**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 October 1, 2023**

**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 November 10, 2023, there were 13,910,127 shares of registrant’s common stock, par value $0.001 per share, outstanding.

**QUICKLOGIC CORPORATION**
**FORM 10-Q**
**October 1, 2023**

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## PART I. Financial Information

### Item 1. Financial Statements

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

| | October 1, 2023 | January 1, 2023 |
|---|---|---|
| **ASSETS** | | |
| Current assets: | | |
| Cash, cash equivalents and restricted cash | $ 18,625 | $ 19,201 |
| Accounts receivable, net of allowance for doubtful accounts of $16 and $18, as of October 1, 2023 and January 1, 2023, respectively | 481 | 2,689 |
| Contract assets | 4,015 | 1,987 |
| Note receivable | 1,186 | — |
| Inventories | 2,030 | 2,493 |
| Prepaid expenses and other current assets | 1,726 | 1,570 |
| Total current assets | 28,063 | 27,940 |
| Property and equipment, net | 4,547 | 465 |
| Capitalized internal-use software, net | 1,666 | 1,514 |
| Right of use assets, net | 1,082 | 1,397 |
| Intangible assets, net | 564 | 645 |
| Non-marketable equity investment | 300 | 300 |
| Goodwill | 185 | 185 |
| Other assets | 142 | 140 |
| **TOTAL ASSETS** | $ 36,549 | $ 32,586 |
| **LIABILITIES AND STOCKHOLDERS' EQUITY** | | |
| Current liabilities: | | |
| Revolving line of credit | $ 15,000 | $ 15,000 |
| Trade payables | 3,851 | 2,391 |
| Accrued liabilities | 2,047 | 1,509 |
| Deferred revenue | 333 | 272 |
| Lease liabilities, current | 821 | 850 |
| Total current liabilities | 22,052 | 20,022 |
| Long-term liabilities: | | |
| Lease liabilities, non-current | 284 | 544 |
| Other liabilities, non-current | 173 | 125 |
| Total liabilities | 22,509 | 20,691 |
| Commitments and contingencies (see Note 11) | | |
| Stockholders' equity: | | |
| Preferred stock, $0.001 par value; 10,000 shares authorized; no shares issued and outstanding | — | — |
| Common stock, $0.001 par value; 200,000 authorized; 13,906 and 13,202 shares issued and outstanding as of October 1, 2023 and January 1, 2023, respectively | 14 | 13 |
| Additional paid-in capital | 321,623 | 317,174 |
| Accumulated deficit | (307,597) | (305,292) |
| Total stockholders' equity | 14,040 | 11,895 |
| **TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY** | $ 36,549 | $ 32,586 |

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 | | Nine Months Ended | |
|---|---|---|---|---|
| | October 1, 2023 | October 2, 2022 | October 1, 2023 | October 2, 2022 |
| Revenue | $ 6,665 | $ 3,459 | $ 13,719 | $ 12,096 |
| Cost of revenue | 1,537 | 1,781 | 4,998 | 5,413 |
| Gross profit | 5,128 | 1,678 | 8,721 | 6,683 |
| Operating expenses: | | | | |
| Research and development | 1,933 | 1,018 | 5,067 | 3,541 |
| Selling, general and administrative | 1,915 | 1,900 | 5,700 | 6,018 |
| Total operating expenses | 3,848 | 2,918 | 10,767 | 9,559 |
| Operating income (loss) | 1,280 | (1,240) | (2,046) | (2,876) |
| Interest expense | (48) | (44) | (156) | (98) |
| Interest income and other (expense) income, net | (36) | (60) | (99) | (42) |
| Income (loss) before income taxes | 1,196 | (1,344) | (2,301) | (3,016) |
| Provision for income taxes | 4 | 3 | 4 | 19 |
| Net income (loss) | $ 1,192 | $ (1,347) | $ (2,305) | $ (3,035) |
| Net income (loss) per share: | | | | |
| Basic EPS | $ 0.09 | $ (0.11) | $ (0.17) | $ (0.24) |
| Diluted EPS | $ 0.08 | $ (0.11) | $ (0.17) | $ (0.24) |
| Weighted average shares outstanding: | | | | |
| Basic | 13,859 | 12,664 | 13,377 | 12,401 |
| Diluted | 14,131 | 12,664 | 13,377 | 12,401 |

Note: Net income (loss) equals comprehensive income (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)**

| | Nine Months Ended | |
|---|---|---|
| | October 1, 2023 | October 2, 2022 |
| Cash flows from operating activities: | | |
| Net loss | $ (2,305) | $ (3,035) |
| Adjustments to reconcile net loss to net cash used in operating activities: | | |
| Depreciation and amortization | 697 | 516 |
| ROU asset amortization | 760 | 585 |
| Stock-based compensation | 1,917 | 1,347 |
| Write-down of inventories and reclassifications | 605 | 72 |
| Gain on disposal of equipment | — | (27) |
| Other | 4 | — |
| Changes in operating assets and liabilities: | | |
| Accounts receivable | 2,205 | (2,611) |
| Contract assets | (2,028) | — |
| Inventories | (142) | (195) |
| Other assets | (1,343) | (158) |
| Trade payables | (836) | 668 |
| Accrued liabilities | 537 | (52) |
| Deferred revenue | 61 | (239) |
| Lease Liabilities | (298) | (272) |
| Other long-term liabilities | 48 | (22) |
| Net cash used in operating activities | (118) | (3,423) |
| Cash flows from investing activities: | | |
| Capital expenditures for property and equipment | (2,015) | (139) |
| Capitalized internal-use software | (422) | (495) |
| Net cash used in investing activities | (2,437) | (634) |
| Cash flows from financing activities: | | |
| Payment of finance lease obligations | (435) | (299) |
| Proceeds from line of credit | 45,000 | 45,000 |
| Repayment of line of credit | (45,000) | (45,000) |
| Proceeds from issuance of common stock | 121 | 4,787 |
| Proceeds from issuance of common stock to investors | 2,313 | — |
| Stock issuance cost | (20) | — |
| Net cash provided by financing activities | 1,979 | 4,488 |
| Net increase (decrease) in cash, cash equivalents and restricted cash | (576) | 431 |
| Cash, cash equivalents and restricted cash at beginning of period | 19,201 | 19,605 |
| Cash, cash equivalents and restricted cash at end of period | $ 18,625 | $ 20,036 |
| | | |
| Supplemental disclosures of cash flow information: | | |
| Interest paid | $ 59 | $ 18 |
| Income taxes paid | $ 11 | $ 14 |
| | | |
| Supplemental disclosures of noncash financing and investing items | | |
| Purchases of fixed assets with financing lease | $ 445 | $ — |
| Stock-based compensation capitalized as internal-use software | $ 119 | $ — |
| Purchases of property and equipment in accounts payable | $ 2,296 | $ — |

