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

# FORM 10-Q

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

**For the Quarterly Period Ended July 3, 2022**

**OR**

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

**For the Transition Period From ______ To**

**COMMISSION FILE NUMBER: 000-22671**

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

| | |
|---|---|
| **Delaware**<br>**(State or other jurisdiction of incorporation or organization)** | **77-0188504**<br>**(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, 2022, there were 12,591,225 shares of registrant’s common stock, par value $0.001 per share, outstanding.

**QUICKLOGIC CORPORATION**
**FORM 10-Q**
**July 3, 2022**

**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 3, 2022 | January 2, 2022 |
|---|---|---|
| **ASSETS** | | |
| Current assets: | | |
| Cash, cash equivalents and restricted cash | $ 18,546 | $ 19,605 |
| Accounts receivable, net of allowances for doubtful accounts of $62 | 3,560 | 1,294 |
| Inventories | 2,212 | 2,078 |
| Other current assets | 1,201 | 1,181 |
| Total current assets | 25,519 | 24,158 |
| Property and equipment, net | 607 | 499 |
| Capitalized internal-use software, net | 1,343 | 1,241 |
| Right of use assets | 1,141 | 1,529 |
| Intangible assets | 699 | 752 |
| Goodwill | 185 | 185 |
| Investment in privately-held non-affiliate | 300 | 300 |
| Other assets | 195 | 309 |
| **TOTAL ASSETS** | $ 29,989 | $ 28,973 |
| | | |
| **LIABILITIES AND STOCKHOLDERS' EQUITY** | | |
| Current liabilities: | | |
| Revolving line of credit | $ 15,000 | $ 15,000 |
| Trade payables | 1,898 | 934 |
| Accrued liabilities | 1,652 | 1,665 |
| Deferred revenue | 142 | 455 |
| Lease liabilities, current | 705 | 819 |
| Total current liabilities | 19,397 | 18,873 |
| Long-term liabilities: | | |
| Lease liabilities, non-current | 482 | 744 |
| Other liabilities, non-current | 125 | 147 |
| Total liabilities | 20,004 | 19,764 |
| Commitments and contingencies (see Note 10) | — | — |
| 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; 12,428 and 11,863 shares issued and outstanding as of July 3, 2022 and January 2, 2022, respectively | 12 | 12 |
| Additional paid-in capital | 312,686 | 310,222 |
| Accumulated deficit | (302,713) | (301,025) |
| Total stockholders' equity | 9,985 | 9,209 |
| **TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY** | $ 29,989 | $ 28,973 |

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 3, 2022 | July 4, 2021 | July 3, 2022 | July 4, 2021 |
| Revenue | $ 4,541 | $ 2,882 | $ 8,637 | $ 5,122 |
| Cost of revenue | 1,997 | 1,416 | 3,632 | 2,512 |
| Gross profit | 2,544 | 1,466 | 5,005 | 2,610 |
| Operating expenses: | | | | |
| Research and development | 1,190 | 1,652 | 2,523 | 3,539 |
| Selling, general and administrative | 1,981 | 1,794 | 4,118 | 3,741 |
| Total operating expenses | 3,171 | 3,446 | 6,641 | 7,280 |
| Loss from operations | (627) | (1,980) | (1,636) | (4,670) |
| Interest expense | (22) | (32) | (55) | (64) |
| Gain on forgiveness of debt | — | — | — | 1,192 |
| Interest income and other income (expense), net | 142 | (45) | 19 | (52) |
| Loss before income taxes | (507) | (2,057) | (1,672) | (3,594) |
| Provision for income taxes | 17 | 5 | 16 | 157 |
| Net loss | $ (524) | $ (2,062) | $ (1,688) | $ (3,751) |
| Net loss per share: | | | | |
| Basic and diluted | $ (0.04) | $ (0.18) | $ (0.14) | $ (0.33) |
| Weighted average shares outstanding: | | | | |
| Basic and diluted | 12,412 | 11,485 | 12,269 | 11,374 |

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 3, 2022 | July 4, 2021 |
| Cash flows from operating activities: | | |
| Net loss | $ (1,688) | $ (3,751) |
| Adjustments to reconcile net loss to net cash used in operating activities: | | |
| Depreciation and amortization | 334 | 323 |
| Stock-based compensation | 860 | 570 |
| Write-down of inventories and reclassifications | 54 | 229 |
| Gain on disposal of equipment | (76) | — |
| Gain on forgiveness of debt | — | (1,192) |
| Bad debt expense | — | 32 |
| Changes in operating assets and liabilities: | | |
| Accounts receivable | (2,266) | (407) |
| Inventories | (188) | 254 |
| Other assets | (6) | 82 |
| Trade payables | 1,161 | 569 |
| Accrued liabilities | 87 | 266 |
| Deferred revenue | (313) | 24 |
| Other long-term liabilities | (22) | 189 |
| Net cash used in operating activities | (2,063) | (2,812) |
| Cash flows from investing activities: | | |
| Capital expenditures for property and equipment | (117) | (174) |
| Capitalized internal-use software | (285) | (273) |
| Net cash used in investing activities | (402) | (447) |
| Cash flows from financing activities: | | |
| Payment of finance lease obligations | (198) | (156) |
| Proceeds from line of credit | 30,000 | 30,000 |
| Repayment of line of credit | (30,000) | (30,000) |
| Proceeds from issuance of common stock | 1,604 | 148 |
| Taxes paid related to settlement of equity awards | — | (485) |
| Net cash provided by (used in) financing activities | 1,406 | (493) |
| Net (decrease) increase in cash, cash equivalents and restricted cash | (1,059) | (3,752) |
| Cash, cash equivalents and restricted cash at beginning of period | 19,605 | 22,748 |
| Cash, cash equivalents and restricted cash at end of period | $ 18,546 | $ 18,996 |

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 2, 2022 | 11,863 | $ 12 | $ 310,222 | $ (301,025) | $ 9,209 |
| Issuance of common stock under public stock offering, net of stock issuance cost | 310 | — | 1,482 | — | 1,482 |
| Common stock issued under stock plans and employee stock purchase plans | 189 | — | — | — | — |
| Stock-based compensation | — | — | 383 | — | 383 |
| Net loss | — | — | — | (1,164) | (1,164) |
| Balance at April 3, 2022 | 12,362 | 12 | 312,087 | (302,189) | 9,910 |
| Common stock issued under stock plans and employee stock purchase plan | 66 | — | 122 | — | 122 |
| Stock-based compensation | — | — | 477 | — | 477 |
| Net loss | — | — | — | (524) | (524) |
| Balance at July 3, 2022 | 12,428 | $ 12 | $ 312,686 | $ (302,713) | $ 9,985 |

| | 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 plans | 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 |

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”), military, aerospace and defense products. 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. 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 2, 2022, which was filed with the Securities and Exchange Commission (“SEC”) on March 22, 2022. Operating results for the three and six months ended July 3, 2022 are not necessarily indicative of the results that may be expected for the full fiscal 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 quarter for 2022 and 2021 ended on July 3, 2022 and July 4, 2021, respectively.

