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

FORM 10-Q

(Mark One)

☒ QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the quarterly period ended October 1, 2022

or

☐ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the transition period from _____ to _____
Commission file number: 001-33170

NETLIST, INC.
(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization)	**95-4812784** (I.R.S. Employer Identification No.)
111 Academy, Suite 100 **Irvine, California** (Address of principal executive offices)	**92617** (Zip Code)

(949) 435-0025
(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act: **None**

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

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

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

Large accelerated filer ☒ Accelerated filer ☐ Non-accelerated filer ☐ Smaller reporting company ☐
Emerging growth company ☐

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

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

As of October 28, 2022, there were 232,096,236 outstanding shares of the registrant's common stock.

Netlist EX2115
Samsung v. Netlist
IPR2025-01431

NETLIST, INC. AND SUBSIDIARIES

Form 10-Q

For the Quarter Ended October 1, 2022

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PART I. — FINANCIAL INFORMATION

Item 1. Financial Statements

NETLIST, INC. AND SUBSIDIARIES

Condensed Consolidated Balance Sheets
(In thousands, except par value)

	October 1, 2022 (unaudited)	January 1, 2022
ASSETS		
Current Assets:		
Cash and cash equivalents	$ 23,342	$ 47,679
Restricted cash	20,100	10,800
Accounts receivable, net of allowances of $166 (2022) and $283 (2021)	10,668	12,727
Inventories	18,391	15,670
Prepaid expenses and other current assets	868	1,126
Total current assets	73,369	88,002
Property and equipment, net	1,166	989
Operating lease right-of-use assets	2,207	1,891
Other assets	297	294
Total assets	$ 77,039	$ 91,176
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current Liabilities:		
Accounts payable	$ 24,112	$ 25,887
Revolving line of credit	8,000	7,000
Accrued payroll and related liabilities	1,714	1,308
Accrued expenses and other current liabilities	2,374	632
Long-term debt due within one year	1	562
Total current liabilities	36,201	35,389
Operating lease liabilities	1,845	1,593
Other liabilities	317	152
Total liabilities	38,363	37,134
Commitments and contingencies		
Stockholders' equity:		
Preferred stock, $0.001 par value—10,000 shares authorized: Series A preferred stock, $0.001 par value; 1,000 shares authorized; none issued and outstanding	—	—
Common stock, $0.001 par value—450,000 shares authorized; 232,094 (2022) and 230,113 (2021) shares issued and outstanding	233	231
Additional paid-in capital	248,920	243,866
Accumulated deficit	(210,477)	(190,055)
Total stockholders' equity	38,676	54,042
Total liabilities and stockholders' equity	$ 77,039	$ 91,176

See accompanying Notes to Condensed Consolidated Financial Statements.

NETLIST, INC. AND SUBSIDIARIES

Condensed Consolidated Statements of Operations (Unaudited)
(In thousands, except per share amounts)

	Three Months Ended		Nine Months Ended	
	October 1, 2022	October 2, 2021	October 1, 2022	October 2, 2021
Net product sales	$ 34,424	$ 26,749	$ 139,982	$ 66,009
License fee	—	—	—	40,000
Net sales	34,424	26,749	139,982	106,009
Cost of sales	32,244	24,241	129,691	59,135
Gross profit	2,180	2,508	10,291	46,874
Operating expenses:				
Research and development	2,550	2,038	7,679	5,222
Intellectual property legal fees	5,577	8,461	11,716	14,585
Selling, general and administrative	3,767	2,590	11,429	7,639
Total operating expenses	11,894	13,089	30,824	27,446
Operating (loss) income	(9,714)	(10,581)	(20,533)	19,428
Other income (expense), net:				
Interest income (expense), net	34	(125)	38	(417)
Other income (expense), net	82	(2)	74	641
Total other income (expense), net	116	(127)	112	224
(Loss) income before provision for income taxes	(9,598)	(10,708)	(20,421)	19,652
Provision for income taxes	—	—	1	6,601
Net (loss) income	$ (9,598)	$ (10,708)	$ (20,422)	$ 13,051
(Loss) earnings per share:				
Basic	$ (0.04)	$ (0.05)	$ (0.09)	$ 0.06
Diluted	$ (0.04)	$ (0.05)	$ (0.09)	$ 0.06
Weighted-average common shares outstanding:				
Basic	231,739	224,020	231,194	215,135
Diluted	231,739	224,020	231,194	235,862

See accompanying Notes to the Condensed Consolidated Statements.

NETLIST, INC. AND SUBSIDIARIES

Condensed Consolidated Statements of Stockholders Equity (Unaudited)
(In thousands)

	Common Stock		Additional Paid-in Capital	Accumulated Deficit	Total Stockholders' Equity
	Shares	Amount			
Balance, January 1, 2022	230,113	$ 231	$ 243,866	$ (190,055)	$ 54,042
Net loss	—	—	—	(5,872)	(5,872)
Issuance of common stock, net	303	—	1,767	—	1,767
Exercise of stock options	197	—	138	—	138
Stock-based compensation	—	—	682	—	682
Restricted stock units vested and distributed	533	1	(1)	—	—
Tax withholdings related to net share settlements of equity awards	(117)	—	(591)	—	(591)
Balance, April 2, 2022	231,029	232	245,861	(195,927)	50,166
Net loss	—	—	—	(4,952)	(4,952)
Issuance of common stock, net	354	—	1,973	—	1,973
Exercise of stock options	72	—	47	—	47
Stock-based compensation	—	—	790	—	790
Restricted stock units vested and distributed	50	—	—	—	—
Tax withholdings related to net share settlements of equity awards	(17)	—	(108)	—	(108)
Balance, July 2, 2022	231,488	232	248,563	(200,879)	47,916
Net loss	—	—	—	(9,598)	(9,598)
Exercise of stock options	135	—	96	—	96
Stock-based compensation	—	—	892	—	892
Restricted stock units vested and distributed	693	1	(1)	—	—
Tax withholdings related to net share settlements of equity awards	(222)	—	(630)	—	(630)
Balance, October 1, 2022	232,094	$ 233	$ 248,920	$ (210,477)	$ 38,676

See accompanying Notes to the Condensed Consolidated Statements.

NETLIST, INC. AND SUBSIDIARIES

Condensed Consolidated Statements of Stockholders Equity (Unaudited) (Continued)
(In thousands)

	Common Stock		Additional Paid-in Capital	Accumulated Deficit	Total Stockholders' Equity
	Shares	Amount			
Balance, January 2, 2021	195,978	$ 195	$ 192,071	$ (194,886)	$ (2,620)
Net loss	—	—	—	(4,017)	(4,017)
Issuance of common stock, net	11,700	12	9,349	—	9,361
Exercise of stock options	476	—	376	—	376
Exercise of warrants	6,508	7	3,975	—	3,982
Stock-based compensation	—	—	338	—	338
Restricted stock units vested and distributed	501	1	(1)	—	—
Tax withholdings related to net share settlements of equity awards	(150)	—	(276)	—	(276)
Balance, April 3, 2021	215,013	215	205,832	(198,903)	7,144
Net Income	—	—	—	27,776	27,776
Exercise of stock options	345	—	256	—	256
Exercise of warrants	588	1	375	—	376
Stock-based compensation	—	—	379	—	379
Restricted stock units vested and distributed	63	—	—	—	—
Tax withholdings related to net share settlements of equity awards	(22)	—	(47)	—	(47)
Balance, July 3, 2021	215,987	216	206,795	(171,127)	35,884
Net loss	—	—	—	(10,708)	(10,708)
Issuance of common stock, net	2,973	3	16,913	—	16,916
Exercise of stock options	1,909	2	3,178	—	3,180
Exercise of warrants	4,712	5	2,906	—	2,911
Stock-based compensation	—	—	445	—	445
Restricted stock units vested and distributed	521	—	—	—	—
Tax withholdings related to net share settlements of equity awards	(133)	—	(714)	—	(714)
Balance, October 2, 2021	225,969	$ 226	$ 229,523	$ (181,835)	$ 47,914

See accompanying Notes to the Condensed Consolidated Statements.