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 1, 2023 | 13,202 | $ 13 | $ 317,174 | $ (305,292) | $ 11,895 |
| Issuance of common stock under public stock offering, net of stock issuance cost | 450 | 1 | 2,292 | — | 2,293 |
| Common stock issued under stock plans and employee stock purchase plans | 34 | — | — | — | — |
| Stock-based compensation | — | — | 715 | — | 715 |
| Net loss | — | — | — | (1,228) | (1,228) |
| Balance at April 2, 2023 | 13,686 | 14 | 320,181 | (306,520) | 13,675 |
| Common stock issued under stock plans and employee stock purchase plan | 39 | — | 122 | — | 122 |
| Stock-based compensation | — | — | 647 | — | 647 |
| Net loss | — | — | — | (2,269) | (2,269) |
| Balance at July 2, 2023 | 13,725 | 14 | 320,950 | (308,789) | 12,175 |
| Common stock issued under stock plans and employee stock purchase plan | 181 | — | — | — | — |
| Common stock offering, net of issuance costs | — | — | — | — | — |
| Stock-based compensation | — | — | 673 | — | 673 |
| Net income | — | — | — | 1,192 | 1,192 |
| Balance at October 1, 2023 | 13,906 | $ 14 | $ 321,623 | $ (307,597) | $ 14,040 |

| | 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 issued under stock plans and employee stock purchase plan | 195 | — | — | — | — |
| Common stock offering, net of issuance costs | 487 | 1 | 3,182 | — | 3,183 |
| Stock-based compensation | — | — | 487 | — | 487 |
| Net loss | — | — | — | (1,347) | (1,347) |
| Balance at October 2, 2022 | 13,110 | $ 13 | $ 316,355 | $ (304,060) | $ 12,308 |

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, the "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 or IoT hardware products, 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"). Starting in late 2021, the Company increased its professional engineering services business related to its eFPGA products for both civilian and military applications. The Company’s wholly owned subsidiary, SensiML Corp. ("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 1, 2023, which was filed with the Securities and Exchange Commission (“SEC”) on March 28, 2023. Operating results for the three and nine months ended October 1, 2023 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 third fiscal quarter for 2023 and 2022 ended on October 1, 2023 and October 2, 2022, respectively.

***2023 Cybersecurity Incident***

On January 20, 2023, the Company detected a ransomware infection affecting a limited number of IT systems, including systems that contained personal information of our employees. Upon detection of the incident, the Company promptly began an assessment of all Company IT systems, notified law enforcement, and engaged legal counsel and other incident response professionals. Through counsel, the Company retained a leading cybersecurity forensics firm to review and investigate the incident. We have completed our forensic work and have found no impact on our financial systems. For potentially affected individuals or entities whose personally identifiable data may have been accessed, we are providing free credit monitoring services to them.

The Company is voluntarily taking steps to further secure its IT infrastructure, systems, and security. The Company believes the incident has not had nor will have a material impact on its business operations, ability to service its customers, or financial results. The Company carries insurance, including cyber insurance, commensurate with its size and the nature of its operations.

***Liquidity***

The Company has financed its operations and capital investments through the sale of common stock, finance and operating leases, a revolving line of credit with Heritage Bank (the "Revolving Facility"), and cash flows from operations. As of October 1, 2023, the Company's principal sources of liquidity consisted of cash, cash equivalents and restricted cash of $18.6 million, inclusive of a $15.0 million advance from its Revolving Facility, and $2.3 million in net proceeds from the Company's sale of common stock in the nine months ended October 1, 2023. The Company's restricted cash balance as of October 1, 2023 was $0.1 million and relates to amounts pledged as cash security for the use of credit cards.

The Company was in compliance with all the Revolving Facility loan covenants as of October 1, 2023. As of October 1, 2023, the Company had $15.0 million outstanding on the Revolving Facility with an interest rate of 9.00%.

On April 28, 2023, the Company converted accounts receivable for a customer in the amount of approximately $1.16 million to notes receivable (the "Note"). At the time, the Note bore an interest rate of 3.0% compounded monthly. On June 28, 2023, the Company cancelled the original note and entered into a revised promissory note with the customer, where the interest rate changed to 4.69% compounded monthly, or a 4.8% effective annual interest rate, accruing from the date of the prior note. If not prepaid prior to the Note maturity date of June 28, 2024, the principal and all accrued and unpaid interest will be due and payable to the Company. If an event of default occurs, the interest rate will increase to 10.0%. All other terms of the note remained the same.

On March 21, 2023, the Company entered into common stock purchase agreements with certain investors for the sale of an aggregate of 450 thousand shares of common stock, par value $0.001, in a registered direct offering, resulting in net cash proceeds of approximately $2.3 million. Issuance costs related to the offering were negligible. The purchase price for each share of common stock was $5.14. See Note 7 for additional information.

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 as of October 1, 2023, together with its revenues from operations, and the 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 ArcticLink® and PolarPro® platforms, ArcticPro™, EOS *S3* SoC, Quick AI solution, QuickAI™, SensiML Analytics Toolkit, Eclipse II products, and eFPGA IP licenses and professional services; 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 ability to capitalize on synergies with our subsidiary SensiML; the issuance and exercise of stock options and participation in the Company's employee stock purchase plan; and other factors related to the uncertainties of the industry and global economics.

Over the longer term, the Company anticipates that sales generated from its new product offerings, 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 2024, 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, and are insignificant for all periods presented.

***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.

Although these estimates are based on the Company's knowledge of current events and actions it may undertake in the future, actual results may materially differ from these estimates and assumptions in regard to revenue recognition; and the valuation of inventories including identification of excess quantities, market value and obsolescence.

The methods, estimates and judgments we use in applying our most critical accounting policies have a significant impact on the results we report in our 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 our most difficult and subjective judgments, often as a result of the need to make estimates of matters that are inherently uncertain. Based on this definition, our critical accounting estimates include revenue recognition and determination of the standalone selling price for certain distinct performance obligations (such as for IP licensing and professional services contracts) and the assessment of excess, obsolete, and unsaleable inventories. We believe that we apply judgments and estimates in a consistent manner and that such consistent application results in 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. For additional information, please refer to the Company's most recent Annual Report on Form 10-K which was filed with the SEC on March 28, 2023.

***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 does not require collateral. See Note 10, Information Concerning Product Lines, Geographic Information and Revenue Concentration, for information regarding concentrations associated with accounts receivable.

As of October 1, 2023 and January 1, 2023, the Company had $15.0 million of revolving debt outstanding with Heritage Bank; the revolving debt carried an interest rate of 9.00% and 8.00% 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. The maturity date for advances under the revolving debt agreement is December 31, 2024. At October 1, 2023, the Company had utilized a significant portion of the revolving debt, and as a result, it maintains a substantial amount of cash deposits with Heritage Bank. The concentration of cash with one financial institution poses certain risks.

For instance, adverse developments affecting financial institutions, companies in the financial services industry or the financial services industry, such as actual events or concerns involving liquidity, defaults, or non-performance, could adversely impact the stability of Heritage Bank, leading to additional financial risks for the Company.

Any material decline in available funding or our ability to access our cash, cash equivalents, and liquidity resources, inclusive of those at Heritage Bank, could adversely impact our ability to meet our operating expenses, financial and contractual obligations, or result in breaches of our contractual obligations. Any of these impacts could have material adverse impacts on our operations and liquidity.