***COVID-19 - Impact on Business***

There have been no material changes due to the impact of the Covid-19 pandemic on our business from that disclosed in our most recently filed Annual Report. Our most recent Annual Report on Form 10-K for the year ended January 2, 2022 as filed with the SEC on March 22, 2022 provides additional information about our business and operations.

***Liquidity***

The Company has financed its operations and capital investments through public and private offerings of our common stock, finance and operating leases, and borrowing under a revolving line of credit with Heritage Bank (the "Revolving Facility"), partially offset by cash used in operations. In addition to the Company's $18.5 million of cash, cash equivalents and restricted cash, as of July 3, 2022 other sources of liquidity included a $15.0 million drawn down from the Revolving Facility and $1.6 million in net proceeds from the Company's sale of common stock in six months ended July 3, 2022.

The Company was in compliance with all the Heritage Bank Revolving Facility loan covenants as of July 3, 2022. As of July 3, 2022, the Company had $15.0 million outstanding on the Revolving Facility with an interest rate of 5.25%.

On February 9, 2022, the Company entered into common stock purchase agreements with certain investors for the sale of an aggregate of 310,000 shares of common stock, par value $0.001, in a registered direct offering. These share placements resulted in net cash proceeds of approximately $1.5 million. Issuance costs related to this offering were negligible. The purchase price for each share of common stock in this placement was $4.78. The Company currently intends to use the net proceeds from the financing for working capital, the development of next generation eFPGA-based products, including AI and open-source hardware or software, and general corporate purposes.

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, 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, market acceptance of existing and new products including solutions based on its eFPGA IP, ArcticLink®, and PolarPro® platforms, eFPGA, EOS S3 SoC, Quick AI solution, and SensiML software fluctuations in revenue as a result of product end-of-life, fluctuations in revenue as a result of the stage in the product life cycle of its customers’ products, costs of securing access to and availability of adequate manufacturing capacity; levels of inventories; wafer purchase commitments; customer credit terms; the amount and timing of research development expenditures; the timing of new product introductions; production volumes; 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 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, together with financial resources from its Revolving Facility, assuming renewal of the Revolving Facility or the Company entering into a new debt agreement with an alternative lender prior to the expiration of the Revolving Facility in December 2023, 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 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, fair value measurements, 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. For additional information, please refer to the Company's most recent annual report which was filed with the SEC on March 22, 2022.

***Concentration of Risk***

The Company's accounts receivable is 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 9, Information Concerning Product Lines, Geographic Information and Revenue Concentration, for information regarding concentrations associated with accounts receivable.

**Note 2 — Significant Accounting Policies**

During the three and six months ended July 3, 2022 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 2, 2022. For a discussion of the significant accounting policies, please see the Annual Report on Form 10-K for the fiscal year ended January 2, 2022, filed with the SEC on March 22, 2022.

***Recent Accounting Standards Adopted***

In May 2021, the Financial Accounting Standards Board ("FASB") issued ASU No. 2021-04, *Issuer's Accounting for Certain Modifications of Exchanges of Freestanding Equity-Classified Written Call Options* to clarify the accounting for modifications or exchanges of freestanding equity-classified written call options, such as warrants, that remain equity classified after modification or exchange. This ASU became effective for the Company on January 3, 2022 and did not have a material impact on the Company's consolidated financial statements.

***New Accounting Standards Not Yet Adopted***

In June 2022, the FASB issued ASU No. 2022-03, *Fair Value Measurement (Topic 820) Fair Value Measurement of Equity Securities Subject to Contractual Sale Restrictions* to clarify the measurement of the fair value of an equity security subject to contractual restrictions that prohibit the sale of an equity security and requires disclosures related to these types of equity securities. This ASU 2022-03 becomes effective for the Company on January 2, 2023 and is not expected to have an impact on the Company's consolidated financial statements or disclosures.

**Note 3 — Net Loss Per Share**

Basic loss per share is computed by dividing net loss 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 3, 2022 and July 4, 2021, 536 thousand and 255 thousand 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 thousand shares were issued in connection with May 29, 2018, stock offering were not included in the diluted loss per share calculation of the periods presented 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 of July 3, 2022, and January 2, 2022 (in thousands):

| | July 3, 2022 | January 2, 2022 |
|---|---|---|
| Accounts receivable: | | |
| Trade account receivables | $ 3,295 | $ 1,113 |
| Less: Allowance for doubtful accounts | (62) | (62) |
| Trade account receivables, net | 3,233 | 1,051 |
| Unbilled account receivables | 12 | — |
| Contract assets | 315 | 243 |
| | $ 3,560 | $ 1,294 |
| Inventories: | | |
| Work-in-process | $ 1,512 | $ 1,397 |
| Finished goods | 700 | 681 |
| | $ 2,212 | $ 2,078 |
| Other current assets: | | |
| Prepaid taxes, royalties and other prepaid expenses | $ 893 | $ 921 |
| Other | 308 | 260 |
| | $ 1,201 | $ 1,181 |
| Property and equipment, net: | | |
| Equipment | $ 10,348 | $ 10,341 |
| Software | 1,803 | 1,878 |
| Furniture and fixtures | 21 | 32 |
| Leasehold improvements | 466 | 466 |
| | 12,638 | 12,717 |
| Less: Accumulated depreciation and amortization | (12,031) | (12,218) |
| | $ 607 | $ 499 |
| Capitalized internal-use software, net: | | |
| Capitalized internal-use software | $ 1,984 | $ 1,699 |
| Less: Accumulated amortization | (641) | (458) |
| | $ 1,343 | $ 1,241 |
| Accrued liabilities: | | |
| Accrued compensation | $ 914 | $ 740 |
| Accrued employee benefits | 37 | 111 |
| Accrued payroll tax | 97 | 102 |
| Other(1) | 604 | 712 |
| | $ 1,652 | $ 1,665 |

(1) Accrued liabilities-Other is partially comprised of a $100 non-cash lease adjustment offsetting Other Assets in the six months ended July 3, 2022.

