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

FORM 10-Q

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

For the Quarterly Period Ended June 30, 2024

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

For the Transition Period From ______ To

COMMISSION FILE NUMBER: 000-22671

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

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

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

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

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

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

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

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

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

Large accelerated filer	☐	Accelerated Filer	☐
Non-accelerated filer	☒	Smaller Reporting Company	☒
		Emerging growth company	☐

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

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

As of August 9, 2024, there were 14,465,609 shares of registrant’s common stock, par value $0.001 per share, outstanding.

QUICKLOGIC CORPORATION
FORM 10-Q
June 30, 2024

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PART I. Financial Information

Item 1. Unaudited Condensed Consolidated Financial Statements

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

	June 30, 2024	December 31, 2023
ASSETS		
Current assets:		
Cash, cash equivalents and restricted cash	$ 23,266	$ 24,606
Accounts receivable, net of allowance for doubtful accounts of $24 and $34, as of June 30, 2024 and December 31, 2023, respectively	928	1,625
Contract assets	2,254	3,609
Inventories, net	1,751	2,029
Prepaid expenses and other current assets	1,686	1,561
Total current assets	29,885	33,430
Property and equipment, net	12,043	8,948
Capitalized internal-use software, net	2,287	2,069
Right of use assets, net	896	981
Intangible assets, net	484	537
Non-marketable equity investment	300	300
Goodwill	185	185
Note receivable	1,229	1,200
Other assets	142	142
TOTAL ASSETS	$ 47,451	$ 47,792
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Revolving line of credit	$ 20,000	$ 20,000
Trade payables	1,449	4,657
Accrued liabilities	1,277	2,673
Deferred revenue	756	1,052
Note payable, current	890	946
Lease liabilities, current	266	302
Total current liabilities	24,638	29,630
Long-term liabilities:		
Lease liabilities, non-current	609	681
Notes payable, non-current	274	461
Other liabilities, non-current	125	125
Total liabilities	25,646	30,897
Commitments and contingencies (see Note 13)		
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; 14,458 and 14,118 shares issued and outstanding as of June 30, 2024 and December 31, 2023, respectively	14	14
Additional paid-in capital	328,788	322,436
Accumulated deficit	(306,997)	(305,555)
Total stockholders' equity	21,805	16,895
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	$ 47,451	$ 47,792

See accompanying notes to unaudited condensed consolidated financial statements.

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

	Three Months Ended		Six Months Ended	
	June 30, 2024	July 2, 2023	June 30, 2024	July 2, 2023
Revenue	$ 4,127	$ 2,921	$ 10,134	$ 7,054
Cost of revenue	2,022	1,718	4,046	3,461
Gross profit	2,105	1,203	6,088	3,593
Operating expenses:				
Research and development	1,527	1,505	2,986	3,134
Selling, general and administrative	2,095	1,924	4,446	3,785
Total operating expenses	3,622	3,429	7,432	6,919
Operating income (loss)	(1,517)	(2,226)	(1,344)	(3,326)
Interest expense	(40)	(50)	(109)	(108)
Interest income and other income (expense), net	1	—	12	(63)
Income (loss) before income taxes	(1,556)	(2,276)	(1,441)	(3,497)
(Benefit from) provision for income taxes	(6)	(7)	1	—
Net income (loss)	$ (1,550)	$ (2,269)	$ (1,442)	$ (3,497)
Net income (loss) per share:				
Basic	$ (0.11)	$ (0.17)	$ (0.10)	$ (0.26)
Diluted	$ (0.11)	$ (0.17)	$ (0.10)	$ (0.26)
Weighted average shares outstanding:				
Basic	14,439	13,709	14,308	13,297
Diluted	14,439	13,709	14,308	13,297

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)

	Six Months Ended	
	June 30, 2024	**July 2, 2023**
Cash flows provided by (used in) operating activities:		
Net income (loss)	$ (1,442)	$ (3,497)
Adjustments to reconcile net income (loss) to net cash provided by (used in) operating activities:		
Depreciation and amortization	1,674	734
ROU asset amortization	131	181
Stock-based compensation	2,477	1,302
Write-down of inventories and reclassifications	47	212
Other	(10)	5
Changes in operating assets and liabilities:		
Accounts receivable	706	1,747
Contract assets	1,355	974
Inventories	231	(174)
Other assets	262	(1,162)
Trade payables	(3,657)	(840)
Accrued liabilities	(1,397)	371
Deferred revenue	(296)	22
Lease liabilities	(154)	(196)
Net cash provided by (used in) operating activities	(73)	(321)
Cash flows provided by (used in) investing activities:		
Capital expenditures for property and equipment	(4,053)	(87)
Capitalized internal-use software	(420)	(442)
Net cash provided by (used in) investing activities	(4,473)	(529)
Cash flows provided by (used in) financing activities:		
Payment of notes payable	(518)	(305)
Proceeds from notes payable	—	105
Proceeds from line of credit	40,000	30,000
Repayment of line of credit	(40,000)	(30,000)
Proceeds from issuance of common stock	188	121
Proceeds from issuance of common stock to investors	3,560	2,313
Stock issuance cost	(24)	(20)
Net cash provided by (used in) financing activities	3,206	2,214
Net increase (decrease) in cash, cash equivalents and restricted cash	(1,340)	1,364
Cash, cash equivalents and restricted cash at beginning of period	24,606	19,201
Cash, cash equivalents and restricted cash at end of period	$ 23,266	$ 20,565
Supplemental disclosures of cash flow information:		
Interest paid	$ 116	$ 42
Income taxes paid	$ 37	$ 10
Supplemental disclosures of non-cash financing and investing items		
Purchases of assets with financing arrangements	$ 275	$ 551
Stock-based compensation capitalized as internal-use software	$ 143	$ 38
Stock-based compensation capitalized as tooling and fixed assets	$ 9	$ 23
Purchases of property and equipment in accounts payable	$ 309	$ 1,592

See accompanying notes to unaudited condensed consolidated financial statements.

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

	Common Stock		Additional Paid-In	Accumulated	Total Stockholders'
	Shares	Amount	Capital	Deficit	Equity
Balance at December 31, 2023	14,118	$ 14	$ 322,436	$ (305,555)	$ 16,895
Issuance of common stock from private placement, net of stock issuance cost	223	—	3,535	—	3,535
Common stock issued under stock plans and employee stock purchase plans	81	—	—	—	—
Stock-based compensation	—	—	1,709	—	1,709
Net income	—	—	—	108	108
Balance at March 31, 2024	14,422	$ 14	$ 327,680	$ (305,447)	$ 22,247
Common stock issued under stock plans and employee stock purchase plan	36	—	188	—	188
Stock-based compensation	—	—	920	—	920
Net income (loss)	—	—	—	(1,550)	(1,550)
Balance at June 30, 2024	14,458	$ 14	$ 328,788	$ (306,997)	$ 21,805

	Common Stock		Additional Paid-In	Accumulated	Total Stockholders'
	Shares	Amount	Capital	Deficit	Equity
Balance at January 1, 2023	13,202	$ 13	$ 317,174	$ (305,292)	$ 11,895
Issuance of common stock from private placement, 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 income (loss)	—	—	—	(2,269)	(2,269)
Balance at July 2, 2023	13,725	14	320,950	(308,789)	12,175

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 was founded in 1988 and reincorporated in Delaware in 1999. The Company provides innovative, programmable silicon and software platforms to enable its customers to develop custom hardware products in a fast time-to-market and cost-effective way. Specifically, QuickLogic is a fabless semiconductor company with a variety of products: embedded FPGA ("eFPGA") intellectual property ("IP"), low power, multi-core semiconductor system-on-chips ("SoCs"), discrete FPGAs, and AI software. QuickLogic's customers can use its eFPGA IP for hardware acceleration and pre-processing in their Application Specific Integrated Circuit ("ASIC") products, the Company's SoCs to run its customers' software and build their hardware around, and the Company's discrete FPGAs to implement their custom functionality. The Analytics Toolkit from SensiML Corporation ("SensiML"), the Company's wholly-owned subsidiary, provides an end-to-end Artificial Intelligence / Machine Learning 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 Aerospace and Defense, Consumer/Industrial IoT, and Consumer Electronics markets.