**Note 2 — Significant Accounting Policies**

During the three and nine months ended October 1, 2023 there were no changes to the Company's significant accounting policies from its disclosures in the Annual Report on Form 10-K for the year ended January 1, 2023. For a discussion of the significant accounting policies, please see the Annual Report on Form 10-K for the fiscal year ended January 1, 2023, filed with the SEC on March 28, 2023.

***Reclassification***

Certain amounts in the statement of cash flows for the nine months ended October 2, 2022 were reclassified to conform with the current period presentation. These reclassifications were within cash flows from operating activities with no impact to the net cash used in operating activities for the period.

***Recent Accounting Standards Adopted***

In August 2020, the FASB issued ASU No. 2020-06, *Debt—Debt with Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging—Contracts in Entity's Own Equity (Subtopic 815-40)*: Accounting for Convertible Instruments and Contracts in an Entity's Own Equity, which address issues identified as a result of the complexity associated with applying generally accepted accounting principles for certain financial instruments with characteristics of liabilities and equity. ASU No. 2020-06 becomes effective for the Company on January 1, 2024. Early adoption is permitted, but no earlier than fiscal years beginning after December 15, 2020, including interim periods within those fiscal years. The Board specified that an entity should adopt the guidance as of the beginning of its annual fiscal year. The Company early adopted ASU No. 2020-06 on January 2, 2023 and it had no material impact on the Company's consolidated financial statements or related disclosures.

***Recent 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. For public business entities, the amendments in this Update are effective for fiscal years beginning after December 15, 2023, and interim periods within those fiscal years. Early adoption is permitted for both interim and annual financial statements that have not yet been issued or made available for issuance. The adoption of this ASU is not expected to have an impact on the Company's consolidated financial statements or disclosures.

**Note 3 — Net Income (Loss) Per Share**

Basic income (loss) per share is computed by dividing net income (loss) by the weighted average number of common shares outstanding during the period. Diluted net income (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 income (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 periods in which the Company has reported a net loss, diluted net loss per share attributable to common stockholders is the same as basic net loss per share attributable to common stockholders as dilutive common shares are not assumed to have been issued if their effect is anti-dilutive. For periods in which the Company has reported a net income, diluted net income per share attributable to common stockholders is different from basic net income per share attributable to common stockholders as dilutive common shares would increase the amount of shares outstanding reduced by the amounts of treasury shares repurchased from the proceeds at the average market price for the period.

For the three months ended October 1, 2023, 925 thousand shares of common stock associate 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. Of these, a 276 thousand share equivalent was determined to be dilutive and included in the computation of diluted net income per share for the period. Estimated proceeds for the dilutive shares were determined to be $147 thousand, which resulted in a reduction of dilutive shares by 4,672 using the treasury stock method at an average market price of $8.41.

For the nine months ended October 1, 2023 and the three and nine months ended October 2, 2022, 925 thousand and 398 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 the 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. The warrants were exercisable through May 29, 2023 at a price of $19.32 per share. The warrants expired unexercised on May 29, 2023.

**Note 4 — Balance Sheet Components**

The following table provides details relating to certain balance sheet line items as of October 1, 2023, and January 1, 2023 (in thousands):

| | | October 1, 2023 | | January 1, 2023 |
|---|---|---|---|---|
| Accounts receivable: | | | | |
| Trade account receivables | $ | 497 | $ | 2,707 |
| Less: Allowance for doubtful accounts | | (16) | | (18) |
| | $ | 481 | $ | 2,689 |
| Inventories: | | | | |
| Work-in-process | $ | 1,898 | $ | 1,826 |
| Finished goods | | 132 | | 667 |
| | $ | 2,030 | $ | 2,493 |
| Prepaid expenses and other current assets: | | | | |
| Prepaid taxes | $ | 512 | $ | 510 |
| Deferred charges | | 414 | | 295 |
| Other prepaid taxes, royalties, and other prepaid expenses | | 636 | | 500 |
| Other | | 164 | | 265 |
| | $ | 1,726 | $ | 1,570 |
| Property and equipment, net: | | | | |
| Equipment | $ | 10,487 | $ | 10,133 |
| Tooling(1) | $ | 3,862 | | |
| Software | | 1,803 | | 1,803 |
| Furniture and fixtures | | 65 | | 65 |
| Leasehold improvements | | 549 | | 466 |
| | | 16,766 | | 12,467 |
| Less: Accumulated depreciation and amortization | | (12,219) | | (12,002) |
| | $ | 4,547 | $ | 465 |
| Capitalized internal-use software, net: | | | | |
| Capitalized internal-use software | $ | 2,921 | $ | 2,370 |
| Less: Accumulated amortization | | (1,255) | | (856) |
| | $ | 1,666 | $ | 1,514 |
| Accrued liabilities: | | | | |
| Accrued compensation | $ | 1,293 | $ | 865 |
| Accrued employee benefits | | 117 | | 40 |
| Accrued payroll tax | | 81 | | 57 |
| Other | | 556 | | 547 |
| | $ | 2,047 | $ | 1,509 |

(1) In the nine months ended October 1 2023, the Company capitalized $3.86 million related to tooling to be utilized under its long-term professional services contracts. The tooling will be depreciated over an estimated useful life of seven years.

**Note 5 — Debt Obligations**

***Revolving Line of Credit***

As of October 1, 2023 and January 1, 2023, the Company had $15.0 million of revolving debt outstanding with an interest rate of 9.00% and 8.00% 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. Related interest expenses and annual facility fees recognized were $30 thousand and $92 thousand for the three and nine months ended October 1, 2023 and $20 thousand and $59 thousand for the three and nine months ended October 2, 2022, respectively.

**Note 6 — Leases**

The Company's principal research and development and corporate facilities are leased office buildings located in the United States. These lease facilities are classified as operating leases and have lease terms of one to five years. The Company maintains sales offices out of which it conducts sales and marketing activities in various countries outside of the United States which are rented under short-term leases. The Company has elected the practical expedient to apply to recognition requirements to short-term leases and recognizes rent payments on short-term leases on a straight-line basis over the lease term. Finance leases are primarily for engineering design software and have leases terms of generally two to three years. Total rent expenses were $0.1 million and $0.3 million for the three and nine months ended October 1, 2023 and $0.1 million and $0.3 million for the three and nine months ended October 2, 2022, respectively.

Right-of-use assets were approximately $1.1 million and $1.4 million as of October 1, 2023 and January 1, 2023, respectively. Lease liabilities were approximately $1.1 million and $1.4 million as of October 1, 2023 and January 1, 2023, respectively.

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

| | Three Months Ended | | Nine Months Ended | |
|---|---|---|---|---|
| | October 1, 2023 | October 2, 2022 | October 1, 2023 | October 2, 2022 |
| Operating lease costs: | | | | |
| Fixed | $ 100 | $ 100 | $ 301 | $ 300 |
| Short term | 4 | 4 | 13 | 16 |
| Total | $ 104 | $ 104 | $ 314 | $ 316 |
| Finance lease costs: | | | | |
| Amortization of ROU asset | $ 163 | $ 109 | $ 486 | $ 328 |
| Interest | 18 | 5 | 59 | 18 |
| Total | $ 181 | $ 114 | $ 545 | $ 346 |

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 nine months ended October 1, 2023 and October 2, 2022 was $445 thousand and $0, respectively.