**Note 5 — Debt Obligations**

***Revolving Line of Credit***

As of July 3, 2022 and January 2, 2022, the Company had $15.0 million of revolving debt outstanding with an interest rate of 5.25% and 3.75% per annum, respectively. Heritage 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 agreement. The Company was in compliance with all loan covenants under the agreement as of the end of the current reporting period. Interest expense recognized were $14 thousand and $39 thousand for the three and six months ended July 3, 2022, respectively, and $22 thousand and $46 thousand for the three and six months ended July 4, 2021, respectively.

On April 4, 2022, the Company entered into a Fifth Amendment (the "Amendment") to the December 21, 2018 Amended and Restated Loan and Security Agreement (as amended, the "Agreement") with Heritage Bank. The purpose of the Fifth Amendment was primarily to clarify certain terms of the Agreement as follows: (i) added a definition of "Remaining Months Liquidity" to be defined as the Borrower's unrestricted cash maintained at Bank (including cash in the Pledged Account) minus the outstanding principal amount of the Advances, divided by the absolute value of the average trailing three (3) month EBITDA; and (ii) revised the minimum cash and remaining months liquidity financial covenants. The minimum cash covenant was revised such that the balance of unrestricted cash in the pledged account shall at all times exceed the principal amount of all advances owed that are outstanding at any time. The remaining months liquidity covenant specified that it should not be less than nine months. The Company does not believe that the clarifications of the terms in the Amendment will have a material impact on the Company's liquidity or utilization of the revolving loan under the Agreement.

**Note 6 — Leases**

The Company entered into operating leases for office space for its headquarters. The Company has elected the practical expedient to apply to recognition requirements to short-term leases for its domestic and foreign subsidiaries and for its sales offices and recognized rent payments on short-term leases on a straight-line basis over the lease term. 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 3, 2022 and January 2, 2022, the balance of right-of-use assets was approximately $1.1 million and $1.5 million, respectively, and the lease liability was approximately $1.2 million and $1.6 million, respectively, for operating and finance leases for the headquarters in San Jose and for the operating subsidiaries of SensiML in Oregon and the Company's subsidiary in India. Total rent expense was $0.1 million and $0.2 million for the three and six months ended July 3, 2022 and July 4, 2021, respectively.

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

| | Three Months Ended | | Six Months Ended | |
|---|---|---|---|---|
| | July 3, 2022 | July 4, 2021 | July 3, 2022 | July 4, 2021 |
| Operating lease costs: | | | | |
| Fixed | $ 100 | $ 101 | $ 199 | $ 204 |
| Short term | 6 | 5 | 13 | 9 |
| Total | $ 106 | $ 106 | $ 212 | $ 213 |
| Finance lease costs: | | | | |
| Amortization of ROU asset | $ 109 | $ 98 | $ 219 | $ 513 |
| Interest | 6 | 6 | 13 | 52 |
| Total | $ 115 | $ 104 | $ 232 | $ 565 |

The following table provides the details of supplemental cash flow information. 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 3, 2022 and the six months ended July 4, 2021 were $0 (in thousands):

| | Six Months Ended | |
|---|---|---|
| | July 3, 2022 | July 4, 2021 |
| Cash paid for amounts included in the measurement of lease liabilities: | | |
| Operating cash flows used for operating leases | $ 203 | $ 202 |
| Operating cash flows used for finance leases | 13 | 5 |
| Financing cash flows used for financing leases | 198 | 156 |
| Total | $ 414 | $ 363 |

The following table provides the details of right-of-use assets and lease liabilities as of July 3, 2022 and January 2, 2022 (in thousands):

| | July 3, 2022 | January 2, 2022 |
|---|---|---|
| Right-of-use assets: | | |
| Operating leases | $ 640 | $ 809 |
| Finance leases | 501 | 720 |
| Total right-of-use assets | $ 1,141 | $ 1,529 |
| Lease liabilities: | | |
| Operating leases | $ 695 | $ 873 |
| Finance leases | 492 | 690 |
| Total lease liabilities | $ 1,187 | $ 1,563 |

The following table provided the details of future lease payments for operating and finance leases as of July 3, 2022 (in thousands):

| | Operating Leases | Finance Leases |
|---|---|---|
| 2022 (remaining period) | $ 206 | $ 264 |
| 2023 | 422 | 141 |
| 2024 | 106 | 106 |
| Total lease payments | 734 | 511 |
| Less: Interest | (39) | (19) |
| Present value of lease liabilities | $ 695 | $ 492 |

The following table provides the details of lease terms and discount rates as of July 3, 2022 and January 2, 2022:

| | July 3, 2022 | January 2, 2022 |
|---|---|---|
| Right-of-use assets: | | |
| Weighted-average remaining lease term (years) | | |
| Operating leases | 1.75 | 2.25 |
| Finance leases | 1.84 | 2.15 |
| Weighted-average discount rates: | | |
| Operating leases | 6.00% | 6.00% |
| Finance leases | 4.42% | 4.57% |

**Note *7* — Employee Stock Plans**

***2019 Stock Plan***

On May 10, 2022 at the Company's Annual Meeting, Company stockholders approved increasing the reservation of the additional shares under the 2019 Stock Plan, as amended on May 10, 2022. The approval of an additional 900 thousand shares of common stock increased the total number of available shares to 1.4 million under the 2019 Stock Plan, as amended. The number of shares available for future awards as of the date of the Annual Meeting are the sum of (1) 900 thousand, (2) the number of shares available for future awards under the plan immediately before such approval which were 522 thousand shares and (3) any shares subject to outstanding awards under the 2019 Plan or the 2009 Plan, that are terminated, canceled, surrendered, or forfeited which was zero at the Date. On May 19, 2022, the Company filed a Registration Statement on Form S-8 with the SEC to register an additional 900 thousand shares of its common stock that may be issued under the Company's 2019 Stock Plan, as amended.

**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 3, 2022 and July 4, 2021 was as follows (in thousands):

| | Three Months Ended | | Six Months Ended | |
|---|---|---|---|---|
| | July 3, 2022 | July 4, 2021 | July 3, 2022 | July 4, 2021 |
| Cost of revenue | $ 117 | $ 18 | $ 173 | $ 54 |
| Research and development | 91 | 82 | 176 | 239 |
| Selling, general and administrative | 269 | 102 | 511 | 277 |
| Total | $ 477 | $ 202 | $ 860 | $ 570 |

There was no stock-based compensation expense reversal related to the cancellation of certain unvested performance-based RSUs for the three and six months ended July 3, 2022 and July 4, 2021.