NETLIST, INC. AND SUBSIDIARIES

Condensed Consolidated Statements of Cash Flows (Unaudited)
(In thousands)

	Nine Months Ended	
	October 1, 2022	October 2, 2021
Cash flows from operating activities:		
Net income (loss)	$ (20,422)	$ 13,051
Adjustments to reconcile net income (loss) to net cash provided by (used in) operating activities:		
Depreciation and amortization	241	95
Interest accrued on convertible promissory notes	—	226
Amortization of debt discounts	—	158
Non-cash lease expense	476	288
Gain on extinguishment of debt	—	(643)
Stock-based compensation	2,364	1,162
Changes in operating assets and liabilities:		
Accounts receivable	2,059	(78)
Inventories	(2,721)	(16,189)
Prepaid expenses and other assets	255	(439)
Accounts payable	(1,775)	22,837
Accrued payroll and related liabilities	406	310
Accrued expenses and other liabilities	1,422	(683)
Net cash provided by (used in) operating activities	(17,695)	20,095
Cash flows from investing activities:		
Acquisition of property and equipment	(396)	(318)
Net cash used in investing activities	(396)	(318)
Cash flows from financing activities:		
Net borrowings under line of credit	1,000	809
Principal repayments under finance lease	(77)	—
Payments on note payable	(561)	(251)
Proceeds from issuance of common stock, net	3,740	26,277
Proceeds from exercise of stock options and warrants	281	11,081
Payments for taxes related to net share settlement of equity awards	(1,329)	(1,037)
Net cash provided by financing activities	3,054	36,879
Net change in cash, cash equivalents and restricted cash	(15,037)	56,656
Cash, cash equivalents and restricted cash at beginning of period	58,479	16,526
Cash, cash equivalents and restricted cash at end of period	$ 43,442	$ 73,182
Reconciliation of cash, cash equivalents and restricted cash at end of period:		
Cash and cash equivalents	$ 23,342	$ 62,282
Restricted cash	20,100	10,900
Cash, cash equivalents and restricted cash at end of period	$ 43,442	$ 73,182

See accompanying Notes to the Condensed Consolidated Statements.

NETLIST, INC. AND SUBSIDIARIES

Notes to Condensed Consolidated Financial Statements (Unaudited)

Note 1—Description of Business

Netlist, Inc. and its wholly owned subsidiaries (collectively the "Company" or "Netlist") provides high-performance solid-state drives and modular memory solutions to enterprise customers in diverse industries. The Company's non-volatile memory express solid-state drives ("NVMe SSDs") in various capacities and form factors and the line of custom and specialty memory products bring industry-leading performance to server and storage appliance customers and cloud service providers. Netlist licenses its portfolio of intellectual property including patents, in server memory, hybrid memory and storage class memory, to companies that implement Netlist's technology.

Note 2—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 ("U.S. GAAP"). Certain information and footnote disclosures normally included in the condensed consolidated financial statements prepared in accordance with U.S. GAAP have been condensed or omitted pursuant to the rules and regulations of the Securities and Exchange Commission ("SEC"). These condensed consolidated financial statements should be read in conjunction with the condensed consolidated financial statements and notes thereto as of and for the year ended January 1, 2022, included in the Company's Annual Report on Form 10-K filed with the SEC on March 1, 2022 (the "2021 Annual Report").

In the opinion of management, all adjustments for the fair presentation of the Company's condensed consolidated financial statements have been made. The adjustments are of a normal recurring nature except as otherwise noted. The results of operations for the interim periods are not necessarily indicative of the results to be expected for other periods or the full fiscal year. The Company has evaluated events occurring subsequent to October 1, 2022 through the filing date of this Quarterly Report on Form 10-Q and concluded that there were no events that required recognition and disclosures other than those discussed elsewhere in the notes hereto.

Principles of Consolidation

The accompanying condensed consolidated financial statements include the accounts of Netlist, Inc. and its wholly owned subsidiaries. All intercompany balances and transactions have been eliminated in consolidation.

Fiscal Year

The Company's fiscal year is the 52- or 53-week period that ends on the Saturday nearest to December 31. The Company's fiscal year 2022 will include 52 weeks and ends on December 31, 2022. Each quarter of fiscal year 2022 will be comprised of 13 weeks. Unless otherwise stated, references to particular years, quarters, months and periods refer to the Company's fiscal years ended in January and the associated quarters, months and periods of those fiscal years.

Use of Estimates

The preparation of the accompanying condensed consolidated financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the amounts reported. Actual results may differ materially from those estimates.

Recently Adopted Accounting Guidance

In the first quarter of 2022, we adopted the Financial Accounting Standards Board ("FASB") Accounting Standards Update ("ASU") No. 2020-06, *Debt—Debt with Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging—Contracts in Entity's Own Equity (Subtopic 815-40): Accounting for Convertible Instruments and Contracts in an Entity's Own Equity*. This ASU amends the guidance on convertible instruments and the derivatives scope exception for contracts in an entity's own equity, and also improves and amends the related earnings per share guidance for both Subtopics. The adoption of this ASU did not have an impact on the Company's condensed consolidated financial statements as the Company paid off its convertible debt in December 2021.

Note 3—Supplemental Financial Information

Inventories

Inventories consisted of the following (in thousands):

	October 1, 2022	January 1, 2022
Raw materials	$ 13,121	$ 4,208
Work in process	202	154
Finished goods	5,068	11,308
	$ 18,391	$ 15,670

(Loss) Earnings Per Share

The following table shows the computation of basic and diluted (loss) earnings per share of common stock (in thousands, except per share data):

	Three Months Ended		Nine Months Ended	
	October 1, 2022	October 2, 2021	October 1, 2022	October 2, 2021
Numerator:				
Net (loss) income	$ (9,598)	$ (10,708)	$ (20,422)	$ 13,051
Denominator:				
Weighted-average basic shares outstanding	231,739	224,020	231,194	215,135
Effect of dilutive securities	—	—	—	20,727
Weighted-average diluted shares	231,739	224,020	231,194	235,862
Basic (loss) earnings per share	$ (0.04)	$ (0.05)	$ (0.09)	$ 0.06
Diluted (loss) earnings per share	$ (0.04)	$ (0.05)	$ (0.09)	$ 0.06

The table below shows potentially dilutive weighted average common share equivalents, consisting of shares issuable upon the exercise of outstanding stock options and warrants using the treasury stock method, shares issuable upon conversion feature of a convertible note using the "if-converted" method, and the shares vesting of issuable upon the restricted stock awards ("RSAs") and restricted stock units ("RSUs"). These potential weighted average common share equivalents have been excluded from the diluted net loss per share calculations above as their effect would be anti-dilutive (in thousands):

	Three Months Ended		Nine Months Ended	
	October 1, 2022	October 2, 2021	October 1, 2022	October 2, 2021
Weighted average common share equivalents	4,323	21,158	5,451	—

Disaggregation of Net Sales

The following table shows disaggregated net sales by major source (in thousands):

	Three Months Ended		Nine Months Ended	
	October 1, 2022	October 2, 2021	October 1, 2022	October 2, 2021
Resales of third-party products	$ 25,717	$ 20,089	$ 120,470	$ 51,014
Sale of the Company's modular memory subsystems	8,707	6,660	19,512	14,995
License fee	—	—	—	40,000
Total net sales	$ 34,424	$ 26,749	$ 139,982	$ 106,009

Major Customers and Products

The Company's net product sales have historically been concentrated in a small number of customers. The following table sets forth the percentage of net product sales made to customers that each comprise 10% or more of total product sales:

	Three Months Ended		Nine Months Ended	
	October 1, 2022	October 2, 2021	October 1, 2022	October 2, 2021
Customer A	42%	25%	42%	15%
Customer B	*	13%	*	*
Customer C	15%	*	16%	*
Customer D	17%	*	*	*

* Less than 10% of net sales during the period.

As of October 1, 2022, two customers represented 59% and 14% of aggregated gross receivables, respectively. As of January 1, 2022, four customers represented 26%, 16%, 13%, and 13% of aggregate gross receivables, respectively. The loss of a major customer or a reduction in sales to or difficulties collecting payments from these customers could significantly reduce the Company's net sales and adversely affect its operating results. The Company mitigates risks associated with foreign and domestic receivables by purchasing comprehensive credit insurance.