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 December 31, 2023, which was filed with the Securities and Exchange Commission (“SEC”) on March 27, 2024. Operating results for the three and six months ended June 30, 2024 are not necessarily indicative of the results that may be expected for the full fiscal year.

QuickLogic's fiscal year ends on the Sunday closest to December 31 and each fiscal quarter ends on the Sunday closest to the end of each calendar quarter. QuickLogic's second fiscal quarter for 2024 and 2023 ended on June 30, 2024 and July 2, 2023, respectively.

The Company has one reportable business segment based on how its Chief Operating Decision Maker ("CODM") manages the business and in a manner consistent with the internal reporting provided to the CODM. The CODM, the Company's Chief Executive Officer ("CEO"), reviews detailed income statements, balance sheets, and sales reports in order to assess performance of the Company. Sales and operating income are some of the key variables monitored by the CODM and management when determining the Company's consolidated financial condition and operating performance.

Liquidity

The Company has financed its operations and capital investments through the sale of common stock, financing arrangements, operating leases, a revolving line of credit with Heritage Bank (the "Revolving Facility"), and cash flows from operations. As of June 30, 2024, the Company's principal sources of liquidity consisted of cash, cash equivalents and restricted cash of $23.3 million, inclusive of a $20.0 million advance from its Revolving Facility and $3.5 million in net proceeds from the Company's sale of common stock in the six months ended June 30, 2024. The Company's restricted cash balance as of June 30, 2024 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 June 30, 2024. As of June 30, 2024, the Company had $20.0 million outstanding on the Revolving Facility with an interest rate of 9.00%.

On March 13, 2024, the Company entered into common stock purchase agreements with certain institutional investors and their affiliated entities for the sale of an aggregate of 223 thousand shares of common stock, par value $0.001, in a registered direct offering, resulting in net cash proceeds of approximately $3.5 million. Issuance costs related to the offering were negligible. The purchase price for each share of common stock was $16.00. See Note 9 for additional information.

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 its common stock, in a registered direct offering pursuant to an effective shelf registration statement on Form S-3, resulting in net cash proceeds of approximately $2.3 million. Issuance costs related to the offering were immaterial. The purchase price for each share of common stock in the Share Placement was $5.14.

On April 28, 2023, the Company converted accounts receivable for a customer in the amount of approximately $1.16 million to notes receivable (the "Original Note"). At the time, the Original 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 ("Second Revised 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 Original Note. On June 27, 2024, the Company cancelled the Second Revised Note and entered into a revised promissory note ("Current Note") with the customer, where the interest rate changed to 10.0% per annum. Accrued but unpaid interest will be compounded monthly, accruing from the date of the Current Note. Additionally, if not prepaid prior to the Current Note maturity date of the earlier of (i) 24 months from June 28, 2024 or (ii) the closing of the customer's Series B financing, 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 15.31%. All other terms of the Note remained the same. As of June 30, 2024, the related note receivable balance was $1.23 million, including $66 thousand in accrued interest.

The Company currently uses its cash to fund its working capital, to accelerate the development of next generation products, and for general corporate purposes. Based on past performance and current expectations, the Company believes that its existing cash and cash equivalents, together with $3.5 million gross cash proceeds from the March 13, 2024 financing, 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 the Company's ArcticLink® and PolarPro® platforms, ArcticPro™, EOS S3 SoC, Quick AI solution, QuickAI™, SensiML Analytics Toolkit, Eclipse II products, and eFPGA IP license 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 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 on December 31, 2025, 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 in consolidation.

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 commitments and contingencies at the date of the condensed consolidated financial statements, and the reported amounts of revenues and expenses during the reporting periods.

The methods, estimates, and judgments the Company uses in applying its most critical accounting policies have a significant impact on the results it reports in its consolidated financial statements. The SEC has defined critical accounting policies as those that are most important to the portrayal of the Company's financial condition and results of operations and requires it to make its most difficult and subjective judgments, often as a result of the need to make estimates of matters that are inherently uncertain.

Although these estimates are based on the Company’s knowledge of current events and actions it may undertake in the future, actual results may ultimately materially differ from these estimates and assumptions. Areas where management uses subjective judgment include, but are not limited to, revenue recognition, inventory valuation, including the identification of excess quantities, market value, and obsolescence, and valuation of goodwill and long-lived and intangible assets. The Company believes that it applies 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 the Company's consolidated 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 27, 2024.

Concentration of Risk

The Company's accounts receivable and note receivable are denominated in U.S. dollars and are derived primarily from sales to customers located in North America, Asia Pacific, and Europe. The Company performs ongoing credit evaluations of its customers and does not require collateral. See Note 12, Information Concerning Product Lines, Geographic Information and Revenue Concentration, for information regarding concentrations associated with accounts receivable.

As of June 30, 2024 and December 31, 2023, the Company had $20.0 million of revolving debt outstanding with Heritage Bank; the revolving debt carried an interest rate of 9.00% per annum. 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, 2025. At June 30, 2024, 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 the Company's ability to access its cash, cash equivalents, and liquidity resources, inclusive of those at Heritage Bank, could adversely impact its ability to meet its operating expenses, financial and contractual obligations, or result in breaches of its contractual obligations. Any of these impacts could have material adverse impacts on the Company's operations and liquidity.

Note 2 — Significant Accounting Policies

During the three and six months ended June 30, 2024, 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 December 31, 2023. For a discussion of the significant accounting policies, please see the Annual Report on Form 10-K for the fiscal year ended December 31, 2023, filed with the SEC on March 27, 2024.

In the six months ended June 30, 2024, there we no observable indicators of impairment for the non-marketable equity investment. Furthermore, utilizing the probability-of-default method to determine the current expected credit loss for the Company's note receivable, the Company determined the associated current expected credit loss to be de minimis as of June 30, 2024.

Financing Arrangements, Non-Cash Activities, & Correction of an Error

The Company previously classified certain licensed tooling software as leased assets and liabilities under ROU assets and financing lease liabilities pursuant to lease accounting under ASC 842, Leases. Upon further analysis, the Company determined these amounts are intangible assets subject to amortization in accordance with ASC 350, Intangibles, Goodwill, and Other and financed through financing arrangements. As a result, the Company corrected immaterial errors to revise its statement of cash flows for the six months ended July 2, 2023. Cash payments on notes payable during the six months ended July 2, 2023 were $0.3 million, instead of presented as payments of finance lease obligations. Proceeds from notes payable during the six months ended July 2, 2023 were $0.1 million, instead of increases in accrued liabilities and other long-term liabilities. Additionally, $0.3 million was added to the depreciation and amortization adjustment for amortization of software tools financed through financing arrangements for the six months ended July 2, 2023.

Conforming the Company's consolidated statement of cash flows for the six months ended July 2, 2023 to the Company's reclassification at FY'23 year-end of certain assets from property and equipment to internal-use software resulted in the reclassification of investing cash outflows from capital expenditures to internal-use software in the amount of $0.1 million.

Additionally, non-cash activities of $0.3 million related to deferred charges were removed from the consolidated statement of cash flows. Purchases of assets with financing arrangements were $0.6 million for the six months ended July 2, 2023. Purchases of property and equipment in accounts payable was $1.6 million for the six months ended July 2, 2023.

The Company has determined the correction of these errors did not have a material impact on the Company's financial statements, including net income and the balance of accumulated deficit as of and for the six months ended July 2, 2023.