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

No stock options were granted during the three and six months ended July 3, 2022 and July 4, 2021.

***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 3, 2022 (in thousands):

| | Shares Available for Grants |
|---|---|
| Balance at January 2, 2022 | 594 |
| Authorized | 908 |
| RSUs granted | (99) |
| RSUs forfeited or expired | 18 |
| Balance at July 3, 2022 | 1,421 |

***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 3, 2022:

| | Number of Shares (in thousands) | Weighted Average Exercise Price | Weighted Average Remaining Term (in years) | Aggregate Intrinsic Value (in thousands) |
|---|---|---|---|---|
| Balance outstanding at January 2, 2022 | 93 | $ 27.49 | | |
| Expired | (9) | $ 48.03 | | |
| Balance outstanding at July 3, 2022 | 84 | $ 25.42 | 2.94 | $ — |
| Exercisable at July 3, 2022 | 84 | $ 25.42 | 2.94 | $ — |
| Vested and expected to vest at July 3, 2022 | 84 | $ 25.42 | 2.94 | $ — |

No stock options were granted, exercised, forfeited or expired during the six months ended July 3, 2022 and July 4, 2021.

Total stock-based compensation related to stock options was $0 during the six months ended July 3, 2022 and July 4, 2021.

As of July 3, 2022, 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 $0.5 million and $0.9 million for the three and six months ended July 3, 2022, respectively, and approximately $0.2 million and $0.6 million for the three and six months ended July 4, 2021, respectively.

As of July 3, 2022 and July 4, 2021, there was approximately $1.1 million and $0.2 million, respectively, in unrecognized compensation expense related to RSUs. The remaining unrecognized stock-based compensation expense as of July 3, 2022 is expected to be recorded over a weighted average period of 1.47 years.

A summary of activity for the Company's RSUs and PRSUs for the six months ended July 3, 2022 is as follows:

| | RSUs & PRSUs Outstanding | |
|---|---|---|
| | Number of Shares (in thousands) | Weighted Average Grant Date Fair Value |
| Nonvested at January 2, 2022 | 568 | $ 5.86 |
| Granted | 99 | 5.51 |
| Vested | (229) | 5.95 |
| Forfeited | (22) | 5.09 |
| Nonvested at July 3, 2022 | 416 | $ 5.78 |

***Employee Stock Purchase Plan***

Total stock-based compensation related to the Company's Employee Stock Purchase Plan was approximately $11 thousand and $34 thousand for the three and six months ended July 3, 2022, respectively, and $36 thousand and $66 thousand for the three and six months ended July 4, 2021, respectively.

**Note 8 — Income Taxes**

The Company recorded a net income tax expense of $17 thousand and $16 thousand for the three and six months ended July 3, 2022, respectively, and $5 thousand and $0.2 million for the three and six months ended July 4, 2021, respectively. A majority of the income tax expense for the three months ended July 3, 2022 was related to the Company's foreign subsidiaries, which are cost-plus entities, and state minimum income taxes. A majority of the income tax expense for the six months ended July 3, 2022 was related to income tax expense of the Company's foreign subsidiaries and state minimum income taxes, partially offset by tax benefits from foreign income tax returns related to the Company's foreign subsidiaries. The difference between the estimated annual effective income tax benefit rate of 2.1% and the 21% U.S. federal statutory expense rate reflects state income taxes, foreign income taxes, the effect of certain permanent differences, and a full valuation allowance against net deferred tax assets.

The valuation allowance primarily resulted from not having sufficient income from deferred tax liability reversals in the appropriate future periods to support the realization of certain deferred tax assets. Based on the estimated reversal patterns of the Company’s deferred tax assets and liabilities, it is more likely than not that the Company will not realize the federal, state and certain foreign deferred tax assets generated as there is insufficient projected income from reversals of deferred tax liabilities. Accordingly, the Company continues to maintain a full valuation allowance against all of U.S. and certain foreign net deferred tax assets as of July 3, 2022.

The Company had no unrecognized tax benefits as of July 3, 2022 and January 2, 2022 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.

**Note 9 — 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 family (in thousands):

| | Three Months Ended | | Six Months Ended | |
|---|---|---|---|---|
| | July 3, 2022 | July 4, 2021 | July 3, 2022 | July 4, 2021 |
| New products | $ 3,131 | $ 1,262 | $ 6,581 | $ 2,337 |
| Mature products | 1,410 | 1,620 | 2,056 | 2,785 |
| Total revenue | $ 4,541 | $ 2,882 | $ 8,637 | $ 5,122 |

New products revenue consists of revenues from the sale of hardware products manufactured on 180 nanometer or smaller semiconductor processes, eFPGA intellectual property licenses, professional services, and QuickAI and SensiML AI software as a service (“SaaS”) revenue. Mature products include all products produced on semiconductor processes larger than 180 nanometer.

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

| | Three Months Ended | | Six Months Ended | |
|---|---|---|---|---|
| | July 3, 2022 | July 4, 2021 | July 3, 2022 | July 4, 2021 |
| Hardware products | $ 1,464 | $ 1,069 | $ 3,299 | $ 2,074 |
| eFPGA IP | 1,617 | 150 | 3,188 | 150 |
| SaaS | 50 | 43 | 94 | 113 |
| New products revenue | $ 3,131 | $ 1,262 | $ 6,581 | $ 2,337 |

eFPGA IP revenue was $1.6 million and $3.2 million for the three and six months ended July 3, 2022. eFPGA IP revenue, consisting of intellectual property license revenue and professional services revenue, was $1.5 million and $3.1 million for the three and six months ended July 3, 2022, respectively, and $23 thousand for the three and six months ended July 4, 2021, and IP revenue was $0.1 million for the three and six months ended July 3, 2022 and $125 thousand for the three and six months ended July 4, 2021. Contract liabilities related to professional services revenue of $0 and $0.3 million and were included in deferred revenue on the consolidated balance sheets as of July 3, 2022 and January 2, 2022, respectively.

We derive revenue from sales to customers located in North America, Europe and Asia Pacific.

North America revenue from the United States was $3.0 million, or 67% of total revenue, and $5.5 million, or 63% of total revenue for the three and six months ended July 3, 2022, respectively. North America revenue from the United States was $0.6 million, or 19% of total revenue, and $1.8 million, or 35% of total revenue for the three and six months ended July 4, 2021, respectively.