The Company resells certain component products to end-customers that are not reached in the distribution models of the component manufacturers, including storage customers, appliance customers, system builders and cloud and datacenter customers. For the three and nine months ended October 1, 2022, resales of these products represented approximately 75% and 86% of net product sales, respectively. For the three and nine months ended October 2, 2021, resales of these products represented approximately 75% and 77% of net product sales, respectively.

Note 4—Credit Agreement

On October 31, 2009, the Company and Silicon Valley Bank ("SVB") entered into a credit agreement, as the same may from time to time be amended, modified, supplemented or restated, (the "SVB Credit Agreement"), which provides for a revolving line of credit up to $10.0 million, as amended. The SVB Credit Agreement was most recently amended on April 29, 2022, and the borrowing base is limited to 85% of eligible accounts receivable, subject to certain adjustments, and 50% of eligible inventory. Borrowings accrue interest on advance at a per annum rate equal to the greater of 0.75% above the Wall Street Journal prime rate ("Prime Rate") or 4.25%. The maturity date is April 28, 2023, as amended.

The SVB Credit Agreement requires letters of credit to be secured by cash, which is classified as restricted cash in the accompanying condensed consolidated balance sheets. As of October 1, 2022 and January 1, 2022, (i) outstanding letters of credit were $20.1 million and $10.8 million, respectively, (ii) outstanding borrowings were $8.0 million and $7.0 million, respectively, and (iii) availability under the revolving line of credit was $0.2 million and none, respectively.

The SVB Credit Agreement subjects the Company to certain affirmative and negative covenants, including financial covenants with respect to the Company's liquidity and restrictions on the payment of dividends. As of October 1, 2022, the Company was in compliance with its covenants under the SVB Credit Agreement.

Note 5—Debt

The Company's debt consisted of the following (in thousands):

	October 1, 2022	January 1, 2022
Notes payable	1	562
Less: amounts due within one year	(1)	(562)
Long-term debt	$ —	$ —

Note 6—Leases

The Company has operating and finance leases primarily associated with office and manufacturing facilities and certain equipment. The determination of which discount rate to use when measuring the lease obligation was deemed a significant judgment.

Lease cost and supplemental condensed consolidated cash flow information related to operating and finance leases were as follows (in thousands):

	Three Months Ended		Nine Months Ended	
	October 1, 2022	October 2, 2021	October 1, 2022	October 2, 2021
Lease cost:				
Operating lease cost	$ 195	$ 85	$ 591	$ 325
Cash paid for amounts included in the measurement of lease liabilities:				
Operating cash flows from operating leases	$ 167	$ 85	$ 486	$ 325
Right-of-use assets obtained in exchange for lease obligations:				
Operating leases	$ —	$ —	$ 588	$ —
Finance leases	$ —	$ 20	$ 372	$ 20
Lease modification to increase operating lease assets	$ —	$ —	$ 204	$ 338

For the three and nine months ended October 1, 2022, and October 2, 2021, finance lease costs and cash flows from finance leases were immaterial.

Supplemental condensed consolidated balance sheet information related to leases was as follows (in thousands):

	October 1, 2022	January 1, 2022
Operating Leases		
Operating lease right-of-use assets	$ 2,207	$ 1,891
Accrued expenses and other current liabilities	$ 487	$ 318
Operating lease liabilities	1,845	1,593
Total operating lease liabilities	$ 2,332	$ 1,911
Finance Leases		
Property and equipment, at cost	$ 488	$ 116
Accumulated depreciation	(97)	(54)
Property and equipment, net	$ 391	$ 62
Accrued expenses and other current liabilities	$ 209	$ 24
Other liabilities	150	41
Total finance lease liabilities	$ 359	$ 65

The following table includes supplemental information:

	October 1, 2022	January 1, 2022
Weighted Average Remaining Lease Term (in years)		
Operating lease	4.0	4.8
Finance lease	1.8	2.9
Weighted Average Discount Rate		
Operating lease	5.5%	5.5%
Finance lease	4.4%	5.2%

Maturities of lease liabilities as of October 1, 2022, were as follows (in thousands):

Fiscal Year	Operating Leases	Finance Leases
2022 (remainder of the year)	$ 167	$ 55
2023	559	221
2024	613	91
2025	624	5
2026	639	2
2027	24	—
Total lease payments	2,626	374
Less: imputed interest	(294)	(15)
Total	$ 2,332	$ 359

Note 7—Commitments and Contingencies

Contingent Legal Expenses

We may retain the services of law firms that specialize in patent licensing and enforcement and patent law in connection with our licensing and enforcement activities. These law firms may be retained on a contingent fee basis whereby such law firms are paid on a scaled percentage of any negotiated fee, settlements or judgments awarded based on how and when the fees, settlements or judgments are obtained.

Litigation and Patent Reexaminations

We own numerous patents and continue to seek to grow and strengthen our patent portfolio, which covers various aspects of our innovations and includes various claim scopes. We plan to pursue avenues to monetize our intellectual property portfolio, in which we would generate revenue by selling or licensing our technology, and we intend to vigorously enforce our patent rights against alleged infringers of such rights. We dedicate substantial resources to protecting and enforcing our intellectual property rights, including with patent infringement proceedings we file against third parties and defense of our patents against challenges made by way of reexamination and review proceedings at the U.S. Patent and Trademark Office ("USPTO") Patent Trial and Appeal Board ("PTAB"). We expect these activities to continue for the foreseeable future, with no guarantee that any ongoing or future patent protection or litigation activities will be successful, or that we will be able to monetize our intellectual property portfolio. We are also subject to litigation based on claims that we have infringed on the intellectual property rights of others.

Any litigation, regardless of its outcome, is inherently uncertain, involves a significant dedication of resources, including time and capital, and diverts management's attention from our other activities. As a result, any current or future infringement claims or patent challenges by or against third parties, whether eventually decided in our favor or settled, could materially adversely affect our business, financial condition and results of operations. Additionally, the outcome of pending or future litigation and related patent reviews and reexaminations, as well as any delay in their resolution, could affect our ability to continue to sell our products, protect against competition in the current and expected markets for our products or license or otherwise monetize our intellectual property rights in the future.

Google Litigations

On December 4, 2009, Netlist filed a patent infringement lawsuit against Google, Inc. ("Google") in the U.S. District Court for the Northern District of California (the "NDCA"), seeking damages and injunctive relief based on Google's alleged infringement of our U.S. Patent No. 7,619,912 (the "'912 Patent") which relates generally to technologies to implement rank multiplication. The NDCA case was stayed, pending challenges to the '912 Patent before the USPTO. Eventually, the United States Court of Appeals for the Federal Circuit confirmed the '912 Patent's validity on June 15, 2020, and the NDCA case stay was lifted and the case proceeded before Senior Judge Armstrong, where the parties entered cross motions for summary judgment. Of the issues in play, the parties contested the application of the defense of intervening rights to the claims at issue in the case. Afterward, the NDCA case was re-assigned to Chief Judge Seeborg of the NDCA, and the hearing for the parties' cross motions took place on March 3, 2022. On May 5, 2022, Chief Judge Seeborg entered an Order granting Netlist's Motion for Summary Judgement that Claim 16 of the '912 Patent is not subject to Google's pleaded defense of Intervening Rights. On July 13, 2022, Chief Judge Seeborg ordered – shortly before the planned July 14, 2022 case management conference – that the case be stayed for a 90-day period pending the outcome of an action initiated by Samsung Electronic Co., Ltd. ("Samsung") in Delaware involving the '912 Patent. Samsung's Delaware cause of action for the '912 Patent was dismissed by Judge Andrews there, and Netlist shortly thereafter brought a lawsuit against Samsung for their infringement of at least the '912 Patent in the U.S. District Court for the Eastern District of Texas ("EDTX"). In light of the pendency of the '912 Patent matter Netlist brought against Samsung in EDTX, Chief Judge Seeborg entered an order via stipulation on October 17, 2022 staying the Google case until the resolution of that EDTX action.