Additional Classifications in the Condensed Consolidated Statement of Cash Flows

To conform with current period's classifications on the condensed consolidated statement of cash flows, the Company has added the following classification lines: ROU asset amortization, Changes in lease liabilities, and Proceeds from issuance of common stock to investors. These reclassifications to the Statement of Cash Flows for the six months ended June 30, 2024 were not material.

Recent Accounting Standards 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 Company adopted ASU No. 2020-06 on January 1, 2024 and it had no material impact on the Company's consolidated financial statements or related disclosures.

Recent Accounting Standards Not Yet Adopted

In December 2023, the FASB issued ASU No. 2023-09, *Income Taxes (Topic 740) Improvements to Income Tax Disclosures* to enhance the transparency and decision usefulness of income tax disclosures by providing information to better assess how an entity's operations and related tax risks and tax planning and operational opportunities affect its tax rate and prospects for future cash flows. For public entities, the amendments in this Update are effective for fiscal years beginning after December 15, 2024. Early adoption is permitted for annual financial statements that have not yet been issued or made available for issuance. The adoption of this ASU is not expected to have a material impact on the Company's consolidated financial statements or disclosures.

In November 2023, the FASB issued ASU No. 2023-07, *Segment Reporting (Topic 280) Improvements to Disclosures About Reportable Segments* to enhance disclosures about significant segment expenses, among other interim disclosure requirements. For public entities, the amendments in this Update are effective for fiscal years beginning after December 15, 2023, and interim periods beginning after December 15, 2024. Early adoption is permitted. The adoption of this ASU is not expected to have a material impact on the Company's consolidated financial statements or disclosures.

Note 3 — Net Income (Loss) Per Share

Basic net income (loss) per share was computed by dividing net income (loss) available 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 and six months ended June 30, 2024 and July 2, 2023, 703 thousand and 739 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 this period. Warrants to purchase up to 386 thousand shares that 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 June 30, 2024, and December 31, 2023 (in thousands):

	June 30, 2024	December 31, 2023
Inventories:		
Work-in-process	$ 1,430	$ 1,602
Finished goods	321	427
	$ 1,751	$ 2,029
Prepaid expenses and other current assets:		
Prepaid taxes	$ 446	$ 498
Deferred charges	457	290
Other prepaid taxes, royalties, and other prepaid expenses	635	629
Other	148	144
	$ 1,686	$ 1,561
Property and equipment, net:		
Equipment	$ 10,512	$ 10,503
Software tools	1,364	2,163
Tooling	11,370	7,085
Software	1,803	1,803
Furniture and fixtures	58	65
Leasehold improvements	647	580
	25,754	22,199
Less: Accumulated depreciation and amortization	(13,711)	(13,251)
	$ 12,043	$ 8,948
Capitalized internal-use software, net:		
Capitalized internal-use software	$ 4,064	$ 3,491
Less: Accumulated amortization	(1,777)	(1,422)
	$ 2,287	$ 2,069
Intangible assets, net:		
Intangible assets	$ 1,156	$ 1,156
Less: Accumulated amortization	(672)	(619)
	$ 484	$ 537
Accrued liabilities:		
Accrued compensation	$ 673	$ 1,910
Accrued employee benefits	68	57
Accrued payroll tax	59	197
Other	477	509
	$ 1,277	$ 2,673

The Company capitalized $4.28 million in pre-production design and development costs as tooling to be utilized under its long-term professional services contracts for the six months ended June 30, 2024. $1.67 million in pre-production design and development costs were capitalized as tooling for the six months ended July 2, 2023. The capitalized assets recognized in the period are owned by the Company.

The Company recorded depreciation and amortization expense of $1.7 million and $0.7 million for the six months ended June 30, 2024 and July 2, 2023, respectively. No interest was capitalized for any period presented.

Depreciation and amortization expense included approximately $0.4 million and $0.3 million of amortization expense related to capitalized internal-use software for the six months ended June 30, 2024 and July 2, 2023, respectively.

Note 5 — Property, Plant, and Equipment

Property, plant, and equipment are stated at cost, less accumulated depreciation and amortization. Depreciation begins at the time the asset is placed in service. Maintenance and repairs are charged to operations as incurred. Depreciation is computed using the straight-line method over the following estimated useful lives of the assets:

	Estimated Useful Lives
Equipment	1 - 10 years
Software tools	1 - 2 years
Tooling	7 years
Software	1 - 7 years
Furniture and fixtures	5 - 7 years
Leasehold improvements	3 - 5 years

The amortization period of leasehold improvements made at the inception of the lease is directly related to the initial lease term, while the amortization period for subsequent leasehold improvements is directly related to the initial lease term adjusted for extensions.

Note 6 — Intangible Assets

The following table provides the details of the carrying value of intangible assets recorded from the 2019 acquisition of SensiML at June 30, 2024 (in thousands):

	June 30, 2024			
	Remaining Useful Life	**Gross Carrying Amount**	**Accumulated Amortization**	**Net Carrying Amount**
Developed technology	4.50	$ 959	$ (527)	$ 432
Customer relationships	—	81	(81)	—
Trade names and trademarks	4.50	116	(64)	52
Total acquired identifiable intangible assets		$ 1,156	$ (672)	$ 484

The following table provides the details of future annual amortization of intangible assets, based upon the current useful lives at June 30, 2024 (in thousands):

	Amount
Annual Fiscal Years	
2024 (remaining period)	$ 54
2025	107
2026	107
2027	107
2028	109
Total	$ 484

Note 7 — Debt Obligations

Revolving Line of Credit

As of June 30, 2024 and December 31, 2023, the Company had $20.0 million of revolving debt outstanding with an interest rate of 9.00% per annum. 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 $15 thousand and $56 thousand for the three and six months ended June 30, 2024, respectively and $29 thousand and $62 thousand for the three and six months ended July 2, 2023, respectively.

Financing Arrangements

The amount of assets purchased through financing arrangements on the condensed consolidated balance sheet were $1.2 million and $1.1 million as of June 30, 2024 and July 2, 2023, respectively. The corresponding note payable amount for these financing arrangements was $1.2 million and $1.1 million as of June 30, 2024 and July 2, 2023, respectively. Payments related to financing arrangements were $0.3 million and $0.5 million for the three and six months ended June 30, 2024, respectively, and $0.2 million and $0.3 million for the three and six months ended July 2, 2023, respectively. The Company's outstanding financing arrangements as of June 30, 2024 have remaining terms of 0.17 years to 1.74 years, with a weighted average remaining term of 1.41 years. Stated interest rates for its financing arrangements outstanding as of June 30, 2024 range from 3.75% to 9.89%, with a weighted average interest rate of 8.35%. The Company's outstanding financing arrangements as of July 2, 2023 had remaining terms of 1.41 years to 2.76 years, with a weighted average remaining term of 2.04 years. Stated interest rates for its financing arrangements outstanding as of July 2, 2023 ranged from 3.75% to 8.00%, with a weighted average interest rate of 6.71%.

Remaining amounts due to be paid in Fiscal Years 2024 and 2025 as of June 30, 2024 are $0.6 million and $0.7 million, respectively, less amounts representing interest of $0.1 million results in the total notes payable amount of $1.2 million.

Note 8 — 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 three 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. Total rent expenses were $0.1 million for the three months ended June 30, 2024 and July 2, 2023 and $0.2 million for the six months ended June 30, 2024 and July 2, 2023.

Right-of-use assets were approximately $0.9 million and $1.0 million as of June 30, 2024 and December 31, 2023, respectively. Lease liabilities were approximately $0.9 million and $1.0 million as of June 30, 2024 and December 31, 2023, respectively.