The following table provides the details of supplemental cash flow information (in thousands):

| | Nine Months Ended | |
|---|---|---|
| | October 1, 2023 | October 2, 2022 |
| Cash paid for amounts included in the measurement of lease liabilities: | | |
| Operating cash flows used for operating leases | $ 315 | $ 306 |
| Operating cash flows used for finance leases | 59 | 18 |
| Financing cash flows used for finance leases | 435 | 299 |
| Total | $ 809 | $ 623 |

Non-cash ROU assets related to operating leases included in the operating cash flows for the nine months ended October 1, 2023 and October 2, 2022 were $274 thousand and $257 thousand, respectively. Non-cash ROU assets related to finance leases included in the financing cash flows for the nine months ended October 1, 2023 and October 2, 2022 were $486 thousand and $328 thousand, respectively.

The following table provides the details of right-of-use assets and lease liabilities as of October 1, 2023 and January 1, 2023 (in thousands):

| | October 1, 2023 | January 1, 2023 |
|---|---|---|
| Right-of-use assets: | | |
| Operating leases | $ 190 | $ 464 |
| Finance leases | 892 | 933 |
| Total right-of-use assets | $ 1,082 | $ 1,397 |
| Lease liabilities: | | |
| Operating leases | $ 208 | $ 507 |
| Finance leases | 897 | 887 |
| Total lease liabilities | $ 1,105 | $ 1,394 |

The following table provided the details of future lease payments for operating and finance leases as of October 1, 2023 (in thousands):

| | Operating Leases | Finance Leases |
|---|---|---|
| 2023 (remaining period) | $ 106 | $ 165 |
| 2024 | 106 | 624 |
| 2025 | — | 168 |
| Total lease payments | 212 | 957 |
| Less: Interest | (4) | (60) |
| Present value of lease liabilities | $ 208 | $ 897 |

The following table provides the details of lease terms and discount rates as of October 1, 2023 and January 1, 2023:

| | October 1, 2023 | January 1, 2023 |
|---|---|---|
| Right-of-use assets: | | |
| Weighted-average remaining lease term (years) | | |
| Operating leases(1) | 0.50 | 1.25 |
| Finance leases | 1.84 | 1.91 |
| Weighted-average discount rates: | | |
| Operating leases | 6.00% | 6.00% |
| Finance leases | 6.77% | 5.95% |

(1) The operating lease relates to the Company's headquarters in San Jose, CA. On October 24, 2023, the Company renewed its lease at its current location for an additional three years. The amended lease term will expire on April 14, 2027 with no change in terms.

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**Note 7 — Capital Stock**

***Issuance of Common Stock***

On March 21, 2023, the Company entered into common stock purchase agreements with certain investors for the sale of an aggregate of 450 thousand shares of common stock in registered direct offerings pursuant to our effective shelf registration statement on Form S-3 (File No. 333-266942), resulting in net cash proceeds of approximately $2.3 million. Issuance costs related to the registered direct offering were insignificant. The purchase price for each share of common stock was $5.14.

On August 17, 2022, the Company filed a Registration Statement on Form S-3 (File No. 333-266942) with the SEC, under which we may sell, from time-to-time common stock, preferred stock, depositary shares, warrants, debt securities, and units, individually or as units comprised of one or more of the other securities or a combination thereof. The Company's registration statement became effective on August 26, 2022.

**Note 8 — Stock-Based Compensation**

Stock-based compensation expense included in the Company's consolidated financial statements for the three and nine months ended October 1, 2023 and October 2, 2022 was as follows (in thousands):

| | Three Months Ended | | Nine Months Ended | |
|---|---|---|---|---|
| | October 1, 2023 | October 2, 2022 | October 1, 2023 | October 2, 2022 |
| Cost of revenue | $ 73 | $ 44 | $ 239 | $ 217 |
| Research and development | 171 | 149 | 513 | 325 |
| Selling, general and administrative | 372 | 294 | 1,165 | 805 |
| Total | $ 616 | $ 487 | $ 1,917 | $ 1,347 |

The Company capitalized stock-based compensation amounts to capitalized internal-use software and tooling, net of $119 thousand and $0 for the nine months ended October 1, 2023 and October 2, 2022, respectively.

***Stock-Based Compensation Award Activity***

The following table summarizes the activity in the shares available for grant under the 2019 Plan during the nine months ended October 1, 2023 (in thousands):

| | Shares Available for Grants |
|---|---|
| Balance at January 1, 2023 | 960 |
| Authorized | — |
| Restricted stock units (RSUs) granted | (393) |
| RSUs forfeited or expired | 15 |
| Options expired | 2 |
| Balance at October 1, 2023 | 584 |

***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 nine months ended October 1, 2023:

| | Number of Shares (in thousands) | Weighted Average Exercise Price | Weighted Average Remaining Term (in years) | Aggregate Intrinsic Value (in thousands) |
|---|---|---|---|---|
| Balance outstanding at January 1, 2023 | 75 | $ 24.50 | 2.80 | $ — |
| Forfeited or expired | (2) | $ 32.93 | | |
| Balance outstanding, exercisable, and vested at October 1, 2023 | 73 | $ 24.24 | 2.13 | $ — |

No stock options were granted or exercised during the nine months ended October 1, 2023. No stock options were granted, exercised, forfeited, or expired during the nine months ended October 2, 2022.

Total stock-based compensation related to stock options was $0 during the nine months ended October 1, 2023 and October 2, 2022.

***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 were approximately $0.6 million and $1.8 million for the three and nine months ended October 1, 2023 and approximately $0.5 million and $1.3 million for the three and nine months ended October 2, 2022, respectively.

As of October 1, 2023 and October 2, 2022, there was approximately $3.7 million and $1.1 million, respectively, in unrecognized compensation expense related to RSUs. The remaining unrecognized stock-based compensation expense as of October 1, 2023 is expected to be recorded over a weighted average period of 1.52 years.

A summary of activity for the Company's RSUs and PRSUs for the nine months ended October 1, 2023 is as follows:

| | RSUs & PRSUs Outstanding | |
|---|---|---|
| | Number of Shares (in thousands) | Weighted Average Grant Date Fair Value |
| Nonvested at January 1, 2023 | 630 | $ 6.05 |
| Granted | 393 | 8.07 |
| Vested and released | (224) | 6.14 |
| Forfeited | (15) | 6.73 |
| Nonvested at October 1, 2023 | 784 | $ 7.02 |

***Employee Stock Purchase Plan***

Total stock-based compensation related to the Company's Employee Stock Purchase Plan was approximately $25 thousand and $100 thousand for the three and nine months ended October 1, 2023, respectively, and $20 thousand and $54 thousand for the three and nine months ended October 2, 2022, respectively.

**Note 9 — Income Taxes**

The Company recorded a net income tax expense of $4 thousand and $4 thousand for the three and nine months ended October 1, 2023, respectively, and a net income tax expense of $3 thousand and $19 thousand for the three and nine months ended October 2, 2022, respectively. The difference between the estimated annual effective tax rate of 2.67% and the U.S. federal statutory tax rate of 21% is primarily due to the Company's valuation allowance movement in each period presented. It is more likely than not that the Company will not realize the federal, state, and certain foreign deferred tax assets as of October 1, 2023. As such, the Company continues to maintain a full valuation allowance against all of its US and certain foreign net deferred tax assets as of October 1, 2023.

