

**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 September 30, 2023

OR

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

For the transition period from to

Commission file number 001-40960

Arteris, Inc.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation or organization)

27-0117058

(I.R.S. Employer Identification No.)

900 E. Hamilton Ave., Suite 300
Campbell, CA 95008
(408) 470-7300

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common stock, \$0.001 par value	AIP	The Nasdaq Stock Market LLC

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

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate web site, if any, every Interactive Data File required to be submitted and posted 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 and post such files). Yes No

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

Large accelerated filer	<input type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input checked="" type="checkbox"/>	Smaller reporting company	<input checked="" type="checkbox"/>
		Emerging growth company	<input checked="" type="checkbox"/>

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 Act). Yes No

As of October 31, 2023, there were 36,854,383 shares of the registrant's common stock outstanding.

TABLE OF CONTENTS

	Page
<u>Part I. Financial Information</u>	3
<u>Item 1. Financial Statements (unaudited)</u>	3
<u>Condensed Consolidated Balance Sheets as of September 30, 2023 and December 31, 2022</u>	3
<u>Condensed Consolidated Statements of Loss for the Three and Nine Months Ended September 30, 2023 and 2022</u>	4
<u>Condensed Consolidated Statements of Comprehensive Loss for the Three and Nine Months Ended September 30, 2023 and 2022</u>	5
<u>Condensed Consolidated Statements of Stockholders' Equity for the Three and Nine Months Ended September 30, 2023 and 2022</u>	6
<u>Condensed Consolidated Statements of Cash Flows for the Nine Months Ended September 30, 2023 and 2022</u>	8
<u>Notes to Unaudited Condensed Consolidated Financial Statements</u>	9
<u>Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations</u>	27
<u>Item 3. Quantitative and Qualitative Disclosures About Market Risk</u>	40
<u>Item 4. Controls and Procedures</u>	40
<u>Part II. Other Information</u>	42
<u>Item 1. Legal Proceedings</u>	42
<u>Item 1A. Risk Factors</u>	42
<u>Item 2. Unregistered Sales of Equity Securities and Use of Proceeds</u>	82
<u>Item 3. Defaults Upon Senior Securities</u>	82
<u>Item 4. Mine Safety Disclosures</u>	83
<u>Item 5. Other Information</u>	83
<u>Item 6. Exhibits</u>	84
<u>Signatures</u>	85

Part I - Financial Information
Item 1. Financial Statements

Arteris, Inc.
Condensed Consolidated Balance Sheets
(In thousands, except share and per share data)
(Unaudited)

	As of	
	September 30, 2023	December 31, 2022
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 18,627	\$ 37,423
Short-term investments	27,734	30,728
Accounts receivable, net of allowance of \$0 and \$250 as of September 30, 2023 and December 31, 2022, respectively	10,370	7,143
Prepaid expenses and other current assets	5,249	5,818
Total current assets	61,980	81,112
Property and equipment, net	5,430	3,617
Long-term investments	10,287	4,427
Equity method investment	9,410	11,897
Operating lease right-of-use assets	1,598	1,883
Intangibles, net	4,050	4,575
Goodwill	4,178	4,218
Other assets	5,238	3,787
TOTAL ASSETS	\$ 102,171	\$ 115,516
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$ 445	\$ 572
Accrued expenses and other current liabilities	11,983	12,095
Operating lease liabilities, current	571	899
Deferred revenue, current	29,898	28,839
Vendor financing arrangements, current	1,623	1,264
Total current liabilities	44,520	43,669
Deferred revenue, noncurrent	22,647	21,840
Operating lease liabilities, noncurrent	1,038	1,009
Vendor financing arrangements, noncurrent	1,378	448
Deferred income, noncurrent	9,108	9,993
Other liabilities	1,451	1,022
Total liabilities	80,142	77,981
Commitments and contingencies (Note 11)		
Stockholders' equity:		
Preferred stock, par value of \$0.001 - 10,000,000 shares authorized and no shares issued and outstanding as of September 30, 2023 and December 31, 2022, respectively	—	—
Common stock, par value of \$0.001 - 300,000,000 shares authorized as of September 30, 2023 and December 31, 2022; 36,826,655 and 34,625,875 shares issued and outstanding as of September 30, 2023 and December 31, 2022, respectively	37	34
Additional paid-in capital	114,652	103,778
Accumulated other comprehensive income	46	101
Accumulated deficit	(92,706)	(66,378)
Total stockholders' equity	22,029	37,535
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	\$ 102,171	\$ 115,516

See accompanying notes to unaudited condensed consolidated financial statements.

Arteris, Inc.
Condensed Consolidated Statements of Loss
(In thousands, except share and per share data)
(Unaudited)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
Revenue				
Licensing, support and maintenance	\$ 12,084	\$ 11,135	\$ 36,926	\$ 35,743
Variable royalties and other	1,190	1,463	4,236	3,432
Total revenue	13,274	12,598	41,162	39,175
Cost of revenue	1,280	928	3,629	3,196
Gross profit	11,994	11,670	37,533	35,979
Operating expenses:				
Research and development	10,997	11,022	34,465	30,849
Sales and marketing	5,024	4,411	15,630	12,788
General and administrative	4,426	3,991	13,331	12,138
Total operating expenses	20,447	19,424	63,426	55,775
Loss from operations	(8,453)	(7,754)	(25,893)	(19,796)
Interest expense	(77)	(22)	(136)	(60)
Other income (expense), net	898	340	2,641	406
Loss before income taxes and loss from equity method investment	(7,632)	(7,436)	(23,388)	(19,450)
Loss from equity method investment, net of tax	919	—	2,487	—
Provision for (benefit from) income taxes	(398)	248	453	722
Net loss	\$ (8,153)	\$ (7,684)	\$ (26,328)	\$ (20,172)
Net loss per share attributable to common stockholders, basic and diluted	\$ (0.23)	\$ (0.23)	\$ (0.75)	\$ (0.63)
Weighted average shares used in computing per share amounts, basic and diluted	36,010,106	32,836,014	35,291,207	32,228,429

See accompanying notes to unaudited condensed consolidated financial statements.

Arteris, Inc.
Condensed Consolidated Statements of Comprehensive Loss
(In thousands)
(Unaudited)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
Net loss	\$ (8,153)	\$ (7,684)	\$ (26,328)	\$ (20,172)
Other comprehensive loss:				
Unrealized gains (losses) on available-for-sale securities, net of tax	12	(21)	(55)	(21)
Comprehensive loss	<u>\$ (8,141)</u>	<u>\$ (7,705)</u>	<u>\$ (26,383)</u>	<u>\$ (20,193)</u>

See accompanying notes to unaudited condensed consolidated financial statements.

Arteris, Inc.
Condensed Consolidated Statements of Stockholders' Equity
(In thousands, except share data)
(Unaudited)

	Stockholders' Equity					
	Common Stock		Additional Paid-In Capital	Accumulated Other Comprehensive Income	Accumulated Deficit	Total
	Shares	Amount				
BALANCE—June 30, 2023	36,033,361	\$ 36	\$ 111,403	\$ 34	\$ (84,553)	\$ 26,920
Issuance of common stock upon exercise of stock options	135,750	—	43	—	—	43
Issuance of common stock for settlement of Restricted Stock Units (RSUs)	728,362	1	(1)	—	—	—
Tax withholding on RSUs settlement	(70,818)	—	(507)	—	—	(507)
Stock-based compensation expense	—	—	3,714	—	—	3,714
Unrealized gains on available-for-sale securities, net of tax	—	—	—	12	—	12
Net loss	—	—	—	—	(8,153)	(8,153)
BALANCE—September 30, 2023	<u>36,826,655</u>	<u>\$ 37</u>	<u>\$ 114,652</u>	<u>\$ 46</u>	<u>\$ (92,706)</u>	<u>\$ 22,029</u>

	Stockholders' Equity					
	Common Stock		Additional Paid-In Capital	Accumulated Other Comprehensive Loss	Accumulated Deficit	Total
	Shares	Amount				
BALANCE—June 30, 2022	32,622,817	\$ 33	\$ 97,237	\$ (81)	\$ (51,479)	\$ 45,710
Issuance of common stock upon exercise of stock options	255,108	—	173	—	—	173
Issuance of common stock for settlement of restricted stock units	614,184	—	—	—	—	—
Tax withholding on RSUs settlement	(171,218)	—	(1,210)	—	—	(1,210)
Stock-based compensation expense	—	—	3,389	—	—	3,389
Unrealized losses on available-for-sale securities, net of tax	—	—	—	(21)	—	(21)
Net loss	—	—	—	—	(7,684)	(7,684)
BALANCE—September 30, 2022	<u>33,320,891</u>	<u>\$ 33</u>	<u>\$ 99,589</u>	<u>\$ (102)</u>	<u>\$ (59,163)</u>	<u>\$ 40,357</u>

See accompanying notes to unaudited condensed consolidated financial statements.

Arteris, Inc.
Condensed Consolidated Statements of Stockholders' Equity
(In thousands, except share data)
(Unaudited)

	Stockholders' Equity					
	Common Stock		Additional Paid-In Capital	Accumulated Other		Total
	Shares	Amount		Comprehensive Income	Accumulated Deficit	
BALANCE—December 31, 2022	34,625,875	\$ 34	\$103,778	\$ 101	\$ (66,378)	\$ 37,535
Issuance of common stock upon exercise of stock options	779,227	1	459	—	—	460
Issuance of common stock for settlement of restricted stock units	1,503,925	2	(2)	—	—	—
Tax withholding on RSUs settlement	(82,372)	—	(564)	—	—	(564)
Stock-based compensation expense	—	—	10,981	—	—	10,981
Unrealized losses on available-for-sale securities, net of tax	—	—	—	(55)	—	(55)
Net loss	—	—	—	—	(26,328)	(26,328)
BALANCE—September 30, 2023	<u>36,826,655</u>	<u>\$ 37</u>	<u>\$114,652</u>	<u>\$ 46</u>	<u>\$ (92,706)</u>	<u>\$ 22,029</u>

	Stockholders' Equity					
	Common Stock		Additional Paid-In Capital	Accumulated Other		Total
	Shares	Amount		Comprehensive Loss	Accumulated Deficit	
BALANCE—December 31, 2021	31,530,682	\$ 31	\$ 91,945	\$ (81)	\$ (38,991)	\$ 52,904
Issuance of common stock upon exercise of stock options	1,022,050	2	615	—	—	617
Issuance of common stock for settlement of restricted stock units	1,008,620	—	—	—	—	—
Tax withholding on RSUs settlement	(240,461)	—	(2,053)	—	—	(2,053)
Stock-based compensation expense	—	—	9,082	—	—	9,082
Unrealized losses on available-for-sale securities, net of tax	—	—	—	(21)	—	(21)
Net loss	—	—	—	—	(20,172)	(20,172)
BALANCE—September 30, 2022	<u>33,320,891</u>	<u>\$ 33</u>	<u>\$ 99,589</u>	<u>\$ (102)</u>	<u>\$ (59,163)</u>	<u>\$ 40,357</u>

See accompanying notes to unaudited condensed consolidated financial statements.

Arteris, Inc.
Condensed Consolidated Statements of Cash Flows
(In thousands)
(Unaudited)

	Nine Months Ended September 30,	
	2023	2022
CASH FLOWS FROM OPERATING ACTIVITIES:		
Net loss	\$ (26,328)	\$ (20,172)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	2,240	1,568
Stock-based compensation	10,981	9,082
Amortization of deferred income	(882)	(94)
Loss from equity method investment	2,487	—
Net accretion of discounts on available-for-sale securities	(698)	—
Gain on deconsolidation of subsidiary	—	(149)
Other, net	(3)	6
Changes in operating assets and liabilities:		
Accounts receivable, net	(3,225)	4,234
Prepaid expenses and other assets	(495)	(1,799)
Accounts payable	(237)	408
Accrued expenses and other liabilities	1,544	23
Deferred revenue	1,866	517
Net cash used in operating activities	<u>(12,750)</u>	<u>(6,376)</u>
CASH FLOWS FROM INVESTING ACTIVITIES:		
Purchases of property and equipment	(1,075)	(655)
Purchases of available-for-sale securities and other	(35,373)	(6,399)
Proceeds from maturities of available-for-sale securities	33,150	—
Payments relating to investment in equity method investment	—	(520)
Proceeds from principal portion of related party loan	—	241
Other	(25)	—
Net cash used in investing activities	<u>(3,323)</u>	<u>(7,333)</u>
CASH FLOWS FROM FINANCING ACTIVITIES:		
Payments of contingent consideration for business combination	(1,269)	(1,573)
Principal payments under vendor financing arrangements	(1,041)	(635)
Proceeds from exercise of stock options	460	601
Payments to tax authorities for shares withheld from employees	(564)	(2,053)
Payments of deferred offering costs	—	(256)
Other	79	—
Net cash used in financing activities	<u>(2,335)</u>	<u>(3,916)</u>
NET DECREASE IN CASH, CASH EQUIVALENTS AND RESTRICTED CASH	(18,408)	(17,625)
CASH, CASH EQUIVALENTS AND RESTRICTED CASH, beginning of period	37,423	85,825
CASH, CASH EQUIVALENTS AND RESTRICTED CASH, end of period	<u>\$ 19,015</u>	<u>\$ 68,200</u>
Cash, cash equivalents and restricted cash at end of period:		
Cash and cash equivalents	\$ 18,627	\$ 68,200
Restricted cash, noncurrent	388	—
Cash, cash equivalents and restricted cash—end of period	<u>\$ 19,015</u>	<u>\$ 68,200</u>
Noncash investing and financing activities:		
Purchase of property and equipment through vendor financing	\$ 2,592	\$ 1,809
Operating lease right-of-use assets, exchanged for lease obligations	\$ 480	\$ 63
Equity obtained in equity method investment in exchange for contribution of license agreement	\$ —	\$ 11,563

See accompanying notes to unaudited condensed consolidated financial statements.

ARTERIS, INC.
NOTES TO UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

1. DESCRIPTION OF BUSINESS

Arteris, Inc. was incorporated in Delaware on April 12, 2004. Arteris, Inc. and its subsidiaries (collectively, the Company or Arteris) develop, license, and support the on-chip interconnect fabric technology used in System-on-Chip (SoC) designs for a variety of devices and in the development and distribution of Network-on-Chip (NoC) interconnect intellectual property (IP). The Company also provides software and services to enable efficient deployment of NoC IP, IP support & maintenance services, professional services and training and on-site support services. The Company is headquartered in Campbell, California and has offices in the United States, France, Japan, South Korea and China.

2. BASIS OF PRESENTATION AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Presentation

The accompanying unaudited condensed consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America (GAAP) for interim financial information and do not include all disclosures normally required in annual consolidated financial statements prepared in accordance with GAAP. Accordingly, these unaudited condensed consolidated financial statements should be read in conjunction with the audited consolidated financial statements for the year ended December 31, 2022 and the related notes included in the Company's Form 10-K filed on February 28, 2023 (2022 Form 10-K) with the U.S. Securities and Exchange Commission (SEC). The December 31, 2022 condensed consolidated balance sheet was derived from the audited consolidated financial statements as of that date. In management's opinion, the unaudited interim consolidated financial statements have been prepared on the same basis as the annual financial statements and reflect all adjustments, which include only normal recurring adjustments necessary for the fair statement of the unaudited condensed consolidated financial statements.

The operating results for the three and nine months ended September 30, 2023 are not necessarily indicative of the results to be expected for the full year or any other future interim or annual period.

Principles of Consolidation

The unaudited condensed consolidated financial statements include the accounts of Arteris, Inc. and its wholly-owned subsidiaries. All intercompany transactions and accounts have been eliminated.

Use of Estimates

The preparation of the unaudited condensed consolidated financial statements in conformity with GAAP requires management to make estimates, judgments and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Such estimates relate to, among others, revenue recognition, the useful lives of assets, assessment of recoverability of property, plant and equipment, fair value of investments, impairment of the equity method investment, fair values of goodwill and other intangible assets, including impairments, leases, allowances for doubtful accounts, deferred tax assets and related valuation allowance, stock-based compensation, potential reserves relating to litigation and tax matters, collectability of certain receivables, fair value and amortization of deferred income, as well as other accruals or reserves. Actual results could differ from those estimates and such differences may be material to the unaudited condensed consolidated financial statements.

Cash, Cash Equivalents and Restricted Cash

The Company considers all highly liquid investments purchased with original maturities of three months or less from the purchase date to be cash equivalents. The Company's cash equivalents include deposits in money market accounts which were unrestricted as to withdrawal or use and are stated at fair value. As of September 30, 2023, cash and cash equivalents consisted primarily of checking, savings, money market accounts and highly liquid investments with original maturities of three months or less. Interest earned on cash and cash equivalents is included in other income (expense), net in the unaudited consolidated statements of loss.

As of September 30, 2023, the Company's long-term restricted cash balance was \$0.4 million, primarily related to a letter of credit for its facility lease agreement. Restricted cash, noncurrent is included in other assets on the unaudited condensed consolidated balance sheets.

Concentrations of Credit Risk

Financial instruments that potentially subject us to concentration of credit risk consist of cash and cash equivalents, investments and accounts receivable. Cash is currently held in three financial institutions that the Company believes are creditworthy. Cash held at these financial institutions generally exceed federally insured limits. The Company is exposed to credit risk in the event of default by the financial institution holding its cash, cash equivalents, and investments to the extent recorded in the balance sheet. The Company has not experienced any losses to date related to these concentrations.

The Company's accounts receivable are derived principally from revenue earned from customers located in Americas, Europe, Middle East and Asia Pacific regions.

Accounts receivable from the Company's major customers representing 10% or more of total accounts receivable was as follows:

	As of	
	September 30, 2023	December 31, 2022
Customer A	24 %	— %
Customer B	14 %	32 %

Revenue from the Company's major customers representing 10% or more of total revenue was as follows:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
Customer B	13 %	24 %	*	26 %

* Customer accounted for less than 10% of total revenue at period end.

Nature of Products and Services

The Company's revenue is primarily derived from licensing intellectual property, licensing software, support and maintenance services, professional services, training services, and royalties.

Design Solutions

Interconnect Solutions product arrangements provide customers the right to software licenses, services, and support and maintenance. The Company enters into licensing arrangements with customers that typically range from two to three years and generally consist of delivery of a design license that grants the customer the right to use the IP to design a contractually defined number of products, a right to access the benefits of its proprietary software tool (RTL), and support and maintenance services that provide the customer a significant benefit from ongoing access to Corporate Application Engineers (CAE) and Field Application Engineers (FAE) (collectively, Application Engineer Support Services) to perform certain verifications including benchmark performance, simulations and ultimately, through the RTL, instantiate designs into silicon over the design term.

Application Engineer Support Services are integral and fundamental to the customer's ability to derive its intended benefit from the IP. CAEs are part of the product development team providing detailed requirements for engineering projects, working very closely with a customer's chief technology officer and the marketing department, and performing quality assurance testing of customer products prior to shipment to their customers. FAEs provide assistance to the customer's engineering team in translating their desired SoC architecture into inputs for NoC IP configuration, assistance in optimizing the NoC configuration, answer to customer questions by the online support system or phone, constructive reviews of the progress achieved by the customer's development team and provision of advice on how to best use the licensed IP, performance of design reviews before customer project RTL freeze and tape-out to ensure the customer used the licensed IP configuration tooling as intended so that the RTL output meets customer requirements and expectations. FAE reviews of the customer's design are mandatory and consist of an understanding of the customer requirements and analysis of the adequacy of the contemplated IP considering the customer's desired architecture and design goals and objectives, taking into consideration bandwidth, coherence/non-coherence, latency, clock and timing, areas, and any and all constraints, as identified and specific to the design under review.

Besides Application Engineer Support Services, support and maintenance services also consist of a stand-ready obligation to provide technical support and software updates over the support term. Generally, the first-year of technical support and software updates are bundled with and into the license fee with a customer option to renew additional years of support throughout the license term. However, the Company continues to provide technical support and software updates throughout the license term even if the customer does not renew these services in subsequent years, making the license term and support and maintenance term co-terminus.

Considering the nature of the combined license and assisting the Company's customers in applying its IP technology in its customers' development environment and the relative significance thereof, the Company has concluded that its Interconnect Solutions IP licensing arrangements are not distinct from its obligation to provide the Application Engineer Support Services and benefits of the RTL. The Interconnect Solutions IP, RTL, and the application engineering support services serve to fulfill its commitment to the customer, as they represent inputs to a single, combined performance obligation that commences upon the later of the arrangement effective date or transfer of the software license. The design license and the regular two-way interaction between the design license tool, RTL, and the application engineering support services give the customer the intended benefit from the arrangement, which is the ability to commercialize their design. Customers cannot benefit from the design license on its own or together with other readily available resources as no other RTL or Application Engineer Support Services providers exist in the marketplace that a customer could use with the design license. Consequently, the RTL and Application Engineer Support Services cannot be used on their own or together with any other design license as the Company does not allow the use of the RTL or provide Application Engineer Support Services separately from the design license. Further, although technical support and software updates is a distinct performance obligation, it is accounted for as if it were part of a single performance obligation that includes the licenses, RTL and Application Engineer Support Services because the technical support and updates are provided in practice for the same period of time and have the same time-based pattern of transfer to the customer as the combined design license, RTL, and Application Engineer Support Services.

Revenues that are derived from the sale of a licensee's products that incorporate the Company's IP are classified as royalty revenues. Royalty revenues are recognized during the quarter in which the sale of the product incorporating the Company's IP occurs. Royalties are calculated either as a percentage of the revenues received by a licensee's sale of products incorporating the Company's IP or on a per unit basis, as specified in the agreements with the licensees. For a majority of the Company's royalty revenues, it receives the actual sales data from its customers after the quarter ends and accounts for it as unbilled receivables. When the Company does not receive actual sales data from the customer prior to the finalization of its financial statements, royalty revenues are recognized based on its estimation of the customer's sales during the quarter.

SoC Integration Automation Software Solutions

SoC Integration Automation software (SIA) (formerly IP deployment) solutions product arrangements provide customers the right to software licenses, software updates and technical support. The software licenses are time-based licenses with terms generally ranging from one to three years. These arrangements generally have two distinct performance obligations that consist of transferring the licensed software and the support and maintenance service. Support and maintenance services consist of a stand-ready obligation to provide technical support and software updates over the support term. For the majority of these contracts, there are no termination rights and the transaction price is non-refundable. Revenue allocated to the software license is generally recognized at a point in time upon the later of the delivery date or the beginning of the license period, and revenue allocated to support services is recognized ratably over the support term. Certain SIA solutions contracts include termination rights that allow the customer to cancel and receive a pro-rata refund on support and maintenance services at the end of each month of the contract period, which results in a ratable recognition of the related license revenue over the contract term.

Professional Services

The Company's agreements may include service elements (other than maintenance and support services). These services include training, design assistance, and consulting. Services performed on a time and materials basis are recognized over the period the services are provided either using an output method such as labor hours, or a method that is otherwise consistent with the way in which value is delivered to the customer. Services performed on a fixed price basis are recognized over time, generally using costs incurred or hours expended to measure progress.

Multiple Performance Obligations

Most of the Company's contracts with customers contain multiple performance obligations. For these contracts, the Company accounts for individual performance obligations separately, if they are distinct. The transaction price is allocated to the separate performance obligations on a relative standalone selling price basis, which are estimated considering multiple factors including observable industry pricing practices and internal pricing strategies and objectives. Standalone selling prices of software license are typically estimated using the residual approach. Standalone selling prices of professional services are typically estimated based on observable transactions when these services are sold on a standalone basis.

Transaction price

Revenue is recognized when, or as, control of a promised product or service transfers to a client, in an amount that reflects the consideration to which the Company expects to be entitled in exchange for transferring those products or services. If the consideration promised in a contract includes a variable amount, the Company estimates the amount to which it expects to be entitled using either the expected value or most likely amount method, to the extent it is probable that a significant reversal of cumulative revenue recognized will not occur. Generally, the transaction price of the Company's contracts is fixed at the inception of the contract, except for variable royalties. The Company's contracts generally do not include terms that could cause variability in the transaction price.

The Company assesses the timing of the transfer of goods or services to the customer as compared to the timing of payments to determine whether a significant financing component exists. As a practical expedient, the Company does not assess the existence of a significant financing component when the difference between payment and transfer of deliverables is a year or less. If the difference in timing arises for reasons other than the provision of finance to either the customer or the Company, no financing component is deemed to exist. When contracts involve a significant financing component, the Company adjusts the promised amount of consideration for the effects of the time value of money if the timing of payments agreed to by the parties to the contract (either explicitly or implicitly) provide the customer with a significant benefit of financing.

The Company reports revenue net of any revenue-based taxes assessed by governmental authorities that are imposed on and concurrent with specific revenue-producing transactions.

In instances where foreign licensees withhold and remit taxes to local authorities in accordance with local laws and regulations, the Company recognizes and presents revenue on a gross basis, and includes the withholding tax in income tax expense.

Flexible Spending Accounts

Some customers enter into a non-cancelable flexible spending account agreements (FSA Agreements) whereby the customer commits to a fixed dollar amount over a specified period of time that can be used to purchase from a list of the Company's products or services. These agreements do not meet the definition of a revenue contract until the customer executes a separate order to identify the required products and services that they are purchasing. The combination of the FSA agreement and the subsequent order creates enforceable rights and obligations, thus meeting the definition of a revenue contract. Each separate order under the agreement is treated as an individual contract and accounted for based on the respective performance obligations included within the FSA agreements.

Contract modifications

The Company's contracts may be modified to add, remove or change existing performance obligations. The accounting for modifications to the Company's contracts involves assessing whether the products and services added to an existing contract are distinct and whether the pricing is at the standalone selling price. Products and services added that are not distinct are accounted for on a cumulative catch-up basis, while those that are distinct are accounted for prospectively, either as a separate contract if the additional services are priced at the standalone selling price, or as a termination of the existing contract and creation of a new contract if not priced at the standalone selling price. The Company's more significant contract modifications include extensions of the design license term and the purchase of additional years of support and maintenance.

Judgments

The Company's contracts with customers often include promises to transfer multiple products and services to a customer. Determining whether products and services are considered distinct performance obligations that should be accounted for separately versus together requires significant judgment. Judgment is also required to determine the standalone selling price for each distinct performance obligation.

Contract Balances

The timing of revenue recognition may differ from the timing of invoicing to customers, and these timing differences result in receivables (billed or unbilled), contract assets, or contract liabilities (deferred revenue) on the Company's consolidated balance sheets. The Company records a contract asset when revenue is recognized prior to the right to invoice. The Company records deferred revenue when it invoices customers and revenue is not yet recognized. Customers are generally invoiced in single or annual amounts, although some customers are invoiced more frequently over time. The Company records an unbilled receivable when revenue is recognized and it has an unconditional right to invoice and receive payment.

The Company capitalizes sales commission as costs of obtaining a contract when they are incremental and, if they are expected to be recovered, amortized in a manner consistent with the pattern of transfer of the good or service to which the asset relates.

Significant Accounting Policies

There have been no significant changes to the Company's significant accounting policies during the nine months ended September 30, 2023 from those disclosed in the annual consolidated financial statements for the year ended December 31, 2022, except for those disclosed in this document.

3. REVENUE

Disaggregated Revenue

The following table shows revenue by product and services groups (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
Licensing, support and maintenance	\$ 12,084	\$ 11,135	\$ 36,926	\$ 35,743
Variable royalties	1,068	695	4,058	2,266
Other	122	768	178	1,166
Total	\$ 13,274	\$ 12,598	\$ 41,162	\$ 39,175

Contract Balances

The following table provides information about accounts receivable, net, contract assets and deferred revenue (in thousands):

	As of	
	September 30, 2023	December 31, 2022
Accounts receivable, net	\$ 10,370	\$ 7,143
Contract assets	\$ 1,192	\$ 1,180
Deferred revenue	\$ 52,545	\$ 50,679

The Company recognized revenue of \$10.7 million and \$9.4 million for the three months ended September 30, 2023 and 2022, respectively, and \$23.7 million and \$22.0 million for the nine months ended September 30, 2023 and 2022, respectively, that was included in the deferred revenue balance at the beginning of the respective periods. Contract assets are included in prepaid expenses and other current assets and other assets on the unaudited condensed consolidated balance sheets.