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

	Three Months Ended		Six Months Ended	
	June 30, 2024	**July 2, 2023**	**June 30, 2024**	**July 2, 2023**
Operating lease costs:				
Fixed	$ 101	$ 100	$ 192	$ 200
Short term	5	5	9	9
Total	$ 106	$ 105	$ 201	$ 209

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

	Six Months Ended	
	June 30, 2024	**July 2, 2023**
Cash paid for amounts included in the measurement of lease liabilities:		
Operating cash flows used for operating leases	$ 197	$ 209

Non-cash ROU assets related to operating leases included in the operating cash flows for the six months ended June 30, 2024 and July 2, 2023 were $131 thousand and $181 thousand, respectively.

The following table provides the details of right-of-use assets and lease liabilities as of June 30, 2024 and December 31, 2023 (in thousands):

	June 30, 2024	**December 31, 2023**
Right-of-use assets:		
Operating leases	$ 896	$ 981
Lease liabilities:		
Operating leases	$ 875	$ 983

The following table provided the details of future lease payments for operating leases as of June 30, 2024 (in thousands):

	Operating Leases
2024 (remaining period)	$ 181
2025	339
2026	349
2027	128
Total lease payments	997
Less: Interest	(122)
Present value of lease liabilities	$ 875

The following table provides the details of lease terms and discount rates as of June 30, 2024 and December 31, 2023:

	June 30, 2024	**December 31, 2023**
Right-of-use assets:		
Weighted-average remaining lease term (years)		
Operating leases(1)	2.92	3.25
Weighted-average discount rates:		
Operating leases	6.00%	6.00%

(1) The operating lease relates to the Company's headquarters in San Jose, CA. The lease term expires on June 14, 2027.

Note 9 — Capital Stock

Issuance of Common Stock

On March 13, 2024, the Company entered into common stock purchase agreements with certain institutional investors and their affiliated entities for the sale of an aggregate of 222,500 shares of common stock, par value $0.001, in a registered direct offering, resulting in net cash proceeds of approximately $3.5 million. The purchase price for each share of common stock was $16.00. The per share purchase price reflects a zero discount based upon the 10-day volume weighted average price on the day the pricing was agreed. Issuance costs related to the offering were immaterial.

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 its common stock, in a registered direct offering pursuant to an effective shelf registration statement on Form S-3, resulting in net cash proceeds of approximately $2.3 million. Issuance costs related to the offering were immaterial. The purchase price for each share of common stock in the Share Placement 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 it 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 10 — Stock-Based Compensation

Stock-based compensation expense included in the Company's consolidated financial statements for the three and six months ended June 30, 2024 and July 2, 2023 was as follows (in thousands):

	Three Months Ended		Six Months Ended	
	June 30, 2024	July 2, 2023	June 30, 2024	July 2, 2023
Cost of revenue	$ 88	$ 88	$ 325	$ 166
Research and development	197	158	554	342
Selling, general and administrative	517	340	1,486	793
Total	$ 802	$ 586	$ 2,365	$ 1,301

The Company capitalized stock-based compensation amounts to capitalized internal-use software and tooling, net of $67 thousand and $152 thousand for the three and six months ended June 30, 2024, respectively and $61 thousand and $61 thousand for the three and six months ended July 2, 2023, respectively.

Stock-Based Compensation Award Activity

The following table summarizes the activity in the shares available for grant under the 2019 Plan during the six months ended June 30, 2024 (in thousands):

	Shares Available for Grants
Balance at December 31, 2023	595
Restricted stock units (RSUs) granted	(171)
PSUs/RSUs forfeited or expired	51
Options expired	6
Balance at June 30, 2024	481

Stock Options

The following table summarizes stock options outstanding and stock option activity under the 2009 Plan and the 2019 Plan, and the related weighted average exercise price for the six months ended June 30, 2024:

	Number of Shares (in thousands)	Weighted Average Exercise Price	Weighted Average Remaining Term (in years)	Aggregate Intrinsic Value (in thousands)
Balance outstanding at December 31, 2023	60	$ 19.45		
Forfeited or expired	(6)	$ 51.19		
Balance outstanding, exercisable, and vested at June 30, 2024	54	$ 15.64	2.00	$ —

No stock options were granted or exercised during the six months ended June 30, 2024 and July 2, 2023. Stock options equivalent to 6 thousand and 2 thousand shares expired during the six months ended June 30, 2024 and July 2, 2023.

Total stock-based compensation related to stock options was $0 during the six months ended June 30, 2024 and July 2, 2023.

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 $0.8 million and $2.3 million for the three and six months ended June 30, 2024, respectively and $0.6 million and $1.2 million, for the three and six months ended July 2, 2023, respectively.

As of June 30, 2024 and July 2, 2023, there was approximately $2.4 million and $1.8 million, respectively, in unrecognized compensation expense related to RSUs. The remaining unrecognized stock-based compensation expense as of June 30, 2024 is expected to be recorded over a weighted average period of 0.88 years.

A summary of activity for the Company's RSUs and PRSUs for the six months ended June 30, 2024 is as follows:

	RSUs & PRSUs Outstanding	
	Number of Shares (in thousands)	Weighted Average Grant Date Fair Value
Nonvested at December 31, 2023	589	$ 7.35
Granted	171	13.94
Vested and released	(96)	11.68
Forfeited	(51)	13.13
Nonvested at June 30, 2024	613	$ 8.03

Employee Stock Purchase Plan

Total stock-based compensation related to the Company's Employee Stock Purchase Plan was approximately $13 thousand and $41 thousand for the three and six months ended June 30, 2024, respectively and $16 thousand and $75 thousand, for the three and six months ended July 2, 2023, respectively.

Note 11 — Income Taxes

The Company recorded a net income tax benefit of $6 thousand and $7 thousand for the three months ended June 30, 2024 and July 2, 2023, respectively. Additionally, the Company recorded a net income tax expense of $1 thousand and $0 for the six months ended June 30, 2024 and July 2, 2023, respectively. The difference between the estimated annual effective tax rate of 6.38% 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 June 30, 2024. 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 June 30, 2024.

Note 12 — Information Concerning Product Lines, Geographic Information and Revenue Concentration

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

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

	Three Months Ended		Six Months Ended	
	June 30, 2024	July 2, 2023	June 30, 2024	July 2, 2023
New products	$ 3,057	$ 2,233	$ 7,933	$ 5,288
Mature products	1,070	688	2,201	1,766
Total revenue	$ 4,127	$ 2,921	$ 10,134	$ 7,054

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		Six Months Ended	
	June 30, 2024	July 2, 2023	June 30, 2024	July 2, 2023
Hardware products	$ 505	$ 366	$ 1,000	$ 528
eFPGA IP and professional services	2,521	1,857	6,564	4,667
SaaS & Other	31	10	369	93
New products revenue	$ 3,057	$ 2,233	$ 7,933	$ 5,288

eFPGA IP and professional services revenue for the three months ended June 30, 2024 and July 2, 2023 was $2.5 million and $1.9 million, respectively, and for the six months ended June 30, 2024 and July 2, 2023 was $6.6 million and $4.7 million, respectively, which were primarily professional services revenue.

Contract assets related to professional services revenue were $2.3 million and $1.0 million as of June 30, 2024 and July 2, 2023, respectively. Contract liabilities related to professional services revenue were $0.7 million and $0.3 million as of June 30, 2024 and July 2, 2023, 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 $3.4 million, or 83% of total revenue, and $8.3 million, or 82% of total revenue for the three and six months ended June 30, 2024, respectively and $2.3 million, or 80% of total revenue, and $5.6 million, or 80% of total revenue for the three and six months ended July 2, 2023, respectively.