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

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

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

| | Three Months Ended | | Nine Months Ended | |
|---|---|---|---|---|
| | October 1, 2023 | October 2, 2022 | October 1, 2023 | October 2, 2022 |
| New products | $ 6,096 | $ 2,252 | $ 11,384 | $ 8,833 |
| Mature products | 569 | 1,207 | 2,335 | 3,263 |
| Total revenue | $ 6,665 | $ 3,459 | $ 13,719 | $ 12,096 |

New products revenue consists of revenues from the sale of hardware products manufactured on 180 nanometer or smaller semiconductor processes, eFPGA IP license and eFPGA-related professional services, 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 | | Nine Months Ended | |
|---|---|---|---|---|
| | October 1, 2023 | October 2, 2022 | October 1, 2023 | October 2, 2022 |
| Hardware products | $ 248 | $ 308 | $ 776 | $ 3,607 |
| eFPGA IP and professional services | 5,838 | 1,700 | 10,505 | 4,911 |
| SaaS & Other | 10 | 244 | 103 | 315 |
| New products revenue | $ 6,096 | $ 2,252 | $ 11,384 | $ 8,833 |

eFPGA IP revenue for the three months ended October 1, 2023 and October 2, 2022 was $5.8 million and $1.7 million, respectively, which were primarily professional services revenue.

Contract assets related to professional services revenue were $4.0 million and $1.5 million as of October 1, 2023 and October 2, 2022, respectively. Contract liabilities related to professional services revenue were $304 thousand and $165 thousand as of October 1, 2023 and October 2, 2022, respectively.

The tables below present disaggregated revenues by geographical location. Revenue attributed to geographic location is based on the destination of the product or service. Substantially all revenues in North America were in the United States. Revenue in the United States was $6.0 million, or 91% of total revenue, and $11.7 million, or 85% of total revenue for the three and nine months ended October 1, 2023, respectively, and $2.3 million, or 67% of total revenue, and $7.8 million, or 64% of total revenue for the three and nine months ended October 2, 2022, respectively.

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

| | Three Months Ended | | Nine Months Ended | |
|---|---|---|---|---|
| | October 1, 2023 | October 2, 2022 | October 1, 2023 | October 2, 2022 |
| Asia Pacific | $ 371 | $ 783 | $ 1,540 | $ 3,114 |
| North America | 6,051 | 2,389 | 11,739 | 7,904 |
| Europe | 243 | 287 | 440 | 1,078 |
| Total revenue | $ 6,665 | $ 3,459 | $ 13,719 | $ 12,096 |

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

| | Three Months Ended | | Nine Months Ended | |
|---|---|---|---|---|
| | October 1, 2023 | October 2, 2022 | October 1, 2023 | October 2, 2022 |
| Distributor "A" | * | 20% | 11% | 15% |
| Distributor "B" | * | * | * | 16% |
| Distributor "C" | * | 10% | * | * |
| Customer "A" | 84% | 30% | 67% | * |
| Customer "B" | * | 13% | * | * |
| Customer "C" | * | 12% | * | 20% |
| Customer "F" | * | * | * | 16% |

* 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:

| | October 1, 2023 | January 1, 2023 |
|---|---|---|
| Distributor "A" | * | 14% |
| Customer "A" | 89% | * |
| Customer "C" | * | 22% |
| Customer "F" | * | 44% |

**Note 11 — Commitments and Contingencies**

***Commitments***

The Company's principal contractual commitments include purchase obligations, re-payments of draw-downs from the revolving line of credit, and payments under operating and finance leases. Purchase obligations are largely comprised of open purchase order commitments to suppliers and to subcontractors under professional services agreements. Our risk associated with the purchase obligations under professional services agreements is limited to the termination liability provisions within those contracts, and as such, we do not believe they represent a material liquidity risk to us.

Certain wafer manufacturers require the Company to forecast wafer starts several months in advance. The Company is committed to taking delivery of and paying for a portion of forecasted wafer volume. As of October 1, 2023, the Company had no significant outstanding commitments for the purchase of wafer inventory.

***Purchase Obligations***

Purchase obligations represent contractual agreements to purchase goods or services entered into in the ordinary course of business. Purchase obligations are legally binding and amongst other things, specify a minimum or a range of quantities, pricing, and approximate timing of the transaction. Purchase obligations include amounts that are recorded on the Company's consolidated balance sheets, as well as amounts that are not recorded on the Company's consolidated balance sheets. As of October 1, 2023, total outstanding purchase obligations for other goods and services were $6.1 million due within the next twelve months, not recorded on the Company's consolidated balance sheet.

***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.

## 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 1, 2023, found in our Annual Report on Form 10-K filed with the Securities and Exchange Commission ("SEC") on March 28, 2023. 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. We currently have a total of five patent applications pending.

Our semiconductor solutions typically fall into one of four categories: Sensor Processing, Hardware products consisting of Sensor Processing, Display Smart Connectivity, and eFPGA intellectual property and its associated tools. 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 sensors, 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 eFPGA IP are currently developed on 12nm, 16nm, 22nm, 28nm, 40nm, 65nm, 90nm, 130nm, and 250nm process nodes. The licensable IP is generated by an automated compiler tool, called Australis™, that enables our engineers to create an eFPGA IP for our licensees that they can then integrate into their SoC without significant involvement by QuickLogic. We believe this flow enables a scalable development and support model for QuickLogic. For our eFPGA strategy, we typically work with semiconductor manufacturing partners prior to this IP being 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 primarily from eFPGA IP licensing and professional services in Q4 2023 and FY2024.

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 third quarter of 2023, we generated total revenue of $6.7 million, an increase of 128% compared to the prior quarter, and an increase of 93% compared to the same quarter last year. Our new product revenue in the third quarter was $6.1 million, an increase of 173% from the prior quarter and an increase of 171% from the third quarter of 2022. The increase in new product revenue from the prior quarter was primarily driven by a $3.97 million increase in eFPGA professional services revenue, partially offset by a decrease of $119 thousand in hardware product revenue. Our mature product revenue was $0.6 million in the third quarter of 2023, a decrease of 17% compared to the prior quarter, and a decrease of 53% compared to the third quarter of 2022. 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 eFPGA IP licensing and professional services and SensiML initiatives. Overall, we reported net income of $1.2 million for the third quarter of 2023, as compared to a net loss of $2.3 million in the prior quarter and a net loss of $1.3 million for the third quarter of 2022.

We have experienced net losses in recent years and expect losses to continue through at least fiscal year 2023 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 1, 2023 as filed with the SEC on March 28, 2023, provides additional information about our business and operations.

As of October 1, 2023, there have not been any material developments concerning the Cyber-Incident previously reported on our Form 10-K for the year ended January 1, 2023, which was filed with the Securities and Exchange Commission ("SEC") on March 28, 2023. The Company's investigation is complete and there was no impact on the Company's financial systems. The Company believes the incident has not had nor will have a material impact on its business operations, ability to serve its customers, or financial results. See Note 1, The Company and Basis of Presentation.