On July 26, 2022, Netlist filed a patent infringement lawsuit against Google Cloud EMEA Limited, Google Germany GmbH, Redtec Computing GmbH, and Google, Inc., seeking damages based on those defendants' infringement of European Patents EP 2,454,735 ("EP735") and EP 3,404,660 ("EP660"), which both generally relate to load reduced dual in line memory modules ("LRDIMM") technologies. As of the reporting date, the Dusseldorf Court has set Google's deadline for a statement of defense as December 30, 2022, with the date for a final oral hearing on the issues scheduled for November 9, 2023.

Micron Litigations

On April 28, 2021, Netlist filed a complaint for patent infringement against Micron Technology, Inc. ("Micron") in the United States District Court for the Western District of Texas, Waco Division ("WDTX") (Case No. 6:21-cv00431 & Case No. 6:21-cv-00430). These proceedings are based on the alleged infringement by Micron's

LRDIMM and Micron's non-volatile dual in line memory modules ("NVDIMM") enterprise memory modules under four U.S. patents – U.S. Patent Nos. 10,489,314, 9,824,035, 10,268,608, and 8,301,833. As of the reporting date, the case has been assigned to Hon. Judge Lee Yeakel, and the parties completed briefing on their claim construction arguments. On May 11, 2022, Judge Yeakel entered a stay of the case pending the resolution of Micron's requested Inter Partes Review ("IPR") proceedings against the four patents asserted by Netlist in this case (U.S. Patent Nos. 8,301,833, 9,854,035, 10,268,608, and 10,489,314). Following entry of that stay order on September 2, 2022, Micron moved the Court to "temporarily" lift the stay to add counterclaims for declaratory judgment of noninfringement of U.S. Patent Nos. 7,619,912 (the "'912 Patent"), 9,858,215 (the "'215 Patent"), 10,860,506 (the "'506 Patent"), 10,949,339 (the "'339 Patent"), 11,016,918 (the "'918 Patent"), 11,232,054 (the "'054 Patent"), and 11,093,417 (the "'417 Patent"). This addition would encompass four of the six patents asserted in Netlist's initial EDTX filing against Micron (Case No. 2:22-cv-00203 – further details of this case below), and all three of the patents asserted in Netlist's second EDTX filing against Micron (Case No. 2:22-cv-00294 – further details of this case below). On October 5, 2022, Judge Yeakel denied Micron's motion and returned the action to a stayed state, asking only that the parties submit status reports within 10-days of any activity in the relevant underlying IPR proceedings.

As noted above, Micron filed requests to bring IPR proceedings against Netlist's U.S. Patent Nos. 8,301,833, 9,854,035, 10,268,608, and 10,489,314. As of the reporting date, the PTAB granted Micron's request for the '035 Patent and the '833 Patent, but denied its request for the '608 Patent. The PTAB further denied Micron's request for rehearing on the '608 Patent's institution denial. Netlist's Patent Owner Preliminary Response to Micron's requests to IPR the '314 Patent were filed August 3, 2022.

On March 31, 2022, Netlist filed a patent infringement lawsuit against Micron in Germany, seeking damages based on their infringement of EP735 and EP660. On June 24, 2022, Netlist filed an extension of its Complaint requesting injunctive relief. Micron filed its statement of defense, thus setting Netlist's deadline for a response as December 1, 2022. Further, Micron initiated a nullity proceeding against the asserted EP patents in this action, making Netlist's response to the same as November 19, 2022. The Dusseldorf Court set an oral hearing for the Micron case in Dusseldorf on May 4, 2023. As of the reporting date, that deadline remains unchanged.

On June 10, 2022, Netlist filed a complaint for patent infringement against Micron in the EDTX, Marshall Division (Case No. 2:22-cv-00203-JRG-RSP). These proceedings are based on the alleged infringement by Micron's LRDIMM, Micron's memory modules utilizing on-board power management modules ("PMIC"), and Micron's high bandwidth memory ("HBM") components, under six U.S. patents – U.S. Patent Nos. 8,787,060, 9,318,160, 10,860,506, 10,949,339, 11,016,918, and 11,232,054. On September 2, 2022, contemporaneously with its filing in the stayed WDTX action, Micron moved the Court to stay and sever aspects of this initial EDTX case. Following the denial of its parallel motion in the WDTX, Micron moved to withdraw its stay motion in this case, which Chief Judge Gilstrap entered on October 15, 2022. As of the reporting date, the case stands ready to proceed with a claim construction hearing set for July 19, 2023, and trial beginning on January 22, 2024.

On August 1, 2022, Netlist filed a complaint for patent infringement against Micron in the EDTX (Case No. 2:22-cv-00294) under the '912 patent, which relates generally to technologies to implement rank multiplication. On August 15, 2022, Netlist filed its first amended complaint, further addressing Micron's infringement of the '215 Patent and the '417 Patent. On September 12, 2022, Micron moved to stay this second EDTX action in light of its parallel motions pending in both the WDTX and initial EDTX cases. Given the denial of Micron's motion in the WDTX on October 5, 2022, Micron moved to withdraw its motion to stay in this action, which Chief Judge Gilstrap entered on October 13, 2022. On October 21, 2022, Chief Judge Gilstrap ordered that this Micron action and a parallel action by Netlist against Samsung on the same patents (22-cv-00293-JRG) be consolidated and set for a joint scheduling conference on November 17, 2022, further instructing that the Samsung action be considered the "LEAD CASE" and that any further filings from either action be submitted in that case for all pretrial matters.

Samsung Litigations

On May 28, 2020, Netlist filed a complaint against Samsung in the United States District Court for the Central District of California for Samsung's breach of the parties' Joint Development and License Agreement ("JDLA"). On July 22, 2020, Netlist amended its complaint to seek a Declaratory Judgment that it properly terminated the JDLA in

light of Samsung's material breaches. On October 14, 2021, the Court entered summary judgment in Netlist's favor and confirmed Netlist properly terminated the JDLA as of July 15, 2020. On February 15, 2022, the Court entered a Final Judgment in favor of Netlist on each of its three claims and confirmed conclusively that all licenses granted under the JDLA were terminated. On February 25, 2022, Samsung filed a Notice of Appeal, and the Federal Court of Appeals for the Ninth Circuit issued a Time Schedule Order on February 28, 2022, setting Samsung's deadline to file an opening appeal brief as June 6, 2022. As of the reporting date, Samsung filed its opening brief seeking an appeal of the lower Court's decisions. Netlist filed its response to Samsung's appeal and its own opening cross-appeal brief on August 4, 2022. Samsung responded as allowed on October 6, 2022 after seeking an extension of its deadline. Netlist now has an opportunity to enter a Reply in support of its cross-appeal, which is due for filing November 28, 2022.

On October 15, 2021, Samsung filed a declaratory judgement action against Netlist in the United States District Court for the District of Delaware ("DDE"), requesting in relevant part that the Delaware District Court declare that Samsung does not infringe Netlist's U.S. Patent Nos. 7,619,912, 9,858,218, 10,217,523, 10,474,595, 10,860,506, 10,949,339, and 11,016,918. As of the reporting date, Samsung seeks leave to add the '054 Patent (issued Jan. 25, 2022) to the action. Netlist believes Samsung's claims levied in the DDE action meritless, and the relief Samsung requests unjustified. Netlist filed a motion seeking dismissal of Samsung's operative DDE complaint, and an opposition contesting the inclusion of the '054 Patent as part of Samsung's proposed second amended complaint filing. On August 1, 2022, the Court entered an Order on the pending motions denying Samsung's request to amend its operative complaint a second time to add a count against the '054 Patent, and granting-in-part Netlist's motion that various causes of action be dismissed. Specifically, Judge Andrews dismissed all of Samsung's counts related to Netlist's U.S. Patent Nos. 7,619,912, 10,860,506, 10,949,339, and 11,016,918. Thus, on August 22, 2022, Netlist entered its Answer to Samsung's remaining Counterclaims. On September 12, 2022, Netlist amended its Counterclaims to include counterclaims tying Google, LLC and Alphabet, Inc. to the action. As of the reporting date, Google, LLC and Alphabet, Inc.'s responses to the claims are set for November 3, 2022.