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

| | Three Months Ended | | Six Months Ended | |
|---|---|---|---|---|
| | July 3, 2022 | July 4, 2021 | July 3, 2022 | July 4, 2021 |
| Asia Pacific | $ 840 | $ 1,075 | $ 2,331 | $ 1,828 |
| North America | 3,082 | 565 | 5,515 | 1,824 |
| Europe | 619 | 1,242 | 791 | 1,470 |
| Total revenue | $ 4,541 | $ 2,882 | $ 8,637 | $ 5,122 |

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 3, 2022 | July 4, 2021 | July 3, 2022 | July 4, 2021 |
| Distributor "A" | 15% | 14% | 13% | 13% |
| Distributor "C" | * | * | * | 16% |
| Distributor "E" | 11% | 29% | 20% | 29% |
| Customer "E" | 11% | * | * | 20% |
| Customer "F" | 11% | 29% | * | 29% |
| Customer "N" | 29% | * | 23% | * |
| Customer "O" | 16% | * | 21% | * |
| Customer "P" | * | * | 11% | * |

* 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 3, 2022 | January 2, 2022 |
|---|---|---|
| Distributor "A" | 13% | 42% |
| Distributor "C" | * | 17% |
| Distributor "E" | * | 22% |
| Distributor "J" | 36% | * |
| Customer "O" | 29% | 10% |

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

## Note 10 — 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 3, 2022, the Company had $0.6 million of outstanding commitments for the purchase of wafer 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 3, 2022, total outstanding purchase obligations for other goods and services were $1.2 million 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.

## Note 11 — Subsequent Events

***eFPGA Project Agreement***

On August 8, 2022, we executed an Agreement (the "Agreement") with a new customer to develop an eFPGA product in accordance with the customer's specifications. Under the terms of the Agreement, we will be paid fees of $6.9 million for performing the work over an approximately 12-month period from the execution date of the Agreement. Upon successful performance, the Agreement allows for the customer to extend the scope of work to tens of millions of dollars over the span of multiple years.

## 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.*

*The forward-looking statements contained in the Quarterly Report 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 2, 2022, found in our Annual Report on Form 10-K filed with the Securities and Exchange Commission ("SEC") on March 22, 2022. 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 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 Consumer/Industrial IoT, Consumer electronics, Military, Aerospace and Defense 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. Inclusive of one pending, patent application disclosed in our fiscal 2021 annual report, at the end of the second quarter of fiscal 2022 we had a total of five patent applications pending.

Our semiconductor solutions typically fall into one of three categories: Sensor Processing, Display 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, ("VEE"), technology, and Display Power Optimizer, ("DPO"), technology; and (ii) implements commonly used mobile system interfaces, such as Low Voltage Differential Signaling, ("LVDS"), Mobile Industry Processor Interface, ("MIPI"), and Secure Digital Input Output, ("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 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, ("ODMs"), we can amortize our Research and Development, ("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 2022.

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 2022, we generated total revenue of $4.5 million, an increase of 11% compared to the prior quarter, and an increase of 58% compared to the same quarter last year. Our new product revenue in the second quarter was $3.1 million, a decrease of 9% from the prior quarter and an increase of 148% from the second quarter of 2021. The increase in new product revenue was primarily driven by professional services revenue of $1.6 million in the current quarter. Our mature product revenue was $1.4 million in the second quarter of 2022, an increase of 118% compared to the prior quarter, and a decrease of 13% compared to the second quarter of 2021. 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 $0.5 million for the second quarter of 2022, a decrease of 55% compared with the prior quarter, and a decrease of 75% compared with the second quarter of 2021.

We have experienced net losses in the recent years and expect losses to continue through at least fiscal year 2022 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.

There have been no material changes due to the impact of the Covid-19 pandemic on our business from that disclosed in our most recently filed Annual Report. Our most recent Annual Report on Form 10-K for the year ended January 2, 2022 as filed with the SEC on March 22, 2022 provides additional information about our business and operations.

***Critical Accounting Policies and 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, and determination of the Stand-Alone Selling Price ("SSP") for certain distinct performance obligations (such as for IP licensing and professional services contracts), goodwill and intangible assets, valuation of inventories including identification of excess quantities and product obsolescence, allowance for doubtful accounts, valuation of long-lived assets, leases, measurement of stock-based compensation, and accounting for income taxes. We believe that we apply judgments and estimates in a consistent manner and that this consistent application results in our consolidated 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 3, 2022, 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 2, 2022, filed with the SEC on March 22, 2022.

***Results of Operations***

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

| | Three Months Ended | | Six Months Ended | |
|---|---|---|---|---|
| | July 3, 2022 | July 4, 2021 | July 3, 2022 | July 4, 2021 |
| Revenue | 100% | 100% | 100% | 100% |
| Cost of revenue | 44% | 49% | 42% | 49% |
| Gross profit | 56% | 51% | 58% | 51% |
| Operating expenses: | | | | |
| Research and development | 26% | 57% | 29% | 69% |
| Selling, general and administrative | 44% | 63% | 48% | 73% |
| Loss from operations | (14)% | (69)% | (19)% | (91)% |
| | | | | |
| Interest expense | —% | (1)% | —% | (1)% |
| Gain on forgiveness of debt | —% | —% | —% | 23% |
| Interest income and other income (expense), net | 3% | (2)% | —% | (1)% |
| Loss before income taxes | (11)% | (71)% | (19)% | (70)% |
| Provision for income taxes | 1% | —% | 1% | 3% |
| Net loss | (12)% | (71)% | (20)% | (73)% |

***Three Months Ended July 3, 2022 Compared to Three Months Ended July 4, 2021***

*Revenue*

The table below sets forth the changes in revenue in the three months ended July 3, 2022 compared to the three months ended July 4, 2021 (in thousands, except percentage data):

| | Three Months Ended | | | | Change | |
|---|---|---|---|---|---|---|
| | July 3, 2022 | | July 4, 2021 | | | |
| | Amount | % of Total Revenues | Amount | % of Total Revenues | Amount | Percentage |
| New products | $ 3,131 | 69% | $ 1,262 | 44% | $ 1,869 | 148% |
| Mature products | 1,410 | 31% | 1,620 | 56% | (210) | (13)% |
| Total revenue | $ 4,541 | 100% | $ 2,882 | 100% | $ 1,659 | 58% |

Note: For all periods presented, New products include hardware products and related revenues manufactured on 180 nanometer or smaller semiconductor processes, intellectual property license, professional services, QuickAI and SensiML AI software as a service (SaaS) revenues. Mature products include all products produced on semiconductor processes larger than 180 nanometer.