As of October 1, 2023, the Company had one operating lease with a remaining lease term of 0.5 years. The operating lease relates to the Company's headquarters in San Jose, CA. On October 24, 2023, the Company renewed its lease at its current location for an additional three years. The amended lease term will expire on April 14, 2027 with no change in terms.

***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), and the assessment of excess, obsolete, and unsaleable inventories. 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 nine months ended October 1, 2023, 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 1, 2023, filed with the SEC on March 28, 2023.

***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 | | Nine Months Ended | |
|---|---|---|---|---|
| | October 1, 2023 | October 2, 2022 | October 1, 2023 | October 2, 2022 |
| Revenue | 100% | 100% | 100% | 100% |
| Cost of revenue | 23% | 51% | 36% | 45% |
| Gross profit | 77% | 49% | 64% | 55% |
| Operating expenses: | | | | |
| Research and development | 29% | 29% | 37% | 29% |
| Selling, general and administrative | 29% | 56% | 42% | 50% |
| Income (loss) from operations | 19% | (36)% | (15)% | (24)% |
| Interest expense | (1)% | (1)% | (1)% | —% |
| Interest income and other income (expense), net | —% | (2)% | (1)% | (1)% |
| Income (loss) before income taxes | 18% | (39)% | (17)% | (25)% |
| Provision for income taxes | —% | —% | —% | —% |
| Net income (loss) | 18% | (39)% | (17)% | (25)% |

***Three Months Ended October 1, 2023 Compared to Three Months Ended October 2, 2022***

*Revenue*

The table below sets forth the changes in revenue in the three months ended October 1, 2023 compared to the three months ended October 2, 2022 (in thousands, except percentage data):

| | Three Months Ended | | | | Change | |
|---|---|---|---|---|---|---|
| | October 1, 2023 | | October 2, 2022 | | | |
| | Amount | % of Total Revenues | Amount | % of Total Revenues | Amount | Percentage |
| New products | $ 6,096 | 91% | $ 2,252 | 65% | $ 3,844 | 171% |
| Mature products | 569 | 9% | 1,207 | 35% | (638) | (53)% |
| Total revenue | $ 6,665 | 100% | $ 3,459 | 100% | $ 3,206 | 93% |

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) revenue. Mature products include all products produced on semiconductor processes larger than 180 nanometer.

Product revenue for the third quarter of 2023 compared to the third quarter of 2022 increased $3.2 million. The increase resulted primarily from increases in professional services eFPGA revenues, partially offset by a decrease in revenue from devices.

*New Product Revenue*

The table below sets forth the changes in new product revenue in the three months ended October 1, 2023 compared to the three months ended October 2, 2022 (in thousands, except percentage data):

| | Three Months Ended | | | | Change | |
|---|---|---|---|---|---|---|
| | October 1, 2023 | | October 2, 2022 | | | |
| | Amount | % of Total Revenues | Amount | % of Total Revenues | Amount | Percentage |
| Hardware products | $ 248 | 4% | $ 308 | 9% | $ (60) | (19)% |
| eFPGA IP and professional services | 5,838 | 88% | 1,700 | 49% | 4,138 | 243% |
| SaaS & Other | 10 | 0% | 244 | 7% | (234) | (96)% |
| Total new product revenue | $ 6,096 | 91% | $ 2,252 | 65% | $ 3,844 | 171% |

eFPGA IP revenue for the three months ended October 1, 2023 and October 2, 2022 was $5.8 million and $1.7 million, respectively, which were primarily professional services revenue.

*Gross Profit*

The table below sets forth the changes in gross profit for the three months ended October 1, 2023 compared to the three months ended October 2, 2022 (in thousands, except percentage data):

| | Three Months Ended | | | | Change | |
|---|---|---|---|---|---|---|
| | October 1, 2023 | | October 2, 2022 | | | |
| | Amount | % of Total Revenues | Amount | % of Total Revenues | Amount | Percentage |
| Revenue | $ 6,665 | 100% | $ 3,459 | 100% | $ 3,206 | 93% |
| Cost of revenue | 1,537 | 23% | 1,781 | 51% | (244) | (14)% |
| Gross profit | $ 5,128 | 77% | $ 1,678 | 49% | $ 3,450 | 206% |

In the third quarter of 2023, gross profitincreased $3.5 million, or 206%, compared to the same quarter in the prior year. The increase in gross profit reflects a 93%increase in revenues combined with a 14% net decrease in cost of revenue. While there was a decrease in product costs resulting from lower devices volumes, the timing of certain professional services cost into the fourth quarter of 2023 had a favorable impact on third-quarter 2023 margins. We expect the impact from the timing of these costs will result in higher costs of revenue in subsequent quarters in 2023 and 2024, with a commensurate decrease in gross margins for those quarters. Additionally, certain tooling costs for the Company's eFPGA professional services projects were determined to qualify for capitalization. As a result, the Company capitalized $2.1 million related to tooling to be utilized under its long-term professional services contracts. The tooling will be depreciated over an estimated useful life of seven years. The capitalization of this tooling also contributed to a reduced cost of revenues for the current period as compared with prior periods, resulting in a favorable impact on gross profit for the third quarter of 2023.

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 October 1, 2023, compared to the three months ended October 2, 2022 (in thousands, except percentage data):

| | Three Months Ended | | | | Change | |
|---|---|---|---|---|---|---|
| | October 1, 2023 | | October 2, 2022 | | | |
| | Amount | % of Total Revenues | Amount | % of Total Revenues | Amount | Percentage |
| R&D expense | $ 1,933 | 29% | $ 1,018 | 29% | $ 915 | 90% |
| SG&A expense | 1,915 | 29% | 1,900 | 56% | 15 | 1% |
| Total operating expenses | $ 3,848 | 58% | $ 2,918 | 85% | $ 930 | 32% |

*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 $0.9 million increase in R&D expenses in the third quarter of 2023, as compared to the third quarter of 2022, was attributable to increases in time and effort spent by engineering personnel on internal R&D projects in the current quarter.

*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 Company had a net, immaterial increases in S&GA expenses in the third quarter of 2023, as compared to the third quarter of 2022. This is primarily attributable to some increases in compensation costs offset with decreases in legal and accounting and audit expenses.

*Interest Expense, 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 October 1, 2023, compared to the three months ended October 2, 2022 (in thousands, except percentage data):

| | Three Months Ended | | Change | |
|---|---|---|---|---|
| | October 1, 2023 | October 2, 2022 | Amount | Percentage |
| Interest expense | $ (48) | $ (44) | $ 4 | 9% |
| Interest income and other income (expense), net | (36) | (60) | (24) | (40)% |
| Total interest (expense), interest income and other income (expense), net | $ (84) | $ (104) | $ (20) | (19)% |

Interest expense relates primarily to our revolving line of credit facility and finance leases liabilities. Interest income and other income (expense), net, relates to net foreign exchange losses recorded, partially offset by interest earned in our money market accounts. Changes in interest expense are related to our revolving loan's interest rate variability. Interest expense for the third quarter of this year as compared to the same period in the prior year increased approximately $4 thousand which was comprised of a $10 thousand increase in interest expense related to software leases, a $8 thousand decrease in interest expense related to our revolving line of credit facility, and a $2 thousand increase in interest expense related to IT hardware financing costs. The change in interest income and other income (expense), net reflected decreased foreign exchange losses over the prior period.