As of September 30, 2023, non-cancelable contracted but unsatisfied or partially satisfied performance obligations that have not yet been recognized, which includes deferred revenue and amounts that will be invoiced and recognized as revenues in future periods, is \$61.3 million, of which \$32.7 million is expected to be recognized over the next 12 months and the remainder thereafter. The Company has elected to exclude the potential future royalty receipts from this amount.

Costs of Obtaining a Contract with a Customer

Incremental costs of obtaining a contract with a customer consist primarily of direct sales commissions incurred upon execution of the contract. These costs are required to be capitalized under ASC 340-40, *Other Assets and Deferred Costs — Contracts With Customers*, and amortized over the license term. As direct sales commissions paid for term extensions are commensurate with the amounts paid for initial contracts, the deferred incremental costs for initial contracts and for term extensions are recognized over the respective contract terms. Total capitalized direct commission costs were as follows (in thousands):

	As of	
	September 30, 2023	December 31, 2022
Short-term commission capitalized in prepaid expenses and other current assets	\$ 2,436	\$ 2,636
Long-term commission capitalized in other assets	1,274	1,535
Total	\$ 3,710	\$ 4,171

Amortization of capitalized sales commissions was \$0.9 million for both the three months ended September 30, 2023 and 2022, \$2.8 million and \$2.5 million for the nine months ended September 30, 2023 and 2022, respectively, and are included in sales and marketing expense in the unaudited condensed consolidated statements of loss.

4. NET LOSS PER SHARE

The following table presents the calculation of basic and diluted net loss per share attributable to common stockholders (in thousands, except share and per share data):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
Numerator:				
Net loss	\$ (8,153)	\$ (7,684)	\$ (26,328)	\$ (20,172)
Denominator:				
Weighted-average shares outstanding - basic and diluted	36,010,106	32,836,014	35,291,207	32,228,429
Net loss per share, basic and diluted	\$ (0.23)	\$ (0.23)	\$ (0.75)	\$ (0.63)

Since the Company was in a loss position for all periods presented, the diluted earnings per share is equal to the basic earnings per share as the effect of potentially dilutive securities would have been antidilutive.

The following table summarizes the potentially dilutive securities that were excluded from the calculation of diluted earnings per share because they would be anti-dilutive:

	As of	
	September 30, 2023	September 30, 2022
Stock options	2,997,359	4,037,721
Restricted stock units	6,234,174	5,104,347
Restricted common shares issued for business combination (see Note 12)	331,574	—
Total	9,563,107	9,142,068

5. INVESTMENTS

The following tables summarize the fair value and amortized cost of the Company's cash equivalents and available-for-sale securities by major security type (in thousands):

	As of September 30, 2023		
	Amortized Cost	Unrealized Losses	Aggregate Fair Value
Assets:			
U.S. government agency securities	\$ 20,531	\$ (80)	\$ 20,451
U.S. treasury securities	11,883	(4)	11,879
Money market funds	11,758	—	11,758
Certificate of deposit	5,000	—	5,000
Corporate bonds	3,700	(24)	3,676
Total financial assets	\$ 52,872	\$ (108)	\$ 52,764

	As of December 31, 2022		
	Amortized Cost	Unrealized Losses	Aggregate Fair Value
Assets:			
Money market funds	\$ 30,428	\$ —	\$ 30,428
U.S. government agency securities	18,508	(40)	18,468
U.S. treasury securities	8,379	(2)	8,377
Corporate bonds	5,717	(10)	5,707
Commercial paper	2,604	(1)	2,603
Total financial assets	\$ 65,636	\$ (53)	\$ 65,583

The maturity dates of the Company's investments are as follows (in thousands):

	September 30, 2023
Less than one year	\$ 42,477
1-2 years	10,287
Total	\$ 52,764

As of September 30, 2023 and December 31, 2022, securities with a fair value of \$2.0 million and zero, respectively, were in a continuous net unrealized loss position for more than 12 months. As of September 30, 2023, the unrealized losses for available-for-sale investments were non-credit related and the Company does not intend to sell the investments that were in an unrealized loss position, nor does it foresee or project that it will be required to sell those investments before recovery of their amortized costs basis, which may be at maturity. Thus, as of September 30, 2023 no allowance for credit losses or impairment losses for the Company's investments were recorded.

6. FAIR VALUE MEASUREMENTS

Assets Measured and Recorded at Fair Value on a Non-Recurring Basis

Equity method investments, and certain non-financial assets, such as intangible assets are remeasured at fair value only if an impairment or observable price adjustment is recognized in the current period.

Financial Instruments Not Recorded at Fair Value on a Recurring Basis

Financial instruments not recorded at fair value on a recurring basis include vendor financing arrangements. The carrying value of the vendor financing agreements was \$3.0 million and \$1.7 million as of September 30, 2023 and December 31, 2022, respectively. The Company's vendor financing arrangements are classified within Level 2 because these borrowings are not actively traded and have a variable interest rate structure based upon the Company's incremental borrowing rate. The estimated fair values of these financial instruments approximate their carrying values.

Financial Instruments Recorded at Fair Value on a Recurring Basis

The following tables summarize the Company's financial assets measured at fair value on a recurring basis by level within the fair value hierarchy (in thousands):

	As of			
	September 30, 2023			
	Level 1	Level 2	Level 3	Fair Value
Assets:				
Cash equivalents:				
Money market funds	\$ 11,758	\$ —	\$ —	\$ 11,758
U.S. treasury securities	—	2,985	—	2,985
Total cash equivalents	11,758	2,985	—	14,743
Short-term investments:				
Certificate of deposit	—	5,000	—	5,000
Corporate bonds	—	989	—	989
U.S. government agency securities	—	12,851	—	12,851
U.S. treasury securities	—	8,894	—	8,894
Total short-term investments	—	27,734	—	27,734
Long-term investments:				
Corporate bonds	—	2,687	—	2,687
U.S. government agency securities	—	7,600	—	7,600
Total long-term investments	—	10,287	—	10,287
Total financial assets	\$ 11,758	\$ 41,006	\$ —	\$ 52,764

	As of			
	December 31, 2022			
	Level 1	Level 2	Level 3	Fair Value
Assets:				
Cash equivalents:				
Money market funds	\$ 30,428	\$ —	\$ —	\$ 30,428
Total cash equivalents	30,428	—	—	30,428
Short-term investments:				
Commercial paper	—	2,603	—	2,603
Corporate bonds	—	3,971	—	3,971
U.S. government agency securities	—	15,777	—	15,777
U.S. treasury securities	—	8,377	—	8,377
Total short-term investments	—	30,728	—	30,728
Long-term investments:				
Corporate bonds	—	1,736	—	1,736
U.S. government agency securities	—	2,691	—	2,691
Total long-term investments	—	4,427	—	4,427
Total financial assets	\$ 30,428	\$ 35,155	\$ —	\$ 65,583

Money market funds are highly liquid investments and are actively traded. The fair value is based on quoted prices for identical assets in active markets and therefore classified as Level 1 of the fair value hierarchy.

The Company's other investments are considered Level 2 financial instruments as their fair values are determined using inputs that are directly or indirectly observable in active or less active markets. There were no transfers between levels during the three and nine months ended September 30, 2023.

7. INTANGIBLE ASSETS AND GOODWILL

Intangible assets, net

Intangible assets, net consisted of the following as of September 30, 2023 (in thousands):

	Gross Fair Value	Accumulated Amortization	Net Book Value
Developed technology	\$ 3,090	\$ (1,112)	\$ 1,978
Customer relationships	1,830	(458)	1,372
IPR&D	500	—	500
Trade name and other	200	—	200
Total intangibles	\$ 5,620	\$ (1,570)	\$ 4,050

Intangible assets, net consisted of the following as of December 31, 2022 (in thousands):

	Gross Fair Value	Accumulated Amortization	Net Book Value
Developed technology	\$ 3,090	\$ (708)	\$ 2,382
Customer relationships	1,830	(287)	1,543
IPR&D	500	—	500
Trade name and other	150	—	150
Total intangibles	\$ 5,570	\$ (995)	\$ 4,575

Amortization expense of intangible assets was \$0.2 million and \$0.1 million for the three months ended September 30, 2023 and 2022, respectively, and \$0.6 million and \$0.4 million for the nine months ended September 30, 2023 and 2022, respectively.

The expected future amortization expense of these intangible assets as of September 30, 2023 is as follows (in thousands):

Fiscal year ending December 31,		
Remainder of 2023	\$	192
2024		767
2025		739
2026		427
2027		427
Thereafter		798
Total future amortization expense	\$	<u>3,350</u>

Goodwill

As of September 30, 2023 and December 31, 2022, goodwill was \$4.2 million. No goodwill impairments were recorded during the three and nine months ended September 30, 2023 and 2022.

8. ACQUISITION

Semifore Acquisition

On December 27, 2022, the Company acquired 100% of the issued and outstanding equity securities (the Acquisition) of Semifore, Inc. (Semifore), provider of hardware software interface (HSI) technology. Semifore technologies are used to effectively design, verify, document, and help in the validation of the hardware-software integration that is used in the SoC complex chip market. The addition of Semifore technologies and team expertise augments Arteris System IP and SoC Integration Automation software (SIA) (formerly IP deployment (IPD)) to further enhance software control of the IP and SoC hardware. The Acquisition closed on December 27, 2022 and has been accounted for in accordance with the acquisition method of accounting for business combinations with the Company as the accounting acquirer.

The consideration transferred for the acquisition was \$3.1 million. The Company recorded \$1.4 million for developed technology intangible assets with an estimated useful life of seven years and \$0.7 million for customer relationships intangible assets with an estimated useful life of eight years.

In connection with the acquisition, key employees and former owners of Semifore were issued a total of 663,143 shares of the Company's common stock and obtained the right to additional cash payment totaling \$1.8 million. Out of the 663,143 shares issued, 331,569 shares of common stock vested as of the closing date and the remaining 331,574 shares and \$1.8 million cash payment will vest on the first and third anniversary of the closing date if certain key employees continue to be employed by the Company. These contingent cash payments and equity awards have been accounted for separately from the business combination and will be recognized by the Company as compensation costs in the subsequent periods as related services are provided. The Company recognized \$0.3 million and \$1.0 million as compensation expense during the three and nine months ended September 30, 2023, respectively.

Under the acquisition method of accounting, the purchase price is allocated to identifiable assets acquired and liabilities assumed based on their fair values on the acquisition date. The following table provides the estimated fair values of the identifiable assets acquired and liabilities assumed as of the acquisition date (in thousands):

	FAIR VALUE
Cash	\$ 267
Accounts receivable	372
Prepaid expenses and other current assets	63
Contract assets	15
Intangibles	2,120
Accounts payable	(139)
Deferred revenue	(672)
Deferred tax liability	(484)
Total identifiable net assets	1,542
Goodwill	1,541
Total purchase price	\$ 3,083

Goodwill generated from this business combination is attributed to synergies between the Company's and Semifore's respective products and services and is housed within the Company's single operating segment. The Company does not have any tax basis in the total goodwill of \$1.5 million and the goodwill is non-deductible for income tax purposes.

The Company incurred \$0.5 million acquisition-related expenses, which were recorded as general and administrative expenses in the consolidated statements of income (loss) for the year ended December 31, 2022.

The Acquisition did not have a material impact on the Company's condensed consolidated financial statements; therefore, historical and proforma disclosures have not been presented.

9. LEASES

The Company leases its offices at various locations under noncancelable operating lease agreements expiring at various dates through 2032. Under the terms of these agreements, the Company also bears the costs for certain insurance, property tax, and maintenance. The terms of certain lease agreements provide for increasing rental payments at fixed intervals.

Total operating lease related costs were as follows (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
Operating lease cost	\$ 288	\$ 263	\$ 841	\$ 802
Short-term lease cost	32	38	147	263
Total lease cost	\$ 320	\$ 301	\$ 988	\$ 1,065

The weighted-average remaining term of the Company's operating leases was 4.1 years and 3.1 years as of September 30, 2023 and December 31, 2022, respectively, and the weighted-average discount rate used to measure the present value of the operating lease liabilities was 10.0% and 7.5% as of September 30, 2023 and December 31, 2022, respectively. Cash payments made related to operating lease liabilities were \$0.3 million for both the three months ended September 30, 2023 and 2022, respectively and \$0.8 million for both the nine months ended September 30, 2023 and 2022.

Maturities of operating lease liabilities as of September 30, 2023 were as follows (in thousands):

Fiscal year ending December 31,	
Remainder of 2023	\$ 185
2024	603
2025	391
2026	265
2027	265
Thereafter	211
Total undiscounted cash flows	\$ 1,920
Less: imputed interest	(311)
Present value of lease liabilities	\$ 1,609
Operating lease liabilities, current	\$ 571
Operating lease liabilities, non-current	1,038
Total lease liabilities	\$ 1,609

In May 2023, the Company entered into an operating lease agreement for a new headquarter facility in Campbell, California with future lease payments of \$2.6 million. The lease commenced in October 2023 with a lease term of approximately 5.4 years.

10. BORROWINGS

Vendor financing arrangements—The Company has various vendor financing arrangements with extended payment terms on the purchase of software licenses and equipment. In order to determine the present value of the commitments, the Company used an imputed interest rate of 10.0%, which is an estimate based on the Company's collateralized borrowing rate.

Vendor financing arrangements as of September 30, 2023 were as follows (in thousands):

Fiscal year ending December 31,	Amount
Remainder of 2023	\$ 322
2024	1,550
2025	994
2026	496
Total undiscounted cash flows	\$ 3,362
Less: Imputed interest	(361)
Present value of vendor financing arrangements	\$ 3,001
Vendor financing arrangements, current	\$ 1,623
Vendor financing arrangements, noncurrent	1,378
	\$ 3,001

Interest expense from vendor financing arrangements was \$0.1 million and less than \$0.1 million for the three months ended September 30, 2023 and 2022, respectively. Interest expense from vendor financing arrangements was \$0.1 million for both the nine months ended September 30, 2023 and 2022.

11. COMMITMENTS AND CONTINGENCIES

Letter of Credit—In conjunction with the execution of the operating lease for the Company's new headquarter facility, a letter of credit in the amount of \$0.4 million was issued and outstanding as of September 30, 2023. No draws have been made under such letter of credit. There was no letter of credit issued and outstanding as of December 31, 2022.

Indemnifications—The Company often enters into limited indemnification provisions in license agreements in the ordinary course of the Company’s licensing business. Pursuant to these provisions, which are often inserted into license agreements in the semiconductor IP and software licensing industries, the Company agrees to indemnify, hold harmless, and reimburse the indemnified parties up to a capped amount for losses suffered or incurred by such indemnified parties due to third party claims if such claims are determined to be caused by the Company. The term of these indemnification provisions is generally either for a term of years or perpetual, in each case beginning on the execution date of the agreement. The Company has also agreed to indemnify under indemnity agreements with its directors and officers, to the extent legally permissible, against liabilities incurred in connection with any action in which such individual may be involved by reason of such individual being or having been a director or officer, other than certain liabilities arising from willful misconduct of the individual.

The Company has incurred no actual payment obligations from these above-noted indemnification provisions and director and officer indemnity agreements for three and nine months ended September 30, 2023 and 2022 and the unaudited condensed consolidated financial statements do not include liabilities for any potential indemnity-related obligations as of September 30, 2023 and December 31, 2022.

Legal—The Company has been and will continue to be subject to legal proceedings and claims.

In the normal course of business, the Company may receive inquiries or become involved in legal disputes regarding such litigation matters. Pursuant to ASC 450, Contingencies, the Company makes a provision for a liability relating to legal matters when it is both probable that a liability has been incurred, and the amount of the loss can be reasonably estimated. These provisions are reviewed at least quarterly and adjusted to reflect the impacts of negotiations, estimated settlements, legal rulings, advice of legal counsel and other information and events pertaining to a particular matter.

In December 2022, the Company received notice of a complaint filed against the Company and another defendant in the semiconductor industry, by Network System Technologies, LLC in the United States District Court for the Western District of Texas, and additional complaints were filed in the Eastern District of Texas against certain companies, including some customers of the Company, asserting among other things patent infringement relating to the Company’s technology seeking damages and injunctive relief. On July 21, 2023, the District Court for the Western District of Texas issued its ruling on the Company Motion to Dismiss by granting the motion in part and denying the motion in part with the leave to amend. The plaintiff filed a First Amended Complaint (FAC) on August 7, 2023, and Arteris filed a Motion to Dismiss the pre-suit indirect and willful infringement claims on September 5, 2023. Network System Technologies, LLC’s opposition was filed on October 10, 2023, and Arteris filed a reply on October 17, 2023. The Company continues to vigorously defend itself in respect to these complaints and anticipates an increase in legal expenses to do so.

Due to the inherent uncertainties and complex technical issues arising from such intellectual property litigation, the Company cannot predict or guarantee any result of such intellectual property litigation. As with any such litigation at its initial stages, the Company cannot comment on the possible final litigation results of ongoing litigation or the risk whether the Company may not prevail in such intellectual property litigation. In addition, such litigation may make it necessary to support or defend the Company or the Company’s customers relating to the claims in the litigation.

Further, the ultimate outcome of the litigation, like any litigation, is uncertain and, regardless of outcome, litigation can have an adverse impact on the Company because of defense costs, potential negative publicity, diversion of management resources and other factors, which in turn may have a material adverse impact on the Company’s business, consolidated financial position, results of operations, or cash flows. As intellectual property claims are inherently unpredictable, the Company is currently evaluating whether such matters may have a material adverse effect on the Company’s financial position, results of operations, or cash flows.

In addition, significant judgement is required in both the determination of probability and determination as to whether a loss is reasonably estimable. Future revisions to such estimates could materially impact the Company’s results. Accordingly, there can be no assurance that existing or any future legal proceedings for liability estimates arising in the ordinary course of business or otherwise will not have a material adverse effect on the Company’s business, consolidated financial position, results of operations or cash flows.

The Company has no other material contractual noncancelable commitments as of September 30, 2023 and December 31, 2022.

12. STOCK-BASED COMPENSATION

2016 Stock Plan

On October 10, 2016, the Company amended and restated the 2013 Equity Incentive Plan and changed the name of the plan to Arteris, Inc. 2016 Incentive Plan (the 2016 Plan). Adoption of the 2016 Plan provides for participation by foreign nationals or those employed outside of the United States.

The 2016 Plan provides for the granting of the following types of stock awards: incentive stock options, non-statutory stock options, stock appreciation rights (SARs), restricted stock awards, restricted stock unit awards (RSUs) and other stock awards. The number of shares authorized for award was 20,803,838. The Company granted awards of common stock in the form of 14,142,208 shares as of December 31, 2021. Following the Company's IPO in October 2021, all future grants will be made under the 2021 Plan (as defined below), with none remaining available for future grant under the 2016 Plan.

2021 Stock Plan

The Company adopted the 2021 Incentive Award Plan (the 2021 Plan) effective October 26, 2021. The 2021 Plan provides for a variety of stock-based compensation awards, including stock options, SARs, restricted stock awards, RSUs, performance bonus awards, performance stock unit awards, dividend equivalents, or other stock or cash based awards.

Following the effectiveness of the 2021 Plan, the Company will not make any further grants under the 2016 Plan. However, the 2016 Plan will continue to govern the terms and conditions of the outstanding awards granted under this plan. Shares of common stock subject to awards granted under the 2016 Plan that are forfeited or lapse unexercised and withheld to cover taxes which following the effective date of the 2021 Plan are not issued under the 2016 Plan will be available for issuance under the 2021 Plan.

2021 Employee stock purchase plan

The Company adopted the 2021 Employee Stock Purchase Plan (the 2021 ESPP) effective on October 26, 2021. The 2021 ESPP would enable eligible employees of the Company to purchase shares of common stock at a discount to fair market value. As of September 30, 2023, there had been no offering period under the ESPP.

2022 Employment Inducement Incentive Plan

The Company adopted the 2022 Employment Inducement Incentive Plan (the 2022 Inducement Plan) effective November 3, 2022, pursuant to which it reserved 2,000,000 shares of its common stock. The 2022 Inducement Plan provides for a variety of stock-based compensation awards, including stock options, SARs, restricted stock awards, restricted stock unit awards, performance bonus awards, performance stock unit awards, dividend equivalents, or other stock or cash based awards. Awards under the 2022 Inducement Plan can only be made to newly hired employees.

Shares Available for Future Grant

Shares available for future grant consisted of the following:

	<u>As of</u> <u>September 30,</u> <u>2023</u>
Shares available for future grant under the 2021 Plan	3,265,292
Shares available for future grant under the 2021 ESPP	1,268,564
Shares available for future grant under the 2022 Inducement Plan	1,003,680

The Company issues new shares upon a share option exercise or release of restricted stock units.

Stock Options

The following table summarizes the stock option activities under the Company's 2016 Plan and 2021 Plan:

	Options Outstanding			
	Number of Shares	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Term (Years)	Aggregate Intrinsic Value (\$'000s)
BALANCE—December 31, 2022	3,542,836	\$ 1.08	6.17	\$ 11,416
Granted	420,000	\$ 6.54		
Exercised	(779,227)	\$ 0.59		
Canceled	(186,250)	\$ 3.50		
BALANCE—September 30, 2023	<u>2,997,359</u>	\$ 1.82	6.20	\$ 14,070
Options vested and exercisable—September 30, 2023	<u>2,398,597</u>	\$ 1.16	5.65	\$ 12,822

The aggregate intrinsic value of the options exercised for the nine months ended September 30, 2023 and 2022 was \$4.2 million and \$9.8 million, respectively. The total grant-date fair value of options vested was \$0.3 million for both the nine months ended September 30, 2023 and 2022, respectively.

As of September 30, 2023, there was \$1.2 million of unamortized stock-based compensation cost related to unvested stock options, which is expected to be recognized over a weighted-average period of 3.2 years.

The fair value of each stock option granted is estimated using the Black-Scholes option-pricing model. The Company determines valuation assumptions for Black-Scholes as follows:

Risk-Free Interest Rate—The Company bases the risk-free interest rate used in the Black-Scholes option-pricing model on the implied yield available on US Treasury zero coupon issues with an equivalent expected term of the options for each option group.

Expected Term—The expected term represents the period that the Company's stock-based awards are expected to be outstanding. The expected term assumption is based on the simplified method. The Company expects to continue using the simplified method until sufficient information about the Company's historical behavior is available.

Volatility—The Company determines the price volatility factor based on the historical volatilities of the Company's peer group as the Company does not have sufficient trading history for its common stock.

Dividend Yield—The Company has never declared or paid any cash dividend and does not currently plan to pay a cash dividend in the foreseeable future. Consequently, the Company used an expected dividend yield of zero.

The following table summarizes the valuation assumptions:

Stock Options Valuation Assumptions

	Three and Nine Months Ended September 30, 2023
Fair value of common stock	\$6.54
Expected volatility	44.0%
Expected term (in years)	6.0
Risk-free interest rate	3.9%
Expected dividend yield	0%

The Company granted 420,000 stock options during the nine months ended September 30, 2023 and had no stock option grants during the nine months ended September 30, 2022.

Restricted Stock Units and Awards

The following table summarizes the restricted stock unit activities under the Company's 2016 and 2021 Plan and the 2022 Inducement Plan:

	Restricted Stock Units	
	Number of Shares	Weighted-Average Grant Date Fair Value
Unvested—December 31, 2022	5,619,013	\$ 7.24
Granted	2,752,491	\$ 5.72
Vested	(1,503,925)	\$ 7.20
Canceled	(633,405)	\$ 7.78
Unvested—September 30, 2023	6,234,174	\$ 6.52

The total grant-date fair value of restricted stock units vested was \$11.8 million and \$6.3 million during the nine months ended September 30, 2023 and 2022, respectively.

As of September 30, 2023, there was \$33.5 million of unamortized stock-based compensation cost related to unvested restricted stock units, which is expected to be recognized over a weighted-average period of 2.8 years.

Restricted Common Stock

In connection with the Semifore Acquisition (see Note 8), the Company issued 331,574 shares of common stock that will vest on the first and third anniversary of the closing of the Acquisition contingent on the continued employment of certain key employees. As of September 30, 2023, 331,574 shares of common stock remain unvested. These shares had a grant date fair value of \$1.3 million based on the closing stock price on the acquisition date. The Company will recognize total compensation cost of \$1.3 million to be amortized on a straight-line basis over the total vesting period of three years. As of September 30, 2023, the total unamortized compensation cost was \$1.0 million.

Stock-based Compensation

Stock-based compensation expense is recorded on a departmental basis, based on the classification of the award holder. The following table presents the amount of stock-based compensation related to stock-based awards to employees on the Company's unaudited condensed consolidated statements of loss (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
Cost of revenue	\$ 181	\$ 118	\$ 386	\$ 474
Research and development	1,742	1,798	5,656	4,435
Sales and marketing	666	679	2,088	1,678
General and administrative	1,125	794	2,851	2,495
Total stock-based compensation	\$ 3,714	\$ 3,389	\$ 10,981	\$ 9,082

During the three and nine months ended September 30, 2023, the Company recognized \$0.1 million and \$0.3 million, respectively as stock-based compensation expense for common stock issued as part of the Semifore Acquisition.

13. EQUITY METHOD INVESTMENT

On February 21, 2022, Arteris IP (Hong Kong) Ltd. (AHK), a wholly-owned subsidiary of the Company, entered into a Share Purchase and Shareholders Agreement (the SPA) with certain investors and Ningbo Transchip Information Consulting Partnership (Limited Partnership) (Management Co). The transaction closed on June 20, 2022.

The Company, the investors and Management Co, pursuant to the SPA, subscribed to the registered capital of Transchip Technology (Nanjing) Co., Ltd. (Transchip), a formerly wholly-owned subsidiary of the Company. As a result, the registered capital of Transchip increased to \$29.4 million. The Company subscribed for the registered capital of approximately \$11.9 million, of which \$11.6 million of the contribution was contributed in-kind by way of an interconnect solutions technology license by the Company pursuant to a five-year technology license and services agreement which can be extended automatically for another five-year term, and the remaining was paid in cash.

The license agreement provides Transchip the right to software licenses, services, software updates and technical support. On the closing date, the license agreement including the support and maintenance services to be provided to Transchip was valued to be \$11.6 million, which was recorded as deferred income and will be recognized as other income (expense), net over a period of ten years on a straight line basis after delivery of the license. The license was delivered to Transchip on September 2, 2022. For the three and nine months ended September 30, 2023, the Company recognized income of \$0.3 million and \$0.9 million, respectively, for the license agreement.

Deconsolidation of Transchip as a subsidiary

Prior to closing of the Transchip transaction, Transchip was a wholly-owned subsidiary of the Company with limited operations. Upon closing of the Transchip transaction, the Company no longer has control, and therefore deconsolidated Transchip. Accordingly, the Company derecognized all the assets and liabilities of Transchip and recognized a disposal gain of \$0.1 million, included in other income (expense), net in the unaudited condensed consolidated statements of loss and comprehensive loss, for the nine months ended September 30, 2022.

The Company's ownership interest of Transchip's common stock was 35.0% on a fully diluted basis as of September 30, 2023. The Company accounts for its common stock investment in Transchip as an equity method investment as it does not control but has significant influence over operating and financing policies of Transchip. Transchip is the Company's only equity method investment.

As of September 30, 2023, the carrying value of the investment in Transchip was \$9.4 million. There was no significant difference between the Company's carrying value of the investment in Transchip and its share of underlying equity in net assets of Transchip. The Company's loss from its proportionate share of its equity method investment in Transchip was \$0.9 million and \$2.5 million for the three and nine months ended September 30, 2023, respectively. The Company concluded that there were no indicators of impairment related to the Company's equity method investment in Transchip as of September 30, 2023.

14. INCOME TAXES

The Company's effective tax rate was (1.8)% and (3.9)% for the nine months ended September 30, 2023 and 2022, respectively. The Company's income tax provision was \$0.5 million and \$0.7 million for the nine months ended September 30, 2023 and 2022, respectively. The change in forecasted foreign withholding tax, changes in the geographic mix of worldwide earnings which are taxed at different rates, and the impact of losses in jurisdictions with full valuation allowances, has resulted in a decrease in the income tax provision for the period ended September 30, 2023 compared to the period ended September 30, 2022.