Product revenue for the second quarter of 2022 compared to the second quarter of 2021 increased $1.7 million. The $1.9 million increase in new products revenue was partially offset by a 13% net decrease in mature product revenue from a reduction in QECL and Eclipse Plus products, partially offset by an increase in PASIC4 products.

*New Product Revenue*

The table below sets forth the changes in new product revenue in the three months ended July 3, 2022 compared to the three months ended July 4, 2021 (in thousands, except percentage data):

| | Three Months Ended | | | | Change | |
|---|---|---|---|---|---|---|
| | July 3, 2022 | | July 4, 2021 | | | |
| | Amount | % of Total Revenues | Amount | % of Total Revenues | Amount | Percentage |
| Hardware products | $ 1,464 | 32% | $ 1,068 | 37% | $ 396 | 37% |
| eFPGA IP | 1,617 | 36% | 148 | 5% | 1,469 | 993% |
| SaaS | 50 | 1% | 46 | 2% | 4 | 9% |
| Total new product revenue | $ 3,131 | 69% | $ 1,262 | 44% | $ 1,869 | 148% |

The $0.4 million increase in new hardware product revenue was primarily comprised of a $0.8 million increase smart connectivity products partially offset by a $0.4 million decrease in sensor revenue. eFPGA IP revenue increased $1.5 million, or 993%, as compared to the same quarter in the prior year. The increase in eFPGA IP revenue was primarily driven by an increase in professional services revenue of $1.5 million partially offset by a 2% decrease in IP revenue.

*Gross Profit*

The table below sets forth the changes in gross profit for the three months ended July 3, 2022 compared to the three month ended July 4, 2021 (in thousands, except percentage data):

| | Three Months Ended | | | | | |
|---|---|---|---|---|---|---|
| | July 3, 2022 | | July 4, 2021 | | Change | |
| | Amount | % of Total Revenues | Amount | % of Total Revenues | Amount | Percentage |
| Revenue | $ 4,541 | 100% | $ 2,882 | 100% | $ 1,659 | 58% |
| Cost of revenue | 1,997 | 44% | 1,416 | 49% | 581 | 41% |
| Gross profit | $ 2,544 | 56% | $ 1,466 | 51% | $ 1,078 | 74% |

In the second quarter of 2022, gross profit increased $1.1 million, or 74%, as compared to the same quarter in the prior year. The increase in gross profit reflects a 58% increased in revenue, primarily composed of an increase of $0.4 million in new product hardware revenue and an increase of $1.5 million in eFPGA IP revenue, partially offset by a $0.2 million decrease in mature product revenue. The net increase in revenue was partially offset by a $0.6 million increase in cost of revenues, primarily comprised of $0.8 million in costs related to eFPGA IP, and partially offset by a $0.2 million decrease in product cost standards. eFPGA IP revenue and costs related to eFPGA IP revenue were comprised eFPGA intellectual property license revenue and costs, respectively, and professional services revenue and costs, respectively.

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 3, 2022, compared to the three months ended July 4, 2021 (in thousands, except percentage data):

| | Three Months Ended | | | | | |
|---|---|---|---|---|---|---|
| | July 3, 2022 | | July 4, 2021 | | Change | |
| | Amount | % of Total Revenues | Amount | % of Total Revenues | Amount | Percentage |
| R&D expense | $ 1,190 | 26% | $ 1,652 | 57% | $ (462) | (28)% |
| SG&A expense | 1,981 | 44% | 1,794 | 62% | 187 | 10% |
| Total operating expenses | $ 3,171 | 70% | $ 3,446 | 120% | $ (275) | (8)% |

*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 $0.5 million decrease in R&D expenses in the second quarter of 2022, as compared to the second quarter of 2021, was primarily attributable to R&D costs allocable to cost of revenue related to eFPGA IP revenue, a reduction in amortization and depreciation, and in expensed software. These were partially offset by increases in salary and related expenses, higher recruiting expenses, increased printing expenses, consulting and other outside services. R&D costs allocable to cost of revenue related to eFPGA IP revenue included costs related to eFPGA intellectual property license revenue and professional services revenue.

*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 $0.2 millionincrease in SG&A expenses in the second quarter of 2022, as compared to the second quarter of 2021 was primarily attributable to increases in salary and related expenses, stock-based compensation expenses, legal expenses and occupancy costs, and accounting and audit expenses, partially offset by a decrease in selling expenses and consulting costs.

*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 3, 2022, compared to the three months ended July 4, 2021 (in thousands, except percentage data):

| | Three Months Ended | | Change | |
|---|---|---|---|---|
| | July 3, 2022 | July 4, 2021 | Amount | Percentage |
| Interest expense | $ (22) | $ (32) | $ 10 | (31)% |
| Interest income and other income (expense), net | 142 | (45) | 187 | (416)% |
| Total interest income and other income (expense), net | $ 120 | $ (77) | $ 197 | (256)% |

Interest expense relates primarily to our revolving 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 expense for the second quarter of this year as compared to the same period in the prior year decreased approximately $10 thousand, which reflected a reduction in interest expense from finance lease liabilities partially offset by an increase in interest rates on our revolving line of credit loan. Interest income and other income (expense), net, was a net income of approximately $0.1 million and a net expense of approximately $77 thousand for the three months ended July 3, 2022 and July 4, 2021, respectively. The increase in total interest income and other income (expense), net reflected an increase in net foreign exchange gains and in other income and a reduction in interest expense over the prior period presented.

*Provision for Income Taxes*

The table below sets forth the changes in the provisions for income taxes in the three months ended July 3, 2022, compared to the three months ended July 4, 2021 (in thousands, except percentage data):

| | Three Months Ended | | Change | |
|---|---|---|---|---|
| | July 3, 2022 | July 4, 2021 | Amount | Percentage |
| Provision for income taxes | $ 17 | $ 5 | $ 12 | 240% |

The majority of the income tax expense for the three months ended July 3, 2022 and July 4, 2021 related to our foreign subsidiaries, which are cost-plus entities.

***Six Months Ended July 3, 2022 Compared to Six Months Ended July 4, 2021***

*Revenue*

The table below sets forth the changes in revenue for the six months ended July 3, 2022, compared to the six months ended July 4, 2021 (in thousands, except percentage data):

| | Six Months Ended | | | | Change | |
|---|---|---|---|---|---|---|
| | July 3, 2022 | | July 4, 2021 | | | |
| | Amount | % of Total Revenues | Amount | % of Total Revenues | Amount | Percentage |
| New products | $ 6,581 | 76% | $ 2,337 | 46% | $ 4,244 | 182% |
| Mature products | 2,056 | 24% | 2,785 | 54% | (729) | (26)% |
| Total revenue | $ 8,637 | 100% | $ 5,122 | 100% | $ 3,515 | 69% |

Note: For all periods presented, New products include all products and related revenues manufactured on 180 nanometer or smaller semiconductor processes, eFPGA IP license, professional services, QuickAI and SensiML AI software as a service (SaaS) revenues. Mature products include all products produced on semiconductor processes larger than 180 nanometer.