*Provision for Income Taxes*

The table below sets forth the changes in the provisions for income taxes in the three months ended October 1, 2023, compared to the three months ended October 2, 2022 (in thousands, except percentage data):

| | Three Months Ended | | Change | |
|---|---|---|---|---|
| | October 1, 2023 | October 2, 2022 | Amount | Percentage |
| Provision for income taxes | $ 4 | $ 3 | $ 1 | 33% |

The majority of the income tax expense for the three months ended October 1, 2023 and October 2, 2022 are related to our foreign subsidiaries, which are cost-plus entities.

***Nine Months Ended October 1, 2023 Compared to Nine Months Ended October 2, 2022***

*Revenue*

The table below sets forth the changes in revenue in the nine months ended October 1, 2023 compared to the nine months ended October 2, 2022 (in thousands, except percentage data):

| | Nine Months Ended | | | | Change | |
|---|---|---|---|---|---|---|
| | October 1, 2023 | | October 2, 2022 | | | |
| | Amount | % of Total Revenues | Amount | % of Total Revenues | Amount | Percentage |
| New products | $ 11,384 | 83% | $ 8,833 | 73% | $ 2,551 | 29% |
| Mature products | 2,335 | 17% | 3,263 | 27% | (928) | (28)% |
| Total revenue | $ 13,719 | 100% | $ 12,096 | 100% | $ 1,623 | 13% |

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) revenue. Mature products include all products produced on semiconductor processes larger than 180 nanometer.

Product revenue for the nine months ending October 1, 2023 compared to the nine months ending October 2, 2022 increased $1.6 million. The increase resulted primarily from increases in eFPGA revenues, partially offset by a decrease in revenue from devices.

*New Product Revenue*

The table below sets forth the changes in new product revenue in the nine months ended October 1, 2023 compared to the nine months ended October 2, 2022 (in thousands, except percentage data):

| | Nine Months Ended | | | | Change | |
|---|---|---|---|---|---|---|
| | October 1, 2023 | | October 2, 2022 | | | |
| | Amount | % of Total Revenues | Amount | % of Total Revenues | Amount | Percentage |
| Hardware products | $ 776 | 6% | $ 3,607 | 30% | $ (2,831) | (78)% |
| eFPGA IP and professional services | 10,505 | 77% | 4,911 | 41% | 5,594 | 114% |
| SaaS & Other | 103 | (0)% | 315 | 2% | (212) | (67)% |
| Total new product revenue | $ 11,384 | 83% | $ 8,833 | 73% | $ 2,551 | 29% |

eFPGA revenue for the nine months ended October 1, 2023 was $10.5 million which was comprised of approximately $10.3 million in professional services revenue and $0.2 million in eFPGA intellectual property license revenue. eFPGA revenue for the nine months ended October 2, 2022 was $4.9 million, which was comprised of approximately $4.8 million in professional services revenue and $0.1 million in eFPGA intellectual property license revenue.

*Gross Profit*

The table below sets forth the changes in gross profit for the nine months ended October 1, 2023 compared to the nine months ended October 2, 2022 (in thousands, except percentage data):

| | Nine Months Ended | | | | Change | |
|---|---|---|---|---|---|---|
| | October 1, 2023 | | October 2, 2022 | | | |
| | Amount | % of Total Revenues | Amount | % of Total Revenues | Amount | Percentage |
| Revenue | $ 13,719 | 100% | $ 12,096 | 100% | $ 1,623 | 13% |
| Cost of revenue | 4,998 | 36% | 5,413 | 45% | (415) | (8)% |
| Gross profit | $ 8,721 | 64% | $ 6,683 | 55% | $ 2,038 | 30% |

In the nine months ended October 1, 2023, gross profitincreased $2.04 million, or 30%, as compared to the same period in the prior year. The increase in gross profit reflects an 13% increase in revenues combined with an 8% net decrease in cost of revenue. While there was a decrease in product costs resulting from lower devices volumes, the timing of certain professional services cost into the fourth quarter of 2023 had a favorable impact on year-to-date FY2023 margins. We expect the impact from the timing of these costs will result in higher costs of revenue in subsequent quarters in 2023 and 2024, with a commensurate decrease in gross margins for those quarters. Additionally, certain tooling costs for the Company's eFPGA professional services projects were determined to qualify for capitalization. As a result, the Company capitalized $3.86 million related to tooling to be utilized under its long-term professional services contracts. The tooling will be depreciated over an estimated useful life of seven years. The capitalization of this tooling also contributed to a reduced cost of revenues for the current year-to-date period as compared with prior periods, resulting in a favorable impact on gross profit for the nine months ended October 1, 2023.

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 nine months ended October 1, 2023, compared to the nine months ended October 2, 2022 (in thousands, except percentage data):

| | Nine Months Ended | | | | Change | |
|---|---|---|---|---|---|---|
| | October 1, 2023 | | October 2, 2022 | | | |
| | Amount | % of Total Revenues | Amount | % of Total Revenues | Amount | Percentage |
| R&D expense | $ 5,067 | 37% | $ 3,541 | 29% | $ 1,526 | 43% |
| SG&A expense | 5,700 | 42% | 6,018 | 50% | (318) | (5)% |
| Total operating expenses | $ 10,767 | 79% | $ 9,559 | 79% | $ 1,208 | 13% |

*Research and Development*

Our R&D expenses consist primarily of personnel, overhead and other costs associated with SoC and software development, programmable logic design, AI and eFPGA development. The $1.5 million increase in R&D expenses in the nine months ending October 1, 2023, as compared to the same period in the prior year, was attributable to increases in time and effort spent by engineering personnel on internal R&D projects in the current year.

*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 $0.3 million decrease in SG&A expenses in the nine months ending October 1, 2023, as compared to the same period in the prior year, was primarily attributable to decreases in legal, insurance, and accounting and audit expenses. These were partially offset by increases in compensation.

*Interest Expense, 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 nine months ended October 1, 2023, compared to the nine months ended October 2, 2022 (in thousands, except percentage data):

| | Nine Months Ended | | Change | |
|---|---|---|---|---|
| | October 1, 2023 | October 2, 2022 | Amount | Percentage |
| Interest expense | $ (156) | $ (98) | $ 58 | 59% |
| Interest income and other expense, net | (99) | (42) | 57 | 136% |
| Total interest (expense), interest income and other income (expense), net | $ (255) | $ (140) | $ 115 | 82% |

Interest expense relates primarily to our revolving line of credit facility and finance lease liabilities. Interest income and other income (expense), net, relates to net foreign exchange losses recorded, partially offset by interest earned in our money market accounts. Changes in interest expense are related to our revolving loan's interest rate variability. Interest expense for the nine months ending October 1, 2023, as compared to the same period in the prior year, increased approximately $58 thousand, which was comprised of a $36 thousand increase in interest expense related to software leases, a $18 thousand increase in interest expense related to our revolving line of credit facility, and a $7 thousand increase in interest expense related to IT hardware financing costs. This was partially offset by a $3 thousand decrease in the annual facility fee associated with the revolving line of credit. The change in interest income and other income (expense), net reflected increased foreign exchange losses over the prior period.