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

	Three Months Ended		Six Months Ended	
	June 30, 2024	July 2, 2023	June 30, 2024	July 2, 2023
Asia Pacific	$ 410	$ 456	$ 1,138	$ 1,169
North America	3,611	2,370	8,654	5,688
Europe	106	95	342	197
Total revenue	$ 4,127	$ 2,921	$ 10,134	$ 7,054

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

	Three Months Ended		Six Months Ended	
	June 30, 2024	July 2, 2023	June 30, 2024	July 2, 2023
Distributor "A"	11%	18%	10%	17%
Distributor "C"	16%	*	*	*
Customer "A"	55%	47%	59%	51%
Customer "B"	*	12%	*	10%
Customer "C"	*	11%	*	*

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

	June 30, 2024	December 31, 2023
Customer "A"	70%	86%

Note 13 — 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 financing arrangements. Purchase obligations are largely comprised of open purchase order commitments to suppliers and to subcontractors under professional services agreements. The Company's risk associated with the purchase obligations under professional services agreements is limited to the termination liability provisions within those contracts, and as such, it does not believe they represent a material liquidity risk to the Company.

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 June 30, 2024, the Company had $114 thousand in 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 June 30, 2024, total outstanding purchase obligations for other goods and services were $2.6 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 December 31, 2023, found in our Annual Report on Form 10-K filed with the Securities and Exchange Commission ("SEC") on March 27, 2024. 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

QuickLogic Corporation was founded in 1988 and reincorporated in Delaware in 1999. We provide innovative, programmable silicon and software platforms to enable our customers to develop custom hardware products in a fast time-to-market and cost-effective way. Specifically, we are a fabless semiconductor company with a variety of products: embedded FPGA ("eFPGA") intellectual property ("IP"), low power, multi-core semiconductor system-on-chips ("SoCs"), discrete FPGAs, and AI software. Our customers can use our eFPGA IP for hardware acceleration and pre-processing in their Application Specific Integrated Circuit (ASIC) products, our SoCs to run our customers' software and build their hardware around, and our discrete FPGAs to implement their custom functionality. The Analytics Toolkit from SensiML Corporation ("SensiML"), our wholly-owned subsidiary, provides an end-to-end Artificial Intelligence / Machine Learning 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 Aerospace and Defense, Consumer/Industrial IoT, and Consumer Electronics markets.

Our new products include the following: eFPGA IP Licensing business and associated professional services, consisting of development and integration of eFPGA technology into custom semiconductor solutions and our silicon products consisting of EOS™, QuickAI™, ArcticLink® III, PolarPro®3, PolarPro II, PolarPro, and Eclipse II products. In addition to delivering our own semiconductor solutions, our new products category includes our AI/ML Software Platform from our wholly-owned subsidiary company, SensiML, which includes Software as a Service (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 products revenue category. Our mature products include primarily FPGA families named PASIC®3 and QuickRAM®, as well as programming hardware and design software. We currently have a total of three patent applications pending.

For our IP and silicon platforms, we collaborate with multiple partners on co-marketing and/or co-selling initiatives. These partners could have primary business lines in semiconductor IP, Design Services, semiconductor foundry, semiconductor assembly and test, and others. For our AI/ML Software, SensiML collaborates with several microcontroller and sensor manufacturers to integrate the microcontroller and/or sensor manufacturers' development kits with SensiML's Analytics Toolkit in order to showcase combined solutions for AI/ML applications. Currently, these collaborations include Infineon Technologies, On Semiconductor Corp., Microchip Technology Inc., Silicon Laboratories, Inc., STMicroelectronics N.V., Arduino, NXP Semiconductors N.V., Raspberry Pi, and Nordic Semiconductor.

Our eFPGA IP is currently developed on 12nm, 16nm, 22nm, 28nm, 40nm, 65nm, 90nm, 130nm, and 250nm process nodes with a roadmap to more advanced nodes. The licensable IP is generated by our automated compiler tool called Australis™, which 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.

We have changed our manufacturing strategies to reduce the cost of our silicon solution platforms to enable their use in a range of unique products ranging from low to high volume. Our EOS S3, EOS S3AI, QuickAI, and ArcticLink III silicon platforms combine mixed signal physical functions and hard-wired logic alongside our field programmable logic. Our EOS S3, EOS S3AI, and ArcticLink III solution platforms are manufactured on process nodes where we can benefit from smaller die sizes and lower power consumption. We typically implement sophisticated logic blocks and mixed signal functions in hard-wired logic because it is very cost-effective and energy efficient. We use small form factor packages, which are less expensive to manufacture and include smaller pin counts. Reduced pin counts result in lower costs for our customers' printed circuit board space and routing. Furthermore, our SRAM reprogrammable silicon platforms can be programmed in-system by our customers, and therefore, we do not incur programming costs, lowering the overall cost of ownership to our customers. We expect to continue to invest in silicon solution platforms and manufacturing technologies that make us competitive for the variety of markets and applications that programmable logic serves.

In order to grow our revenue from its current level, we depend upon increased revenue from our new products, including existing new product platforms and platforms currently in development. We expect our business growth to be driven mainly by eFPGA IP and our silicon solutions, with additional contributions from 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, sale, and marketing of our new solution platforms, IP, and software.

We market our programmable logic (FPGAs and eFPGA IP) solutions primarily to Defense Industrial Base contractors, U.S. Government entities, System OEMs, and fabless semiconductor companies. These customers may value one or more of our product categories. A solution can be based on our programmable technology, which enables customized designs, low power, flexibility, rapid time-to-market, longer time-in-market, and lower total cost of ownership. We are capable of providing complete solutions because of our investment in developing the low power IP and software required to implement specific functions, along with sensor software algorithms optimized for our architecture. In some cases, we develop the IPs and either software or firmware ourselves and, in other cases, we utilize third parties to develop the mixed signal physical layers, logic, and/or software.

We market our SoC and SensiML solutions to OEMs and ODMs offering differentiated Consumer/IoT products, to processor vendors wishing to expand their served available market, and to sensor manufacturers and sensor processing software companies wishing to expand their ecosystems. Our target markets for our SoC and SensiML products include Consumer/Industrial IoT and Consumer Electronics.

By using our silicon platforms, our IPs, our software, and our in-depth architecture knowledge, we can deliver energy efficient custom solutions that blend the benefits of traditional ASSPs with the flexibility, product proliferation, differentiation, and low total cost of ownership advantages of programmable logic.

We monetize our technology through hardware product sales and eFPGA IP licenses, with any necessary corresponding work delivered via professional engineering services, SensiML Analytics Toolkit subscriptions, and per unit royalties. We specialize in enhancing the user experience in leading edge IoT hardware products. For our customers, we enable hardware and sensor algorithmic differentiation quickly, cost-effectively, and at low power. For our partners, we expand their reach into new segments and new use cases, thereby expanding the served available market for their existing hardware products.

Our embedded FPGA technology gives ASIC and SoC developers the benefit of flexibility to make design changes post-manufacturing changes at very fast time-to-and time-in-market, while keeping power consumption low. Our multi-core sensor processing products such as ArcticLink 3 S1, ArcticLink 3 S2, EOS 3, EOS S3 LV, and EOS S3AI provide an extremely power-efficient approach for real-time multi-modal (vision, motion, voice, location, biometric, and environmental) sensor processing independently of the cloud. Our SensiML Analytics Toolkit is cutting-edge software that enables ultra-low power IoT endpoints that implement AI to transform raw sensor data into meaningful insight at the device itself. The toolkit also provides an end-to-end development platform spanning data collection, labeling, algorithm and firmware auto generation, and testing.

We recognize that our markets require a range of solutions, and we intend to work with market-leading companies to combine silicon solution platforms, packaging technology, FPGA User Tools, sensor software algorithms, software drivers and firmware, to meet the product proliferation, high bandwidth, time-to-market, time-in-market, and form factor requirements of our customers. We intend to continue to define and implement compelling solutions for our target customers and partners.

We believe our solutions are resonating with our target customers who value lower power consumption, platform design flexibility, rapid time-to-market, longer time-in-market, and low total cost of ownership available through the use of our solutions.