Product revenue for the six months ended July 3, 2022, as compared to the six months ended July 4, 2021 increased $3.5 million. The increase in product revenue was comprised of a $4.2 million increase in new product revenue partially offset by a 26% decrease in mature product revenue.

*New Product Revenue*

The table below sets forth the changes in new product revenue in the six months ended July 3, 2022 compared to the six months ended July 4, 2021 (in thousands, except percentage data):

| | Six Months Ended | | | | Change | |
|---|---|---|---|---|---|---|
| | July 3, 2022 | | July 4, 2021 | | | |
| | Amount | % of Total Revenues | Amount | % of Total Revenues | Amount | Percentage |
| Hardware products | $ 3,299 | 38% | $ 2,074 | 40% | $ 1,225 | 59% |
| eFPGA IP | 3,188 | 37% | 148 | 3% | 3,040 | 2054% |
| SaaS | 94 | 1% | 115 | 2% | (21) | (18)% |
| Total new product revenue | $ 6,581 | 76% | $ 2,337 | 46% | $ 4,244 | 182% |

The $1.2 million increase in new hardware product revenue was primarily comprised of $1.0 million in higher connectivity product revenue, $1.0 million in higher display product revenue, partially offset by decrease a $0.7 million decrease in sensor product revenue. eFPGA IP revenue increased $3.0 million, or 2054%, as compared to the same period in the prior year, primarily driven by an increase in professional services. eFPGA IP revenue was comprised of eFPGA intellectual property license revenue and professional services revenue.

*Gross Profit*

The table below sets forth the changes in gross profit for the six months ended July 3, 2022, compared to the six months ended July 4, 2021 (in thousands, except percentage data):

| | Six Months Ended | | | | Change | |
|---|---|---|---|---|---|---|
| | July 3, 2022 | | July 4, 2021 | | | |
| | Amount | % of Total Revenues | Amount | % of Total Revenues | Amount | Percentage |
| Revenue | $ 8,637 | 100% | $ 5,122 | 100% | $ 3,515 | 69% |
| Cost of revenue | 3,632 | 42% | 2,512 | 49% | 1,120 | 45% |
| Gross profit | $ 5,005 | 58% | $ 2,610 | 51% | $ 2,395 | 92% |

Gross profit for the six months ended July 3, 2022, as compared to the six months ended July 4, 2021, increased $2.4 million, or 92%. The increase was primarily due to an increase revenue of $3.5 million or 69%. The increase in revenue was primarily composed of an increase of $1.2 million in new product revenue and an increase in eFPGA IP revenue of $3.1 million was partially offset a decrease of $0.7 million in mature product revenue. The increase in revenue was partially offset by an increase of $1.2 million in eFPGA IP cost of revenue, partially offset by a reduction in product cost of revenue due to the mix of products sold. eFPGA IP revenue and costs related to eFPGA IP revenue were comprised eFPGA intellectual property license revenue and costs, respectively, and professional services revenue and costs, respectively.

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 six months ended July 3, 2022, compared to the six months ended July 4, 2021 (in thousands, except percentage data):

| | Six Months Ended | | | | Change | |
|---|---|---|---|---|---|---|
| | July 3, 2022 | | July 4, 2021 | | | |
| | Amount | % of Total Revenues | Amount | % of Total Revenues | Amount | Percentage |
| R&D expense | $ 2,523 | 29% | $ 3,539 | 69% | $ (1,016) | (29)% |
| SG&A expense | 4,118 | 48% | 3,741 | 73% | 377 | 10% |
| Total operating expenses | $ 6,641 | 77% | $ 7,280 | 142% | $ (639) | (9)% |

*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. R&D expenses in the six months ended July 3, 2022, as compared to the six months ended July 4, 2021, decreased $1 million. The decrease in R&D expenses was primarily attributable to R&D costs allocable to cost of revenue in support of eFPGA IP and decreases in stock-based compensation costs and consulting services, partially offset increases in salary and related expenses, and amortization expense.
R&D costs allocable to cost of revenues in support of eFGPA IP included costs related to eFPGA intellectual property license revenue and professional services revenue.

*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. SG&A expenses in the six months ended July 3, 2022, as compared to the six months ended July 4, 2021, increased $0.4 million. The increase was primarily attributable to higher stock-based compensation expenses, legal fees and accounting and audit expenses, outside services expenses, insurance costs, dues and subscriptions and director service fees, partially offset by reductions in consulting expenses.

*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 3, 2022, compared to the six months ended July 4, 2021 (in thousands, except percentage data):

| | Six Months Ended | | Change | |
|---|---|---|---|---|
| | July 3, 2022 | July 4, 2021 | Amount | Percentage |
| Interest expense | $ (55) | $ (64) | $ 9 | (14)% |
| Gain on forgiveness of debt | — | 1,192 | (1,192) | (100)% |
| Interest income and other expense, net | 19 | (52) | 71 | (137)% |
| | $ (36) | $ 1,076 | $ (1,112) | (103)% |

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 expense for the six months ended July 3, 2022 compared to the same period in the previous year declined $9 thousand, which reflected a decrease in interest expense from finance lease liabilities partially offset by an increase in interest rates on our revolving line of credit loan. Interest income and other expense, net, for the six months ended July 3, 2022 compared to the same period in the previous year, increased $71 thousand, which primarily reflected an increase in net foreign exchange gains. Interest expense and interest income and other income (expense), net, for the six months ended July 4, 2021 was $1.1 million and which included a gain on forgiveness of debt relates to the gain related to the forgiveness of the PPP loan of $1.2 million.

*Provision for Income Taxes*

The table below sets forth the changes in provision for income taxes for the six months ended July 3, 2022, compared to the six months ended July 4, 2021 (in thousands, except percentage data):

| | Six Months Ended | | Change | |
|---|---|---|---|---|
| | July 3, 2022 | July 4, 2021 | Amount | Percentage |
| Provision for income taxes | $ 16 | $ 157 | $ 141 | 90% |

The majority of the income tax expense for the six months ended July 3, 2022 and July 4, 2021 relates to our foreign subsidiaries, which are cost-plus entities. Included in the provision for the six months ended July 4, 2021 was a $125,000 deferred tax provision related to a one-time repatriation of funds from our India entity.