The Company's management continuously evaluates the need for a valuation allowance and, as of September 30, 2023, concluded that a full valuation allowance on its federal, state, and certain foreign jurisdictions deferred tax assets was still appropriate.

As of September 30, 2023 and 2022, the Company's gross liability for unrecognized tax benefits was \$2.6 million and \$3.1 million, respectively. The Company's practice is to recognize interest and/or penalties related to income tax matters in income tax expense. As of September 30, 2023 and 2022, the Company had no accrued interest or penalties related to its unrecognized tax benefits. If any unrecognized tax benefits are realized, it would not result in any income tax benefit as the Company currently has a full valuation allowance against the deferred tax assets in which there is currently an uncertain tax benefit.

15. RELATED PARTY TRANSACTIONS

The Company defines related parties as directors, executive officers, nominees for director, stockholders that have significant influence over the Company, or are a greater than 10% beneficial owner of the Company's capital and their affiliates or immediate family members.

In November 2020, the Company entered into a lease agreement with Isabelle Geday, a member of the Board of Directors. The lease payments were less than \$0.1 million for both the three months ended September 30, 2023 and 2022 and \$0.1 million for both the nine months ended September 30, 2023 and 2022. In addition, the Company signed a consulting agreement with Ms. Geday on December 1, 2021, which was subsequently assigned to Magillem Design Services S.A., effective January 10, 2022. Prior to signing the consulting agreement, Ms. Geday was paid as an executive employee of the Company from December 1, 2020 through November 30, 2021. As a consultant, Ms. Geday will provide services for an initial three-year term and is eligible to receive \$26,445 per month for the first 12 months of the consulting term and \$19,445 per month for the remaining 24 months of the consulting term. For the three months ended September 30, 2023 and 2022, the Company paid Ms. Geday \$0.1 million for consulting services. For the nine months ended September 30, 2023 and 2022, the Company paid Ms. Geday \$0.2 million for consulting services. Lastly, the 455,000 stock options and 62,200 RSUs granted in connection with Ms. Geday's prior employment continue to vest.

In December 2022, the Company entered into a no-fee non-exclusive evaluation license agreement of Magillem products with Transchip. The evaluation was extended and is ongoing as of September 30, 2023. Commencing August 2023, Transchip is carrying out a no-fee evaluation of additional Company products. See Note 13 Equity Method Investment, to our unaudited condensed consolidated financial statements appearing elsewhere in this Quarterly Report on Form 10-Q for additional discussion of the Company's transactions with Transchip.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our unaudited condensed consolidated financial statements and related notes included under Part I, Item 1 in this Quarterly Report on Form 10-Q and our audited consolidated financial statements and the related notes and the discussion under the heading "Management's Discussion and Analysis of Financial Condition and Results of Operations" for the fiscal year ended December 31, 2022 included in the 2022 Form 10-K. This discussion and analysis contains forward-looking statements based upon current beliefs, plans and expectations that involve risks, uncertainties and assumptions, such as statements regarding our plans, objectives, expectations, intentions and projections. Our actual results and the timing of selected events could differ materially from those anticipated in these forward-looking statements as a result of several factors, including those set forth under the heading "Risk Factors" in this Quarterly Report on Form 10-Q. Please also see the section under the heading "Cautionary Note Regarding Forward-Looking Statements" in the 2022 Form 10-K.

Unless the context otherwise requires, all references in this report to "we," "us," "our," the "Company," and "Arteris" refer to Arteris, Inc. and its subsidiaries.

Overview

We are a leading provider of system IP, including interconnect and other intellectual property, (collectively, IP) technology that connects client IP blocks such as processors, memories, artificial intelligence/machine learning (AI/ML) accelerators, graphics subsystems, safety and security and other input/output (I/Os) subsystems via multiple Network-on-Chips (NoCs) in order for our customers to create System-on-Chips (NoC) (SoCs) semiconductors faster, better, and at a lower cost. Our products enable our customers to deliver increasingly complex SoCs that not only process data but are also able to make decisions. Growth in the total addressable market for our solutions is being driven by the addition of more processors, channels of memory access, machine learning sections, chiplets, additional I/O interface standards and other subsystems within SoCs. The growth in the numbers of these connected on-chip subsystems place an increasing premium on the interconnect IP capability to move data inside complex SoCs. We believe this increase in SoC complexity is creating a significant opportunity for sophisticated system IP solutions which incorporate NoC interconnect IP, SoC Integration Automation software (SIA) (formerly IP deployment software) and NoC interface IP (consisting of peripheral data transport IP and control plane networks connected to NoC interconnect IPs).

Our SIA solutions (formerly IP deployment solutions), which were significantly enhanced by our acquisition of Magillem Design Services S.A. (Magillem) in 2020, complement our interconnect IP solutions by helping to automate not only the customer configuration of its NoC interconnect but also the process of integrating and assembling all of the customer's IP blocks into an SoC. Products incorporating our IP are used to carry most of the important data inside complex SoCs for sophisticated applications, including automotive, enterprise computing, communications, consumer electronics, and industrial markets.

As of September 30, 2023, we had 242 full-time employees and offices in eight locations in the United States, France, China, South Korea and Japan. For the three months ended September 30, 2023, we generated revenue of \$13.3 million, net loss of \$8.2 million, and net loss per share, basic and diluted of \$0.23. As of September 30, 2023, we had Annual Contract Value (as defined below) of \$52.3 million. During the three months ended September 30, 2023, we added one net new Active Customer (as defined below) and our customers had 22 Confirmed Design Starts (as defined below).

Factors Affecting Our Business

We believe that the growth of our business and our future success are dependent upon many factors including those described under "Risk Factors" and elsewhere in this report, in addition to those described below. While each of these factors presents significant opportunities for us, these factors also pose challenges that we must successfully address in order to sustain the growth of our business and enhance our results of operations.

License Agreements with New and Existing Customers

Our ability to generate revenue from new license agreements, and the timing of such revenue, is subject to a number of factors, risks and contingencies. For new products, the time from initial development until we generate license revenue can be lengthy, typically between one and three years. In addition, because the selection process by our customers is typically lengthy and market requirements and alternative solutions available to customers for IP-based products change rapidly, we may be required to incur significant research and development expenditures in pursuit of new products over extended, multiyear periods of time with no assurance that our solutions will be successfully developed or ultimately selected by our customers. While we make efforts to observe market demand and market need trends, we cannot be certain that our investment in developing and testing new products will generate an adequate rate of return in the form of fees, royalties or other revenues, or any revenues. Moreover, the customer acquisition process has a typical duration of six to nine months; following this, a customer's chip design cycle is typically between one to three years and may be delayed due to factors beyond our control, which may result in our customer's product not reaching the market until long after we entered into a contract with such customer. Customers typically start shipping their products using our interconnect IP solutions between one to five years following completion of their product design, known as mass production, at which point we start to receive royalties; this lasts for up to seven years depending on the market segment. Any significant delay in the ramp-up of volume production of the customer's products into which our product is designed could adversely affect our business due to delayed or significantly reduced revenues. Further, because the average selling prices (ASPs) of our products may decline over time, we consider new license agreements and new product launches to be critical to our future success and anticipate that for our newer products, we are and will remain highly dependent on market demand timing and revenue from new license agreements.

End Customer Product Demand and Market Conditions

Demand for our interconnect IP solutions and associated royalty revenue is highly dependent on market conditions in the end markets in which our customers operate. These end markets, which include the automotive, enterprise computing, communications, consumer electronics, and industrial markets, are subject to a number of factors including end-product acceptance and sales, competitive pressures, supply chain issues and general market conditions. For example, our revenue has been supported by the increased need for more complex SoCs to enable sophisticated automated driving. If the demand in this market continues to grow, we anticipate it will continue to have a positive impact on our revenue. In contrast, if general market conditions deteriorate or other factors occur such as supply chain issues resulting in fewer semiconductors utilizing our IP solutions being available for sale, our revenue would be adversely affected.

Terms of our Agreements with Customers

Our revenue from period to period can be impacted by the terms of the agreements we enter into with our customers. For example, in recent periods we have made and will continue to make certain changes to SIA agreements that result in the ratable recognition of the related license revenue over the contract term. As a result of how these contracts are structured and the revenue is recognized, our revenue in the three and nine months ended September 30, 2023 may not be comparable to future periods if we do not enter into similar contractual agreements. Further, a meaningful percentage of our revenue is generated through royalty payments. Because the time between a new license agreement win and the customer's end product being sold can be substantial, with sales of the end product being subject to a number of factors outside our control, our revenue from royalties is difficult to predict. As a result of the foregoing, revenue may fluctuate significantly from period to period and any increase or decrease in such revenue may not be indicative of future period-to-period increases or decreases.

Technological Development and Market Growth

We believe our growth has been and will continue to be driven by technology trends in our end markets. For example, the requirements of smaller die size, lower power consumption, a higher frequency of operation and management of critical net latency in a timely and cost-effective manner for on-chip processing in the automotive, enterprise computing, communications, consumer electronics, and industrial markets has resulted in increased SoC design complexity for chips used in these markets. This trend in turn has created increased demand for in-licensing commercial semiconductor design IP, which in turn has positively impacted our revenue and growth.

In order to address technological developments such as the above and expand our offerings, we have invested significantly in our research and development efforts. These investments, which included growth in engineering headcount, have resulted in substantially increased research and development expenses in recent periods. As we continue to invest in our technology and new product design efforts, we anticipate research and development expense will increase on an absolute basis and as a percentage of revenue in the near term. In the medium to longer term, however, while we expect to increase our research and development expense on an absolute basis, we expect this expense to reduce as a percentage of revenue.

We will continue to evaluate growth opportunities through acquisitions of other businesses.

Impact of Operating Globally

We believe our products' global footprint provides us with the opportunity to enter new markets and accelerate our growth. For the nine months ended September 30, 2023, 64.8% of our revenue was derived from sales to customers outside of the United States and 31.0% of our revenue was derived from customers located in China, respectively. For 2022, 59.3% of our revenue was derived from sales to customers outside of the United States and 28.8% of our revenue was derived from customers located in China. While we believe operating internationally has beneficially impacted our results of operations, we are subject to inherent risks attributed to operating in a global economy. Further, our international operations have been, and may in the future continue to be, subject to restrictive government regulations. For example, U.S. export regulations, including regulations announced October 7, 2022 and further amended effective November 17, 2023, that impose broad end-use and other restrictions on doing business with certain customers and facilities in China that develop or produce semiconductor chips or manufacturing equipment, may limit or adversely impact our ability to license or support our products to entities in or doing business with certain advanced AI or "supercomputer" design companies, foundries and manufacturers of assemblies and components in China. As a result of these restrictions, our customers may experience changes to or delays in their design projects, and we may face challenges to maintain our revenue and/or our revenue may decrease.

Cyclical Nature of the Semiconductor Industry

The semiconductor industry in which our customers operate is highly cyclical and is characterized by increasingly rapid technological change, product obsolescence, competitive pricing pressures, evolving standards, short product life cycles, and fluctuations in product supply and demand. New technology may result in sudden changes in system designs or platform changes that may render some of our IP solutions obsolete and require us to devote significant research and development resources to compete effectively. Periods of rapid growth and capacity expansion are occasionally followed by significant market corrections in which our customers' sales decline, inventories accumulate, and facilities go underutilized. During an expansion cycle, we may increase research and development hiring to add to our product offerings or spend more on sales and marketing to acquire new customers, such as during the recent cycle of expansion in which we increased the number of our engineers significantly. During periods of slower growth or industry contractions, our sales generally suffer due to a decrease in customers' Confirmed Design Starts or in sales of our customers' products.

COVID-19 Impact

The duration and extent of the COVID-19 pandemic already had an adverse effect on the global economy and the lasting effects of the pandemic continue to be unknown. In response to the COVID-19 pandemic, the measures implemented by various authorities have caused us to change our business practices, including those related to where employees work, the distance between employees in our facilities, limitations on in-person meetings between employees and with customers, suppliers, service providers and stakeholders, as well as restrictions on business travel to domestic and international locations and to attend trade shows, technical conferences and other events. Although we have experienced, and may continue to experience, some impact on certain parts of our business as a result of governmental restrictions and other measures to mitigate the spread of COVID-19, our results of operations, cash flows and financial condition were not materially adversely impacted the three and nine months ended September 30, 2023.

We are unable to accurately predict the full impact that COVID-19 or similar pandemics will have on our future results of operations, financial condition, liquidity and cash flows due to numerous uncertainties, including the duration and severity of any future pandemics and containment measures. Although we expect most of our employees to return to physical offices, the nature and extent of that return is uncertain and differs among jurisdictions. For additional details, see the section titled “Risk Factors—Our business has been, and may continue to be, adversely affected by health epidemics, pandemics and other outbreaks of infectious disease.”

Key Performance Indicators

We use the following key performance indicators to analyze our business performance and financial forecasts and to develop strategic plans, which we believe provide useful information to investors and others in understanding and evaluating our results of operations in the same manner as our management team. These key performance indicators are presented for supplemental informational purposes only, should not be considered a substitute for financial information presented in accordance with generally accepted accounting principles in the United States (GAAP), and may differ from similarly titled metrics or measures used by other companies, securities analysts, or investors.

Annual Contract Value

We define Annual Contract Value (ACV) for an individual customer agreement as the total fixed fees under the agreement divided by the number of years in the agreement term. Our total ACV is the aggregate ACVs for all our customers as measured at a given point in time. Total fixed fees include licensing, support and maintenance and other fixed fees under IP licensing or software licensing agreements but exclude variable revenue derived from licensing agreements with customers, particularly royalties. ACV was \$52.3 million and \$50.2 million as of September 30, 2023 and September 30, 2022, respectively. In addition, total ACV and trailing-twelve-months variable royalties and other revenue was \$57.3 million and \$53.2 million as of September 30, 2023 and September 30, 2022, respectively. We monitor ACV to measure our success and believe the increase in the number shows our progress in expanding our customers' adoption of our platform. ACV fluctuates due to a number of factors, including the timing, duration and dollar amount of customer contracts.

Active Customers and Customer Retention

We define Active Customers as customers who have entered into a license agreement with us that remains in effect. The retention and expansion of our relationships with existing customers are key indicators of our revenue potential. We added one and 10 net new Active Customers during the three months ended September 30, 2023 and 2022, respectively. Our annual average customer retention rate was 98% from September 30, 2022 to September 30, 2023.

Confirmed Design Starts

We define Confirmed Design Starts as when customers confirm their commencement of new semiconductor designs using our interconnect IP and notify us. Confirmed Design Starts is a metric management uses to assess the activity level of our customers in terms of the number of new semiconductor designs that are started using our interconnect IP in a given period. Our interconnect IP and NoC interface IP customer base started a total of 22 and 21 designs during the three months ended September 30, 2023 and 2022, respectively. We believe that the number of Confirmed Design Starts is an important indicator of the growth of our business and future royalty revenue trends.

Remaining Performance Obligations

We define Remaining Performance Obligations (RPO) as the amount of contracted future revenue that has not yet been recognized, including deferred revenue, billed and unbilled cancelable and non-cancelable contracted amounts.

The RPO amount is intended to provide visibility into future revenue streams. We expect RPO to fluctuate up or down from period to period for several reasons, including amounts, timing, and duration of customer contracts, as well as the timing of billing cycles for each contract. Our RPO was \$62.5 million and \$59.3 million as of September 30, 2023 and 2022, respectively.

Components of Our Results of Operations

Revenue: Our revenue is primarily derived from licensing intellectual property, licensing software, support and maintenance services, professional services, training services, and royalties. Our agreements often include other service elements including training and professional services which were immaterial for the three and nine months ended September 30, 2023 and 2022, respectively.

Our interconnect solutions product arrangements provide customers the right to software licenses, services, and support and maintenance. We enter into licensing arrangements with customers that typically range from two to three years and generally consist of delivery of a design license that grants the customer the right to use the IP to design a contractually defined number of products, a right to access the benefits of its proprietary software tool (RTL), and support and maintenance services that provide the customer a significant benefit from ongoing access to Corporate Application Engineers (CAE) and Field Application Engineers (FAE) (collectively, Application Engineer Support Services) to perform certain verifications including benchmark performance, simulations and ultimately, through the RTL, instantiate designs into silicon over the design term.

Application Engineer Support Services are integral and fundamental to the customer's ability to derive its intended benefit from the IP. CAEs are part of the product development team providing detailed requirements for engineering projects, working very closely with a customer's chief technology officer and the marketing department, and performing quality assurance testing of customer products prior to shipment to their customers. FAEs provide assistance to the customer's engineering team in translating their desired SoC architecture into inputs for NoC IP configuration, assistance in optimizing the NoC configuration, answer to customer questions by the online support system or phone, constructive reviews of the progress achieved by the customer's development team and provision of advice on how to best use the licensed IP, performance of design reviews before customer project RTL freeze and tape-out to ensure the customer used the licensed IP configuration tooling as intended so that the RTL output meets customer requirements and expectations. FAE reviews of the customer's design are mandatory and consist of an understanding of the customer requirements and analysis of the adequacy of the contemplated IP considering the customer's desired architecture and design goals and objectives, taking into consideration bandwidth, coherence/non-coherence, latency, clock and timing, areas, and any and all constraints, as identified and specific to the design under review.

Besides Application Engineer Support Services, support and maintenance services also consist of a stand-ready obligation to provide technical support and software updates over the support term. Generally, the first-year of technical support and software updates are bundled with and into the license fee with a customer option to renew additional years of support throughout the license term. However, we may continue to provide technical support and software updates throughout the license term even if the customer does not renew these services in subsequent years, making the license term and support and maintenance term co-terminus.

Revenues that are derived from the sale of a licensee's products that incorporate our IP are classified as royalty revenues. Royalty revenues are recognized during the quarter in which the sale of the product incorporating the IP occurs. Royalties are calculated either as a percentage of the revenues received by a licensee's sale of products incorporating the IP or on a per unit basis, as specified in the agreements with the licensees. For a majority of our royalty revenues, we receive the actual sales data from our customers after the quarter ends and account for it as unbilled receivables. When we do not receive actual sales data from the customer prior to the finalization of our financial statements, royalty revenues are recognized based on our estimation of the customer's sales during the quarter.

Our SIA solutions product and CSRCompiler product arrangements provide customers the right to software licenses, software updates and technical support. The software licenses are time-based licenses with terms generally ranging from one to three years. These arrangements generally have two distinct performance obligations that consist of transferring the licensed software and the support and maintenance service. Support and maintenance services consist of a stand-ready obligation to provide technical support and software updates over the support term. For the majority of these contracts, there are no termination rights and the transaction price is non-refundable. Revenue allocated to the software license is generally recognized at a point in time upon the later of the delivery date or the beginning of the license period, and revenue allocated to support services is recognized ratably over the support term. Certain SIA solutions contracts include termination rights that allow the customer to cancel and receive a pro-rata refund on support and maintenance services at the end of each month of the contract period, which results in a ratable recognition of the related license revenue over the contract term.

Cost of revenue: Cost of revenue relates to costs associated with our licensing agreements and support and maintenance, including applicable FAE personnel-related costs such as stock-based compensation, travel, amortization of developed technology acquired intangibles and allocated overhead. We expect cost of revenue as a percentage of revenue to modestly decline over time due to productivity improvements of our FAE processes.

Allocation of Overhead Costs: Overhead costs that are not substantially dedicated for use by a specific functional group are allocated based on headcount. Such costs include costs associated with office facilities, depreciation of property and equipment, certain support function personnel costs and other expenses.

Research and development (R&D) expenses: R&D expenses consist primarily of salaries and associated personnel-related costs, facilities expenses associated with research and development activities, third-party project-related expenses connected with the development of our intellectual property which are expensed as incurred, and stock-based compensation expense and other allocated costs. We expect R&D expenses to increase in absolute terms and as a percentage of revenue in the short term and to continue to increase in absolute terms in the medium to long term but decrease as a percentage of revenue as certain new products are launched.

Sales and marketing (S&M) expenses: S&M expenses consist primarily of salaries, commissions, travel and other costs associated with S&M activities, as well as advertising, trade show participation, public relations, and other marketing costs, stock-based compensation expenses and other allocated costs. We expect S&M expenses to increase in absolute terms but decrease as a percentage of revenue due to productivity improvements of our sales processes.

General and administrative (G&A) expenses: G&A expenses consist primarily of salaries for management and administrative employees, depreciation, insurance costs, accounting, legal and consulting fees, other professional service fees, expenses related to the development of corporate initiatives and facilities expenses associated with G&A activities and stock-based compensation expense, fees for directors and other allocated costs.

We incur additional expenses as a result of operating as a public company, including costs to comply with the rules and regulations applicable to companies listed on a national securities exchange, costs related to compliance and reporting obligations, and increased expenses for additional G&A personnel, directors' and officers' insurance, investor relations, and professional services. We expect G&A expenses to increase as our business grows. In addition, we expect G&A expenses as a percentage of revenue to vary from period to period but generally decrease over the long term.

Interest expense: Interest expense consists primarily of interest expense on our vendor financing arrangements.

Other income (expense), net: Other income (expense), net consists primarily of interest income earned on our cash and cash equivalents and available-for-sale investments, gains and losses from foreign currency exchange, gain on deconsolidation of subsidiary, realized gains and losses from available-for-sale investments as well as deferred income.

Loss from equity method investment: Loss from equity method investment consists of our proportionate share of net income (losses) from our equity method investee.

Provision for (benefit from) income taxes: Our income tax provision consists primarily of income taxes in certain foreign jurisdictions in which we conduct business and includes foreign non-recoverable withholding taxes. We have a full valuation allowance against our U.S. federal and state deferred tax assets as the realization of the full amount of these deferred tax assets is uncertain, including net operating loss carryforwards and tax credits related primarily to research and development. We expect to maintain this full valuation allowance until it becomes more likely than not that the deferred tax assets will be realized.

Results of Operations

The following table summarizes our GAAP results of operations for the periods presented. The results below are not necessarily indicative of results to be expected for future periods.

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
	<i>(in thousands)</i>			
Total revenue	\$ 13,274	\$ 12,598	\$ 41,162	\$ 39,175
Cost of revenue (1)	1,280	928	3,629	3,196
Gross profit	11,994	11,670	37,533	35,979
Operating expenses:				
Research and development (1)	10,997	11,022	34,465	30,849
Sales and marketing (1)	5,024	4,411	15,630	12,788
General and administrative (1)	4,426	3,991	13,331	12,138
Total operating expenses	20,447	19,424	63,426	55,775
Loss from operations	(8,453)	(7,754)	(25,893)	(19,796)
Interest expense	(77)	(22)	(136)	(60)
Other income (expense), net	898	340	2,641	406
Loss before income taxes and loss from equity method investment	(7,632)	(7,436)	(23,388)	(19,450)
Loss from equity method investment, net of tax	919	—	2,487	—
Provision for (benefit from) income taxes	(398)	248	453	722
Net loss	\$ (8,153)	\$ (7,684)	\$ (26,328)	\$ (20,172)

(1) Includes stock-based compensation expense as follows:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
	<i>(in thousands)</i>			
Cost of revenue	\$ 181	\$ 118	\$ 386	\$ 474
Research and development	1,742	1,798	5,656	4,435
Sales and marketing	666	679	2,088	1,678
General and administrative	1,125	794	2,851	2,495
Total stock-based compensation	\$ 3,714	\$ 3,389	\$ 10,981	\$ 9,082

The following table summarizes our results of operations as a percentage of total revenue for each of the periods indicated:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
	<i>(as a percentage of total revenue)</i>			
Total revenue	100 %	100 %	100 %	100 %
Cost of revenue	10	7	9	8
Gross profit	90	93	91	92
Operating expenses:				
Research and development	83	87	84	79
Sales and marketing	38	35	38	32
General and administrative	33	32	32	31
Total operating expenses	154	154	154	142
Loss from operations	(64)	(61)	(63)	(50)
Interest expense	—	—	—	—
Other income (expense), net	7	3	6	1
Loss before income taxes and loss from equity method investment	(57)	(58)	(57)	(49)
Loss from equity method investment, net of tax	7	—	6	—
Provision for (benefit from) income taxes	(3)	2	1	2
Net loss	(61)%	(60)%	(64)%	(51)%

Comparison of the Three Months Ended September 30, 2023 and 2022

Revenue

	Three Months Ended September 30,		Change	
	2023	2022	\$	%
	<i>(dollars in thousands)</i>			
Licensing, support and maintenance	\$ 12,084	\$ 11,135	\$ 949	9 %
Variable royalties	1,068	695	373	54 %
Other	122	768	(646)	(84)%
Total	\$ 13,274	\$ 12,598	\$ 676	5 %

Revenue from licensing, support and maintenance increased \$0.9 million during the three months ended September 30, 2023 compared to the three months ended September 30, 2022. The increase was primarily due to addition of new customers, offset by a change in timing of revenue recognition for certain arrangements for the three months ended September 30, 2023 compared to the three months ended September 30, 2022. The change in timing of revenue recognition resulted from certain additional rights received by our customers in new arrangements entered in 2023. As a result of the change in timing of revenue recognition, a substantial majority of the revenue derived from certain contracts is being recognized in future quarters. Growth in our variable royalty revenue was primarily due to production increase from existing customers. Other revenue decreased due to timing of completion of professional services.

Cost of revenue

	Three Months Ended September 30,		Change	
	2023	2022	\$	%
	<i>(dollars in thousands)</i>			
Cost of revenue	\$ 1,280	\$ 928	\$ 352	38 %

Cost of revenue increased, \$0.4 million, or 38%, to \$1.3 million for the three months ended September 30, 2023, from \$0.9 million for the three months ended September 30, 2022. The increase in cost of revenue was primarily due to higher FAE employee-related costs.

Operating expenses

	Three Months Ended September 30,		Change	
	2023	2022	\$	%
	<i>(dollars in thousands)</i>			
Research and development	\$ 10,997	\$ 11,022	\$ (25)	— %
Sales and marketing	5,024	4,411	613	14 %
General and administrative	4,426	3,991	435	11 %
Total operating expenses	\$ 20,447	\$ 19,424	\$ 1,023	5 %

Research and development expenses

R&D expenses remained relatively flat for the three months ended September 30, 2023 compared to the three months ended September 30, 2022.

Sales and marketing expenses

S&M expenses increased, \$0.6 million, or 14%, to \$5.0 million for the three months ended September 30, 2023 from \$4.4 million for the three months ended September 30, 2022. The increase in S&M expenses was primarily due to higher employee-related costs of \$0.4 million mainly driven by increased headcount to support growth of our business.

General and administrative expenses

G&A expenses increased, \$0.4 million, or 11%, to \$4.4 million for the three months ended September 30, 2023 from \$4.0 million for the three months ended September 30, 2022. The increase in G&A expenses was primarily due to higher professional fees of \$0.4 million driven by legal expenses related to our intellectual property litigation.

Interest expense

	Three Months Ended September 30,		Change	
	2023	2022	\$	%
	<i>(dollars in thousands)</i>			
Interest expense	\$ (77)	\$ (22)	\$ (55)	250 %

Interest expense remained relatively flat for the three months ended September 30, 2023 compared to the three months ended September 30, 2022.

Other income (expense), net

	Three Months Ended September 30,		Change	
	2023	2022	\$	%
	<i>(dollars in thousands)</i>			
Other income (expense), net	\$ 898	\$ 340	\$ 558	164 %

Other income (expense), net was \$0.9 million for the three months ended September 30, 2023, compared to \$0.3 million for the three months ended September 30, 2022. The increase in other income (expense), net was primarily due to higher interest rates on cash balances and interest income earned on our available-for-sale investments.

Loss from equity method investment

	Three Months Ended September 30,		Change	
	2023	2022	\$	%
	<i>(dollars in thousands)</i>			
Loss from equity method investment	\$ 919	\$ —	\$ 919	*

* Not meaningful

Loss from equity method investment was \$0.9 million for the three months ended September 30, 2023, compared to zero for the three months ended September 30, 2022, representing our proportionate share of Transchip's net loss during the second quarter of 2023.