We sell our products through a network of sales managers in North America, Europe, and Asia. In addition to our corporate headquarters in San Jose, California, we have international sales operations in Japan and the United Kingdom. Our sales personnel and independent sales representatives are responsible for sales and application support for a given region, focusing on major strategic accounts, and managing our channel sales partners such as distributors.

Customers typically order our products through our distributors. Currently, we have ten active distributors in North America and a network of fifteen active distributors and sales representatives throughout Europe and Asia to support our international business. eFPGA IP customers and SensiML SaaS subscribers typically enter into licensing agreements directly with QuickLogic and SensiML, respectively.

We also have an Aerospace and Defense, industrial, and IoT product customer base that purchases our mature silicon products. We expect to continue to offer silicon hardware products to these customers, as well as new eFPGA IP for when these customers choose to implement their own silicon platform solution.

During the second quarter of 2024, we generated total revenue of $4.1 million, a decrease of 31% compared to the prior quarter, and an increase of 41% compared to the same quarter last year. Our new product revenue in the second quarter was $3.1 million, a decrease of 37% from the prior quarter and an increase of 37% from the second quarter of 2023. Our mature product revenue was $1.1 million in the second quarter of 2024, a decrease of 5% compared to the prior quarter, and an increase of 56% compared to the second quarter of 2023. 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 a net loss of $1.6 million for the second quarter of 2024, as compared to a net income of $0.1 million in the prior quarter and a net loss of $2.3 million for the second quarter of 2023.

As of June 30, 2024, we had one operating lease with a remaining lease term of 2.92 years. The operating lease relates to our company headquarters in San Jose, CA.

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 consolidated financial statements. The SEC has defined critical accounting policies as those that are most important to the portrayal of the company's financial condition and results of operations and requires 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 policies include revenue recognition, inventory valuation, including the identification of excess quantities, market value, and obsolescence, and valuation of goodwill and long-lived and intangible assets. 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. During the three and six months ended June 30, 2024, 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 December 31, 2023, which was filed with the SEC on March 27, 2024.

Results of Operations

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

	Three Months Ended		Six Months Ended	
	June 30, 2024	July 2, 2023	June 30, 2024	July 2, 2023
Revenue	100%	100%	100%	100%
Cost of revenue	49%	59%	40%	49%
Gross profit	51%	41%	60%	51%
Operating expenses:				
Research and development	37%	52%	29%	44%
Selling, general and administrative	51%	65%	44%	54%
Income (loss) from operations	(37)%	(76)%	(13)%	(47)%
Interest expense	(1)%	(2)%	(1)%	(2)%
Interest income and other income (expense), net	—%	(0)%	—%	(1)%
Income (loss) before income taxes	(38)%	(78)%	(14)%	(50)%
(Benefit from) provision for income taxes	—%	—%	—%	—%
Net income (loss)	(38)%	(78)%	(14)%	(50)%

Three Months Ended June 30, 2024 Compared to Three Months Ended July 2, 2023

Revenue

The table below sets forth the changes in revenue in the three months ended June 30, 2024 compared to the three months ended July 2, 2023 (in thousands, except percentage data):

	Three Months Ended				Change	
	June 30, 2024		July 2, 2023			
	Amount	% of Total Revenues	Amount	% of Total Revenues	Amount	Percentage
New products	$ 3,057	74%	$ 2,233	76%	$ 824	37%
Mature products	1,070	26%	688	24%	382	56%
Total revenue	$ 4,127	100%	$ 2,921	100%	$ 1,206	41%

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 second quarter of 2024 compared to the second quarter of 2023 increased $1.2 million. The increase resulted primarily from increases in professional services eFPGA revenues and revenue from devices and royalties.

New Product Revenue

The table below sets forth the changes in new product revenue in the three months ended June 30, 2024 compared to the three months ended July 2, 2023 (in thousands, except percentage data):

	Three Months Ended				Change	
	June 30, 2024		July 2, 2023			
	Amount	% of Total Revenues	Amount	% of Total Revenues	Amount	Percentage
Hardware products	$ 505	12%	$ 366	12%	$ 139	38%
eFPGA IP and professional services	2,521	61%	1,857	64%	664	36%
SaaS & Other	31	1%	10	—%	21	210%
Total new product revenue	$ 3,057	74%	$ 2,233	76%	$ 824	37%

eFPGA IP revenue for the three months ended June 30, 2024 and July 2, 2023 was $2.5 million and $1.9 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 June 30, 2024 compared to the three months ended July 2, 2023 (in thousands, except percentage data):

	Three Months Ended					
	June 30, 2024		July 2, 2023		Change	
	Amount	% of Total Revenues	Amount	% of Total Revenues	Amount	Percentage
Revenue	$ 4,127	100%	$ 2,921	100%	$ 1,206	41%
Cost of revenue	2,022	49%	1,718	59%	304	18%
Gross profit	$ 2,105	51%	$ 1,203	41%	$ 902	75%

In the second quarter of 2024, gross profit increased $0.9 million, or 75%, compared to the same quarter in the prior year. The net increase in gross profit reflects a 41% increase in revenues, offset by a 18% net increase in cost of revenue. Revenue increased from the same quarter in the prior year due to revenues associated with Department of Defense contracts, as well as increases in device sale and royalty revenues. The net increase in cost of revenues was primarily due to the increased activity commensurate with the professional services revenue contracts. Labor, semiconductor tooling, and increased depreciation expenses substantially comprised this increase, with slight offsets from decreased consulting expenses.

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 June 30, 2024 compared to the three months ended July 2, 2023 (in thousands, except percentage data):

	Three Months Ended					
	June 30, 2024		July 2, 2023		Change	
	Amount	% of Total Revenues	Amount	% of Total Revenues	Amount	Percentage
R&D expense	$ 1,527	37%	$ 1,505	52%	$ 22	1%
SG&A expense	2,095	51%	1,924	65%	171	9%
Total operating expenses	$ 3,622	88%	$ 3,429	117%	$ 193	6%

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 $22 thousand increase in R&D expenses in the second quarter of 2024, as compared to the second quarter of 2023, was primarily due to net allocations to cost of revenue resulting from labor and tooling costs attributable to professional services revenue contracts, with slight offsets due to increases in net depreciation and amortization expense from notes payable related to equipment.

Selling, General and Administrative

Our selling, general and administrative (SG&A) expenses consist primarily of personnel and related overhead costs for sales, marketing, finance, administration, human resources, and general management. The $0.2 million increase in SG&A expenses in the second quarter of 2024, as compared to the second quarter of 2023, was attributable to increases in compensation, offset by decreases in variable incentive compensation and outside services.

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 June 30, 2024 compared to the three months ended July 2, 2023 (in thousands, except percentage data):

	Three Months Ended		Change	
	June 30, 2024	July 2, 2023	Amount	Percentage
Interest expense	$ (40)	$ (50)	$ (10)	(20)%
Interest income and other income (expense), net	1	—	1	100%
Total interest (expense), interest income and other income (expense), net	$ (39)	$ (50)	$ (11)	(22)%

Interest expense relates primarily to our revolving line of credit facility and notes payable. 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 second quarter of this year as compared to the same period in the prior year decreased approximately $10 thousand, which was comprised of a $5 thousand increase in interest expense related to notes payable, a $14 thousand decrease in interest expense and facility fees related to our revolving line of credit facility, and a $1 thousand decrease in interest expense related to IT hardware financing costs. The favorable 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 June 30, 2024, compared to the three months ended July 2, 2023 (in thousands, except percentage data):

	Three Months Ended		Change	
	June 30, 2024	July 2, 2023	Amount	Percentage
(Benefit from) provision for income taxes	$ (6)	$ (7)	$ 1	(14)%

The Company recorded a net income tax benefit of $6 thousand for the three months ended June 30, 2024 and a net income tax benefit of $7 thousand for the three months ended July 2, 2023. The effective tax rate for the second quarter ended June 30, 2024 was (0.37)% as compared to (0.29)% for the same period in the prior year.