On November 19, 2021, Samsung filed IPR requests contesting the validity of U.S. Patent Nos. 9,858,218 (the "'218 Patent"), 10,474,595 (the "'595 Patent"), and 10,217,523 (the "'523 Patent"). Netlist filed its initial responses to Samsung's petitions on February 18, 2022, contesting the institution of any IPR on the grounds propounded. As of the reporting date, the PTAB has granted Samsung's IPR requests related to the '218, '523, and '595 patents. Netlist filed its Patent Owner's Response for the '523 Patent IPR on August 4, 2022, and its Patent Owner Responses for the '218 and '595 Patent IPRs on August 15, 2022.

On February 17, 2022, Samsung filed an IPR request contesting the validity of only claim 16 within the '912 Patent. Samsung then filed two additional IPR requests contesting the validity of the '506 and '339 Patents. Netlist filed its Patent Owner's Preliminary Response for the '912 and '339 Patent IPRs on July 21, 2022, and for the '506 Patent IPR on July 28, 2022. On August 26, 2022, Samsung filed two additional IPR petitions contesting the validity of Netlist's U.S. Patent Nos. 8,787,060 (the "'060 Patent") and 9,318,160 (the "'106 Patent"). On October 19, 2022, the PTAB set Netlist's deadline to file its preliminary responses in those proceedings as January 19, 2023. On the same day, the PTAB instituted IPR trials on both the '912 and '339 patents. The following day, the PTAB instituted an IPR trial on the '506 patent. Separately, Netlist has filed its Patent Owner Preliminary Responses to Samsung's IPR petitions against the '918 and '054 Patents on September 9, 2022 and September 8, 2022, respectively.

On June 3, 2022, Netlist filed a patent infringement lawsuit against Samsung in Dusseldorf, Germany, seeking damages for Samsung's infringement of Netlist's Patents EP735 and EP660. The Dusseldorf Court set an Oral Hearing date for September 5, 2023. As of the reporting date, Netlist filed an extension of its Complaint requesting injunctive relief, which Samsung followed with a request for an extension of its deadline to provide a statement of defense and alternatively to stay the proceedings entirely. Micron initiated a parallel nullity action on both patents asserted in the Dusseldorf Court, setting Netlist's deadline to provide its initial arguments against nullity on November 19, 2022.

On December 20, 2021, Netlist filed a complaint for patent infringement against Samsung Electronics Co., Ltd., Samsung Semiconductor, Inc., and Samsung Electronics America, Inc. in the EDTX (Case No. 2:21-cv-463) under the '506, '339, and '918 Patents. Samsung responded to Netlist's complaint on April 12, 2022, and Judge Gilstrap ordered a scheduling conference be set. On May 3, 2022, Netlist entered a First Amended Complaint pursuant to the Federal Rules of Civil Procedure ("FRCP") Rule 15, adding claims for infringement under three additional patents: the '060, '160, and

‘054 Patents. On May 4, 2022, Netlist complied with the EDTX local patent rules and served its preliminary infringement contentions on Samsung. On May 27, 2022, Samsung moved to stay this action and sever the patents it sought to add to its Declaratory Judgement action in Delaware. On August 2, 2022, Samsung withdrew that first motion to stay in light of Judge Andrews’ order mandating dismissal of all Samsung’s claims related to the Texas Netlist patents the day before. On August 30, 2022 Samsung moved to stay the action a second time, this time in light of its IPR petitions, and its appeal of the Central District California Judgment at the 9th Circuit Court of Appeals. The matter was fully briefed as of October 17, 2022. In parallel, the parties completed substantive briefing on all claim construction issues and as of the reporting date have filed a joint claim construction statement for the Court’s consideration. The Court assigned claim construction to Magistrate Judge Roy Payne, who scheduled the claim construction hearing for November 4, 2022 in his Court. The Trial start remains set for May 1, 2023.

On August 1, 2022, Netlist filed a complaint for patent infringement against Samsung Electronics Co., Ltd., Samsung Semiconductor, Inc., and Samsung Electronics America, Inc. in the EDTX (Case No. 2:22-cv-00293) under the ‘912 Patent, which relates generally to technologies to implement rank multiplication. On August 15, 2022, Netlist filed its first amended complaint here, further addressing Samsung’s infringement of the ‘215 Patent and ‘417 Patent. On August 31, 2022, Samsung Semiconductor, Inc. and Samsung Electronics America, Inc. sought and received extensions of time to respond to Netlist’s first amended complaint until October 7, 2022. Before answering on September 20, 2022, Samsung collectively moved the Court to sever and transfer the ‘912 Patent from the action and stay the remaining portions of this proceeding in light of Samsung’s appeal before 9th Circuit Court of Appeals. The matter is fully briefed, but Samsung Electronics Co., Ltd.’s response deadline remains currently set for November 29, 2022. Apart from Samsung’s early motion practice and its remaining response deadline, on October 21, 2022, Chief Judge Gilstrap ordered that this action and a parallel action by Netlist against Micron on the same patents (22-cv-00294-JRG) be consolidated and set for a joint scheduling conference on November 17, 2022, further instructing that this Samsung action be considered the “LEAD CASE” and that any further filings from either action be submitted in therefor all pretrial matters.

Other Contingent Obligations

In the ordinary course of our business, we have made certain indemnities, commitments and guarantees pursuant to which we may be required to make payments in relation to certain transactions. These include, among others: (i) intellectual property indemnities to our customers and licensees in connection with the use, sale and/or license of our products; (ii) indemnities to vendors and service providers pertaining to claims based on our negligence or willful misconduct; (iii) indemnities involving the accuracy of representations and warranties in certain contracts; (iv) indemnities to our directors and officers to the maximum extent permitted under the laws of the State of Delaware; (v) indemnities to SVB pertaining to all obligations, demands, claims, and liabilities claimed or asserted by any other party in connection with transactions contemplated by the applicable investment or loan documents, as applicable; and (vi) indemnities or other claims related to certain real estate leases, under which we may be required to indemnify property owners for environmental and other liabilities or may face other claims arising from our use of the applicable premises. The duration of these indemnities, commitments and guarantees varies and, in certain cases, may be indefinite. The majority of these indemnities, commitments and guarantees do not provide for any limitation of the maximum potential for future payments we could be obligated to make. Historically, we have not been obligated to make significant payments as a result of these obligations, and no liabilities have been recorded for these indemnities, commitments and guarantees in the accompanying consolidated balance sheets.

Note 8—Stockholders’ Equity

Serial Preferred Stock

The Company’s authorized capital stock includes 10,000,000 shares of serial preferred stock, with a par value of $0.001 per share. No shares of preferred stock were outstanding as of October 1, 2022 or January 2, 2022.

On April 17, 2017, the Company entered into a rights agreement (as amended from time to time, the “Rights Agreement”) with Computershare Trust Company, N.A., as rights agent. In connection with the adoption of the Rights Agreement and pursuant to its terms, the Company’s board of directors authorized and declared a dividend of one right (each, a “Right”) for each outstanding share of the Company’s common stock to stockholders of record at the close of

business on May 18, 2017 (the "Record Date"), and authorized the issuance of one Right for each share of the Company's common stock issued by the Company (except as otherwise provided in the Rights Agreement) between the Record Date and the Distribution Date (as defined below).

Each Right entitles the registered holder, subject to the terms of the Rights Agreement, to purchase from the Company, when exercisable and subject to adjustment, one unit consisting of one one-thousandth of a share (a "Unit") of Series A Preferred Stock of the Company (the "Preferred Stock"), at a purchase price of $6.56 per Unit, subject to adjustment. Subject to the provisions of the Rights Agreement, including certain exceptions specified therein, a distribution date for the Rights (the "Distribution Date") will occur upon the earlier of (i) 10 business days following a public announcement that a person or group of affiliated or associated persons (an "Acquiring Person") has acquired or otherwise obtained beneficial ownership of 15% or more of the then-outstanding shares of the Company's common stock, and (ii) 10 business days (or such later date as may be determined by the Company's board of directors) following the commencement of a tender offer or exchange offer that would result in a person or group becoming an Acquiring Person. The Rights are not exercisable until the Distribution Date and, unless earlier redeemed or exchanged by the Company pursuant to the terms of the Rights Agreement (as amended on April 16, 2018, April 16, 2019 and August 14, 2020) will expire on the close of business on April 17, 2024.