Provision for (benefit from) income taxes

	Three Months Ended September 30,		Change	
	2023	2022	\$	%
	<i>(dollars in thousands)</i>			
Provision for (benefit from) income taxes	\$ (398)	\$ 248	\$ (646)	(260)%

The provision for (benefit from) income taxes was a benefit of \$0.4 million for the three months ended September 30, 2023 compared to an expense of \$0.2 million for the three months ended September 30, 2022. The decrease in our income tax expense was due to a change in the forecasted geographic mix of worldwide earnings which are taxed at different statutory tax rates, the impact of losses in jurisdictions which have full valuation allowances, and changes in current year foreign withholding taxes. Foreign withholding taxes are generally assessed on gross revenue generated, rather than pre-tax income, in certain countries in which the Company does not file an income tax return.

Comparison of the Nine Months Ended September 30, 2023 and 2022

Revenue

	Nine Months Ended September 30,		Change	
	2023	2022	\$	%
	<i>(dollars in thousands)</i>			
Licensing, support and maintenance	\$ 36,926	\$ 35,743	\$ 1,183	3 %
Variable royalties	4,058	2,266	1,792	79 %
Other	178	1,166	(988)	(85)%
Total	\$ 41,162	\$ 39,175	\$ 1,987	5 %

Revenue from licensing, support and maintenance increased \$1.2 million during the nine months ended September 30, 2023 compared to the nine months ended September 30, 2022. The increase was primarily due to an increase in new license agreements with existing customers, addition of new customers, offset by a change in timing of revenue recognition for certain arrangements for the nine months ended September 30, 2023 compared to the nine months ended September 30, 2022. Growth in our variable royalty revenue was due to royalty audit findings in the second quarter of 2023 as well as production increase from existing customers in the nine months ended September 30, 2023. Other revenue decreased for the nine months ended September 30, 2023 compared to the nine months ended September 30, 2022 due to timing of completion of professional services.

Cost of revenue

	Nine Months Ended September 30,		Change	
	2023	2022	\$	%
	<i>(dollars in thousands)</i>			
Cost of revenue	\$ 3,629	\$ 3,196	\$ 433	14 %

Cost of revenue increased, \$0.4 million, or 14%, to \$3.6 million for the nine months ended September 30, 2023 from \$3.2 million for the nine months ended September 30, 2022. The increase in cost of revenue was primarily due to higher FAE employee-related expenses. I

Operating expenses

	Nine Months Ended September 30,		Change	
	2023	2022	\$	%
	<i>(dollars in thousands)</i>			
Research and development	\$ 34,465	\$ 30,849	\$ 3,616	12 %
Sales and marketing	15,630	12,788	2,842	22 %
General and administrative	13,331	12,138	1,193	10 %
Total operating expenses	\$ 63,426	\$ 55,775	\$ 7,651	14 %

Research and development expenses

R&D expenses increased, \$3.6 million, or 12%, to \$34.5 million for the nine months ended September 30, 2023 from \$30.8 million for the nine months ended September 30, 2022. The increase in R&D expenses was due to higher employee-related costs of \$2.6 million primarily attributable to increased engineering headcount to support our continued growth and investment in our interconnect technology and SIA solutions, including additional headcount as a result of the Semifore acquisition. We also incurred higher stock-based compensation expense of \$1.2 million, primarily related to the modification of certain performance stock unit awards as well as new grants in 2022.

Sales and marketing expenses

S&M expenses increased, \$2.8 million, or 22%, to \$15.6 million for the nine months ended September 30, 2023 from \$12.8 million for the nine months ended September 30, 2022. The increase in S&M expenses was primarily due to higher employee-related costs of \$1.5 million mainly driven by increased headcount to support growth of our business. We also incurred higher stock-based compensation expense of \$0.4 million primarily related to new grants in 2022, higher professional fees of \$0.4 million and an increase in company-wide event costs of \$0.2 million primarily due to an in-person sales event.

General and administrative expenses

G&A expenses increased, \$1.2 million, or 10%, to \$13.3 million for the nine months ended September 30, 2023 from \$12.1 million for the nine months ended September 30, 2022. The increase in G&A expenses was primarily due to higher professional fees of \$1.1 million driven by legal expenses related to our intellectual property litigation.

Interest expense

	Nine Months Ended September 30,		Change	
	2023	2022	\$	%
	<i>(dollars in thousands)</i>			
Interest expense	\$ (136)	\$ (60)	\$ (76)	127 %

Interest expense remained relatively flat for the nine months ended September 30, 2023 and compared to the nine months ended September 30, 2022.

Other income (expense), net

	Nine Months Ended September 30,		Change	
	2023	2022	\$	%
	<i>(dollars in thousands)</i>			
Other income (expense), net	\$ 2,641	\$ 406	\$ 2,235	*

* Not meaningful

Other income (expense), net was \$2.6 million for the nine months ended September 30, 2023, compared to \$0.4 million for the nine months ended September 30, 2022. The increase in other income (expense), net was primarily due to higher interest rates on cash balances, interest income earned on our available-for-sale investments and recognition of deferred income from Transchip.

Loss from equity method investment

	Nine Months Ended September 30,		Change	
	2023	2022	\$	%
	<i>(dollars in thousands)</i>			
Loss from equity method investment	\$ 2,487	\$ —	\$ 2,487	*

* Not meaningful

Loss from equity method investment was \$2.5 million for the nine months ended September 30, 2023, compared to zero for the nine months ended September 30, 2022, representing our proportionate share of Transchip's net loss during the trailing nine months ended June 30, 2023.

Provision for income taxes

	Nine Months Ended September 30,		Change	
	2023	2022	\$	%
	<i>(dollars in thousands)</i>			
Provision for income taxes	\$ 453	\$ 722	\$ (269)	(37)%

Provision for income taxes for the nine months ended September 30, 2023 was \$0.5 million, compared to \$0.7 million for the nine months ended September 30, 2022. The decrease in our income tax expense was due to a change in the forecasted geographic mix of worldwide earnings which are taxed at different statutory tax rates, the impact of losses in jurisdictions which have full valuation allowances, and changes in current year foreign withholding taxes. Foreign withholding taxes are generally assessed on gross revenue generated, rather than pre-tax income, in certain countries in which the Company does not file an income tax return.

Liquidity and Capital Resources

Since inception, we have financed operations primarily from payments received from our customers, the net proceeds from the sale of our common stock in the IPO as well as the net proceeds from the private issuance of our convertible preferred stock and common stock. As of September 30, 2023, we had \$46.4 million in cash and cash equivalents and short-term investments of which \$2.8 million was held by our foreign subsidiaries.

We believe our cash and cash equivalents, short-term investments, and cash provided by sales of our products will be sufficient to meet our expected working capital needs, capital expenditures, financial commitments and other liquidity requirements associated with our existing operations for at least the next 12 months. If these resources are not sufficient to satisfy our liquidity requirements, we may be required to seek additional financing. If we raise additional funds by issuing equity securities, our stockholders will experience dilution. Debt financing, if available, may contain covenants that significantly restrict our operations or our ability to obtain additional debt financing in the future. Any additional financing that we raise may contain terms that are not favorable to us or our stockholders. We cannot assure you that we would be able to obtain additional financing on terms favorable to us or our existing stockholders, or at all. See “Risk Factors —Risks Related to Our Business and Industry—Our ability to raise capital in the future may be limited and could prevent us from executing our growth strategy” for additional information.

Cash Flows

The following table summarizes changes in our cash flows for the periods indicated:

	Nine Months Ended September 30,	
	2023	2022
	<i>(in thousands)</i>	
Net cash used in operating activities	\$ (12,750)	\$ (6,376)
Net cash used in investing activities	\$ (3,323)	\$ (7,333)
Net cash used in financing activities	\$ (2,335)	\$ (3,916)

Operating Activities

Cash flows from operating activities may vary significantly from period to period depending on a variety of factors including the timing of our receipts and payments. Our ongoing cash outflows from operating activities primarily relate to payroll-related costs, payments for professional services, obligations under our property leases and design tool licenses. Our primary source of cash inflows is receipts from our accounts receivable. The timing of receipts of accounts receivable from customers is based upon the completion of agreed milestones or agreed dates as set forth in the contracts.

For the nine months ended September 30, 2023, net cash used in operating activities was \$12.8 million primarily due to our net loss of \$26.3 million, adjusted for non-cash charges of \$14.1 million and \$0.5 million changes in operating assets and liabilities. Non-cash charges primarily consisted of stock-based compensation of \$11.0 million, loss from our equity method investment of \$2.5 million and depreciation and amortization of \$2.2 million, partially offset by amortization of deferred income of \$0.9 million and net accretion of discounts on available-for-sale securities of \$0.7 million. The drivers of the changes in operating assets and liabilities were a \$3.2 million increase in accounts receivable, a \$0.5 million increase in prepaid expense and other current assets and a \$0.2 million decrease in accounts payable, offset by a \$1.9 million increase in deferred revenue and a \$1.5 million increase in accrued expenses and other liabilities.

For the nine months ended September 30, 2022, net cash used in operating activities was \$6.4 million primarily due to our net loss of \$20.2 million, adjusted for non-cash charges of \$10.4 million and \$3.4 million changes in operating assets and liabilities. The non-cash charges primarily consisted of stock-based compensation expense of \$9.1 million and depreciation and amortization of \$1.6 million, partially offset by gain on deconsolidation of our wholly-owned subsidiary of \$0.1 million and amortization of deferred income of \$0.1 million. The primary drivers of the changes in operating assets and liabilities were a \$4.2 million decrease in accounts receivable, a \$0.5 million increase in deferred revenue, a \$0.4 million increase in accounts payable, partially offset by a \$1.8 million increase in prepaid expenses and other assets.

Investing Activities

Net cash used in investing activities for the nine months ended September 30, 2023 was \$3.3 million, primarily attributable to purchases of property and equipment, available-for-sale securities and certificate of deposit, partially offset by proceeds from maturities of available-for-sale securities.

Net cash used in investing activities for the nine months ended September 30, 2022 was \$7.3 million, primarily attributable to purchases of property and equipment, purchases of available-for-sale securities, proceeds from principal portion of our related party loan and payments related to investment in our equity method investee, see Note 13 to our unaudited condensed consolidated financial statements.

Financing Activities

Net cash used in financing activities for the nine months ended September 30, 2023 was \$2.3 million, primarily attributable to payments of contingent consideration for business combination of \$1.3 million and principal payments under vendor financing arrangements of \$1.0 million.

Net cash used in financing activities for the nine months ended September 30, 2022 was \$3.9 million, primarily attributable to payments of contingent consideration for business acquisition of \$1.6 million and payments to tax authorities for shares withheld from employees of \$2.1 million.

Off-Balance Sheet Arrangements

We did not have during the periods presented, and we do not currently have, any off-balance sheet financing arrangements or any relationships with unconsolidated entities or financial partnerships, including entities sometimes referred to as structured finance or special purpose entities, that were established for the purpose of facilitating off-balance sheet arrangements or other contractually narrow or limited purposes.

Critical Accounting Estimates

Our unaudited condensed consolidated financial statements and the related notes thereto included elsewhere in this Quarterly Report on Form 10-Q are prepared in accordance with GAAP. The preparation of these unaudited condensed consolidated financial statements requires us to make certain estimates and assumptions that affect the reported amounts of assets, liabilities, revenue, costs and expenses, and related disclosures. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances. Actual results could differ significantly from the estimates made by management. To the extent that there are differences between our estimates and actual results, our financial condition, results of operations, and cash flows will be affected.

There have been no material changes to our critical accounting estimates as compared to those described in “Management’s Discussion and Analysis of Financial Condition and Results of Operations” set forth in our 2022 Form 10-K, other than those discussed in Note 2 to our unaudited condensed consolidated financial statements.

Recently Issued and Adopted Accounting Pronouncements

For more information regarding recently issued accounting pronouncements, see Note 2 Basis of Presentation and Summary of Significant Accounting Policies, to our unaudited condensed consolidated financial statements included elsewhere in this Quarterly Report on Form 10-Q.

JOBS Act

We are an emerging growth company, as defined in the Jumpstart Our Business Startups (JOBS) Act. The JOBS Act provides that an emerging growth company can take advantage of an extended transition period for complying with new or revised accounting standards. This provision allows an emerging growth company to delay the adoption of some accounting standards until those standards would otherwise apply to private companies. We have elected to use the extended transition period under the JOBS Act for the adoption of certain accounting standards until the earlier of the date we (i) are no longer an emerging growth company or (ii) affirmatively and irrevocably opt out of the extended transition period provided in the JOBS Act. See Note 2, Basis of Presentation and Summary of Significant Accounting Policies, in the notes to our consolidated financial statements included on our 2022 Form 10-K. As a result, our financial statements may not be comparable to companies that comply with new or revised accounting pronouncements as of public company effective dates.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

Not required for the Company as a smaller reporting company.

Item 4. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our Chief Executive Officer and Chief Financial Officer, has evaluated the effectiveness of our disclosure controls and procedures as of the end of the period covered by this Quarterly Report on Form 10-Q. The term “disclosure controls and procedures,” as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the Exchange Act), means controls and other procedures of a company that are designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in the SEC’s rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the company’s management, including its principal executive and principal financial officers, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure. In designing and evaluating our disclosure controls and procedures, our management recognizes that disclosure controls and procedures, no matter how well conceived and operated, can provide only reasonable assurance that the objectives of the disclosure controls and procedures are met. Based on such evaluation, our Chief Executive Officer and Chief Financial Officer concluded that, as of the end of the period covered by this Quarterly Report on Form 10-Q, our disclosure controls and procedures were effective at the reasonable assurance level.

Changes in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting identified in connection with the evaluation required by Rule 13a-15(d) and 15d-15(d) of the Exchange Act 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.

Inherent Limitations on Effectiveness of Controls

Our management, including our Chief Executive Officer and Chief Financial Officer, believes that our disclosure controls and procedures and internal control over financial reporting are designed to provide reasonable assurance of achieving their objectives and are effective at the reasonable assurance level. However, management does not expect that our disclosure controls and procedures or our internal control over financial reporting will prevent or detect all errors and all 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. 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. The design of any system of controls also is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions. Over time, controls may become inadequate because of changes in conditions, or the degree of compliance with the policies or procedures may deteriorate. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected.

Part II - Other Information

Item 1. Legal Proceedings

See Note 11 Commitments and Contingencies, to our unaudited condensed consolidated financial statements included elsewhere in this Quarterly Report on Form 10-Q.

Item 1A. Risk Factors

Investing in our common stock involves a high degree of risk. Before making your decision to invest in shares of our common stock, you should carefully consider and read carefully all of the risks described below, together with the other information contained in this report, including our financial statements and the related notes and the section titled "Management's Discussion and Analysis of Financial Condition and Results of Operations" in this report. We cannot assure you that any of the events discussed below will not occur. These events could have a material and adverse impact on our business, financial condition, results of operations and prospects. Unless otherwise indicated, references to our business being harmed in these risk factors will include harm to our business, reputation, financial condition, results of operations, revenue and future prospects. In such event, the trading price of our common stock could decline, and you could lose all or part of your investment. Additional risks and uncertainties not presently known to us or not believed by us to be material may also negatively impact us.

Risk Factors Summary

This risk factor summary contains a high-level summary of risks associated with our business. It does not contain all of the information that may be important to you, and you should read this risk factor summary together with the more detailed discussion of risks and uncertainties set forth following this summary. The principal risks and uncertainties affecting our business includes, but is not limited to, the following:

- We face significant competition from larger companies and third party providers that may deploy their resources so they can develop their IP solutions internally.
- We have a history of net losses, and we may not achieve or maintain profitability in the future.
- Because our IP solutions are components of end products, if semiconductor, system producers and/or end product producer companies in the automotive market, enterprise computing market, communications market, consumer electronics market, and industrial market do not incorporate our solutions into their end products or if the end products of our customers do not achieve market acceptance, we may not be able to generate adequate license sales and royalty income from our products.
- We depend on market acceptance of third-party semiconductor IP.
- The success of our business depends on sustaining or growing our licensing revenue, and the failure to achieve such revenue would lead to a material decline in our results of operations.
- The nature of the design win process requires us to incur significant expenses without any guarantee that research and development and sales efforts will generate revenue, which could adversely affect our financial results.
- Even if we succeed in securing design wins for our IP interconnect and other solutions and our SoC Integration Automation software (SIA) solutions (formerly IP deployment solutions), we may not generate timely or sufficient margins or margins from those wins and our financial results could suffer.
- We continually pursue new IP interconnect, SoC integration automation, and other technology initiatives, and if we fail to successfully carry out these initiatives, our business could be harmed.
- We may have to invest more resources in research and development than anticipated, which could increase our operating expenses and negatively affect our operating results.
- Product errors or defects could expose us to liability and harm our reputation and we could lose market share.

- If we fail to offer high-quality support, our reputation could suffer.
- Our dependence on international customers and operations also subjects us to a range of other additional regulatory, operational, financial, and geopolitical risks and conflicts that could adversely affect our customers' design schedules, which can adversely impact our financial results.
- If we are unable to protect our proprietary technology and inventions through patents and other intellectual property rights, our ability to compete successfully and our financial results could be adversely impacted.
- We are subject to government regulation, including import, export and economic sanctions laws and regulations that may expose us to liability and increase our costs.
- We face risks associated with doing business in China.
- Litigation, including securities class action litigation, may impair our reputation and lead us to incur significant costs. We are a party to a patent litigation.

Risks Related to Our Business and Industry

We face significant competition from larger companies and third party providers that may deploy their resources so they can develop their IP solutions internally.

We are engaged in a competitive segment of the global semiconductor industry. Our competitive landscape is characterized by competition from companies that have greater resources than us. A variety of factors could adversely impact our ability to compete, including rapid technological change in product design and manufacturing, customers that make purchase decisions based on a mix of factors of varying importance and continuous declines in average selling prices (ASPs). We compete principally on the basis of technology, product quality and features, license, royalty and usage terms, post-contract customer support, interoperability among products, and price and payment terms.

We operate in industries characterized by rapidly changing technologies as well as technological obsolescence. The appearance of new competitors, introduction of new products by our competitors or our failure to timely develop new or enhanced products or technologies in response to changing market demand, whether due to technological shifts or otherwise, could result in the loss of customers and decreased revenue and have an adverse effect on our business, financial condition, and results of operations.

Often, we compete against larger companies that possess substantial financial, technical, research and development and engineering resources that can be deployed so they can develop their IP solutions internally. In addition, we compete against other third-party providers of IP integration solutions, such as Openedges Technologies Inc., Signature IP, TrueChip, SkyeChip, Sdn. Bhd, EXTOLL GmbH, and Arm Limited, that similarly possess substantial financial, technical, research and development and engineering resources. In certain cases, competitive companies may be supported by local or international government funding and similar resources. Varying combinations of these resources provide advantages to these competitors that enable them to influence industry trends and the pace at which they adapt to these trends. A strong competitive response from one or more of our competitors to our marketplace efforts, or a shift in customer preferences to competitors' products, could result in increased pressure to lower our prices more rapidly than anticipated, increased sales and marketing expense, and/or market share loss. The consolidation of our competitors or collaboration among our competitors to deliver more comprehensive offerings than they could individually, may also impact our ability to compete effectively. To the extent our revenue is negatively impacted by competitive pressures and reduced pricing, our business could be harmed.

Our ability to compete in our market is subject to a variety of factors, many of which are beyond our control. The occurrence of any of the below could adversely affect our ability to compete and harm our business:

- Our ability to anticipate and lead critical product development cycles and technological shifts as driven by our target markets, to innovate rapidly and efficiently and to improve our existing solutions.
- Whether any competitor substantially increases its engineering and marketing resources to compete with us in the semiconductor IP interconnect and SIA software technology arena.

- Whether a new entrant with substantially greater resources and/or supported by governmental resources decides to enter the markets in which we compete.
- Whether any existing or new competitor bundles its technologies into one package at a discounted price that would make it uneconomical for our customers to license our products separately.
- The challenges of developing, or acquiring externally developed, technology solutions that are adequate and competitive in meeting the rapidly evolving requirements of next-generation design challenges.
- Our ability to compete on the basis of payment, pricing, features and/or terms.
- Decisions by semiconductor companies, system companies, device or other end product producers, and/or OEMs to develop IP development internally, rather than license IP from outside vendors due to budget constraints or excess engineering capacity.
- Actions by regulators or governmental entities to impose license requirements, limit product availability, limit trade and exportability of our products, the features or contractual terms that either we or our customers can apply to product and service offerings, or to affect monetary policy.
- Actions by regulators or governmental entities to modify or augment tax treatment of our product and service offerings.
- The impact of global and regional inflation on ours and our customers' profitability and expansion plans due to among other effects of inflation, increases in wages, availability of capital, salaries, operating expenses, and costs of insurance, benefits and medical coverage.
- The potential effects of geopolitical conflicts, such as the military conflict between Russia and Ukraine and the conflict in Israel, including retaliatory, military and regulatory actions, on our customers' engineering resources, design schedules, purchasing, development, sales and innovation responses and trends in response to such conflicts.
- Competition, embargoes, sanctions, boycotts and/or social unrest.
- Local or international economic headwind trends that may lead to recessions, economic slowdowns or sudden changes in economic needs of regions and consumers.
- Silicon chip supply chain and shipment volume restrictions on our customers and their end customers that will impact the amount of royalties payable to us.

We may be unable to reduce the cost of our products sufficiently to compete effectively against our competitors. Our cost reduction efforts may not allow us to keep pace with competitive pricing pressures and/or other economic factors including inflation and customer and end market supply chain constraints which could adversely affect our gross margins and ability to meet customer demand. To the extent we are unable to reduce the prices of our products and remain competitive, our revenue will likely decline, resulting in further pressure on our gross margins, which could harm our business. Many other companies in the IP interconnect space have not been able to continue as a going concern due to intense competition and low margins. See "Business—Competition".

We have a history of net losses, and we may not achieve or maintain profitability in the future.

We have incurred net losses in certain periods historically. We incurred a net loss of \$27.4 million in 2022. Our net loss was \$8.2 million and \$7.7 million for the three months ended September 30, 2023 and 2022, respectively and \$26.3 million and \$20.2 million for the nine months ended September 30, 2023 and 2022, respectively. As of September 30, 2023, we had an accumulated deficit of \$92.7 million. We have spent significant funds on organizational and start-up activities, to recruit engineers and other employees and to support our research and development. The net losses we incur may fluctuate significantly from quarter to quarter and may increase as a result of geopolitical and market fluctuations, inflation, economic slowdown and/or recessionary pressures, COVID-19 or similar pandemic and other global economic factors.

Our long-term success is dependent upon our ability to successfully market our interconnect IP and SIA solutions, develop new interconnect IP and SIA solutions, earn revenue, obtain additional capital when needed and, ultimately, to maintain profitable operations. We will need to generate significant additional revenue to achieve profitability. It is possible that we will not achieve profitability or that, even if we do achieve profitability, we may not maintain or increase profitability in the future. Our failure to achieve or maintain profitability could negatively impact the value of our common stock.

Because our IP solutions are components of end products, if semiconductor, system producers and/or end product producer companies in the automotive market, enterprise computing market, communications market, consumer electronics market, and industrial market do not incorporate our solutions into their end products or if the end products of our customers do not achieve market acceptance, we may not be able to generate adequate license sales and royalty income from our products.

Our IP solutions include technology that manages on-chip communications in SoC semiconductor devices. We do not license our IP solutions and deployment tools directly to end-users; we license our technology primarily to companies in the automotive market, enterprise computing market, communications market, consumer electronics market, and industrial market, who then incorporate our technology into the products they sell. As a result, we rely on our customers to incorporate our technology into their end products at the design stage. Once a company incorporates a competitor's technology or develops the technology internally and incorporates it into its end product, it becomes significantly more difficult for us to sell our technology to that company because changing suppliers involves significant cost, time, effort and risk for the company. As a result, we may not achieve targeted customer acceptance despite incurring significant expenditures to develop new technology.

Moreover, even after customers agree to incorporate our technology into their end products, the design cycle is long and may be delayed due to factors beyond our control, which may result in our customers' product not reaching the market until long after our initial design win, which we define as winning the competitive bid selection process. From initial product design-in to volume production, many factors could impact the timing and/or amount of sales actually realized from the design-in. These factors include, but are not limited to, changes in the competitive position of our customers' product, our customers' financial stability, and our customers' ability to ship products under our customers' original schedule. Moreover, several external factors affect our customers' ability and willingness to start their own new product designs and to manufacture and ship their products, including target product market conditions, our customers' financial stability, our customers' competitive positioning and external economic conditions (such as, but not, limited to inflation, recessions, customer and end market supply chain constraints, geopolitical conflict, sanctions, and competition) that may prolong the customers' decision-making process and design cycle.

Further, we do not control the business practices of our customers and we do not influence the degree to which they promote, market or set their product pricing. We therefore cannot assure you that our customers will devote satisfactory efforts to promote their end products, which incorporate our IP technology and deployment solutions.

We depend on growth and economic stability in the end markets that use our products. Any slowdown in the growth and economic stability of these end markets could harm our business.

Our continued success will depend in large part on general economic growth and stability, and growth and stability within our target markets in the automotive market, enterprise computing market, communications market, consumer electronics market, and industrial market. Factors affecting these markets could seriously harm our customers and/or end customers and, as a result, harm us, examples of which include:

- Reduced sales of our customers' and/or end customers' products.
- The effects of catastrophic and other disruptive events at our customers' and/or end customers' offices or facilities including, but not limited to, natural disasters, telecommunications failures, cyber-attacks, terrorist attacks, regional conflicts, pandemics, epidemics or other outbreaks of infectious disease, including the recent COVID-19 pandemic, breaches of security or loss of critical data.
- Increased costs associated with potential disruptions to our customers' and/or end markets' supply chain and other manufacturing and production operations.
- The deterioration of our customers' and/or end customers' financial condition.

- Delays and project cancellations as a result of design flaws in the products developed by our customers and/or end customers.
- The inability of our customers and/or end customers to expand or dedicate the resources necessary to promote and commercialize their products.
- The inability of our customers and/or end customers to adapt to changing technological demands resulting in their products becoming obsolete.
- The failure of our customers' and/or end customers' products to achieve market success and gain broad market acceptance.
- Disruption and uncertainty caused by new developments in export and related regulations.
- Regional and global effect of inflation or other adverse economic conditions, such as rising interest rates, recessions or economic slowdowns, resulting in delays or cancellations of new product design starts.
- Adverse impact of multiple interest rate increases implemented and forecasted by the U.S. Federal Reserve.

Any slowdown in the growth of these end markets, or the emergence of economic instability in these end markets, could harm our business. For example, a significant element of our growth strategy depends on the increasing adoption of vehicles with more sophisticated automated driving, which will likely require more complex SoCs. If anticipated demand in the end market for these vehicles does not materialize, whether due to consumer demand not materializing, regulatory interventions delaying the deployment of automated driving, or the emergence of economic instability in end markets arising from factors such as inflationary trends, deteriorating purchasing power, trade or supply chain disruptions and regional and/or worldwide chip shortages or excess supply, demand fluctuations, unemployment spikes, labor shortages or end market reactions to regional or global geopolitical uncertainties or conflicts, or other factors beyond our control, it would adversely affect demand for our products from customers and royalty revenue and impact our ability to execute our growth strategy.

We depend on market acceptance of third-party semiconductor IP.

The semiconductor IP industry is a relatively small and emerging industry. Our future growth will depend on the level of market acceptance of our third-party licensable IP model, the variety of IP offerings available on the market and the shift in customer preference away from in-house development of semiconductor IP technologies and SIA. Furthermore, the third-party licensable IP model is highly dependent on the market adoption of new services and products, including in the automotive market, enterprise computing market, communications market, consumer electronics market, and industrial market. Such market adoption is important because the increased cost associated with ownership and maintenance of the more complex architectures in SoCs needed for the advanced services and products and time to market pressures on our customers may motivate companies to license third-party IP rather than design them in-house.

The trends that would enable our growth are largely beyond our control. Semiconductor customers also may choose to adopt a multi-chip, off-the-shelf chip solution versus licensing or using highly-integrated chipsets that embed our technologies or use our deployment software. If these market shifts do not materialize or third-party semiconductor IP does not achieve market acceptance, our business could be harmed.

The success of our business depends on sustaining or growing our licensing revenue, and the failure to achieve such revenue would lead to a material decline in our results of operations.

