall not operate as a waiver of, or as an amendment of, any right, power, or remedy of Bank under the Agreement, as in effect prior to the date hereof. Borrower ratifies and reaffirms the continuing effectiveness of all agreements entered into in connection with the Agreement.

5. This Amendment may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one instrument. In the event that any signature is delivered by facsimile transmission or by e-mail delivery of a" .pdf' format data file, such signature shall create !l- vapd and binding obligation of the party executing (or on whose behalf such signature is executed) with the same force and effect as if such facsimile or ".pdf ' signature page were an original hereof.

6. As a condition to the effectiveness of this Amendment, Bank shall have received, in form and substance satisfactory to Bank, the following:

(a) the original signed Amendment, duly executed by Borrower;

(b) a waiver and amendment fee equal to $5,000, pluus an amount equal to all Bank Expenses incurred through the date of this Amendment; and

(c) such other documents, and completion of such other matters, as Bank may reasonably deem necessary or appropriate.

[REMAINDER OF THIS PAGE INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, the undersigned have executed this Amendment as of the first date above written.

QUICKLOGIC CORPORATION

By: /s/ Brian C. Faith

Name: Brian C. Faith
Title: CEO

IN WITNESS WHEREOF, the undersigned have executed this Amendment as of the first date above written.

QUICKLOGIC CORPORATION

By: ______________________

Name: ______________________

Title: ______________________

HERITAGE BANK OF COMMERCE

By: Karla S

Name: KARLA SCHRADER

Title: VP

Exhibit 31.1

CERTIFICATIONS

I, Brian C. Faith, certify that:

1. I have reviewed this quarterly report on Form 10-Q of QuickLogic 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 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 18, 2021

/s/ Brian C. Faith
Brain C. Faith
President and Chief Executive Officer

Exhibit 31.2

CERTIFICATIONS

I, Anthony Contos, certify that:

1. I have reviewed this quarterly report on Form 10-Q of QuickLogic 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 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 18, 2021

/s/ Anthony Contos
Anthony Contos
Interim Chief Accounting Officer

Exhibit 32.1

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

I, Brian C. Faith, the President and Chief Executive Officer of QuickLogic Corporation (the "Company"), do hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

- the Quarterly Report on Form 10-Q of the Company for the quarter ended July 4, 2021 (the "Report"), fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

- the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company for the periods presented therein.

Date:	August 18, 2021	By:	/s/ Brian C. Faith
		Name:	Brian C. Faith
		Title:	*President and 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

I, Anthony Contos, Interim Chief Accounting Officer of QuickLogic Corporation (the "Company") do hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

- the Quarterly Report on Form 10-Q of the Company for the quarter ended July 4, 2021 (the "Report"), fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

- the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company for the periods presented therein.

Date:	August 18, 2021	By:	/s/ Anthony Contos
		Name:	Anthony Contos
		Title:	*Interim Chief Accounting Officer*