In connection with the adoption of the Rights Agreement, the Company's board of directors approved a Certificate of Designation of the Series A Preferred Stock (the "Certificate of Designation") designating 1,000,000 shares of its serial preferred stock as Series A Preferred Stock and setting forth the rights, preferences and limitations of the Preferred Stock. The Company filed the Certificate of Designation with the Secretary of State of the State of Delaware on April 17, 2017.

Common Stock

September 2021 Lincoln Park Purchase Agreement

On September 28, 2021, the Company entered into a purchase agreement (the "September 2021 Purchase Agreement") with Lincoln Park, pursuant to which the Company has the right to sell to Lincoln Park up to an aggregate of $75 million in shares of its common stock subject to the conditions and limitations set forth in the September 2021 Purchase Agreement. Concurrent with the execution of the September 2021 Purchase Agreement, the Company also entered into a registration rights agreement with Lincoln Park relating to the Company's common stock to be sold to Lincoln Park. As consideration for entering into the September 2021 Purchase Agreement, the Company issued to Lincoln Park 218,750 shares of its common stock as initial commitment shares in a noncash transaction on September 28, 2021 and will issue up to 143,750 additional shares of its common stock as additional commitment shares on a pro rata basis in connection with any additional purchases. The Company will not receive any cash proceeds from the issuance of these additional commitment shares.

Pursuant to the September 2021 Purchase Agreement, on any business day and as often as every other business day over the 36-month term of the September 2021 Purchase Agreement, the Company has the right, from time to time, at its sole discretion and subject to certain conditions, to direct Lincoln Park to purchase up to 750,000 shares of its common stock, provided Lincoln Park's obligation under any single such purchase will not exceed $4.0 million, unless the Company and Lincoln Park mutually agree to increase the maximum amount of such single regular purchase. If the Company directs Lincoln Park to purchase the maximum number of shares of common stock, it then may sell in a regular purchase, then in addition to such regular purchase, and subject to certain conditions and limitations in the September 2021 Purchase Agreement, the Company may direct Lincoln Park to purchase an additional amount of common stock that may not exceed the lesser of (i) 300% of the number of shares purchased pursuant to the corresponding regular purchase or (ii) 30% of the total number of shares of its common stock traded during a specified period on the applicable purchase date as set forth in the September 2021 Purchase Agreement. Under certain circumstances and in accordance with the September 2021 Purchase Agreement, the Company may direct Lincoln Park to purchase shares in multiple accelerated purchases on the same trading day.

The Company controls the timing and amount of any sales of its common stock to Lincoln Park. There is no upper limit on the price per share that Lincoln Park must pay for the Company's common stock under the September

2021 Purchase Agreement, but in no event will shares be sold to Lincoln Park on a day the closing price is less than the floor price specified in the September 2021 Purchase Agreement. In all instances, the Company may not sell shares of its common stock to Lincoln Park under the September 2021 Purchase Agreement if that would result in Lincoln Park beneficially owning more than 9.99% of its common stock.

The September 2021 Purchase Agreement does not limit the Company's ability to raise capital from other sources at the Company's sole discretion, except that, subject to certain exceptions, the Company may not enter into any Variable Rate Transaction (as defined in the September 2021 Purchase Agreement, including the issuance of any floating conversion rate or variable priced equity-like securities) during the 36 months after the date of the September 2021 Purchase Agreement. The Company has the right to terminate the September 2021 Purchase Agreement at any time, at no cost to the Company.

During 2021, Lincoln Park purchased an aggregate of 1,550,000 shares of our common stock for a net purchase price of $10.9 million under the September 2021 Purchase Agreement. In connection with the purchases, we issued to Lincoln Park an aggregate of 20,809 shares of our common stock as additional commitment shares in noncash transactions. During the nine months ended October 1, 2022, Lincoln Park purchased an aggregate of 650,000 shares of our common stock for a net purchase price of $3.7 million under the September 2021 Purchase Agreement. In connection with the purchases, we issued to Lincoln Park an aggregate of 7,168 shares of our common stock as additional commitment shares in noncash transactions.

Note 9—Stock-Based Awards

As of October 1, 2022, the Company had 464,076 shares of common stock reserved for future issuance under its Amended and Restated 2006 Incentive Plan ("Amended 2006 Plan"). Stock options granted under the Amended 2006 Plan generally vest at a rate of at least 25% per year over four years and expire 10 years from the grant date. RSUs granted for employees and consultants generally vest in equal installments annually and fully vest over a four-year term from the grant date.

Stock Options

The following table summarizes the activity related to stock options during the nine months ended October 1, 2022:

	Number of Shares (in thousands)	Weighted-Average Exercise Price
Outstanding as of January 1, 2022	5,899	$ 0.88
Granted	—	—
Exercised	(404)	0.69
Expired or forfeited	(605)	0.67
Outstanding as of October 1, 2022	4,890	$ 0.92

Restricted Stock Units

The following table summarizes the activity related to RSUs during the nine months ended October 1, 2022:

	Number of Shares (in thousands)	Weighted-Average Grant-Date Fair Value per Share
Outstanding as of January 1, 2022	2,228	$ 1.36
Granted	2,651	4.25
Vested	(1,276)	1.13
Forfeited	(266)	5.43
Outstanding as of October 1, 2022	3,337	$ 3.42

Stock-Based Compensation

The following table summarizes the stock-based compensation expense by line item in the condensed consolidated statements of operations (in thousands):

	Three Months Ended		Nine Months Ended	
	October 1, 2022	October 2, 2021	October 1, 2022	October 2, 2021
Cost of sales	$ 22	$ 2	$ 41	$ 9
Research and development	283	160	674	438
Selling, general and administrative	587	283	1,649	715
Total	$ 892	$ 445	$ 2,364	$ 1,162

As of October 1, 2022, the Company had approximately $9.7 million, net of estimated forfeitures, of unearned stock-based compensation, which it expects to recognize over a weighted-average period of approximately 3.2 years.

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

Note Regarding Forward-Looking Statements

This Management's Discussion and Analysis of Financial Condition and Results of Operations ("MD&A") and other parts of this report include "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements are statements other than historical facts and often address future events or our future performance. Words such as "anticipate," "estimate," "expect," "project," "intend," "may," "will," "might," "plan," "predict," "believe," "should," "could" and similar words or expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words.

Forward-looking statements contained in this MD&A include statements about, among other things:

- *specific and overall impacts of the COVID-19 pandemic on our financial condition and results of operations;*
- *our beliefs regarding the market and demand for our products or the component products we resell;*
- *our ability to develop and launch new products that are attractive to the market and stimulate customer demand for these products;*
- *our plans relating to our intellectual property, including our goals of monetizing, licensing, expanding and defending our patent portfolio;*
- *our expectations and strategies regarding outstanding legal proceedings and patent reexaminations relating to our intellectual property portfolio;*
- *our expectations with respect to any strategic partnerships or other similar relationships we may pursue;*
- *the competitive landscape of our industry;*
- *general market, economic and political conditions;*
- *our business strategies and objectives;*
- *our expectations regarding our future operations and financial position, including revenues, costs and prospects, and our liquidity and capital resources, including cash flows, sufficiency of cash resources, efforts to reduce expenses and the potential for future financings;*
- *our ability to remediate any material weakness, maintain effective internal control over financial reporting and satisfy the accelerated and enhanced disclosure obligations that will apply to us as we transition from a "smaller reporting company" to a "large accelerated filer" in 2022; and*
- *the impact of the above factors and other future events on the market price and trading volume of our common stock.*

All forward-looking statements reflect management's present assumptions, expectations and beliefs regarding future events and are subject to known and unknown risks, uncertainties and other factors that could cause actual results to differ materially from those expressed in or implied by any forward-looking statements. These risks and uncertainties include those described under "Risk Factors" in Part II, Item 1A of this report. In light of these risks and uncertainties, our forward-looking statements should not be relied on as predictions of future events. Additionally, many of these risks and uncertainties are currently elevated by and may or will continue to be elevated by the COVID-19 pandemic. All forward-looking statements reflect our assumptions, expectations and beliefs only as of the date they are made, and except as required by law, we undertake no obligation to revise or update any forward-looking statements for any reason.