***Liquidity and Capital Resources***

We have financed our operations and capital investments through public and private offerings of our common stock, finance and operating leases, and borrowing under a revolving line of credit and cash flows used in operations, partially offset by cash used in operations. In addition to the Company's cash, cash equivalents and restricted cash of $18.5 million, as of July 3, 2022 other sources of liquidity included a $15.0 million drawn down from our revolving line of credit ("Revolving Facility") with Heritage Bank of Commerce (“Heritage Bank”), and $1.6 million in net proceeds from the Company's sale of common stock, of which $1.5 million represented a registered direct offering in February 2022.

On February 9, 2022, the Company entered into common stock purchase agreements with certain investors for the sale of an aggregate of 310,000 shares of common stock, par value $0.001 in a registered direct offering. These share placements resulted in net cash proceeds of approximately $1.5 million. Issuance costs related to this offering were negligible. The purchase price for each share of common stock in this placement was $4.78. The Company currently intends to use the net proceeds from the financing for working capital, the development of next generation eFPGA-based products, including AI and open-source hardware or software, and general corporate purposes

We were in compliance with all the Heritage Bank Revolving Facility loan covenants as of July 3, 2022. As of July 3, 2022, we had $15.0 million of outstanding on the Revolving Facility with an interest rate of 5.25%.

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 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; market acceptance of existing and new products including solutions based on its eFPGA IP, ArcticLink® and PolarPro® platforms, eFPGA, EOS S3 SoC, Quick AI solution, and SensiML software; fluctuations in revenue as a result of product end-of-life; fluctuations in revenue as a result of the stage in the product life cycle of its customers’ products; costs of securing access to and availability of adequate manufacturing capacity; levels of inventories; wafer purchase commitments; customer credit terms; the amount and timing of research and development expenditures; the timing of new product introductions; production volumes; 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 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, existing cash and cash equivalents, together with financial resources from its Revolving Facility with Heritage Bank, assuming renewal of the Revolving Facility or the Company entering into a new debt agreement with an alternative lender prior to the expiration of the revolving line of credit in December 2023, 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.

As of July 3, 2022, most of our cash, cash equivalents and restricted cash were invested in a money market account at Heritage Bank. As of July 3, 2022, our interest-bearing debt consisted of $0.5 million outstanding under finance leases and $15.0 million outstanding under our Revolving Facility. See Note 5, Debt Obligations, to the unaudited condensed consolidated financial statements for more details.

Cash balances held at our foreign subsidiaries was approximately $0.1 million and$0.4 million as of July 3, 2022 and January 2, 2022, 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 3, 2022 | July 4, 2021 |
| Net cash used in operating activities | $ (2,063) | $ (2,812) |
| Net cash used in investing activities | (402) | (447) |
| Net cash provided by (used in) financing activities | 1,406 | (493) |

***Net cash used in operating activities***

For the six months ended July 3, 2022, net cash used in operating activities was $2.1 million, which was primarily due to the net loss of $1.7 million, adjusted for net non-cash charges of $1.2 million, which included $0.9 million of stock-based compensation, depreciation and amortization expenses of $0.3 million, an inventory write-downs of $54 thousand, partially offset by a gain on disposal of equipment of $76 thousand. Cash outflows from changes in operating assets and liabilities were approximately $1.5 million and were primarily due to an increases in accounts receivable, reflecting the increase in revenues during the period, a decrease in deferred revenue, and an increase in inventory. This was partially offset by an increase in trade payables, which are subject to variability of the timing of payments.

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 thousand including the gain recognized from the forgiveness of the PPP loan of $1.2 million. Other non-cash charges consisted primarily of $0.6 million of stock-based compensation, depreciation and amortization expenses of $0.3 million, and inventory write-downs of $0.2 million. 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.

***Net cash used in investing activities***

For the six months ended July 3, 2022, cash used in investing activities was $0.4 million, which was primarily attributable to the capitalized internal-use software and capital expenditures relating to licensed software and computer equipment.

For the six months ended July 4, 2021, cash used in investing activities was $0.4 million, which was primarily attributable to the capitalized internal-use software and capital expenditure relating to leasehold improvements and computer equipment.

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***Net cash provided by (used in) 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 3, 2022, cash provided by financing activities was $1.4 million, which was primarily derived from the net proceeds of $1.6 million from the stock issuances. We continue to use and repay our revolving line of credit as our cash needs require.

For the six months ended July 4, 2021 cash used in financing activities was $0.5 million and was primarily attributable to taxes paid relating to stock-based compensation equity awards.

**Part I. Financial Information (continued)**

***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.

**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 3, 2022, our Chief Executive Officer and Chief 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 Chief Financial Officer, to allow timely decisions regarding required disclosure.

Our management, including our Chief Executive Officer and Chief Financial 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.

**Item 1A. Risk Factors**

There have been no material changes to the risk factors set forth in our 2021 Annual Report on Form 10-K for the year ended January 2, 2022, filed with the SEC on March 22, 2022, 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.

**Item 3. Defaults Upon Senior Securities**

None.

**Item 6. Exhibits**

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

| Exhibit Number | Description |
|---|---|
| 10.1 | QuickLogic Corporation 2019 Stock Plan, as amended May 10, 2022, (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K, filed on May 5, 2022). |
| 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 Elias Nadar, Chief Financial 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 Elias Nadar, Chief Financial Officer, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002. |
| 101.INS | 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 3, 2022, has been formatted in Inline XBRL and contained in exhibit 101. |

**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 17, 2022

/s/ Elias Nader

Elias Nader
***Chief Financial Officer and Senior Vice-President, Finance***
*(as Principal Financial Officer and on behalf of the Registrant)*

**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 17, 2022

/s/ Brian C. Faith

Brian C. Faith

*President and Chief Executive Officer*

**Exhibit 31.2**

# CERTIFICATIONS

I, Elias Nader, 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 17, 2022

/s/ Elias Nader
Elias Nader
*Chief Financial Officer and Senior Vice-President, Finance*

**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 3, 2022 (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 17, 2022 | 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, Elias Nader, Chief Financial Officer and Senior Vice-President, Finance 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 3, 2022(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 17, 2022 | By: | /s/ Elias Nader |
| | Name: | Elias Nader |
| | Title: | *Chief Financial Officer and Senior Vice-President, Finance* |