Our revenue consists largely of technology license fees and other fees and royalties paid for access to our patented technologies, existing technology and other development and support services we provide to our customers. Our ability to secure and renew the licenses from which our revenue is derived depends on our customers adopting our technology and using it in the products they sell. Once secured, royalty revenue may be negatively affected by factors within and outside our control, including reductions in our customers' sales prices, sales volumes, our failure to timely complete engineering deliverables and the customers' negotiated contract terms.

In addition, our customer acquisition cycle for new licenses and license renewals for existing licensees can be lengthy, typically between two to nine months, and can also be costly and unpredictable. Given the length of the sales cycle, we may incur costs in any particular financial period before any associated revenue stream begins, if at all. We cannot provide any assurance that we will be successful in signing new license agreements or renewing existing license agreements on equal or favorable terms or at all. If we do not achieve our revenue goals, our results of operations could decline.

The nature of the design win process requires us to incur significant expenses without any guarantee that research and development and sales efforts will generate revenue, which could adversely affect our financial results.

We focus on winning competitive bid selection processes, called “design wins,” to incorporate our IP interconnect and other solutions in our customers’ products. These lengthy technical and commercial selection processes may require us to incur significant expenditures and dedicate valued engineering resources to the development or enhancement of our IP interconnect and other solutions without any assurance that our bids will be selected as the design wins. If we incur such expenditures and fail to be selected in the bid selection process, our operating and financial results may be adversely affected. Further, because of the significant costs associated with qualifying new suppliers, customers are likely to use the same or an enhanced version of semiconductor IP from existing suppliers across a number of similar and successor products for a lengthy period of time. As a result, if we fail to secure an initial design win for any of IP interconnect and other solutions to any particular customer, we may lose the opportunity to make future sales of those solutions to that customer for a significant period of time, or at all, and we may experience an associated decline in revenue relating to those products. Because we expect the ASPs of our products may decline over time, we consider design wins to be critical to our future success and anticipate that for our newer products, we are and will remain highly dependent on revenue from newer design wins. Failure to achieve initial design wins may also weaken our position in future competitive selection processes because we may not be perceived as an industry leader.

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

The loss of a key customer or design win, a reduction in sales to any key customer, a significant delay or negative development in our customers’ product development plans, or our inability to attract new significant customers or secure new key design wins could harm our business.

Even if we succeed in securing design wins for our IP interconnect and other solutions and our SIA solutions, we may not generate timely or sufficient margins or margins from those wins and our financial results could suffer.

After incurring significant design and development expenditures and dedicating engineering resources to achieve a single initial design win for an IP interconnect or other solution, a substantial period of time generally elapses before we generate meaningful revenue from royalties relating to such solution, if at all. The reasons for this delay include, among other things, the following:

- Changing customer requirements, resulting in an extended development cycle for the product.
- Delay in the ramp-up of volume production of the customer’s products into which our solutions are designed.
- Delay or cancellation of the customer’s product development plans.
- Market or competitive pressures to reduce the selling price of the customer’s end-product.
- The discovery of design flaws, defects, errors or bugs in the products, whether or not those defects, errors or bugs are related to our IP interconnect and other solutions that delay the customer from finishing the product in which our IP solution is incorporated.
- Lower than expected acceptance of the customers’ end-products.

Moreover, as noted above, even if a customer selects our IP interconnect and other solutions, we cannot guarantee that this will result in any royalty or future licensing revenue, as the customer may ultimately change or cancel its product plans, or the customer's efforts to market and sell its product may not be successful.

We continually pursue new IP interconnect, SoC integration automation, and other technology initiatives, and if we fail to successfully carry out these initiatives, our business could be harmed.

As part of the evolution of our business, we have made substantial investments to develop IP interconnect, SoC integration automation solutions, other technology initiatives, and enhancements to existing technologies we license through our acquisitions and research and development efforts. Continuing to meet the requirements of smaller die size, lower power consumption, a higher frequency of operation and management of critical net latency in a timely and cost-effective manner for chips used in the automotive market, enterprise computing market, communications market, consumer electronics market, and industrial market have resulted in increased SoC design complexity for chips used in these markets. If we are unable to meet these demands for increased SoC design complexity, if we are unable to anticipate technological changes in our industry by introducing new or enhanced IP interconnect and other solutions and/or SIA solutions in a timely and cost-effective manner, or if we fail to introduce new technologies that meet market demand, we may lose our competitive position, our products may become obsolete, and our business could be harmed.

Moreover, new technologies and products may not be profitable, and even if they are profitable, operating margins for new products and businesses may not be as high as the margins we have experienced historically or originally anticipated.

Additionally, from time to time, we invest in expansion into adjacent markets, including the acquisition of Magillem and Semifore, and our growth into the IP interconnect and SIA solutions market. Although we believe these solutions are complementary to our IP interconnect solutions, we have less experience and a more limited operating history in offering software that, among other things, manages register configurations of IP blocks, assembles multiple IP blocks into SoC platforms and links design parameters and metadata to documentation, and our ongoing efforts in this area may not be successful. Our success in these product areas depend on a variety of factors, including the following:

- Our ability to continue to attract new customers in industries in which we have less experience.
- Our successful development of sales and marketing strategies that meet customer requirements.
- Our ability to accurately predict, prepare for, and promptly respond to technological developments in existing and new fields.
- Our ability to compete with new and existing competitors, many of which may have more financial resources, industry experience, brand recognition, relevant intellectual property rights, and/or more established customer relationships than we currently do, and they could include free and open-source solutions that provide similar SIA solutions.
- Our ability to continually balance our investment in adjacent markets with investment in our existing products and services.
- Our ability to attract and retain employees with expertise in new or emerging fields affecting our business.

Difficulties in any of our new product development efforts or our efforts to enter adjacent markets, including delays or disruptions due to factors outside of our control such as any adverse impact resulting from changing macroeconomic and geopolitical environments, market and inflationary pressures, export and trade controls, and COVID-19 or other pandemic, could harm our business.

A fundamental shift in technologies, the regulatory climate or demand patterns and preferences in our existing product markets or the product markets of our customers or end-users could make our current products obsolete, prevent or delay the introduction of new products or enhancements to our existing products or render our products irrelevant to our customers' needs. If our new product development efforts fail to align with the needs of our customers, including due to circumstances outside of our control like a fundamental shift in the product markets of our customers and end users or regulatory changes, our business could be harmed.

Further, we design our IP interconnect solutions to function optimally with various industry-standard core IP transaction protocols including AMBA, ACE, CHI and AXI. Should developers limit access to their IP protocol information or cease cooperation with us for any reason, our ability to support certain processors and IP protocols would be delayed, which could harm our business.

We may have to invest more resources in research and development than anticipated, which could increase our operating expenses and negatively affect our operating results.

We currently devote substantial resources to the research and development of new and enhanced interconnect IP and SIA solutions. However, we may be required to devote more resources than anticipated to address design requirements for specific target markets, new competitors, technological advances in the semiconductor industry or by competitors, our acquisitions, our entry into new markets, or other competitive factors. If we are required to invest significantly greater resources than anticipated without a corresponding increase in revenue, our operating results could decline. Additionally, our periodic research and development expenses may be independent of our level of revenue, which could negatively impact our financial results. We expect these expenses to be significant and increase in the foreseeable future as our technology development efforts continue, and there can be no guarantee that our research and development investments will result in products that create additional revenue.

We may also decide to increase our research and development investment to seize customer or market opportunities, which could negatively impact our financial results.

We continue to experience hiring challenges, including for engineering resources.

Product errors or defects could expose us to liability and harm our reputation and we could lose market share.

Software products frequently contain errors or defects, especially when first introduced, when new versions are released, or when integrated with technologies developed by acquired companies. Product errors, including those resulting from third-party suppliers, could negatively affect the performance or interoperability of our IP interconnect and SIA solutions, could delay the development or release of new solutions or new versions and could adversely affect market acceptance or perception of our technology. In addition, any allegations of manufacturability issues resulting from use of our IP interconnect and other solutions or semiconductor design efficiency issues resulting from our SIA solutions could, even if untrue, adversely affect our reputation and our customers' willingness to license our technology. Any such errors or delays in releasing new products or new versions of products or allegations of unsatisfactory performance could cause us to lose customers, increase our service costs, subject us to liability for damages and divert our resources from other tasks, any one of which could harm our business and operating results.

If we fail to offer high-quality support, our reputation could suffer.

Interconnect IP and SIA technology is complex, and our customer support is critical for the successful deployment of our IP in our customers' designs, and we maintain a team of corporate and field application engineers in our global support organization. High-quality support is important for customer retention, and the importance of our support function will increase as we expand our business and pursue new customers. If we do not help our customers quickly resolve issues and provide effective ongoing support, our ability to maintain and expand our offerings to existing and new customers could suffer, and our reputation with existing or potential customers could suffer.

Our dependence on international customers and operations also subjects us to a range of other additional regulatory, operational, financial, and political risks that could adversely affect our financial results.

We derived 59.3% of our revenue for 2022 from sales to customers outside of the United States. In particular, we derived 28.8% of our revenue in 2022 from customers located in China. For the nine months ended September 30, 2023, 64.8% of our revenue was derived from sales to customers outside of the United States and 31.0% of our revenue was derived from customers located in China. We expect our revenue from China to decrease due to the applicable U.S. government trade restrictions. As a result, the economic, political, legal and social conditions in China could harm our business. In addition, we have offices globally with our sales and research and development being conducted in offices located in the San Francisco Bay Area, Texas, France, China, South Korea, and Japan. Moreover, conducting business outside the United States subjects us to a number of additional risks and challenges, including:

- Changes in a specific country's or region's political, regulatory or economic conditions.
- Imposition of significant new export control regulations targeting the Chinese semiconductor industry and technical support of the Chinese semiconductor industry, tariffs and other barriers, restrictions and regional stability measures, including as between U.S.-China.
- A pandemic, epidemic or other outbreak of an infectious disease, including the recent COVID-19 pandemic, which may cause us or our distributors, vendors and/or customers to temporarily suspend our or their respective operations in the affected city or country or completely.
- Compliance with a wide variety of domestic and foreign laws and regulations (including those of municipalities or provinces where we have operations) and unexpected changes in those laws, export and trade controls, and regulatory requirements, including uncertainties regarding taxes, social insurance contributions and other payroll taxes and fees to governmental entities, tariffs, quotas, export controls, export licenses and other trade barriers.
- Unanticipated restrictions on our ability to sell to foreign customers where sales of products and the provision of services may require export licenses or are prohibited by government action, unfavorable foreign exchange controls and currency exchange rates.
- Potential for substantial penalties and litigation related to violations of a wide variety of laws, treaties and regulations, including labor regulations, export control and anti-corruption regulations (including the U.S. Foreign Corrupt Practices Act and the U.K. Bribery Act).
- Difficulties and costs of staffing and managing international operations across different geographic areas, time zones and cultures.
- Changes in diplomatic and trade relationships.
- Potential political, legal and economic instability, armed conflict, and civil unrest in the countries in which we and our customers are located.
- Difficulty and costs of maintaining effective data security.
- Inadequate protection of our intellectual property.
- Nationalization and expropriation.
- Restrictions on the transfer of funds to and from foreign countries, including withholding taxes and other potentially negative tax consequences.
- Unfavorable and/or changing foreign tax treaties and policies.
- Increased exposure to general market and economic conditions inside and outside of the United States.
- Currency exchange rate fluctuations and the resulting effect on our revenue and expenses, and the cost and risk of entering into hedging transactions if we chose to do so in the future.

- Increased regulatory uncertainties with respect to our wholly foreign-owned enterprise operating in China and any joint ventures we may form or contribute IP or other resources to in the future.
- Trends such as global and regional inflation, supply shortages and supply chain disruptions, geopolitical conflicts and retaliatory actions and regulations affecting or relating to regions such as but not limited to Ukraine, Russia, Eastern Europe or in the Greater China region, may lead to the deterioration of our immediate customers' and/or end market customers' ability and/or willingness to purchase, use, develop, market or sell products or solutions that incorporate or are made while using our products.

These factors, individually or in combination, could impair our ability to effectively operate one or more of our foreign facilities or deliver our semiconductor IP or SIA solutions, result in unexpected and material expenses, or cause an unexpected decline in the demand for our products in certain countries or regions. Our failure to manage the risks and challenges associated with our international business and operations could harm our business.

Downturns or volatility in general economic conditions, including as a result of geopolitical and macroeconomic conditions in the countries in which we conduct business, the recent COVID-19 pandemic or any other outbreak of an infectious disease, could harm our business.

Our revenue, gross margin, and ability to achieve and maintain profitability depend significantly on general economic conditions and the demand for products in the markets in which our customers compete. Weaknesses in the global economy and financial markets, including the current weaknesses resulting from the ongoing COVID-19 pandemic, and any adverse changes in general domestic and global economic conditions that may occur in the future, including any recession, economic slowdown or disruption of credit markets, may lead to, lower demand for products that incorporate our solutions, including in the automotive market, enterprise computing market, communications market, consumer electronics market, and industrial market. A decline in end-user demand can affect our customers' demand for our products, the ability of our customers to obtain credit and otherwise meet their payment obligations and the likelihood of customers canceling or deferring existing orders. Our business could be harmed by such actions.

Because we conduct business, have offices in and derive revenue from customers in China, our business performance may be affected by increased political tensions and changes in China's political, social and economic environment. For example, political instability resulting from changes in the relationship between the United States and China could negatively impact our business. Any significant armed conflict related to this matter is expected to materially and adversely damage our business. Moreover, the role of the Chinese government in the Chinese economy is significant. Chinese policies toward economic liberalization, and laws and policies affecting technology companies, foreign investment, currency exchange rates, taxes and other matters could change, resulting in greater restrictions on our ability and our suppliers' ability to do business and operate facilities in China. If any of these changes were to occur, our business could be harmed and our stock price could decline.

Any disruption in the credit markets, including as a result of the recent COVID-19 pandemic, could also impede our access to capital. If we have limited access to additional financing sources, we may be required to defer capital expenditures or seek other sources of liquidity, which may not be available to us on acceptable terms or at all. All of these factors related to global economic conditions, which are beyond our control, could harm our business. For a more detailed discussion of the COVID-19 pandemic and its recent and potential impact on our business, see “—Our business has been, and may continue to be, adversely affected by health epidemics, pandemics and other outbreaks of infectious disease, including the recent COVID-19 pandemic.”

The Company maintains the majority of its cash and cash equivalents in accounts with major U.S. and multi-national financial institutions, and our deposits at certain of these institutions exceed insured limits. Market conditions can impact the viability of these institutions. In the event of failure of any of the financial institutions where we maintain our cash and cash equivalents, there can be no assurance that we would be able to access uninsured funds in a timely manner or at all. Any inability to access or delay in accessing these funds could adversely affect our business and financial position.

The cyclical nature of the semiconductor industry, including significant supply chain disruption, may limit our ability to maintain or improve our revenue.

The semiconductor industry is highly cyclical and is prone to significant downturns from time to time. Cyclical downturns can result from a variety of market forces including constant and rapid technological change, rapid product obsolescence, price erosion, evolving standards, short product life cycles and wide fluctuations in product supply and demand, all of which can result in significant declines in semiconductor demand. We have experienced downturns in the past and may experience such downturns in the future. For example, the industry experienced a significant downturn in connection with the most recent global recession in 2008, and further experienced downturns in 2020 and 2022, which may be prolonged as a result of the economic impact of the COVID-19 pandemic. These downturns have been characterized by diminished product demand, production overcapacity, high inventory levels and accelerated erosion of average selling prices. Recently, downturns in the semiconductor industry have been attributed to a variety of factors, including the recent COVID-19 pandemic, ongoing trade disputes among the United States and China, weakness in demand and pricing for semiconductors across applications and excess inventory.

Economic downturns have directly impacted our business, as has been the case with many other companies, suppliers, distributors and customers in the semiconductor industry and other industries around the world, and any prolonged or significant future downturns in the semiconductor industry could harm our business. Conversely, significant upturns may suppress customer shipments of royalty-bearing products incorporating our IP solutions due to our customers having limited access to third-party foundry and assembly capacity. In the event of such an upturn, we may not be able to expand our workforce and operations in a sufficiently timely manner, procure adequate resources, or locate suitable third-party suppliers or other third-party subcontractors to respond effectively to changes in demand for our existing products or to the demand for new products requested by our customers, and our business could be harmed.

The semiconductor industry has also faced significant global supply chain issues as a result of the impact both on demand for devices to enable wireless connectivity and remote environments and on supply from the related imposition of government restrictions on staffing and facility operations due to the recent COVID-19 pandemic as well as other trends such as the increasing demand for semiconductors in automobiles, which together have resulted in the inability of fabrication plants to produce sufficient quantities of chips to meet demand, supply chain shortages and other disruptions. Numerous factors, such as the further trade tensions between the U.S. and China, such as the revisions to the U.S. regulations governing the export of certain semiconductor related hardware and software to China announced by the U.S. Department of Commerce's Bureau of Industry and Security on October 7, 2022, may prolong or deepen these challenges faced by the industry.

Our revenue has been concentrated among a small number of licensees and customers, and if we lose any of these customers and fail to replace them, our revenue may decrease substantially.

A significant amount of our revenue is derived from a limited number of customers. We expect that a relatively small number of customers will continue to account for a substantial portion of our revenue for the foreseeable future.

As a result of this revenue concentration, our results of operations could be adversely affected by the decision of a single key licensee or customer to cease using our technology or products or by a decline in the number of products that incorporate our technology that are sold by a single licensee or customer or by a small group of licensees or customers. We must continue to obtain new significant licensees and to increase our revenue and grow our business.

Failure to effectively expand our sales and marketing capabilities could harm our ability to increase our customer base and achieve broader market acceptance of our products.

Our ability to increase our customer base and achieve broader market acceptance of our products and platform capabilities will depend to a significant extent on our ability to expand our global sales and application engineering organization. We plan to continue expanding our sales force, both domestically and internationally. We also plan to dedicate significant resources to sales and marketing programs. All of these efforts will require us to invest significant financial and other resources. Our business will be harmed if our sales and marketing efforts do not generate significant increases in revenue or increases in revenue are smaller than anticipated. We may not achieve anticipated revenue growth from expanding our sales force if we are unable to hire, develop, integrate and retain talented and effective sales personnel, if our new and existing sales personnel, on the whole, are unable to achieve desired productivity levels in a reasonable period of time, or if our sales and marketing programs are not effective.

We experience a strong seasonality in sales in the fourth calendar quarter of the year. As a result, our results of operations are subject to substantial quarterly fluctuations, which may seriously harm our business.

We have experienced, and expect to continue to experience, seasonal fluctuations in sales due to the spending patterns of semiconductor customers who license our products. Typically, the number of total new license agreements we enter into have generally been lowest in the first and second calendar quarters. We expect these seasonality trends to continue. As a result, revenue recognized from our total new license agreements are subject to seasonal fluctuations, which may seriously harm our business.

Substantial portions of our sales are made, and we anticipate will be made, to automotive, enterprise computing, communications, consumer electronics, and industrial suppliers. Any downturn in any of these markets could significantly harm our business.

Each of these sectors is subject to specific market risks. The consumer sector, for example, is subject to changes in end consumer spending patterns, technology developments and general economic conditions.

We are also exposed to the risks associated with the automotive market. For example, our anticipated future growth is highly dependent on the adoption of autonomous driving technologies, which are expected to have increased sensor and power product content. A downturn in the automotive market could delay automakers' plans to introduce new vehicles with these features, which would negatively impact the demand for our products and our ability to grow our business.

Several industries in which companies incorporate our technology, including the automotive industry and others, may undergo consolidation and reorganization and, in some cases, their suppliers may or have entered bankruptcy. Although we have not experienced any lost business or material bad debt write-offs as a result of such consolidation, such trends could harm our business.

Moreover, as a result of the COVID-19 pandemic and the associated responses by governments of various countries to respond and to prevent its spread, the automotive industry, including manufacturers, dealers, distributors, and third-party suppliers have been adversely impacted. For example, many automotive manufacturers were forced to suspend manufacturing operations and may be required to do so again. In addition, government-imposed restrictions on businesses, operations and travel and the related economic uncertainty have impacted demand in many global markets. While demand in the automotive industry is dependent on a number of factors, automotive manufacturers expect the impact of COVID-19 was highly dependent on its duration and severity. The foregoing impacts and other adverse effects on the automotive industry could harm our business, as well as our ability to execute our growth strategy.

Our business has been, and may continue to be, adversely affected by health epidemics, pandemics and other outbreaks of infectious disease, including the recent COVID-19 or similar pandemic.

Public health threats, such as COVID-19, influenza and other highly communicable diseases or viruses, outbreaks of which have from time to time occurred in various parts of the world in which we operate could adversely impact our operations, as well as the operations of our customers, end users of our products, and our and their respective vendors, suppliers and other business partners. Any of these public health threats and related consequences could adversely affect our financial results and could reduce our ability to access capital.

The ultimate extent of the impact of any epidemic, pandemic, or other health crisis on our business will depend on multiple factors that are highly uncertain and cannot be predicted, including its severity, location and duration, and actions taken to contain or prevent further its spread. Additionally, such crises could increase the magnitude of many of the other risks described in this Quarterly Report on Form 10-Q, and may have other material adverse effects on our operations that we are not currently able to predict. If our business and the markets in which we operate experience a prolonged occurrence of adverse public health conditions, it could materially adversely affect our business, financial condition, and results of operations.

We received a Paycheck Protection Program loan, and our application for the PPP Loan could in the future be determined to have been impermissible or could result in damage to our reputation.

In April 2020, we applied for and received an unsecured \$1.6 million loan under the Paycheck Protection Program (the PPP Loan). In December 2020, the PPP Loan was forgiven in full. The Paycheck Protection Program was established under the Coronavirus Aid, Relief, and Economic Security Act (the CARES Act), and is administered by the U.S. Small Business Administration (the SBA). In addition, in May 2020, Semifore, Inc., a company that we recently acquired, was a recipient of \$0.1 million of proceeds from a note payable issued under the Paycheck Protection Program (PPP) under section 7(a)(36) of the Small Business Act. The note was repaid in full in December 2020.

Our receipt of the PPP Loan or the forgiveness of the PPP Loan could result in adverse publicity. In addition, if we are later determined to have been ineligible to receive the PPP Loan or loan forgiveness, we may be subject to significant penalties, including significant civil, criminal and administrative penalties, we could be required to repay the PPP Loan in its entirety, and our reputation could suffer. A review or audit by the SBA or other government entity or claims under the U.S. False Claims Act could consume significant financial and management resources.

A significant portion of our revenue comes from licensing fees, which may vary period to period.

License agreements for our interconnect IP are generally treated as ratable revenue, with revenue being recognized evenly over the license term. In recent periods we have made and will continue to make certain changes to SIA agreements that result in ratable recognition of the related license revenue over the contract term. Still, significant portions of our anticipated future revenue depends upon our success in attracting new customers, or continuing or expanding our relationships with existing customers, and revenue recognized from licensing arrangements varies from period to period, depending on the number and size of deals closed during a quarter, and is difficult to predict. In addition, as we expand our business into new markets, our licensing deals may be smaller in volume but greater in value in volume, which may further fluctuate our licensing revenue quarter to quarter. Our ability to succeed in our licensing efforts will depend on a variety of factors, including the market positioning, performance, delivery, quality, breadth and depth of our current and future IP interconnect and other solutions as well as our sales and marketing skills. Our failure to obtain future licensing customers would impede our future revenue growth and could materially harm our business.

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

Royalty rates could decrease for existing and future license agreements, which could materially adversely affect our operating results.

Royalty payments to us under existing and future license agreements could be lower than currently anticipated for a variety of reasons. Average selling prices for semiconductor products generally decrease over time during the lifespan of a product. Our gross margins and financial results will suffer if we are unable to offset reductions in our average selling prices by reducing our costs, developing new or enhanced products or solutions on a timely basis with higher selling prices or gross margins, or increasing our sales volumes. In addition, there is significant pressure to maintain low royalty rates in certain markets where the end product may have a low average sales price, such as many consumer electronics products. In addition, there is increasing downward pricing pressures in the semiconductor industry on end products incorporating our technology, especially end products for consumer electronics markets. As a result, notwithstanding the existence of a license agreement, our customers may demand that royalty rates for our products on future or renewal agreements be lower than our historic royalty rates. Furthermore, our competitors may lower the royalty rates for their comparable products to win market share which may force us to lower our royalty rates on future or renewal agreements as well. As a consequence of the above referenced factors, as well as unforeseen factors in the future, the royalty rates we receive for use of our technology could decrease with new or renewed customers, thereby decreasing future anticipated revenue and cash flow. Variable royalty revenue was 9.9% of our revenue for the nine months ended September 30, 2023. Therefore, a significant decrease in our royalty revenue could materially adversely affect our operating results.

Moreover, royalty rates may be negatively affected by macroeconomic and geopolitical trends, including from global semiconductor supply chain issues (including from shortages in the availability of the supply of chips in several semiconductor sectors and applications), the recent COVID-19 or similar pandemic and its world effects and changes in products mix. Furthermore, consolidation among our customers may increase the leverage of our existing customers to extract concessions from us in royalty rates.

Changing currency exchange rates could harm our business.

We have operations and assets in the U.S. as well as foreign jurisdictions, and we prepare our consolidated financial statements in U.S. dollars, but a portion of our earnings and expenditures are denominated in other currencies. We therefore must translate our foreign assets, liabilities, revenue and expenses into U.S. dollars at applicable exchange rates. Consequently, fluctuations in the value of foreign currencies relative to the U.S. dollar may negatively affect the value of these items in our financial statements. In addition, since many of our sales in foreign jurisdictions are denominated in U.S. dollars, fluctuations in the value of foreign currencies relative to the U.S. dollar may effectively increase the price of our products in the currency of the jurisdiction in which the sale took place and may result in our products becoming too expensive for non-U.S. customers who do not conduct their business in U.S. dollars. Furthermore, currency exchange rates have been especially volatile in the recent past, and these currency fluctuations may make it difficult for us to predict our results of operations. If the volume of our international operations increases and foreign currency exchange rates change, the impact to our consolidated statements of operations could be significant and may affect the comparability of operating results. The impact from foreign currency exchange for the nine months ended September 30, 2023 was immaterial. We do not believe a 10% increase or decrease in foreign exchange rates would have resulted in a material impact to our operating results. To the extent we fail to manage our foreign currency exposure adequately, we may suffer losses in the value of our net foreign currency investment, and our business may be harmed.

In particular, in light of the military conflict between Russia and Ukraine, and Israel conflict, and the tensions between the European Union, other European countries, as well as the United States, with Russia, any resulting material change to the valuation of the Euro or other currency relative to the U.S. dollar could adversely impact our operating results.

We have made acquisitions and, in the future expect to pursue acquisitions of and investments in new businesses, products or technologies, joint ventures and other strategic transactions that involve numerous risks and could disrupt and harm our business.

As part of our business strategy, we make acquisitions of and investments in new businesses, such as our acquisitions of Magillem and Semifore, Inc., products and technologies and enter into joint ventures and other strategic relationships in the ordinary course. Our ability to grow our revenue, earnings and cash flow at or above our historic rates depends in part upon our ability to identify and successfully acquire and integrate businesses at acceptable prices, realize anticipated synergies and make appropriate investments that support our long-term strategy. We may not be able to consummate acquisitions at rates similar to the past, which could adversely impact our growth rate and the trading price of our common stock. Promising acquisitions and investments are difficult to identify and complete for a number of reasons, including high valuations, competition among prospective buyers, the availability of affordable funding in the capital markets and the need to satisfy applicable closing conditions and obtain applicable antitrust and other regulatory approvals on a timely basis and on acceptable terms. In addition, competition for acquisitions and investment may result in higher purchase prices. Changes in accounting or regulatory requirements or instability in the credit markets could also adversely impact our ability to consummate acquisitions and investments on acceptable terms or at all.