The following MD&A should be read in conjunction with our condensed consolidated financial statements and the related notes included in Part I, Item 1 of this report, as well as our Annual Report on Form 10-K for our fiscal year ended January 1, 2022 (the "2021 Annual Report") filed with the SEC. All information presented herein is based on our fiscal calendar, and references to particular years, quarters, months or periods refer to our fiscal years ended in January or December and the associated quarters, months and periods of those fiscal years. Each of the terms the "Company," "Netlist," "we," "us," or "our" as used herein refers collectively to Netlist, Inc. and its consolidated subsidiaries, unless otherwise stated.

Overview

Netlist provides high-performance solid-state drives and modular memory solutions to enterprise customers in diverse industries. Our NVMe SSDs in various capacities and form factors and the line of custom and specialty memory products bring industry-leading performance to server and storage appliance customers and cloud service providers. Netlist licenses its portfolio of intellectual property including patents, in server memory, hybrid memory and storage class memory, to companies that implement Netlist's technology.

During the third quarter of 2022, we recorded net sales of $34.4 million, gross profit of $2.2 million and net loss of $9.6 million. We have historically financed our operations primarily with proceeds from issuances of equity and debt securities and cash receipts from revenues. We have also funded our operations with a revolving line of credit and term loans under a bank credit facility. See "Recent Developments" and "Liquidity and Capital Resources" below for more information.

Recent Developments

SK hynix Agreements

On April 5, 2021, we entered into a Strategic Product Supply and License Agreement (the "Strategic Agreement") and Product Purchase and Supply Agreement ("Supply Agreement") with SK hynix, Inc., a South Korean memory semiconductor supplier ("SK hynix"). Both agreements have a term of 5 years. Under the Strategic Agreement, (a) we have granted to SK hynix worldwide, non-exclusive, non-assignable licenses to certain of our patents covering memory technologies and (b) SK hynix has granted to us worldwide, non-exclusive, non-assignable licenses to its patent portfolio. In addition, the Strategic Agreement provided for the settlement of all intellectual property proceedings between us and SK hynix and a fee of $40 million paid to us by SK hynix. In addition, the parties have agreed to collaborate on certain technology development activities.

Amendment to SVB Credit Agreement

On October 31, 2009, we entered into the SVB Credit Agreement, which provides for a revolving line of credit of up to $10.0 million, as amended. The SVB Credit Agreement was most recently amended on April 29, 2022, and the borrowing base is limited to 85% of eligible accounts receivable, subject to certain adjustments, and 50% of eligible inventory. Borrowings accrue interest on advance at a per annum rate equal to the greater of 0.75% above the Prime Rate or 4.25%. The maturity date is April 28, 2023, as amended.

September 2021 Lincoln Park Purchase Agreement

On September 28, 2021, we entered into the September 2021 Purchase Agreement with Lincoln Park, pursuant to which we have the right to sell to Lincoln Park up to an aggregate of $75 million in shares of our common stock over the 36-month term of the September 2021 Purchase Agreement subject to the conditions and limitations set forth in the September 2021 Purchase Agreement.

During 2021, Lincoln Park purchased an aggregate of 1,550,000 shares of our common stock for a net purchase price of $10.9 million under the September 2021 Purchase Agreement. In connection with the purchases, we issued to Lincoln Park an aggregate of 20,809 shares of our common stock as additional commitment shares in noncash transactions. During the nine months ended October 1, 2022, Lincoln Park purchased an aggregate of 650,000 shares of our common stock for a net purchase price of $3.7 million under the September 2021 Purchase Agreement. In connection with the purchases, we issued to Lincoln Park an aggregate of 7,168 shares of our common stock as additional commitment shares in noncash transactions.

Economic Conditions, Challenges and Risks

Our performance, financial condition and prospects are affected by a number of factors and are exposed to a number of risks and uncertainties. We operate in a competitive and rapidly evolving industry in which new risks emerge

from time to time, and it is not possible for us to predict all of the risks we may face, nor can we assess the impact of all factors on our business or the extent to which any factor or combination of factors could cause actual results to differ from our expectations. See the discussion of certain risks that we face under “Risk Factors” in Part II, Item 1A of this report.

Impact of COVID-19 on our Business

The impact of the coronavirus disease (“COVID-19”) pandemic will have on our consolidated results of operations is uncertain. Although we initially observed demand increases in our products, we anticipate that the global health crisis caused by COVID-19 may negatively impact business activity across the globe. We will continue to actively monitor the situation and may take further actions altering our business operations that we determine are in the best interests of our employees, customers, suppliers, and stakeholders, or as required by federal, state, or local authorities. It is not clear what the potential effects of such alterations or modifications may have on our business, consolidated results of operations, financial condition, and liquidity.

Results of Operations

Net Sales and Gross Profit

Net sales and gross profit for the three and nine months ended October 1, 2022, and October 2, 2021 were as follows (dollars in thousands):

	Three Months Ended			Nine Months Ended		
	October 1, 2022	October 2, 2021	% Change	October 1, 2022	October 2, 2021	% Change
Net product sales	$ 34,424	$ 26,749	29%	$ 139,982	$ 66,009	112%
License fee	—	—	0%	—	40,000	(100%)
Net sales	34,424	26,749	29%	139,982	106,009	32%
Gross profit - product sales	$ 2,180	$ 2,508	(13%)	$ 10,291	$ 6,874	50%
Gross margin percentage - product sales	6%	9%		7%	10%	
Gross profit	$ 2,180	$ 2,508	(13%)	$ 10,291	$ 46,874	(78%)
Gross margin percentage	6%	9%		7%	44%	

Net Sales

Net sales include (i) resales of component products including DIMMs, SSDs, and dynamic random-access memory (“DRAM ICS” or DRAM) products, and sales of our high-performance memory subsystems and (ii) an upfront non-refundable fee pursuant to the Strategic Agreement with SK hynix entered into on April 5, 2021.

Net product sales increased by approximately $7.7 million during the third quarter of 2022 compared to the same quarter of 2021, primarily as a result of a $12.4 million increase in re-sale of SK hynix products and a $4.9 million increase in sale of Netlist’s flash and SSD products, offset by a $9.6 million decrease in sales of low-profile memory subsystem products.

Net product sales increased by approximately $74.0 million during the first nine months of 2022 compared to the same period in 2021, primarily as a result of a $84.0 million increase in re-sale of SK hynix products and a $8.1 million increase in sale of Netlist’s flash and SSD products, offset by a $18.0 million decrease in sales of low-profile memory subsystem products.

Gross Profit and Gross Margin

Product gross profit decreased by $0.3 million during the third quarter of 2022 compared to the same quarter of 2021 primarily as a result of softer pricing environment and product sales mix. Product gross profit increased during the first nine months of 2022 compared to the same period of 2021 due primarily to higher sales across all product groups.

Product gross margin percentage decreased between the periods as a result of the change in our product mix and increased component product resales as a percentage of revenue.

Operating Expenses

Operating expenses for the three and nine months ended October 1, 2022, and October 2, 2021, were as follows (dollars in thousands):

	Three Months Ended			Nine Months Ended		
	October 1, 2022	October 2, 2021	% Change	October 1, 2022	October 2, 2021	% Change
Research and development	$ 2,550	$ 2,038	25%	$ 7,679	$ 5,222	47%
Percentage of net product sales	7%	8%		5%	8%	
Intellectual property legal fees	$ 5,577	$ 8,461	(34%)	$ 11,716	$ 14,585	(20%)
Percentage of net product sales	16%	32%		8%	22%	
Selling, general and administrative	$ 3,767	$ 2,590	45%	$ 11,429	$ 7,639	50%
Percentage of net product sales	11%	10%		8%	12%	

Research and Development

Research and development expenses increased during the third quarter and the first nine months of 2022 compared to the same periods of 2021 due primarily to an increase in employee headcount, related overhead and new product research.