Six Months Ended June 30, 2024 Compared to Six Months Ended July 2, 2023

Revenue

The table below sets forth the changes in revenue in the six months ended June 30, 2024 compared to the six months ended July 2, 2023 (in thousands, except percentage data):

	Six Months Ended				Change	
	June 30, 2024		July 2, 2023			
	Amount	% of Total Revenues	Amount	% of Total Revenues	Amount	Percentage
New products	$ 7,933	78%	$ 5,288	75%	$ 2,645	50%
Mature products	2,201	22%	1,766	25%	435	25%
Total revenue	$ 10,134	100%	$ 7,054	100%	$ 3,080	44%

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 second quarter of 2024 compared to the second quarter of 2023 increased $3.1 million. The increase resulted primarily from increases in professional services eFPGA revenues and revenue from devices and royalties.

New Product Revenue

The table below sets forth the changes in new product revenue in the six months ended June 30, 2024 compared to the six months ended July 2, 2023 (in thousands, except percentage data):

	Six Months Ended				Change	
	June 30, 2024		July 2, 2023			
	Amount	% of Total Revenues	Amount	% of Total Revenues	Amount	Percentage
Hardware products	$ 1,000	10%	$ 528	7%	$ 472	89%
eFPGA IP and professional services	6,564	65%	4,667	66%	1,897	41%
SaaS & Other	369	3%	93	2%	276	297%
Total new product revenue	$ 7,933	78%	$ 5,288	75%	$ 2,645	50%

eFPGA IP revenue for the six months ended June 30, 2024 and July 2, 2023 was $6.6 million and $4.7 million, respectively, which were primarily professional services revenue.

Gross Profit

The table below sets forth the changes in gross profit for the six months ended June 30, 2024 compared to the six months ended July 2, 2023 (in thousands, except percentage data):

	Six Months Ended				Change	
	June 30, 2024		July 2, 2023			
	Amount	% of Total Revenues	Amount	% of Total Revenues	Amount	Percentage
Revenue	$ 10,134	100%	$ 7,054	100%	$ 3,080	44%
Cost of revenue	4,046	40%	3,461	49%	585	17%
Gross profit	$ 6,088	60%	$ 3,593	51%	$ 2,495	69%

In the second quarter of 2024, gross profit increased $2.5 million, or 69%, compared to the same quarter in the prior year. The increase in gross profit reflects a 44% increase in revenues, offset by a 17% net increase in cost of revenue. Revenue increased from the same quarter in the prior year due to revenues associated with Department of Defense contracts, as well as increases in device sale and royalty revenues. The increase in cost of revenues was primarily due to the increased activity commensurate with the professional services revenue contracts. Labor, semiconductor tooling, and increased depreciation expenses, offset by decreases in consulting expenses, substantially comprised this increase.

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

Operating Expenses

The table below sets forth the changes in operating expenses for the six months ended June 30, 2024 compared to the six months ended July 2, 2023 (in thousands, except percentage data):

	Six Months Ended				Change	
	June 30, 2024		July 2, 2023			
	Amount	% of Total Revenues	Amount	% of Total Revenues	Amount	Percentage
R&D expense	$ 2,986	29%	$ 3,134	44%	$ (148)	(5)%
SG&A expense	4,446	44%	3,785	54%	661	17%
Total operating expenses	$ 7,432	73%	$ 6,919	98%	$ 513	7%

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 $0.1 million decrease in R&D expenses in the second quarter of 2024, as compared to the second quarter of 2023, was primarily due to allocations to cost of revenue resulting from labor and tooling costs attributable to professional services revenue contracts.

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 $0.7 million increase in SG&A expenses in the second quarter of 2024, as compared to the second quarter of 2023, was attributable to increases in equity compensation 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 six months ended June 30, 2024 compared to the six months ended July 2, 2023 (in thousands, except percentage data):

	Six Months Ended		Change	
	June 30, 2024	July 2, 2023	Amount	Percentage
Interest expense	$ (109)	$ (108)	$ 1	1%
Interest income and other expense, net	12	(63)	(75)	(119)%
Total interest (expense), interest income and other income (expense), net	$ (97)	$ (171)	$ (74)	(43)%

Interest expense relates primarily to our revolving line of credit facility and notes payable. 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 second quarter of this year as compared to the same period in the prior year increased approximately $1 thousand, which was comprised of an $8 thousand increase in interest expense related to notes payable, a $6 thousand decrease in interest expense related to our revolving line of credit facility, and a $1 thousand decrease in interest expense related to IT hardware financing costs. The favorable 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 six months ended June 30, 2024, compared to the six months ended July 2, 2023 (in thousands, except percentage data):

	Six Months Ended		Change	
	June 30, 2024	July 2, 2023	Amount	Percentage
(Benefit from) provision for income taxes	$ 1	$ —	$ 1	100%

There was a slight change in the income tax expense for the six months ended June 30, 2024 as compared to the six months ended July 2, 2023. The computed tax rate for the six months ended June 30, 2024 was 0.10% as compared to 0.02% for the six months ended July 2, 2023. The difference between the estimated annual effective income expense of 0.10% 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 June 30, 2024. 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 June 30, 2024. The projected annual effective tax rate before certain discrete items as of the second quarter of 2024 is 6.38%, as compared to the projected annual effective tax rate of (3.04)% for the same period in the prior year.

Balance Sheet Activities

Balance sheet amounts at June 30, 2024 compared to December 31, 2023 resulted from typical and usual activities in the normal course of business.

Total assets decreased by approximately $0.3 million primarily due to a $2.1 million reduction in accounts receivable and contract assets due to the billing and collection of outstanding receivables, $1.7 million in depreciation and amortization expense, a $1.3 million reduction in cash and cash equivalents due to payment of trade payables, and a $0.4 million reduction in inventory and other assets. This was partially offset by the capitalization of $4.9 million in property, plant, and equipment and internal-use software assets and a $0.2 million increase in prepaid expenses and other receivables.

Liabilities decreased by approximately $5.3 million due to payment of trade payables of $3.2 million, accrued liabilities of $1.4 million, and debt and lease obligations of $0.4 million, as well as the recognition of deferred revenue of $0.3 million. Equity increased $4.9 million due to a $6.4 million increase in additional paid in capital arising from the sale of shares of common stock and recognition of stock-based compensation, partially offset by a $1.4 million net loss for the six months ended June 30, 2024.

Liquidity and Capital Resources

We have financed our operations and capital investments through public and private offerings of our common stock, financing arrangements, operating leases, borrowings under a revolving line of credit, and cash flows from operations. In addition to our cash, cash equivalents and restricted cash of $23.3 million, as of June 30, 2024, other sources of liquidity included a $20.0 million drawn down from our revolving line of credit ("Revolving Facility") with Heritage Bank of Commerce (“Heritage Bank”), and $3.5 million in net proceeds from the sale of our common stock on March 13, 2024. Costs related to the offering were immaterial. Our restricted cash balance as of June 30, 2024 was $0.1 million and relates to amounts pledged as cash security for the use of credit cards.

On April 28, 2023, we converted accounts receivable for a customer in the amount of approximately $1.16 million to notes receivable (the "Original Note"). At the time, the Original Note bore an interest rate of 3.0% compounded monthly. On June 28, 2023, we cancelled the Original Note and entered into a revised promissory note ("Second Revised 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 Original Note. On June 27, 2024, we cancelled the Second Revised Note and entered into a revised promissory note ("Current Note") with the customer, where the interest rate changed to 10.0% per annum. Accrued but unpaid interest will be compounded monthly, accruing from the date of the Current Note. Additionally, if not prepaid prior to the Current Note maturity date of the earlier of (i) 24 months from June 28, 2024 or (ii) the closing of the customer's Series B financing, the principal and all accrued and unpaid interest will be due and payable to us. If an event of default occurs, the interest rate will increase to 15.31%. All other terms of the Note remained the same. As of June 30, 2024, the related note receivable balance was $1.23 million, including $66 thousand in accrued interest.