In addition, even if we are able to consummate acquisitions and enter into joint ventures and other strategic relationships, these transactions and relationships present a number of potential risks and challenges that could, if not met, disrupt our business operations, increase our operating costs, negatively affect our growth rate and the trading price of our common stock, and may harm our business. In addition, our Magillem and Semifore, Inc. acquisitions along with our Transchip investment as well as any acquisition, investment, joint venture or other strategic transaction that we may enter into in the future, involve a number of additional financial, accounting, managerial, operational, legal, regulatory and other risks, which may include, among others:

- Any business, technology, service or product that we acquire or invest in could under-perform relative to our expectations and the price that we paid or not perform in accordance with our anticipated timetable, or we could fail to operate any such business profitably.
- We may incur or assume significant debt in connection with our acquisitions, joint ventures and other strategic relationships, which could also cause a deterioration of our credit ratings, result in increased borrowing costs and interest expense and diminish our future access to the capital markets. Alternatively, we may issue additional equity securities, which could dilute your ownership and voting power.
- We expect to incur integration and startup costs.
- Acquisitions, joint ventures and other strategic relationships could cause our financial results to differ from our own or the investment community's expectations in any given period, or over the long-term challenges associated with integrating employees from the acquired company into our organization.
- Pre-closing and post-closing earnings charges could adversely impact operating results in any given period, and the impact may be substantially different from period to period.
- Acquisitions, joint ventures and other strategic relationships could create demands on our management, operational resources and financial and internal control systems that we are unable to effectively address.
- We could experience difficulty in integrating personnel, operations and financial and other controls and systems and retaining key employees and customers.
- We may be unable to achieve cost savings or other synergies anticipated in connection with an acquisition, joint venture or other strategic relationship.
- We may assume unknown liabilities, known contingent liabilities that become realized, known liabilities that prove greater than anticipated, internal control deficiencies or exposure to regulatory sanctions resulting from the acquired company's or investee's activities and the realization of any of these liabilities or deficiencies may increase our expenses, adversely affect our financial position and/or cause us to fail to meet our public financial reporting obligations.

- In connection with acquisitions and joint ventures, we often enter into post-closing financial arrangements such as purchase price adjustments, earn-out obligations and indemnification obligations, which may have unpredictable financial results.
- As a result of our acquisitions, we have recorded significant goodwill and other assets on our consolidated balance sheet and if we are not able to realize the value of these assets, or if the fair value of our investments declines, we may be required to incur impairment charges.
- We may have interests that diverge from those of our joint venture partners or other strategic partners and we may not be able to direct the management and operations of the joint venture or other strategic relationship in the manner we believe is most appropriate, exposing us to additional risk.
- Investing in or making loans to early-stage companies often entails a high degree of risk, and we may not achieve the strategic, technological, financial or commercial benefits we anticipate; we may lose our investment or fail to recoup our loan; or our investment may be illiquid for a greater-than-expected period of time.

Furthermore, potential acquisitions, investments, divestitures, joint ventures and other strategic transactions, whether or not consummated, may divert our management's attention and require considerable cash outlays at the expense of our existing operations. This, and any of the risks set forth above, could harm our business.

Our ability to raise capital in the future may be limited and could prevent us from executing our growth strategy.

Our ability to operate and expand our business depends on the availability of adequate capital, which in turn depends on cash flow generated by our business and equity or other applicable financing arrangements. We believe that our existing cash and cash equivalents, short-term investments and cash provided by sales of our products will satisfy our anticipated cash requirements for at least the next 12 months. However, we have based this estimate on our current operating plans and expectations, which are subject to change, and cannot assure you that that our existing resources will be sufficient to meet our future liquidity needs. We may require additional capital to respond to business opportunities, challenges, acquisitions or other strategic transactions and/or unforeseen circumstances. The timing and amount of our working capital and capital expenditure requirements may vary significantly depending on numerous factors, including:

- market acceptance of our semiconductor IP and other solutions, and our SIA solutions;
- the need to adapt to changing technologies and technical requirements;
- the existence of opportunities for expansion; and
- access to and availability of sufficient management, technical, marketing and financial personnel.

If our capital resources are insufficient to satisfy our liquidity requirements, we may seek to sell additional equity securities or debt securities or obtain additional debt financing. The sale of additional equity securities or convertible debt securities would result in additional dilution to our stockholders. Additional debt would result in increased expenses and could result in covenants that would restrict our operations and our ability to incur additional debt or engage in other capital-raising activities. We have not made arrangements to obtain additional financing and there is no assurance that financing, if required, will be available in amounts or on terms acceptable to us, if at all. If we are unable to obtain adequate financing or financing on terms satisfactory to us, when we require it, our ability to continue to grow and support our business and respond to business opportunities and challenges could be significantly limited.

We may not be able to effectively manage our growth, and we may need to incur significant expenditures to address the additional operational and control requirements of our growth, either of which could harm our business and operating results.

In order to succeed in executing our business plan, we will need to manage our growth effectively as we make significant investments in research and development and sales and marketing and expand our operations and infrastructure both domestically and internationally. In addition, in connection with operating as a public company, we will incur additional significant legal, accounting and other expenses that we did not incur as a private company. If our revenue does not increase to offset these increases in our expenses, we may not achieve or maintain profitability in future periods.

To continue to grow and to meet our ongoing obligations as a public company, we must continue to expand our operational, engineering, accounting and financial systems, procedures, controls and other internal management systems. This may require substantial managerial and financial resources, and our efforts in this regard may not be successful. Our current systems, procedures and controls may not be adequate to support our future operations and we may be unable to meet reporting obligation deadlines under the Exchange Act. Unless our growth results in an increase in our revenue that is proportionate to the increase in our costs associated with this growth, our operating margins will be adversely affected. If we fail to adequately manage our growth, improve our operational, financial and management information systems, or effectively motivate and manage our new and future employees, it could harm our business.

We depend on key and highly skilled personnel to operate our business, and if we are unable to retain our current personnel and hire additional personnel, our ability to develop and market our products could be harmed, which in turn could adversely affect our financial results.

Our success depends to a large extent upon the continued services of our executive officers, managers and skilled personnel, including our development engineers. In particular, we are highly dependent on the services of K. Charles Janac, our President, Chief Executive Officer and Chairman, who has been critical in the development and growth of our business and strategic direction, and we do not have key person insurance. From time to time, there may be changes in our executive management team or other key personnel, which could disrupt our business. Generally, our employees are not bound by obligations that require them to continue to work for us for any specified period and, therefore, they could terminate their employment with us at any time. Moreover, our employees are generally not subject to non-competition agreements. Given these limitations, we may not be able to continue to attract, retain and motivate qualified personnel necessary for our business.

In addition, we recruit from a limited pool of engineers with expertise in SoC design and the competition for such personnel can be intense. The loss of one or more of our executive officers or other key personnel, the loss of access to certain jurisdictions in the event of geopolitical conflict or changes in regulatory frameworks, or our inability to locate suitable or qualified replacements could be significantly detrimental to our product development efforts and could harm our business. In addition, we must attract and retain highly qualified personnel, including certain foreign nationals who are not U.S. citizens or permanent residents, many of whom are highly skilled and constitute an important part of our U.S. workforce, particularly in the areas of engineering and product development. Our ability to hire and retain these employees and their ability to remain and work in the U.S. are impacted by laws and regulations, as well as by procedures and enforcement practices of various government agencies. Changes in immigration laws, regulations or procedures may adversely affect our ability to hire or retain such workers, increase our operating expenses and negatively impact our ability to deliver our products and services, any of which would harm our business.

Volatility in, or lack of performance of, our stock price may also affect our ability to attract and retain key personnel. Employees may be more likely to terminate their employment with us if the shares they own or the shares underlying their vested options or restricted stock units have significantly depreciated or otherwise expressed volatility in value relative to the original purchase prices of the shares or the exercise prices of the options, or, conversely, if the exercise prices of the options that they hold are significantly above the trading price of our common stock. If we are unable to retain our employees, our business could be harmed.

Our management team has limited experience managing a public company.

Many members of our management team have limited experience managing a publicly-traded company, interacting with public company investors and complying with the increasingly complex laws pertaining to public companies. Our management team may not successfully or efficiently manage us as a public company subject to significant regulatory oversight and reporting obligations under the federal securities laws and the continuous scrutiny of securities analysts and investors. These new obligations and constituents require significant attention from our senior management and could divert their attention away from the day-to-day management of our business, which could harm our business.

Catastrophic events may disrupt our business.

Our corporate headquarters are located in an area that is an active earthquake zone. In the event of a major earthquake, hurricane or other forms of catastrophic event such as fire, power loss, telecommunications failure, cyber-attack, war, terrorist attack or disease outbreak, we may be unable to continue our operations and may endure system interruptions, reputational harm, delays in our product development, breaches of data security, or loss of critical data, any of which could have an adverse effect on our future results of operations.

If our counterparties are unable to fulfill their financial and other obligations to us, our business and results of operations may be affected adversely.

Any downturn in economic conditions, geopolitical events or other business factors could threaten the financial health of our counterparties, including companies with which we have entered into licensing agreements, and their ability to fulfill their financial and other obligations to us. Such financial pressures on our counterparties may eventually lead to bankruptcy proceedings or other attempts to avoid financial obligations that are due to us. Because bankruptcy courts have the power to modify or cancel contracts of the petitioner which remain subject to future performance and alter or discharge payment obligations related to pre-petition debts, we may receive less than all of the payments that we would otherwise be entitled to receive from any such counterparty as a result of bankruptcy proceedings.

Risks Related to Intellectual Property, Information Technology and Data Security and Privacy

If we are unable to protect our proprietary technology and inventions through patents and other intellectual property rights, our ability to compete successfully and our financial results could be adversely impacted.

We seek to protect our proprietary technology and innovations, particularly those relating to the design of our products, through patents, trade secrets and other intellectual property rights. As of September 30, 2023, we had 148 total allowed or issued patents, pending patent applications and non-expired provisional patent applications worldwide. Of these, we had 71 allowed or issued patents, 63 of which are U.S. allowed or issued patents, four of which are allowed or issued China patents, two are South Korea issued patents, one is a U.K. issued patent, and one is a Japan issued patent. The 71 allowed or issued patents generally expire between July 2035 and December 2041. As of September 30, 2023, we had 77 pending non-provisional and provisional patent application filings, including 32 in the United States, 21 in Europe, 17 in China, four in South Korea and three in Japan. Maintenance of patent portfolios, particularly outside of the United States, is expensive, and the process of seeking patent protection is lengthy and costly. While we intend to maintain our current portfolio of patents and to continue to prosecute our currently pending patent applications and file future patent applications when appropriate, the value of these actions may not exceed their expense. Existing patents and those that may be issued from any pending or future applications may be subject to challenges, invalidation or circumvention, and the rights granted under our patents may not provide us with meaningful protection or any commercial advantage. In addition, the protection afforded under the patent laws of one country may not be the same as that in other countries. This means, for example, that our right to exclusively commercialize a product in those countries where we have patent rights for that product can vary on a country-by-country basis. We also may not have the same scope of patent protection in every country where we do business.

Additionally, it is difficult to predict the impact of generative artificial intelligence (AI) on our intellectual property rights risk portfolio and costly to monitor the use of our intellectual property. It may be the case that our intellectual property is already being infringed and infringement may occur in the future without our knowledge. Litigation may be necessary to enforce our intellectual property rights. While it is our policy to protect and defend our rights to our IP, we cannot predict whether steps taken by us to enforce and protect our intellectual property rights will be adequate to prevent infringement, misappropriation, or other violations of our intellectual property rights. Any inability to meaningfully enforce our intellectual property rights could harm our ability to compete. Moreover, in any lawsuit we bring to enforce our intellectual property rights, a court may refuse to stop the other party from using the technology at issue on grounds that our intellectual property rights do not cover the technology in question. Further, in such proceedings, the defendant could counterclaim that our intellectual property is invalid or unenforceable and the court may agree, in which case we could lose valuable intellectual property rights. Any litigation of this nature, regardless of outcome or merit, could materially harm our business and hurt our competitive advantage.

If we are unable to protect our proprietary technology and inventions through trade secrets, our competitive position and financial results could be adversely affected.

As noted above, we seek to protect our proprietary technology and innovations, particularly those relating to our products, as patents, trade secrets and other forms of intellectual property. Additionally, while software and other forms of our proprietary works may be protected under copyright law, in some cases we have chosen not to register any copyrights in these works, and instead, primarily rely on protecting our software as a trade secret. In the United States, trade secrets are protected under the federal Economic Espionage Act of 1996 and the Defend Trade Secrets Act of 2016 (the Defend Trade Secrets Act), and under state law, with many states having adopted the Uniform Trade Secrets Act (the UTSA) and several of which that have not. In addition to these federal and state laws inside the United States, under the World Trade Organization's Trade Related-Aspects of IP Rights Agreement (the TRIPS Agreement), trade secrets are to be protected by World Trade Organization member states as "confidential information." Under the UTSA and other trade secret laws, protection of our proprietary information as trade secrets requires us to take steps to prevent unauthorized disclosure to third parties or misappropriation by third parties. In addition, the full benefit of the remedies available under the Defend Trade Secrets Act requires specific language and notice requirements present in the relevant agreements, which may not be present in all of our agreements. While we require our officers, employees, consultants, distributors, and existing and prospective customers and collaborators to sign confidentiality agreements and take various security measures to protect unauthorized disclosure and misappropriation of our trade secrets, we cannot assure or predict that these measures will be sufficient. The semiconductor industry is generally subject to high turnover of employees, so the risk of trade secret misappropriation may be amplified. If any of our trade secrets are subject to unauthorized disclosure or are otherwise misappropriated by third parties, our competitive position may be materially and adversely affected.

Our ability to compete successfully depends in part on our ability to commercialize our IP solutions without infringing the patent, trade secret or other intellectual property rights of others.

To the same extent that we seek to protect our technology and inventions with patents, trade secrets and other intellectual property rights, our competitors and other third parties do the same for their technology and inventions. We have no means of knowing the content of patent applications filed by third parties until they are published. It is also difficult and costly to continuously monitor the intellectual property portfolios of our competitors to ensure our technologies do not violate the intellectual property rights of any third parties.

Claims by other companies that we infringe their intellectual property rights or that patents on which we rely are invalid could adversely affect our business.

The semiconductor industry is ripe with patent assertion entities and is characterized by frequent litigation regarding patent and other intellectual property rights. From time to time, we receive communications from or are sued by third parties that allege that our products or technologies infringe their patent or other intellectual property rights. As a public company with an increased profile and visibility, we may receive similar communications in the future. Lawsuits or other proceedings resulting from allegations of infringement could subject us to significant liability for damages, invalidate our proprietary rights and harm our business. We may not prevail in lawsuits alleging patent infringement given the complex technical issues and inherent uncertainties in intellectual property litigation. If any of our products, technologies or services from which we derive or expect to derive a substantial portion of our revenues, were found to infringe on another company's intellectual property rights, we could be subject to damages, an injunction and/or other equitable relief that would force the removal of such product from the market or we could be required to redesign such product, or take a license to the third party technology, which could be costly. We could also be ordered to pay damages or other compensation, including punitive damages and attorneys' fees to such other company. A negative outcome in any such litigation could also severely disrupt the sales of our marketed products to our customers or their customers, which in turn could harm our relationships with our customers, our market share and our product revenues. Even if we are ultimately successful in defending any intellectual property litigation, such litigation is expensive and time consuming, will divert our management's attention from our business and may harm our reputation.

In the event that any third-party succeeds in asserting a valid claim against us or any of our customers, we could be forced to do one or more of the following:

- discontinue selling access to certain technologies that contain the allegedly infringing intellectual property which would result in a decline in our revenue and could result in breach of contract claim by our affected customers and damage to our reputation;
- stop receiving payment from a customer that can no longer sell the end-product if it contains allegedly infringing intellectual property;
- seek to develop non-infringing technologies, which may not be feasible;
- incur significant legal expenses;
- pay substantial monetary damages to the party whose intellectual property rights we may be found to be infringing; and/or
- we or our customers could be required to seek licenses to the infringed technology that may not be available on commercially reasonable terms, if at all.

If a third party causes us to discontinue the use of any of our technologies, we could be required to design around those technologies. This could be costly and time consuming and could have an adverse impact on our financial results. Any significant impairments of our intellectual property rights from any litigation we face could harm our business and our ability to compete in our industry.

We may not be able to continue to obtain licenses to third-party software and intellectual property on reasonable terms or at all, which may disrupt our business and harm our financial results.

We license third-party software and other intellectual property for use in product research and development and, in several instances, for inclusion in our products such as our license with Qualcomm for FlexNoC. We also license third-party software, including the software of our competitors, to test the interoperability of our products with other industry products and in connection with our professional services. Our third-party licenses typically limit our use of IP to specific uses and for specific time periods, and include other contractual obligations with which we must comply. Moreover, certain intellectual property rights may be licensed to us on a non-exclusive basis, and accordingly, the owners of such intellectual property rights are free to license such rights to third parties, including our competitors, on terms that may be superior to those offered to us, which could place us at a competitive disadvantage. These licenses may need to be renegotiated or renewed from time to time, or we may need to obtain new licenses in the future. For example, we may be required to renegotiate or seek a waiver to or consent under our license with Qualcomm with respect to our FlexNoC product in the event of certain changes of control (as defined in our agreements with Qualcomm) and there can be no guarantee we would be successful in such endeavor. Such provision could prevent us from pursuing a robust sales process in the event of a sale of the company if Qualcomm refuses to provide consent or waive such change in control provision. In such an event, a change in control could cause us to lose our license with Qualcomm and our valuation could be adversely affected. See “Business—Material Agreement—Qualcomm Agreements” in our 2022 Form 10-K for additional information. Third parties may stop adequately supporting or maintaining their technology, or they or their technology may be acquired by our competitors. If we are unable to obtain licenses to these third-party software and intellectual property rights on reasonable terms or at all, we may not be able to sell or support the affected products, our customers’ use of the products may be interrupted, and/or our product development processes and professional services offerings may be disrupted, which could in turn harm our financial results, our customers, and our reputation. Further, if we or our third-party licensors were to breach any material term of a license, such a breach could, among other things, prompt costly litigation, result in the license being terminated or result in fines and other damages. If any of the following were to occur, it could harm our business and our reputation.

We also cannot be certain that our licensors are not infringing the intellectual property rights of others or that our licensors have sufficient rights to the intellectual property to grant us the applicable licenses. Although we seek to mitigate this risk contractually, we may not be able to sufficiently limit our potential liability. If we are unable to obtain or maintain rights to any of this intellectual property because of intellectual property rights infringement claims brought by third parties against our licensors or against us, our ability to develop, maintain and support our products and technology incorporating that intellectual property could be severely limited and our business could be harmed. Furthermore, regardless of outcome, infringement claims may require us to use significant resources and may divert management’s attention.

Some of our products and technology, including those we acquire, may include software licensed under open-source licenses. Use and distribution of open-source software, where applicable, may entail greater risks than use of third-party commercial software, as open-source licensors generally do not provide support, warranties, indemnification, or other contractual protections regarding infringement claims or the quality of the code. To the extent that our technology may in the future depend upon the successful operation of open-source software, any undetected errors or defects in this open-source software could prevent the deployment or impair the functionality of such technologies and injure our reputation.

Moreover, some open-source software licenses require users who distribute that open-source software as part of their proprietary software to publicly disclose all or part of the source code to such software and make available any derivative works or modifications of the open-source code on unfavorable terms or at no cost. If we were to combine our proprietary software with such open-source software in a certain manner, we could, under certain circumstances, be required to comply with such license terms. Although we have tools and processes to monitor and restrict our use of open-source software, the risks associated with open-source usage cannot be eliminated and may, if not properly addressed, result in unanticipated obligations that could harm our business.

Any dispute regarding our intellectual property may require us to indemnify certain customers, the cost of which could severely harm our business.

In any potential dispute involving our patents or other intellectual property, our customers could also become the target of litigation. Some of our agreements, including those with key customers like Texas Instruments Incorporated and Samsung Electronics Co., Ltd., provide for indemnification, and some require us to provide technical support and information to a customer that is involved in litigation involving use of our technology. In addition, we may be exposed to indemnification obligations, risks and liabilities that were unknown at the time that we acquired assets or businesses for our operations. Any of these indemnification and support obligations could result in substantial and material expenses. In addition to the time and expense required for us to indemnify or supply such support to our customers, a customer's development, marketing and sales of licensed semiconductors, mobile communications and data security technologies could be severely disrupted or shut down as a result of litigation, which in turn could severely harm our business as a result of lower or no royalty payments.

Cybersecurity threats continue to increase in frequency and sophistication; a successful cybersecurity attack could interrupt or disrupt our information technology systems, or those of our third-party service providers, or cause the loss of confidential or protected data which could disrupt our business, force us to incur excessive costs or cause reputational harm.

Security breaches, computer malware and computer hacking attacks have become more prevalent across industries and may occur on our systems or those of our third-party service providers or partners. The size and complexity of our information systems make such systems potentially vulnerable to service interruptions or to security breaches from inadvertent or intentional actions by our employees or vendors, or from attacks by malicious third parties. Such attacks are increasing in their frequency, levels of persistence, levels of sophistication and intensity, and are being conducted by sophisticated and organized groups and individuals with a wide range of motives and expertise. As a result of the recent COVID-19 or similar pandemic, we may face increased cybersecurity risks due to our reliance on internet technology and the number of our employees who are working remotely, which may create additional opportunities for cybercriminals to exploit vulnerabilities. In addition to unauthorized access to or acquisition of personal data, confidential information, intellectual property or other sensitive information, such attacks could include the deployment of harmful malware and ransomware, and may use a variety of methods, including denial-of-service attacks, phishing, social engineering and other means, to attain such unauthorized access or acquisition or otherwise affect service reliability and threaten the confidentiality, integrity and availability of information. Like many other companies, we experience attempted cybersecurity actions on a frequent basis, and the frequency of such attempts could increase in the future. While we have invested in the protection of data and information technology, there can be no assurance that our efforts will prevent or quickly identify service interruptions or security breaches. For example, in 2019 a customer paid an invoice to a fraudulent third party and such amount could not be recovered. The techniques used by cybercriminals to obtain unauthorized access to systems or sabotage systems, or disable or degrade services, change frequently, may not be recognized until launched against a target and can originate from a wide variety of sources, including outside groups such as external service providers, organized crime affiliates, terrorist organizations or hostile foreign governments or agencies. We cannot assure that our data protection efforts and our investment in information technology will prevent significant breakdowns, data leakages or breaches in our systems or those of our third-party services providers or partners. Any such interruption or breach of our systems could adversely affect our business operations and/or result in the loss of critical or sensitive confidential information or intellectual property, and could result in financial, legal, business and reputational harm to us. Data security breaches could also expose us to liability under various laws and regulations across jurisdictions and increase the risk of litigation and governmental or regulatory investigation. For example, the California Consumer Privacy Act of 2018 as amended by the California Privacy Rights Act, collectively the CCPA, imposes a private right of action for security breaches that could lead to some form of remedy including regulatory scrutiny, fines, private right of action settlements, and other consequences. Where a security incident involves a breach of security leading to the accidental or unlawful destruction, loss, alternation, unauthorized disclosure of, or access to, personal data in respect of which we are a controller or processor under the GDPR or U.K. GDPR (as defined below), this could result in fines of up to €20.0 million or 4% of annual global turnover under the GDPR or £17.5 million and 4% of total annual revenue in the case of the U.K. GDPR. Due to concerns about data security and integrity, a growing number of legislative and regulatory bodies have adopted breach notification and other requirements in the event that information subject to such laws is accessed by unauthorized persons and additional regulations regarding security of such data are possible. We may be required to notify such breaches to regulators and/or individuals which may result in us incurring additional costs. Moreover, any such compromise of our information security or that of our third parties could result in the misappropriation or unauthorized publication or other exploitation of our confidential business or proprietary information or personal information or that of other parties with which we do business, an interruption in our operations, the unauthorized transfer of cash or other assets, the unauthorized release of customer or employee data or a violation of privacy or other laws. In addition, computer programmers and hackers also may be able to develop and deploy viruses, worms and other malicious software programs that attack our products, or that otherwise exploit any security vulnerabilities, and any such attack, if successful, could expose us to liability to customer claims. Any of the foregoing could irreparably damage our reputation and business, which could have a material adverse effect on our results of operations, cause us to incur significant costs, including legal expenses and remediation costs.

We maintain cyber liability insurance; however, this insurance may not be sufficient to cover the financial, legal, business or reputational losses that may result from an interruption or breach of our systems.

We are subject to data protection, privacy and security laws, regulations, standards and other requirements across different markets where we conduct our business. Our actual or perceived failure to comply with such obligations could harm our business.

The global data protection landscape is rapidly evolving, and we are or may become subject to numerous state, federal and foreign laws, regulations, legal requirements, contractual obligations and industry standards regarding security, data protection and privacy and any actual or perceived failure to comply with these requirements, obligations or standards could harm our reputation and business. If we are found to have breached any such laws or regulations in any such jurisdiction, we may be subject to enforcement actions that require us to change our business practices in a manner which may negatively impact our revenue, as well as expose us to litigation, fines, civil and/or criminal penalties and adverse publicity that could cause our customers to lose trust in us, negatively impacting our reputation and business in a manner that harms our financial position. Implementation standards and enforcement practices are likely to remain uncertain for the foreseeable future, and we cannot yet determine the impact future laws, regulations, standards, or perception of their requirements may have on our business. This evolution may create uncertainty in our business, affect our ability to operate in certain jurisdictions or to collect, store, transfer use and share personal information, necessitate the acceptance of more onerous obligations in our contracts, result in liability or impose additional costs on us. The cost of compliance with these laws, regulations and standards is high and is likely to increase in the future.

As part of our business, we collect personal data, and other potentially sensitive and/or regulated data from our customers. In the U.S., numerous federal and state laws and regulations, including data breach notification laws data privacy and security laws and consumer protection laws and regulations govern the collection, use, disclosure protection and other processing of personal information. For example, the CCPA requires covered companies to, among other things, provide certain disclosures to California consumers about use of personal information, and affords such consumers new privacy rights such as the ability to opt-out of certain sales of personal information and expanded rights to access and require deletion of their personal information, opt out of certain personal information sharing, and receive detailed information about how their personal information is collected, used and shared. The CCPA provides for civil penalties for violations, as well as a private right of action for security breaches that may increase security breach litigation. The California Privacy Rights Act (CPRA) passed in California significantly amends the CCPA and imposes additional data protection obligations on covered businesses, including additional consumer rights processes, limitations on data uses, new audit requirements for higher risk data, and opt outs for certain uses of sensitive data. As part of CPRA, a new California data protection agency is authorized to issue substantive regulations and could result in increased privacy and information security enforcement. The majority of the provisions went into effect on January 1, 2023, and additional compliance investment and potential business process changes may be required. Further, Virginia enacted the Virginia Consumer Data Protection Act, another comprehensive state privacy law, effective January 1, 2023. Colorado also enacted the Colorado Privacy Act, effective July 1, 2023, Connecticut enacted the Connecticut Data Privacy Act, effective July 1, 2023, Texas enacted the Texas Data Privacy Act, effective July 1, 2024, and Utah enacted the Utah Consumer Privacy Act, effective December 31, 2023. These state privacy laws may increase our compliance costs and potential liability, particularly in the event of a data breach, and could harm our business, including how we use personal information. A number of other proposals exist for new federal and state privacy legislation that, if passed, could increase our potential liability, increase our compliance costs and harm our business.