*Provision for Income Taxes*

The table below sets forth the changes in the provisions for income taxes in the nine months ended October 1, 2023, compared to the nine months ended October 2, 2022 (in thousands, except percentage data):

| | Nine Months Ended | | Change | |
|---|---|---|---|---|
| | October 1, 2023 | October 2, 2022 | Amount | Percentage |
| Provision for income taxes | $ 4 | $ 19 | $ (15) | (79)% |

The majority of the income tax expenses for the nine months ended October 2, 2022 are related to our foreign subsidiaries, which are cost-plus entities.

***Balance Sheet Activities***

Balance sheet amounts at October 1, 2023 compared to January 1, 2023 resulted from typical and usual activities in the normal course of business.

Total assets increased by approximately $4.0 million primarily due to the capitalization of $3.86 million in semiconductor tooling, an increase of $2.0 million in contract assets (due to the $14.9 million professional services contract signed later in the quarter), a $2.0 million decrease in accounts receivable due to an offsetting reclassification of $1.2 million in trade accounts receivable to a note receivable in other current assets with the remainder $0.8 million decrease due to collections activity, a $0.6 million decrease in cash, a decrease in device inventories of $0.4 million due to write-downs, and amortization of ROU assets in the amount of $0.3 million.

Liabilities increased by approximately $1.8 million due to an increase of $1.5 million in trade payables resulting from fulfilling revenue contracts with customers, and similarly for the $0.5 million increase in accrued liabilities offset by a net collective decrease of $0.2 million in lease liabilities and other non-current liabilities. Equity increased $2.1 million due to a $4.4 million increase in additional paid in capital arising from the sale of shares of common stock and recognition of stock-based compensation, offset by $2.3 million increase in its accumulated deficit from recurring losses.

***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 borrowings 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 $18.6 million, as of October 1, 2023, 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 $2.3 million in net proceeds from the Company's sale of common stock on March 21, 2023. Costs related to the offering were immaterial. The Company's restricted cash balance as of October 1, 2023 was $0.1 million and relates to amounts pledged as cash security for the use of credit cards.

On April 28, 2023, the Company converted accounts receivable for a customer in the amount of approximately $1.16 million to notes receivable (the "Note"). At the time, the Note bore an interest rate of 3.0% compounded monthly. On June 28, 2023, the Company cancelled the original note and entered into a revised promissory note with the customer, where the interest rate changed to 4.69% compounded monthly, or a 4.8% effective annual interest rate, accruing from the date of the prior note. If not prepaid prior to the Note maturity date of June 28, 2024, the principal and all accrued and unpaid interest will be due and payable to the Company. If an event of default occurs, the interest rate will increase to 10.0%. All other terms of the note remained the same.

On September 14, 2022 and February 9, 2022, the Company entered into common stock purchase agreements with certain investors for the sale of an aggregate of 487,279 and 310,000 shares of common stock, respectively, par value $0.001, in registered direct offerings, resulting in net cash proceeds of approximately $3.2 million and $1.5 million, respectively. Issuance costs related to the September 14, 2022 and the February 9, 2022 offerings were immaterial. The purchase price for each share of common stock in the September 14, 2022 and in the February 9, 2022 placements were $6.57 and $4.78, respectively.

We were in compliance with all the Heritage Bank Revolving Facility loan covenants as of October 1, 2023. As of October 1, 2023, we had $15.0 million outstanding on the Revolving Facility with an interest rate of 9.00%.

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 2024, 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 October 1, 2023, most of our cash, cash equivalents and restricted cash were invested in a money market account at Heritage Bank. As of October 1, 2023, our interest-bearing debt consisted of $0.9 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 were approximately $0.15 million and$0.2 million as of October 1, 2023 and January 1, 2023, 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):

| | Nine Months Ended | |
|---|---|---|
| | **October 1, 2023** | **October 2, 2022** |
| Net cash used in operating activities | $ (118) | $ (3,423) |
| Net cash used in investing activities | (2,437) | (634) |
| Net cash provided by financing activities | 1,979 | 4,488 |

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

For the nine months ended October 1, 2023, net cash used in operating activities was $0.1 million, which was primarily due to the net loss of $2.3 million, adjusted for net non-cash charges of $4 million, which included $1.9 million of stock-based compensation, $0.7 million in depreciation and amortization expenses, $0.8 million in ROU asset amortization expenses, and $0.6 million in write-downs of inventories. Cash outflow from changes in operating assets and liabilities was approximately $1.0 million and was primarily due to a reclassification of a trade payable to a note payable, increases in contract assets, offset by increases in accrued liabilities and trade payables.

For the nine months ended October 2, 2022, net cash used in operating activities was $3.4 million, was was primarily due to the net loss of $3.0 million and a $27 thousand loss on the disposal of equipment, adjusted for net non-cash charges of $2.5 million, which included $1.3 million of stock-based compensation, $0.6 million in ROU asset amortization expenses, $0.5 million in depreciation and amortization expenses, and $0.1 million in write-downs of inventories. Cash outflow from changes in operating assets and liabilities was approximately $2.9 million and were primarily due to an increase in accounts receivable, reflecting an increase in revenues during the period, increases in inventory and other assets and a decrease in deferred revenue, partially offset by an increase in trade payables, which are subject to variability of the timing of payments.

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

For the nine months ended October 1, 2023, and October 2, 2022 cash used in investing activities was $2.4 million and $0.6 million, respectively, which were primarily attributable to the capital expenditures relating to licensed software, capitalized internal-use software, and purchase of specialized semiconductor tooling.

***Net cash provided by financing activities***

Cash flows from financing activities include the draw-downs and repayments of our line of credit. For the quarters ended October 1, 2023 and October 2, 2022, these draw-downs and repayments netted to zero.

For the nine months ended October 1, 2023, cash provided by financing activities was $2 million, which was primarily derived from the net proceeds of $2.3 million from the stock issuance, partially offset by finance lease obligation payments. We continue to use and repay our revolving line of credit as our cash needs require.

For the nine months ended October 2, 2022, cash provided by financing activities was $4.5 million and was primarily derived from the net proceeds of $4.8 million from the stock issuances, partially offset by finance lease obligation payments.

**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 October 1, 2023, 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 fraud. 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 2022 Annual Report on Form 10-K for the year ended January 1, 2023, filed with the SEC on March 28, 2023, 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 |
|---|---|
| 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 October 1, 2023, 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**

/s/ Elias Nader

Date: November 15, 2023

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

**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: November 15, 2023

/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: November 15, 2023

/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 October 1, 2023 (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: November 15, 2023 | 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 October 1, 2023 (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: November 15, 2023 | By: | /s/ Elias Nader |
| | Name: | Elias Nader |
| | Title: | *Chief Financial Officer, and Senior Vice-President, Finance* |