On March 13, 2024, we entered into common stock purchase agreements with certain institutional investors and their affiliated entities for the sale of an aggregate of 223 thousand shares of common stock, par value $0.001, in a registered direct offering, resulting in net cash proceeds of approximately $3.5 million. Issuance costs related to the offering were negligible. The purchase price for each share of common stock was $16.00. See Note 9 for additional information.

On March 21, 2023, we entered into common stock purchase agreements with certain investors for the sale of an aggregate of 450 thousand shares of common stock, in a registered direct offering pursuant to an effective shelf registration statement on Form S-3, resulting in net cash proceeds of approximately $2.3 million. Issuance costs related to the offering were immaterial. The purchase price for each share of common stock in the Share Placement was $5.14.

We were in compliance with all the Heritage Bank Revolving Facility loan covenants as of June 30, 2024. As of June 30, 2024, we had $20.0 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 our existing cash and cash equivalents, together with $3.5 million gross cash proceeds from the March 13, 2024 financing, our revenues from operations, and the available financial resources from the Revolving Facility with Heritage Bank will be sufficient to fund our operations and capital expenditures and provide adequate working capital for the next twelve months.

Various factors affect our liquidity, including, among others: the level of revenue and gross profit as a result of the cyclicality of the semiconductor industry; the conversion of design opportunities into revenue; market acceptance of existing and new products including solutions based on our ArcticLink® and PolarPro® platforms, ArcticPro™, EOS S3 SoC, Quick AI solution, QuickAI™, SensiML Analytics Toolkit, Eclipse II products, and eFPGA IP license 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 our 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 our 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 our employee stock purchase plan; and other factors related to the uncertainties of the industry and global economics.

Over the longer term, we anticipate that sales generated from our new product offerings, existing cash and cash equivalents, together with financial resources from our Revolving Facility with Heritage Bank, assuming renewal of the Revolving Facility or us entering into a new debt agreement with an alternative lender prior to the expiration of the revolving line of credit in December 2025, and our ability to raise additional capital in the public capital markets will be sufficient to satisfy our operations and capital expenditures. However, we cannot provide any assurance that we will be able to raise additional capital, if required, or that such capital will be available on terms acceptable to us. The inability to generate sufficient sales from our new product offerings and/or raise additional capital if needed could have a material adverse effect on our operations and financial condition, including our ability to maintain compliance with our lender's financial covenants.

As of June 30, 2024, most of our cash, cash equivalents and restricted cash were invested in a money market account at Heritage Bank. As of June 30, 2024, our interest-bearing debt consisted of $1.2 million outstanding under notes payable and $20.0 million outstanding under our Revolving Facility. See Note 7, Debt Obligations, to the unaudited condensed consolidated financial statements for more details.

Cash balances held at our foreign subsidiaries were approximately $0.1 million as of June 30, 2024 and December 31, 2023. Earnings from our foreign subsidiaries are currently deemed to be indefinitely reinvested. We do not expect such reinvestment to affect our liquidity and capital resources, and we continually evaluate our liquidity needs and ability to meet global cash requirements as a part of our overall capital deployment strategy. Factors that affect our global capital deployment strategy include anticipated cash flows, the ability to repatriate cash in a tax-efficient manner, funding requirements for operations and investment activities, acquisitions and divestitures, and capital market conditions.

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

	Six Months Ended	
	June 30, 2024	**July 2, 2023**
Net cash provided by (used in) operating activities	$ (73)	$ (321)
Net cash provided by (used in) investing activities	(4,473)	(529)
Net cash provided by (used in) financing activities	3,206	2,214

Net cash provided by (used in) operating activities

For the six months ended June 30, 2024, net cash used in operating activities was $0.1 million, which was primarily due to the net loss of $1.4 million, adjusted for net non-cash charges of $4.3 million, which included $2.5 million of stock-based compensation, $1.7 million in depreciation and amortization expenses, and $0.1 million in ROU asset amortization expenses. Cash outflow from changes in operating assets and liabilities was approximately $2.9 million and was primarily due to decreases in accounts payable and accrued liabilities, partially offset by a decrease in contract assets and accounts receivable.

For the six months ended July 2, 2023, net cash used in operating activities was $0.3 million, which was primarily due to the net loss of $3.5 million, adjusted for net non-cash charges of $2.4 million, which included $1.3 million of stock-based compensation, $0.7 million in depreciation and amortization expenses, $0.2 million in write-downs of inventories, and $0.2 million in ROU asset amortization expenses. Cash inflow from changes in operating assets and liabilities was approximately $0.7 million and was primarily due to increases in accounts receivable and decreases in contract assets, partially offset by decreases in accounts payable and other assets.

Net cash provided by (used in) investing activities

For the six months ended June 30, 2024 and July 2, 2023 cash used in investing activities was $4.5 million and $0.5 million, respectively, which were primarily attributable to the capital expenditures relating to licensed software, capitalized internal-use software, and purchase of specialized semiconductor tooling, which was capitalized.

Net cash provided by (used in) financing activities

Cash flows from financing activities include the draw-downs and repayments of our line of credit. For the quarters ended June 30, 2024 and July 2, 2023, these draw-downs and repayments netted to zero.

For the six months ended June 30, 2024, cash provided by financing activities was $3.2 million, which was primarily derived from the net proceeds of $3.7 million from the common stock issuance, partially offset by $0.5 million in payments related to financing arrangements.

For the six months ended July 2, 2023, cash provided by financing activities was $2.2 million and was primarily derived from the net proceeds of $2.4 million from the common stock issuances and borrowings of notes payable of $0.1 million, partially offset by $0.3 million in payments related to financing arrangements.

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 June 30, 2024, 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 2023 Annual Report on Form 10-K for the year ended December 31, 2023, filed with the SEC on March 27, 2024, 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 5. Other Information

Insider Trading Arrangements

For the six months ended June 30, 2024, none of our directors or officers (as defined in Rule 16a-1(f) of the Exchange Act) adopted or terminated a "Rule 10b5-1 trading arrangement" or "non-Rule 10b5-1 trading arrangement" (as those terms are defined in Item 408 of Regulation S-K), except as follows:

Gary Tauss, Director, adopted a Rule 10b5-1 trading arrangement on March 4, 2024. Under this arrangement, approximately 7,300 shares of our common stock may be sold, subject to certain conditions, before the plan expires on December 9, 2025.

Michael Farese, Chairman of the Board, adopted a Rule 10b5-1 trading arrangement on May 21, 2024. Under this arrangement, approximately 14,700 shares of our common stock may be sold, subject to certain conditions, before the plan expires on May 21, 2025.

The above arrangements are intended to satisfy the affirmative defense conditions of Rule 10b5-1(c) of the Exchange Act.

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 June 30, 2024, 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: August 14, 2024	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: August 14, 2024

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

Exhibit 31.2

CERTIFICATIONS

I, Elias Nader, certify that:

1. I have reviewed this quarterly report on Form 10-Q of QuickLogic Corporation;

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

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

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

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

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

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

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

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

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

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

Date: August 14, 2024

/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 June 30, 2024 (the "Report"), fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

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

Date: August 14, 2024	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 June 30, 2024 (the "Report"), fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

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

Date: August 14, 2024	By:	/s/ Elias Nader
	Name:	Elias Nader
	Title:	*Chief Financial Officer, and Senior Vice-President, Finance*