Our operations abroad may also be subject to increased scrutiny or attention from data protection authorities. For example, the EU General Data Protection Regulation (EU GDPR) and the U.K. General Data Protection Regulation and the U.K. Data Protection Act 2018 (UK GDPR) (collectively, the GDPR) imposes comprehensive data privacy compliance obligations on our collection, processing, sharing, disclosure, transfer and other use of data relating to an identifiable living individual or "personal data". The EU and U.K. regimes also include laws which, among other things, require European Economic Area (EEA) member states and the U.K. to regulate marketing by electronic means and the use of cookies and similar technologies. The GDPR has resulted in, and will continue to result in, significant compliance burdens and costs for companies with customers and/or operations in the EEA and the U.K. The GDPR, and national implementing legislation in each member state, imposes a strict data protection compliance regime including: (i) providing detailed disclosures about how personal data is collected and processed; (ii) demonstrating that an appropriate legal basis is in place or otherwise exists to justify data processing activities; (iii) granting certain rights for data subjects in regard to their personal data (including transparency, the right to be "forgotten," right to data portability, right of access, and right to rectification); (iv) obligation to notify data protection regulators or supervisory authorities (and in certain cases, affected individuals) of significant data breaches; (v) imposing limitations on retention of personal data; (vi) maintaining a record of data processing; and (vii) complying with the principal of accountability and the obligation to demonstrate compliance through policies, procedures, training and audit. If our privacy or data security measures fail to comply with applicable current or future laws and regulations, we may be subject to litigation, regulatory investigations, and enforcement notices requiring us to change the way we use personal data or our marketing practices. For example, under the GDPR we may be subject to fines of up to €20 million / £17.5 million or up to 4% of the total worldwide annual group turnover of the preceding financial year (whichever is higher) for major violations. In addition to the foregoing, a breach of the GDPR could result in regulatory investigations, reputational damage, orders to cease/ change our processing of our data, enforcement notices, and/ or assessment notices (for a compulsory audit). We may also face civil claims including representative actions and other class action type litigation (where individuals have suffered harm), potentially amounting to significant compensation or damages liabilities, as well as associated costs, diversion of internal resources, reputational harm and a potential loss of business.

We are also subject to European Union rules with respect to cross-border transfers of personal data out of the EEA and the U.K. Recent legal developments in Europe have created complexity and uncertainty regarding transfers of personal data from the EEA and the U.K. to the United States. In July 2020, the Court of Justice of the EU (CJEU) limited how organizations could lawfully transfer personal data from the EU/EEA to the United States by invalidating the Privacy Shield for purposes of international transfers and imposing further restrictions on the use of standard contractual clauses (SCCs). In March 2022, the US and EU announced a new regulatory regime intended to replace the invalidated regulations called the EU-US Data Privacy Framework (DPF). On July 10, 2023, the EU adopted an adequacy decision for the EU-U.S. DPF after determining that the additional safeguards included in Executive Order 14086 signed by President Biden on October 7, 2022, provide an adequate level of protection for personal data transferred from the European Union. The adequacy decision allows the EU-U.S. DPF to facilitate the transfer of data from Europe to the United States, benefiting companies and individuals on both sides of the Atlantic. We currently rely on the SCCs to transfer personal data outside the EEA and the U.K., including to the U.S., with respect to both intragroup and third party transfers. We will be required to implement the revised applicable SCCs within the relevant time frames. In addition, the UK's Information Commissioner's Office has published new data transfer standard contracts for transfers from the UK under the UK GDPR. This new documentation will be mandatory for relevant data transfers from September 21, 2022; existing SCCs arrangements must be migrated to the new documentation by March 21, 2024. We will be required to implement the latest U.K. data transfer documentation for data transfers subject to the UK GDPR, within the relevant time frames. These recent developments may require us to review and amend the legal mechanisms by which we make and/ or receive personal data transfers to in the U.S. As supervisory authorities issue further guidance on personal data export mechanisms, including circumstances where the standard contractual clauses cannot be used, and/or start taking enforcement action, we could suffer additional costs, complaints and/or regulatory investigations or fines.

Further, the exit of the U.K. from the EU, often referred to as Brexit, has created uncertainty with regard to data protection regulation in the U.K. The European Commission has adopted an adequacy decision in favor of the U.K., enabling data transfers from EU member states to the U.K. without additional safeguards. However, the U.K. adequacy decision will automatically expire in June 2025 unless the European Commission re-assesses and renews/ extends that decision, and remains under review by the Commission during this period. In September 2021, the U.K. government launched a consultation on its proposals for wide-ranging reform of UK data protection laws following Brexit. There is a risk that any material changes which are made to the U.K. data protection regime could result in the Commission reviewing the U.K. adequacy decision, and the U.K. losing its adequacy decision if the Commission deems the U.K. to no longer provide adequate protection for personal data. The relationship between the U.K. and the EU in relation to certain aspects of data protection law remains unclear, and it is unclear how U.K. data protection laws and regulations will develop in the medium to longer term, and how data transfers to and from the U.K. will be regulated in the long term. These changes will lead to additional costs and increase our overall risk exposure.

Restrictions on the collection, use, sharing or disclosure of personal information or additional requirements and liability for security and data integrity could require us to modify our solutions and features, possibly in a material manner, could limit our ability to develop new products and features and could subject us to increased compliance obligations and regulatory scrutiny.

Although we make reasonable efforts to comply with all applicable data protection laws and regulations, our interpretations and such measures may have been or may prove to be insufficient or incorrect. Any failure to comply with any data protection laws and/or regulations that results in a data security breach could require notifications to data subjects and/or owners under federal, state and/or international data breach notification laws and regulations. The effects of any applicable U.S. state, federal and international laws and regulations that are currently in effect or that may go into effect in the future, are significant and may require us to modify our data processing practices and policies and to incur substantial costs and potential liability in an effort to comply with such laws and regulations. Allegations of non-compliance, whether or not true, could be costly, time consuming, distracting to management, and cause reputational harm. In addition to government regulation, privacy advocates and industry groups may propose new and different self-regulatory standards. Because the interpretation and application of privacy and data protection laws are still uncertain, it is possible that these laws may be interpreted and applied in a manner that is inconsistent with one another or inconsistent with our existing data management practices or the features of our products and services. Any actual or perceived failure to comply with these and other data protection and privacy laws and regulations could result in regulatory scrutiny and increased exposure to the risk of litigation or the imposition of consent orders, resolution agreements, requirements to take particular actions with respect to training, policies or other activities, and civil and criminal penalties, including fines, which could harm our business. In addition, we or our third-party service providers could be required to fundamentally change our business activities and practices or modify our products and services, which could harm our or our third-party service providers' business. Any of the foregoing could result in additional cost and liability to us, damage our reputation, inhibit sales, and harm our business.

Risks Related to Legal, Regulatory, Accounting and Tax Matters

Our failure to comply with the large body of laws and regulations to which we are subject could materially harm our business.

We are subject to regulation by various governmental agencies in the United States and other jurisdictions in which we operate. These laws and regulations (and the government agency responsible for their enforcement in the United States) cover: radio frequency emission regulatory activities (Federal Communications Commission); anti-trust regulatory activities (Federal Trade Commission and Department of Justice); consumer protection laws (Federal Trade Commission); import/export regulatory activities (Department of Commerce); product safety regulatory activities (Consumer Products Safety Commission); worker safety (Occupational Safety and Health Administration); environmental protection (Environmental Protection Agency and similar state and local agencies); employment matters (Equal Employment Opportunity Commission); and tax and other regulations by a variety of regulatory authorities in each of the areas in which we conduct business. In certain jurisdictions, regulatory requirements in one or more of these areas may be more stringent than in the United States.

In the area of employment matters, we are subject to a variety of federal, state and foreign employment and labor laws and regulations, including the Americans with Disabilities Act, the Federal Fair Labor Standards Act, the WARN Act and other regulations related to working conditions, wage and hour pay, overtime pay, employee benefits, anti-discrimination, and termination of employment. We are subject to local employment statutes and regulations in other jurisdictions. Noncompliance with any of these applicable regulations or requirements could subject us to investigations, sanctions, enforcement actions, fines, damages, penalties, or injunctions. In certain instances, former employees have brought claims against us and we expect that we will encounter similar actions against us in the future. An adverse outcome in any such litigation could require us to pay damages, attorneys' fees and costs. These enforcement actions could harm our reputation and business. If any governmental sanctions are imposed, or if we do not prevail in any possible civil or criminal litigation, our business could be harmed. In addition, responding to any action will likely result in a significant diversion of management's attention and resources and an increase in professional fees.

Our failure to comply with the Foreign Corrupt Practices Act, other applicable anti-corruption and anti-bribery laws, and applicable anti-money laundering laws could subject us to penalties and other adverse consequences.

We have extensive international operations and a substantial portion of our business is conducted outside of the United States. Our operations are subject to the U.S. Foreign Corrupt Practices Act of 1977, as amended (the FCPA), the U.S. domestic bribery statute contained in 18 U.S.C. § 201, the U.S. Travel Act, the USA PATRIOT Act, as well as the anti-corruption, anti-bribery, and anti-money laundering laws in the countries where we do business. Anti-corruption laws are interpreted broadly and prohibit companies and their employees and agents from promising, authorizing, making, or offering, soliciting, or accepting, directly or indirectly, improper payments or other benefits to or from any person whether in the public or private sector. The FCPA also requires publicly traded companies to maintain records that accurately and fairly represent their transactions, and to have an adequate system of internal accounting controls. As we increase our international sales and business, our risks under these laws may increase.

Though we maintain policies, internal controls and other measures reasonably designed to promote compliance with applicable anti-corruption, anti-bribery laws, and anti-money laundering laws and regulations, our employees or agents may nevertheless engage in improper conduct for which we might be held responsible. Any violations of these laws, or even allegations of such violations, can lead to an investigation and/or enforcement action, which could disrupt our operations, involve significant management distraction, and lead to significant costs and expenses, including legal fees. If we, or our employees or agents acting on our behalf, are found to have engaged in practices that violate these laws and regulations, we could suffer severe fines and penalties, profit disgorgement, injunctions on future conduct, securities litigation, bans on transacting government business, delisting from securities exchanges and other consequences that may harm our business. In addition, our reputation, our revenue or our stock price could be adversely affected if we become the subject of any negative publicity related to actual or potential violations of any of these laws and regulations.

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

Certain of our products, including our IP interconnect and other solutions and technology are subject to U.S. export controls, including the U.S. Department of Commerce's Export Administration Regulations (EAR) and economic and trade sanctions regulations administered by the U.S. Treasury Department's Office of Foreign Assets Controls. These regulations may limit the export of our products and technology, and provision of our services outside of the United States, or may require export authorizations, including by license, a license exception, or other appropriate government authorizations and conditions, including annual or semi-annual reporting. Export control and economic sanctions laws may also include prohibitions on the sale or supply of certain of our products to embargoed or sanctioned countries, regions, governments, persons, and entities. In addition, various countries regulate the importation of certain products, through import permitting and licensing requirements, and have enacted laws that could limit our ability to distribute our products. The exportation, re-exportation, and importation of our products and technology and the provision of services, including by our partners, must comply with these laws or else we may be adversely affected through reputational harm, government investigations, penalties, and a denial or curtailment of our ability to export our products and technology. Complying with export control and sanctions laws may be time-consuming and may result in the delay or loss of sales opportunities. Although we take precautions to prevent our products and technology from being provided in violation of such laws, our products and technology have previously been, and could in the future be, provided inadvertently in violation of such laws, despite the precautions we take. If we are found to be in violation of U.S. sanctions or export control laws, it could result in substantial fines and penalties for us and for the individuals working for us. Changes in export or import laws or sanctions policies may adversely impact our operations, delay the introduction and sale of our products in international markets, or, in some cases, prevent the export or import of our products and technology to certain countries, regions, governments, persons, or entities altogether, which could harm our business.

We will lose sales if we are unable to obtain government authorization to export certain of our products and services, and we will be subject to legal and regulatory consequences if we do not comply with applicable export control laws and regulations.

Exports of certain of our IP interconnect and other solutions are subject to export controls imposed by the U.S. government and administered by the U.S. Departments of State and Commerce. In certain instances, these regulations may require pre-shipment authorization from the administering department. For products subject to the EAR, administered by the U.S. Department of Commerce's Bureau of Industry and Security, the requirement for a license is dependent on the type and end use of the product, the final destination, the identity of the end user and whether a license exception might apply. Certain of our solutions are subject to EAR. Obtaining export licenses can be difficult, costly and time-consuming and we may not always be successful in obtaining necessary export licenses, and our failure to obtain required import or export approval for our products or limitations on our ability to export or sell our products imposed by these laws may harm our international and domestic revenue. Noncompliance with these laws could have negative consequences, including government investigations, penalties and reputational harm. The absence of comparable restrictions on competitors in other countries may adversely affect our competitive position.

We derived 0.1% and 0.7% of our revenue in the form of royalties in the nine months ended September 30, 2023 and the year ended 2022, respectively, from parties that are subject to the Entity List of the EAR (a list of entities to which the transfer of EAR-controlled technology or software requires a U.S. export license), including Chongxin Bada Technology Development Co., Ltd. (Bada), HiSilicon Technologies Co. Ltd. (HiSilicon), and SZ DJI Technology Co., Ltd. Current and future business with these entities may be limited in scope or suspended entirely in order to comply with the EAR and as a result, our revenue could be adversely impacted. Regulatory changes concerning the export classification of our products, changes to the applicability of the EAR to certain product offerings, or the addition of new entities to the restricted party lists can further increase the scope of export restrictions applicable to our business. Failure to obtain export licenses for our products or having one or more of our customers be restricted from receiving exports from us could significantly reduce our revenue and harm our business.

In addition, the U.S. federal government has increased its Entity List materially in recent years, which affects the range and number of customers, including Chinese customers available to license our products and technology. This raises an additional risk that China and/or other jurisdictions may enact retaliatory legislation or regulations that may raise similar adverse risks. As reflected in other Risk Factors, such risks may increase if additional Chinese entities are placed on the Entity List due, among other things, to their business with Russia in light of China's stance and actions taken relating to Russia-Ukraine tensions and hostilities.

In July 2021, we submitted a voluntary self-disclosure (VSD) to the U.S. Department of Commerce's Bureau of Industry and Security, noting potential violations of the EAR. On April 28, 2022, the Office of Export Enforcement of the U.S. Department of Commerce's Bureau of Industry and Security closed the matter with the issuance of a warning letter. In our VSD submission, we had identified discrete transactions with two customers, Bada and HiSilicon. We do not provide either customer with products or ongoing support. We have taken and continue to take remedial measures to help prevent similar situations from occurring in the future.

We face risks associated with doing business in China.

For the nine months ended September 30, 2023, we derived 31.0% of our revenue from customers located in China. As a result, the economic, political, legal and social conditions in China could harm our business. In recent years, the Chinese economy has experienced periods of rapid expansion and high rates of inflation. These factors have led to the adoption by the Chinese government, from time to time, of various corrective measures designed to restrict the availability of credit or regulate growth and contain inflation. Various factors may in the future cause the Chinese government to impose controls on credit or prices, or to take other action, which could inhibit economic activity in China, and thereby harm the market for our products. In addition, the legal system in China has inherent uncertainties that may limit the legal protections available in the event of any claims or disputes that we have with third parties, including our ability to protect the IP we develop in China or elsewhere. As China's legal system is still evolving, the interpretation of many laws, regulations and rules is not always uniform and enforcement of these laws, regulations and rules involve uncertainties, which may limit the remedies available in the event of any claims or disputes with third parties. In addition, any litigation in China may be protracted and result in substantial costs and diversion of resources and management attention. Some of the other risks related to doing business in China include:

- The Chinese government exerts substantial influence over the manner in which we must conduct our business activities.
- Restrictions on currency exchange may limit our ability to receive, transfer and use our cash effectively.
- Increased uncertainties related to the enforcement of intellectual property rights including any intellectual property rights that we may license to a Chinese (or other emerging jurisdiction) entity, including any joint ventures we may form.
- Increased uncertainties relating to Chinese regulation of exports of products and technology to and from China.
- Increased and rapidly changing export and related trade regulations and restrictions imposed by U.S. and Chinese legislation, executive actions and regulations.
- Difficulty of travel to and from China (and to and from United States) arising from or related to the COVID-19 pandemic or any future pandemic.
- The Chinese government may favor its local businesses and make it more difficult for foreign businesses to operate in China on an equal footing, or create generally difficult conditions for foreign headquartered businesses to operate.
- Increased uncertainties related to the enforcement of contracts with certain parties.
- More restrictive rules on foreign investment could adversely affect our ability to expand our operations in China.
- Geopolitical tensions between China on the one hand and the United States and/or the European Union on the other hand, may increase and may lead to increased export sanctions with Chinese entities and sanctions made against China.

As a result of our growing operations in China, these risks could harm our business.

Further, on June 3, 2021, the President issued Executive Order 14032 (Addressing the Threat from Securities Investments that Finance Certain Companies of the People's Republic of China) targeting entities that are deemed part of the Chinese military-industrial complex. The executive order, and the subsequent Office of Foreign Assets Control additions to its Non-SDN Chinese Military-Industrial Complex Companies List, include one or more entities that have indirectly invested in us. Among other things, this executive order prohibits the purchase or sale of any publicly traded securities of a designated entity. We do not expect that this executive order will impact us; however, further government escalation of restrictions related to Chinese investors and dealings in securities could harm certain shareholders.

Additionally, on October 7, 2022, the U.S. Department of Commerce's Bureau of Industry and Security issued export controls related to the Chinese semiconductor manufacturing, advanced computing, and supercomputer industries. These export controls impose broad end-use and other restrictions on facilities in China that develop or produce semiconductor chips or manufacturing equipment, and may impact our ability to license or support our products to entities in or doing business with certain advanced AI or "supercomputer" design companies, foundries and manufacturers of assemblies and components in China. On October 17, 2023, U.S. Department of Commerce's Bureau of Industry and Security issued regulations amending the October 7, 2022 export controls governing the export of certain semiconductor-related hardware and software to China. These restrictions, which are effective on November 17, 2023, and any subsequent restrictions, may have an adverse effect on our business, results of operations, or financial condition and we may no longer be able to license or support our products to certain companies in China. Furthermore, increased restrictions on China exports may lead to regulatory retaliation by the Chinese government and possibly further escalate geopolitical tensions, and any such scenarios may adversely impact our business. The prospect of future export controls that are implemented in a similar manner may continue to have an ongoing impact on our business, results of operation, or financial conditions.

On August 9, 2023, President Biden signed an "Executive Order 14105 entitled Executive Order on Addressing United States Investments in Certain National Security Technologies and Products in Countries of Concern" that will impact certain investments by U.S. persons and companies in China. This new regulatory regime, which will not likely take effect until implementing regulations are issued by the U.S. Department of the Treasury in early 2024, will require notification to the Treasury Department of certain investments by U.S. persons and companies involving certain sectors and technologies in China and will prohibit other types of investments in China.

We anticipate conducting certain of our operations through joint venture arrangements with Chinese entities. If the Chinese government determines that these arrangements do not comply with applicable regulations, our business could be adversely affected. If the PRC regulatory agencies determine that the agreements that establish the structure and relationship for our operations in China do not comply with PRC regulatory restrictions on foreign investment, we could be subject to severe penalties. In addition, changes in such Chinese laws and regulations may materially and adversely affect our business.

There are uncertainties regarding the interpretation and application of PRC laws, rules and regulations, including, but not limited to, the laws, rules and regulations governing the validity and enforcement of the joint venture arrangement such as the one we are contemplating entering into with certain Chinese entities, including one of our shareholders who holds less than 5% of our outstanding common stock. Because many laws and regulations are relatively new, the interpretations of many laws, regulations and rules are not always uniform. Moreover, the interpretation of statutes and regulations may be subject to government policies reflecting domestic political agendas. Enforcement of existing laws or contracts based on existing law may be uncertain and sporadic. Although we believe, based on our understanding of the current PRC laws, rules and regulations, the structure for our current and contemplated operations based in China complies with all applicable PRC laws, rules and regulations and does not violate, breach, contravene or otherwise conflict with any applicable PRC laws, rules or regulations, we cannot assure you that the PRC regulatory authorities will not determine that such joint venture arrangements do not violate PRC laws, rules or regulations. If the PRC regulatory authorities determine that any joint ventures, we may enter into are in violation of applicable PRC laws, rules or regulations, such joint venture arrangements may become invalid or unenforceable, which will substantially affect our operations adversely.

The Chinese government has broad discretion in dealing with violations of laws and regulations, including levying fines, revoking business and other licenses and requiring actions necessary for compliance. In particular, licenses and permits issued or granted by relevant governmental agencies may be revoked at a later time by other regulatory agencies. We cannot predict the effect of the interpretation of existing or new Chinese laws or regulations on our business. Any of these or similar actions could significantly disrupt our operations or restrict us from conducting a substantial portion of our operations, which could materially and adversely affect our business, financial condition and results of operations. There can be no assurance that the U.S. government will refrain from imposing additional restrictions or constraints on dealings or investments in China, including our investment in Transchip or any future joint venture arrangements.

Joint ventures or similar investments are subject to a number of risks, the occurrence of which could adversely impact any of our current or future joint ventures or similar investments, which in turn could harm our business.

Joint ventures or similar investments such as the investment in Transchip as discussed elsewhere in this report, and other joint ventures or similar investments we may form in the future are subject to a number of risks, including but not limited to:

- Our joint venture or investment partners may not commit sufficient resources to market and distribute our products or to otherwise support the joint venture and its intended operations.
- Our joint venture or investment partners may have economic or business interests or goals that are different from ours.
- Our joint venture or investment partners may infringe the IP we assign to such joint venture, or the IP of other parties, which may expose us to litigation and other potential liabilities.
- Disputes may arise among us and our joint venture or investment partners that result in the delay or termination of activities contemplated by such joint venture or investment or that could result in costly litigation or arbitration that diverts management attention and resources.
- Our joint venture or investment partners may not provide us with timely and accurate information regarding the status or activities of the joint venture or investment which could, among other things, impact our ability to accurately forecast financial results or provide timely information to our shareholders.
- Risks associated with additional capital requirements.
- Any of the risks related to doing business in China or having a Chinese joint venture or investment that are discussed elsewhere in these risk factors.

The occurrence of one or more of the above risks, or any other negative events, could adversely impact our joint ventures or similar investments and could in turn harm our business.

Social and environmental responsibility regulations, policies and provisions, as well as customer and investor demands, may make our supply chain more complex and may adversely affect our relationships with customers and investors.

There is an increasing focus on corporate social and environmental responsibility in the semiconductor industry. A number of our customers have adopted, or may adopt, procurement policies that include social and environmental responsibility provisions or requirements that their suppliers should comply with, or they may seek to include such provisions or requirements in their procurement terms and conditions. An increasing number of investors are also requiring companies to disclose corporate social and environmental policies, practices and metrics. Legal and regulatory requirements, as well as investor expectations, on corporate social responsibility practices and disclosure, are subject to change, can be unpredictable, and may be difficult and expensive for us to comply with, given the complexity of our supply. If we are unable to comply, or are unable to cause our suppliers to comply, with such policies or provisions or meet the requirements of our customers and our investors, a customer may stop purchasing products from us or an investor may sell their shares, and may take legal action against us, which could harm our reputation, revenue and results of operations.

We could be subject to changes in tax rates or the adoption of new tax legislation, whether in or out of the United States, or could otherwise have exposure to additional tax liabilities, which could harm our business.

As a multinational business, we are subject to income and other taxes in both the United States and various foreign jurisdictions. Changes to tax laws or regulations in the jurisdictions in which we operate, or in the interpretation of such laws or regulations, could, significantly increase our effective tax rate and reduce our cash flow from operating activities, and otherwise have a material adverse effect on our financial condition. In addition, other factors or events, including business combinations and investment transactions, changes in the valuation of our deferred tax assets and liabilities, adjustments to taxes upon finalization of various tax returns or as a result of deficiencies asserted by taxing authorities, increases in expenses not deductible for tax purposes, changes in available tax credits, changes in transfer pricing methodologies, other changes in the apportionment of our income and other activities among tax jurisdictions, and changes in tax rates, could also increase our effective tax rate.

Our tax filings are subject to review or audit by the U.S. Internal Revenue Service (the IRS) and state, local and foreign taxing authorities. We may also be liable for taxes in connection with businesses we acquire. Our determinations are not binding on the IRS or any other taxing authorities, and accordingly the final determination in an audit or other proceeding may be materially different than the treatment reflected in our tax provisions, accruals and returns. An assessment of additional taxes because of an audit could harm our business.

Further changes in the tax laws of foreign jurisdictions could arise, in particular, as a result of the base erosion and profit shifting project that was undertaken by the Organization for Economic Co-operation and Development (the OECD). The OECD, which represents a coalition of member countries, recommended changes to numerous long-standing tax principles. These changes, if adopted, could increase tax uncertainty and may adversely affect our provision for income taxes and increase our tax liabilities.

Our ability to use net operating losses to offset future taxable income may be subject to certain limitations.

We have incurred cumulative losses historically and it is possible that we will not achieve profitability in the future. Realization of our existing net operating loss (NOL) carryforwards and other tax attributes (such as research tax credits) depends on future taxable income, and there is a risk that our NOL carryforwards and other tax attributes could expire unused before we achieve profitability and be unavailable to offset future taxable income, which could materially and adversely affect our operating results.

In general, under Sections 382 and 383 of the Internal Revenue Code of 1986, as amended (the Code), if a corporation undergoes an "ownership change," generally defined as a cumulative change of more than 50 percentage points (by value) in its equity ownership by certain stockholders over a three-year period, the corporation's ability to use its pre-change NOL carryforwards and other pre-change tax attributes (such as research tax credits) to offset its post-change income or taxes may be limited. We may have experienced ownership changes in the past and may experience additional ownership changes in the future, including as a result of subsequent changes in our stock ownership, some of which are outside our control. Accordingly, we may not be able to utilize a material portion of our NOL carryforwards, even if we achieve profitability.

The requirements of being a public company require significant resources and management attention and affect our ability to attract and retain executive management and qualified board members.

As a public company, we incur increased legal, accounting, compliance and other expenses that we did not previously incur as a private company. We are subject to the Exchange Act, including the reporting requirements thereunder, the Sarbanes-Oxley Act, the Dodd-Frank Wall Street Reform and Consumer Protection Act, the rules and other applicable securities rules and regulations. These rules and regulations impose various requirements on public companies, including establishment and maintenance of effective disclosure and financial controls and corporate governance practices. Our management and other personnel need to devote a substantial amount of time to these compliance initiatives, which divert their attention away from our core business operations and revenue-producing activities. Moreover, compliance with these rules and regulations increases our legal and financial compliance costs, makes some activities more difficult, time-consuming or costly and increases demand on our systems and resources, particularly after we are no longer an "emerging growth company." Further, we expect that these rules and regulations may make it more difficult and more expensive for us to obtain directors' and officers' liability insurance, which in turn could require us to incur substantially higher costs to obtain the same or similar coverage or accept reduced policy limits and coverage, which, if we accept such reduced policy limits and coverage, could make it more difficult for us to attract and retain qualified individuals to serve on our board of directors and as our executive officers. In addition, prior to our initial public offering, we were not required to comply with SEC requirements to have our financial statements completed and reviewed or audited within a specified time and, as such, we may experience difficulty in meeting the applicable reporting requirements under the Exchange Act. Any failure by us to file our periodic reports with the SEC in a timely manner could harm our reputation and reduce the trading price of our common stock.

We continue to evaluate these rules and regulations and cannot predict or estimate the amount of additional costs we may incur or the timing of such costs. These rules and regulations are often subject to varying interpretations, in many cases due to their lack of specificity, and, as a result, their application in practice may evolve over time as new guidance is provided by regulatory and governing bodies. This could result in continuing uncertainty regarding compliance matters and higher costs necessitated by ongoing revisions to disclosure and governance practices. In addition, if we fail to comply with these rules and regulations, we could be subject to a number of penalties, including the delisting of our common stock, fines, sanctions or other regulatory action or civil litigation.

If we fail to maintain an effective system of disclosure controls and internal control over financial reporting, our ability to produce timely and accurate financial statements or comply with applicable regulations could be impaired.

The Sarbanes-Oxley Act requires, among other things, that we maintain effective disclosure controls and procedures and internal control over financial reporting. Our disclosure controls and other procedures are designed to ensure that information required to be disclosed by us in the reports that we file with the SEC is recorded, processed, summarized and reported within the time periods specified in SEC rules and forms and that information required to be disclosed in reports under the Exchange Act is accumulated and communicated to our principal executive and financial officers, and we continue to evaluate how to improve controls. We are also continuing to improve our internal control over financial reporting. In order to maintain and improve the effectiveness of our disclosure controls and procedures and internal control over financial reporting, we have expended, and anticipate that we will continue to expend, significant resources, including accounting-related costs and significant management oversight.

Our current controls and any new controls that we develop may become inadequate because of changes in conditions in our business. Further, weaknesses in our disclosure controls and internal control over financial reporting may be discovered in the future. Any failure to develop or maintain effective controls or any difficulties encountered in their implementation or improvement could harm our business or cause us to fail to meet our reporting obligations and may result in a restatement of our financial statements for prior periods. Any failure to implement and maintain effective internal control over financial reporting also could adversely affect the results of periodic management evaluations and annual independent registered public accounting firm attestation reports regarding the effectiveness of our internal control over financial reporting that we are required to include in our periodic reports that will be filed with the SEC. Ineffective disclosure controls and procedures and internal control over financial reporting could also cause investors to lose confidence in our reported financial and other information, which would likely have a negative effect on the trading price of our common stock. In addition, if we are unable to continue to meet these requirements, we may not be able to remain listed. As a public company, we are required to provide an annual management report on the effectiveness of our internal control over financial reporting.

Our independent registered public accounting firm is not required to formally attest to the effectiveness of our internal control over financial reporting until after we are no longer an “emerging growth company” as defined in the JOBS Act. At such time, our independent registered public accounting firm may issue a report that is adverse in the event it is not satisfied with the level at which our internal control over financial reporting is documented, designed or operating. Any failure to maintain effective disclosure controls and internal control over financial reporting could harm our business and could cause a decline in the trading price of our common stock.

We are an “emerging growth company,” and we cannot be certain if the reduced disclosure requirements applicable to emerging growth companies will make our common stock less attractive to investors.

We are an “emerging growth company,” as defined in the JOBS Act, and we could remain an emerging growth company until the last day of our fiscal year following the fifth anniversary of the closing of our initial public offering. For as long as we continue to be an emerging growth company, we may choose to take advantage of certain exemptions from various reporting requirements that are applicable to other public companies that are not emerging growth companies, including, but not limited to:

- not being required to engage an auditor to report on our internal controls over financial reporting pursuant to Section 404(b) of the Sarbanes-Oxley Act;
- not being required to comply with any requirement that may be adopted by the Public Company Accounting Oversight Board regarding mandatory audit firm rotation or a supplement to the auditor’s report providing additional information about the audit and the financial statements (i.e., an auditor discussion and analysis);
- not being required to submit certain executive compensation matters to stockholder advisory votes, such as “say-on-pay,” “say-on-frequency,” and “say-on-golden-parachutes”; and
- not being required to disclose certain executive compensation related items such as the correlation between executive compensation and performance and comparisons of the chief executive officer’s compensation to median employee compensation.

In addition, as an emerging growth company, we are only permitted to provide two years of audited financial statements and two years of selected financial data (in addition to any required interim financial statements and selected financial data) in this report, and to present correspondingly reduced disclosure in “Management’s Discussion and Analysis of Financial Condition and Results of Operations.”

We have elected to take advantage of this reduced disclosure obligation and certain of the other exemptions described above and may elect to take advantage of these and other reduced reporting requirements in the future. As a result, the information that we provide to our stockholders may be different than the information you might receive from other public reporting companies in which you hold equity interests. In addition, the JOBS Act permits emerging growth companies to delay adopting new or revised accounting standards until such time as those standards apply to private companies. We have elected to use this extended transition period for complying with new or revised accounting standards until the earlier of the date we (i) are no longer an emerging growth company; or (ii) affirmatively and irrevocably opt out of the extended transition period provided in the JOBS Act. As a result, our consolidated financial statements and the reported results of operations contained therein may not be directly comparable to those of other public companies. We cannot predict whether investors will find our common stock less attractive because of our reliance on these exemptions. If some investors do find our common stock less attractive, there may be a less active trading market for our common stock and our stock price may be reduced or become more volatile.

We will remain an emerging growth company, and will be able to take advantage of the foregoing exemptions, until the last day of our fiscal year following the fifth anniversary of the closing of our initial public offering or such earlier time that we otherwise cease to be an emerging growth company, which will occur upon the earliest of (i) the last day of the first fiscal year in which our annual gross revenue is \$1.235 billion or more; (ii) the date on which we have, during the previous three-year period, issued more than \$1.0 billion in non-convertible debt securities; and (iii) the date that we become a "large accelerated filer" as defined in Rule 12b-2 under the Exchange Act, which will occur as of the end of any fiscal year in which (x) the market value of our common equity held by non-affiliates is \$700 million or more as of the last business day of our most recently completed second fiscal quarter, (y) we have been required to file annual and quarterly reports under the Exchange Act for a period of at least 12 months and (z) we have filed at least one annual report pursuant to the Exchange Act.

Risks Related to Ownership of Our Common Stock

An active and liquid trading market for our common stock may not be sustained.

Our common stock is currently listed on the Nasdaq Stock Market under the symbol "AIP". The price for our common stock may vary and an active or liquid market in our common stock may not be sustained. The lack of an active market may impair the value of your shares, your ability to sell your shares at the time you wish to sell them and the prices that you may obtain for your shares. An inactive market may also impair our ability to raise further capital by selling additional shares of our common stock and our ability to acquire other companies, products or technologies by using our common stock as consideration. Furthermore, there can be no guarantee that we will continue to satisfy the continued listing standards of Nasdaq. If we fail to satisfy the continued listing standards, we could be de-listed, which would negatively impact the value and liquidity of your investment.

Our stock price may be volatile, and investors in our common stock may not be able to resell shares of our common stock at or above the price paid, or at all.

The trading price of our common stock could be volatile and subject to wide fluctuations in response to various factors, many of which are beyond our control, including, but not limited to:

- variations in our actual or anticipated annual or quarterly operating results or those of others in our industry;
- the potential effects arising if U.S. inflationary and/or currency devaluation trends appear or increase;
- results of operations that otherwise fail to meet the expectations of securities analysts and investors;
- changes in earnings estimates or recommendations by securities analysts, or other changes in investor perceptions of the investment opportunity associated with our common stock relative to other investment alternatives;
- market conditions in the semiconductor industry;
- failure to meet our publicly announced guidance or other expectations about our business;
- publications, reports or other media exposure of our products or those of others in our industry, or of our industry generally;

- announcements by us or others in our industry, or by our or their respective suppliers, distributors or other business partners, regarding, among other things, significant contracts, price reductions, capital commitments or other business developments, the entry into or termination of strategic transactions or relationships, securities offerings or other financing initiatives, and public reaction thereto;
- additions or departures of key management personnel;
- regulatory actions involving us or others in our industry, or actual or anticipated changes in applicable government regulations or enforcement thereof;
- the development and sustainability of an active trading market for our common stock;
- sales, or anticipated sales, of large blocks of our common stock, such as any sales that may occur following the expiration of the lockups entered into in connection with our initial public offering or any sales to cover tax obligations or exercise costs in connection with the vesting of restricted stock units or the exercise of options, respectively;
- general economic and securities market conditions, including rising interest rates; and
- other factors discussed in this “Risk Factors” section and elsewhere in this report.

Furthermore, the stock market in general has experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of particular companies. Broad market and industry factors may significantly affect the market price of our common stock, regardless of our actual operating performance. These and other factors may cause the market price and demand for our common stock to fluctuate significantly, which may limit or prevent investors from readily selling their shares of common stock and may otherwise negatively affect the liquidity of our common stock. In addition, in the past, when the market price of a stock has been volatile, holders of that stock have sometimes instituted securities class action litigation against the company that issued the stock. If any of our stockholders were to bring a lawsuit against us, we could incur substantial costs defending the lawsuit. Such a lawsuit could also divert the time and attention of our management from our core business operations.

Since our stock price may be volatile, investors in our common stock may not be able to resell shares of our common stock at or above the price paid, or at all.

We may fail to meet our publicly announced guidance or other expectations about our business, which could cause our stock price to decline.

We provide guidance regarding our expected financial and business performance including our anticipated future revenues, operating expenses and other financial metrics. Correctly identifying the key factors affecting business conditions and predicting future events is inherently uncertain. Any guidance that we provide may not always be accurate or may vary from actual results due to our inability to correctly identify risks and uncertainties and to quantify their impact on our financial performance. We provide no assurances that such guidance will ultimately be accurate, and any such guidance should be treated with appropriate caution. If we fail to meet our guidance or if we find it necessary to revise such guidance, even if seemingly insignificant, investors and analysts may lose confidence in us and the market value of our common stock could be materially adversely affected.

If equity research analysts or industry analysts do not publish research or reports about our business, or if they change their recommendations regarding our stock adversely, our stock price and trading volume could decline.

The trading market for our common stock is influenced by the research and reports that industry or equity research analysts publish about us or our business. As a newly public company, we may be slow to attract research coverage and the analysts who publish information about our common stock will have had relatively little experience with us, which could affect their ability to accurately forecast our results and could make it more likely that we fail to meet their estimates. If only a few securities or industry analysts commence coverage of us, the trading price for our common stock will be negatively impacted. When we obtain industry or equity research analyst coverage, we will not have any control over the analysts' content and opinions included in their reports. If any of the analysts who cover us issue an adverse or misleading opinion regarding us, our business model, financial performance, stock price or otherwise, our stock price would likely decline. If one or more of these analysts ceases coverage of our company or fails to regularly publish reports on us, we could lose visibility in the financial markets, which in turn could cause our stock price or trading volume to decline and result in the loss of all or a part of your investment in us.

Sales of a substantial number of shares of our common stock in the public market could cause our stock price to fall.

If our existing stockholders sell, or indicate an intention to sell, substantial amounts of our common stock in the public market, the market price of our common stock could decline. As of September 30, 2023, we had approximately 36.8 million shares of common stock outstanding.

Shares of common stock that are either subject to outstanding options or reserved for future issuance pursuant to restricted stock unit grants, in each case, under our equity incentive plans are eligible for sale in the public market to the extent permitted by the provisions of various vesting schedules and Rule 144 and Rule 701 under the Securities Act. If these additional shares of common stock are sold, or if it is perceived that they will be sold, in the public market, the market price of our common stock could decline.

In addition, certain of our executive officers, directors and stockholders affiliated with our directors have entered or may enter into Rule 10b5-1 plans providing for sales of shares of our common stock from time to time. Under a Rule 10b5-1 plan, a broker executes trades pursuant to parameters established by the executive officer, director or affiliated stockholder when entering into the plan, without further direction from the executive officer, director or affiliated stockholder. A Rule 10b5-1 plan may be amended or terminated in some circumstances.

Our executive officers, directors and stockholders affiliated with our directors also may buy or sell additional shares outside of a Rule 10b5-1 plan when they are not in possession of material, nonpublic information.

K. Charles Janac, our President, Chief Executive Officer and Chairman, beneficially owns a significant percentage of our stock and will be able to exert significant control over matters subject to stockholder approval.

As of September 30, 2023, K. Charles Janac, our President, Chief Executive Officer and Chairman, held voting power over approximately 28.5% of our outstanding voting stock. Therefore, this stockholder will have the ability to influence us through this ownership position. For example, this stockholder may be able to exercise significant influence over elections of directors, amendments of our organizational documents, or approval of any merger, sale of assets, or other major corporate transaction. This may prevent or discourage unsolicited acquisition proposals or offers for our common stock that you may feel are in your best interest as one of our stockholders.

Our issuance of additional capital stock in connection with financings, acquisitions, investments, our stock incentive plans or otherwise could dilute the ownership and voting power of our other stockholders.

We have 300,000,000 shares of common stock authorized as of September 30, 2023. In addition, our Certificate of Incorporation authorizes us to issue up to 10,000,000 shares of preferred stock with such rights and preferences as may be determined by our board of directors. Our Certificate of Incorporation authorizes us to issue shares of common stock or other securities convertible into or exercisable or exchangeable for shares of our common stock from time to time, for the consideration and on the terms and conditions established by our board of directors in its sole discretion, whether in connection with a financing, an acquisition, an investment, our stock incentive plans or otherwise. Such additional shares of our common stock or such other securities may be issued at a discount to the market price of our common stock at the time of issuance. Our preferred stock could be issued with voting, liquidation, dividend and other rights superior to the rights of our common stock. As discussed below, the potential issuance of preferred stock may delay or prevent a change in control of us, discourage bids for our common stock at a premium to the market price, and materially and adversely affect the market price and the voting and other rights of the holders of our common stock. Any issuance of such securities could result in substantial dilution to our existing stockholders and cause the market price of shares of our common stock to decline.

We do not expect to declare or pay any dividends on our common stock for the foreseeable future.

We do not intend to pay cash dividends on our common stock for the foreseeable future. Consequently, investors must rely on sales of their shares of our common stock after price appreciation, which may never occur, as the only way to realize any future gains on their investment. Investors seeking dividends should not purchase shares of our common stock. Any future determination to pay dividends will be at the discretion of our board of directors and subject to, among other things, our compliance with applicable law, and depending on, among other things, our business prospects, financial condition, results of operations, cash requirements and availability, debt repayment obligations, capital expenditure needs, the terms of any preferred equity securities we may issue in the future, covenants in the agreements governing our current and future indebtedness, other contractual restrictions, industry trends, the provisions of the Delaware General Corporation Law (the DGCL) affecting the payment of dividends and distributions to stockholders and any other factors or considerations our board of directors may regard as relevant. Furthermore, because we are a holding company, our ability to pay dividends on our common stock will depend on our receipt of cash distributions and dividends from our direct and indirect wholly owned subsidiaries, which may be similarly impacted by, among other things, the terms of any preferred equity securities these subsidiaries may issue in the future, debt agreements, other contractual restrictions and provisions of applicable law. See “Dividend Policy” for additional information.

Management may apply our net proceeds from our initial public offering to uses that do not increase our market value or improve our operating results.

Our management has broad discretion in the application of the net proceeds from our initial public offering and could use these proceeds in ways that do not improve our results of operations or enhance the value of our common stock. We intend to use these proceeds for general corporate purposes. We may also use a portion of our net proceeds to acquire or invest in complementary businesses, products, services or technologies, though we do not have any agreements or commitments for any significant acquisitions or investments at this time. We have not reserved or allocated our net proceeds for any specific purpose, and we cannot state with certainty how our management will use our net proceeds. Accordingly, our management will have considerable discretion in applying our net proceeds, and you will not have the opportunity, as part of your investment decision, to assess whether we are using our net proceeds appropriately. We may use our net proceeds for purposes that do not result in any improvement in our results of operations or increase the market value of our common stock. The failure by our management to apply the net proceeds from our initial public offering effectively could impair our growth prospects and result in financial losses that could harm our business and cause the price of our common stock to decline. Until the net proceeds we receive are used, they may be placed in investments that do not produce income or that lose value.

Provisions in our Certificate of Incorporation and Bylaws and under the DGCL contain antitakeover provisions that could prevent or discourage a takeover.

Provisions in our Certificate of Incorporation and our Bylaws may discourage, delay or prevent a merger, acquisition or other change in control of our company that stockholders may consider favorable, including transactions in which you might otherwise receive a premium for your shares. These provisions could also limit the price that investors might be willing to pay in the future for shares of our common stock, thereby depressing the market price of our common stock. In addition, because our board of directors is responsible for appointing the members of our management team, these provisions may frustrate or prevent any attempts by our stockholders to replace or remove our current management by making it more difficult for stockholders to replace members of our board of directors. Among other things, these provisions include those establishing:

- a classified board of directors with three-year staggered terms, which may have the effect of deferring, delaying or discouraging hostile takeovers, or changes in control of us or our management;
- no cumulative voting in the election of directors, which limits the ability of minority stockholders to elect director candidates;
- the exclusive right of our board of directors to elect a director to fill a vacancy created by the expansion of the board of directors or the resignation, death or removal of a director, which prevents stockholders from filling vacancies on our board of directors;
- the ability of our board of directors to authorize the issuance of shares of preferred stock and to determine the terms of those shares, including preferences and voting rights, without stockholder approval, which could be used to significantly dilute the ownership of a hostile acquirer;
- the ability of our board of directors to alter our bylaws without obtaining stockholder approval;
- the required approval of the holders of at least two-thirds of the shares entitled to vote at an election of directors to amend or repeal our bylaws or amend the provisions of our Certificate of Incorporation regarding the election and removal of directors;
- a prohibition on stockholder action by written consent, which forces stockholder action to be taken at an annual or special meeting of our stockholders;
- the requirement that a special meeting of stockholders may be called only by the chairman of the board of directors or a majority of our board of directors, which may delay the ability of our stockholders to force consideration of a proposal or for stockholders controlling a majority of our capital stock to take action, including the removal of directors; and
- advance notice procedures that stockholders must comply with in order to nominate candidates to our board of directors or to propose matters to be acted upon at an annual meeting or special meeting of stockholders, which may discourage or delay a potential acquirer from conducting a solicitation of proxies to elect the acquirer's own slate of directors or otherwise attempting to obtain control of us until the next stockholder meeting or at all.

In addition, we are subject to Section 203 of the DGCL. Subject to specified exceptions, Section 203 prohibits a publicly held Delaware corporation from engaging in a "business combination" with an "interested stockholder" for a period of three years after the date of the transaction in which the person became an interested stockholder unless such transaction is approved in a prescribed manner. "Business combinations" include mergers, asset sales and other transactions resulting in a financial benefit to the "interested stockholder." Subject to various exceptions, an "interested stockholder" is a person who, together with his or her affiliates and associates, owns, or within three years did own, 15% or more of the corporation's outstanding voting stock.

Any provision of our Certificate of Incorporation, Bylaws or Delaware law that has the effect of delaying or preventing a change in control could limit the opportunity for our stockholders to receive a premium for their shares of our capital stock and could also affect the price that some investors are willing to pay for our common stock.

Our Certificate of Incorporation provides that the Court of Chancery of the State of Delaware is the exclusive forum for substantially all disputes between us and our stockholders, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers or employees.

Our Certificate of Incorporation provides that, unless we consent in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware (the Delaware Court of Chancery) will be the exclusive forum for (1) any derivative action or proceeding brought on our behalf; (2) any action asserting a claim of breach of a fiduciary duty owed by any of our directors, officers or other employees or stockholders to us or our stockholders; (3) any action asserting a claim against us, any director or our officers and employees arising pursuant to any provision of the DGCL, our Certificate of Incorporation or our Bylaws, or as to which the DGCL confers exclusive jurisdiction on the Delaware Court of Chancery; or (4) any action asserting a claim against us, any director or our officers or employees that is governed by the internal affairs doctrine; provided that, the exclusive forum provision will not apply to suits brought to enforce any liability or duty created by the Securities Act, the Exchange Act, the rules and regulations thereunder or any other claim for which the federal courts have exclusive jurisdiction; and provided further that, if and only if the Delaware Court of Chancery dismisses any such action for lack of subject matter jurisdiction, such action may be brought in another state or federal court sitting in the State of Delaware. Our Certificate of Incorporation further provides that, unless we consent in writing to the selection of an alternative forum, the federal district courts of the United States of America shall, to the fullest extent permitted by law, be the sole and exclusive forum for the resolution of any complaint asserting a cause of action arising under the Securities Act. Any person or entity purchasing or otherwise acquiring any interest in shares of our capital stock shall be deemed to have notice of and to have consented to the provisions of our Certificate of Incorporation described above.

We believe these provisions benefit us by providing increased consistency in the application of the DGCL by chancellors particularly experienced in resolving corporate disputes and in the application of the Securities Act by federal judges, as applicable, efficient administration of cases on a more expedited schedule relative to other forums and protection against the burdens of multi-forum litigation. However, these provisions may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or our directors, officers or other employees or agents, which may discourage such lawsuits against us and our directors, officers and other employees and agents. The enforceability of similar choice of forum provisions in other companies' certificates of incorporation has been challenged in legal proceedings, and it is possible that, in connection with any applicable action brought against us, a court could find the choice of forum provisions contained in our Certificate of Incorporation to be inapplicable or unenforceable in such action. If a court were to find the choice of forum provision contained in our Certificate of Incorporation to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving such action in other jurisdictions, which could harm our business.

General Risk Factors

Actions of stockholders could cause us to incur substantial costs, divert management's attention and resources and have an adverse effect on our business.

As a public company, we may, from time to time, be subject to proposals and other requests from stockholders urging us to take certain corporate actions, including proposals seeking to influence our corporate policies or effect a change in our management. In the event of such stockholder proposals, particularly with respect to matters which our management and board of directors, in exercising their fiduciary duties, disagree with or have determined not to pursue, our business could be harmed because responding to actions and requests of stockholders can be costly and time-consuming, disrupting our operations and diverting the attention of management and our employees. Additionally, perceived uncertainties as to our future direction may result in the loss of potential business opportunities and may make it more difficult to attract and retain qualified personnel, business partners and customers.

Litigation, including securities class action litigation, may impair our reputation and lead us to incur significant costs. We are a party to a patent litigation.

From time to time, we may be party to various lawsuits and claims arising in the normal course of business, which may include lawsuits or claims relating to contracts, third-party contractors, intellectual property rights, employment matters or other aspects of our business. We may face claims based on intellectual property rights from individuals, companies, non-practicing entities, academic and research institutions, and other parties, including claims from multiple sources against us and other companies. Claims that our products infringe the intellectual property rights of others, regardless of merit, may cause us to incur large costs to respond to, defend and resolve the claims, and they may divert the efforts and attention of our management and technical personnel from our operations.

In addition, in the past, following periods of volatility in the overall market and the market price of a company's securities, securities class action litigation has often been instituted against companies that experienced such volatility. Litigation, if instituted against us, whether or not valid and regardless of outcome, could result in substantial costs, reputational harm and a diversion of our management's attention and resources. In addition, we may be required to pay damage awards or settlements or become subject to injunctions or other equitable remedies, which could harm our business. The outcome of litigation is often difficult to predict, and any litigation may harm our business.

Although we have various insurance policies in place, the potential liabilities associated with litigation matters now or that could arise in the future, could be excluded from coverage or, if covered, could exceed the coverage provided by such policies. In addition, insurance carriers may seek to rescind or deny coverage with respect to any claim or lawsuit. If we do not have sufficient coverage under our policies, or if coverage is denied, we may be required to make material payments to settle litigation or satisfy any judgment. Any of these consequences could harm our business.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

(a) Sales of Unregistered Securities

None.

(b) Use of Proceeds from Public Offering of Common Stock

Our Registration Statement on Form S-1, as amended (File No. 333-259988) (the "Form S-1"), for our IPO was declared effective by the SEC on October 26, 2021. The Form S-1 registered the offering and sale of 5,750,000 shares of common stock. On October 29, 2021, we completed our IPO, in which we issued 5,750,000 shares of common stock at a price to the public of \$14.00 per share, including 750,000 shares issued upon the full exercise of the underwriters' option to purchase additional shares. We received net proceeds of approximately \$71.1 million after deducting underwriting discounts and commissions and offering costs of approximately \$3.8 million.

Jefferies LLC and Cowen served as lead book-running managers and BMO Capital Markets served as joint book-running manager for the offering. Northland Capital Markets and Rosenblatt Securities acted as co-managers.

No payments were made to our directors or officers or their associates, holders of 10% or more of any class of our equity securities or any affiliates in connection with the issuance and sale of the securities registered.

There has been no material change in the planned use of proceeds from our IPO as described in our Final Prospectus for the IPO dated as of October 26, 2021 and filed with the SEC pursuant to Rule 424(b)(4) on October 28, 2021.

Item 3. Defaults Upon Senior Securities

None.

Item 4. Mine Safety Disclosures

Not applicable.

Item 5. Other Information

10b5-1 plans:

On August 10, 2023, Atiq Raza, Director, terminated a Rule 10b5-1 trading arrangement intended to satisfy the affirmative defense of Rule 10b5-1(c) and originally adopted on December 07, 2022 for the sale of up to 765,414 shares of the Company's common stock until May 31, 2024.

On August 15, 2023, Atiq Raza, Director, adopted a Rule 10b5-1 trading arrangement that is intended to satisfy the affirmative defense of Rule 10b5-1(c) for the sale of up to 841,095 shares of the Company's common stock until October 31, 2024.

On August 15, 2023, Paul Alpern, Vice President and General Counsel, terminated a Rule 10b5-1 trading arrangement intended to satisfy the affirmative defense of Rule 10b5-1(c) and originally adopted on March 10, 2023 for the sale of up to 126,700 shares of the Company's common stock until June 30, 2024.

On August 16, 2023, Paul Alpern, Vice President and General Counsel, adopted a Rule 10b5-1 trading arrangement that is intended to satisfy the affirmative defense of Rule 10b5-1(c) for the sale of up to 131,885 shares of the Company's common stock until August 31, 2024.

Item 6. Exhibits

Exhibit No.	Description of Exhibit	Form	Exhibit	Filing Date	Filed Herewith
3.1	Amended and Restated Certificate of Incorporation of Arteris, Inc.	8-K	3.1	10-29-2021	
3.2	Amended and Restated Bylaws of Arteris, Inc.	8-K	3.2	10-29-2021	
4.1	Specimen Stock Certificate evidencing the shares of common stock.	S-1/A	4.1	10-18-2021	
31.1	Certification of Principal Executive Officer pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.				X
31.2	Certification of Principal Financial Officer pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.				X
32.1*	Certification of Principal Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.				X
32.2*	Certification of Principal Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.				X
101.INS	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.				X
101.SCH	XBRL Taxonomy Extension Schema Document.				X
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document.				X
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document.				X
101.LAB	XBRL Taxonomy Extension Label Linkbase Document.				X
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document.				X
104	Cover Page Interactive Data File (formatted as inline XBRL and contained in Exhibits 101).				X

#

Indicates a management contract or compensatory plan or arrangement.

†

Portions of this exhibit (indicated by asterisks) have been omitted pursuant to Item 601(b)(10)(iv) of Regulation S-K under the Securities Act of 1933, as amended, because they are both (i) not material and (ii) the type of information that the registrant both customarily and actually treats as private and confidential.

*

The certifications attached as Exhibits 32.1 and 32.2 that accompany this Quarterly Report on Form 10-Q, are deemed furnished and not filed with the Securities and Exchange Commission and are not to be incorporated by reference into any filing of Arteris, Inc. under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, whether made before or after the date of this Quarterly Report on Form 10-Q, irrespective of any general incorporation language contained in such filing.

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.

Date: November 7, 2023

Arteris, Inc.

By: /s/ K. Charles Janac
Name: K. Charles Janac
Title: President and Chief Executive Officer
(Principal Executive Officer)

By: /s/ Nicholas B. Hawkins
Name: Nicholas B. Hawkins
Title: Vice President and Chief Financial Officer
(Principal Financial and Accounting Officer)

**CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER PURSUANT TO
RULES 13a-14(a) AND 15d-14(a) UNDER THE SECURITIES EXCHANGE ACT OF 1934,
AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, K. Charles Janac, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Arteris, Inc;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 7, 2023

By: _____
Name: K. Charles Janac
Title: President and Chief Executive Officer
(Principal Executive Officer)

**CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER PURSUANT TO
RULES 13a-14(a) AND 15d-14(a) UNDER THE SECURITIES EXCHANGE ACT OF 1934,
AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, Nicholas B. Hawkins, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Arteris, Inc;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 7, 2023

By:	<u>/s/ Nicholas B. Hawkins</u>
Name:	Nicholas B. Hawkins
Title:	Vice President and Chief Financial Officer <i>(Principal Financial and Accounting Officer)</i>

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

In connection with the Quarterly Report of Arteris, Inc. (the "Company") on Form 10-Q for the quarter ended September 30, 2023 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"); and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: November 7, 2023

By:

/s/ K. Charles Janac

Name:

K. Charles Janac

Title:

President and Chief Executive Officer
(Principal Executive Officer)

This certification accompanies the Form 10-Q to which it relates, is not deemed filed with the Securities and Exchange Commission and is not to be incorporated by reference into any filing of the Company under the Securities Act of 1933, as amended, or the Exchange Act (whether made before or after the date of the Form 10-Q), irrespective of any general incorporation language contained in such filing.

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

In connection with the Quarterly Report of Arteris, Inc. (the "Company") on Form 10-Q for the quarter ended September 30, 2023 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"); and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: November 7, 2023

By:	/s/ Nicholas B. Hawkins
Name:	_____ Nicholas B. Hawkins
Title:	Vice President and Chief Financial Officer <i>(Principal Financial and Accounting Officer)</i>

This certification accompanies the Form 10-Q to which it relates, is not deemed filed with the Securities and Exchange Commission and is not to be incorporated by reference into any filing of the Company under the Securities Act of 1933, as amended, or the Exchange Act (whether made before or after the date of the Form 10-Q), irrespective of any general incorporation language contained in such filing.