Intellectual Property Legal Fees

Intellectual property legal fees consist of legal fees incurred for patent filings, protection and enforcement. Although we expect intellectual property legal fees to generally increase over time as we continue to protect, defend and enforce and seek to expand our patent portfolio, these increases may not be linear but may occur in lump sums depending on the due dates of patent filings and their associated fees and the arrangements we may make with our legal advisors in connection with enforcement proceedings, which may include fee arrangements or contingent fee arrangements in which we would pay these legal advisors on a scaled percentage of any negotiated fees, settlements or judgments awarded to us based on if, how and when the fees, settlements or judgments are obtained. See Note 7 to the condensed consolidated financial statements included in Part I, Item 1 of this report for further discussion.

Intellectual property legal fees decreased during the third quarter and the first nine months of 2022 compared to the same periods of 2021 due primarily to lower legal expenses incurred to defend our patent portfolio internationally.

Selling, General and Administrative

Selling, general and administrative expenses increased during the third quarter and the first nine months of 2022 compared to the same periods of 2021 due primarily to an increase in employee headcount and overhead and outside services. As a result of the significant increase in the value of our non-affiliate public float in recent periods, we are a “large accelerated filer” as of the end of fiscal year ended January 2, 2022 which means that we need to file our quarterly and annual reports on an accelerated basis and that we are required to have our independent registered public accounting firm audit and attest to our internal control over financial reporting. Complying with these requirements requires us to invest a material amount in enhancing our financial reporting infrastructure that will cause our selling, general and administrative expenses to increase in future periods.

Other Income (Expense), Net

Other income (expense), net for the three and nine months ended October 1, 2022, and October 2, 2021 was as follows (dollars in thousands):

	Three Months Ended			Nine Months Ended		
	October 1, 2022	October 2, 2021	% Change	October 1, 2022	October 2, 2021	% Change
Interest income (expense), net	$ 34	$ (125)		$ 38	$ (417)	
Other income (expense), net	82	(2)		74	641	
Total other income (expense), net	$ 116	$ (127)	191%	$ 112	$ 224	50%

Interest expense, net, in 2021 consisted primarily of interest expense on the $15 million secured convertible note issued to Samsung Venture Investment Co. ("SVIC Note") in November 2015 and a revolving line of credit under the SVB Credit Agreement, along with the accretion of debt discounts and amortization of debt issuance costs on the SVIC Note. The SVIC Note was paid off in the fourth quarter of 2021 resulting in a decrease in interest expense for the third quarter and the first nine months of 2022 compared to the same periods of 2021.

Other income, net increased during the third quarter of 2022 compared to the same quarter of 2021 primarily as a result of a one-time gain from a sanction judgment. During the first nine months of 2021, other income, net included the gain on forgiveness of the Paycheck Protection Program Loan of $0.6 million. This gain was recognized during the second quarter of 2021 resulting in a decrease in other income for the first nine months of 2022 compared to the same period of 2021.

Liquidity and Capital Resources

Our primary sources of cash are historically proceeds from issuances of equity and debt securities and receipts from revenues. In addition, we have received proceeds from non-recurring engineering and licensing of our patent portfolio, including as a result of our entry into the SK hynix Strategic Agreement, which we use to support our operations. We have also funded our operations with a revolving line of credit under a bank credit facility, and to a lesser extent, equipment leasing arrangements.

The following tables present selected financial information as of October 1, 2022, and January 1, 2022 and for the first nine months of 2022 and 2021 (in thousands):

	October 1, 2022	January 1, 2022
Cash, cash equivalents and restricted cash	$ 43,442	$ 58,479
Convertible promissory note and accrued interest, net	1	562
Working capital	37,168	52,613

	Nine Months Ended	
	October 1, 2022	October 2, 2021
Net cash provided by (used in) operating activities	$ (17,695)	$ 20,095
Net cash used in investing activities	(396)	(318)
Net cash provided by financing activities	3,054	36,879

During the nine months ended October 1, 2022, net cash used in operating activities was primarily a result of net loss of $20.4 million, non-cash adjustments to net loss of $3.1 million, and net cash outflows from changes in operating assets and liabilities of $0.4 million driven predominantly by an increase in inventories due to higher purchases to support increased sales and a decrease in accounts payable, partially offset by a decrease in accounts receivable and an increase in accrued expenses and other liabilities. Net cash provided by financing activities during the nine months ended October 1, 2022 primarily consisted of $1.0 million in net borrowings under the SVB Credit Agreement, $3.7 million in

net proceeds from issuance of common stock under the September 2021 Lincoln Park Purchase Agreement, $0.3 million in proceeds from exercise of stock options, offset by $0.6 million in payments of note payable to finance insurance policies and $1.3 million in payments for taxes related to net share settlement of equity awards.

During the nine months ended October 2, 2021, net cash provided by operating activities was primarily a result of net income of $13.1 million, non-cash adjustments to net income of $1.3 million, and net cash inflows from changes in operating assets and liabilities of $5.7 million driven predominantly by an increase in accounts payable due to higher inventory purchases to support increase in sales and higher legal fees to defend our patent portfolio, partially offset by an increase in inventories. Net cash provided by financing activities during the nine months ended October 2, 2021 primarily consisted of $26.3 million in net proceeds from issuance of common stock under the 2019 Purchase Agreement with Lincoln Park, 2020 Purchase Agreement with Lincoln Park and First 2021 Lincoln Park Purchase Agreement, $11.1 million in proceeds from exercise of stock options and warrants and $0.8 million in net borrowings under the SVB Credit Agreement, partially offset by $1.0 million in payments for taxes related to net share settlement of equity awards.

Capital Resources

September 2021 Lincoln Park Purchase Agreement

On September 28, 2021, we entered into the September 2021 Purchase Agreement with Lincoln Park, pursuant to which we have the right to sell to Lincoln Park up to an aggregate of $75.0 million in shares of our common stock over the 36-month term of the September 2021 Purchase Agreement subject to the conditions and limitations set forth in the September 2021 Purchase Agreement. As of October 1, 2022, $60.4 million remains available under the September 2021 Purchase Agreement with Lincoln Park.

SVB Credit Agreement

On October 31, 2009, we entered into the SVB Credit Agreement, which provides for a revolving line of credit of up to $10.0 million, as amended. The SVB Credit Agreement was most recently amended on April 29, 2022, and the borrowing base is limited to 85% of eligible accounts receivable, subject to certain adjustments, and 50% of eligible inventory. Borrowings accrue interest on advance at a per annum rate equal to the greater of 0.75% above the Prime Rate or 4.25%. The maturity date is April 28, 2023, as amended.

As of October 1, 2022, the outstanding borrowings under the SVB Credit Agreement were $8.0 million with additional borrowing availability of $0.2 million. During the nine months ended October 1, 2022, we made net borrowings of $1.0 million under the SVB Credit Agreement.

Sufficiency of Cash Balances and Potential Sources of Additional Capital

We believe our existing balance of cash and cash equivalents together with cash receipts from revenues, borrowing availability under the SVB Credit Agreement, the equity financing available under September 2021 Purchase Agreement, funds raised through other future debt and equity offerings and taking into account cash expected to be used in our operations, will be sufficient to meet our anticipated cash needs for at least the next 12 months.

Off-Balance Sheet Arrangements

We do not have any off-balance sheet arrangements that have or are reasonably likely to have a current or future effect on our financial condition, changes in financial condition, revenues or expenses, results of operations, liquidity, capital expenditure or capital resources that is material to investors.

Critical Accounting Policies and Use of Estimates

The preparation of our condensed consolidated financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the condensed consolidated financial statements, and the reported

amounts of net sales and expenses during the reporting period. By their nature, these estimates and assumptions are subject to an inherent degree of uncertainty. We base our estimates and assumptions on our historical experience, knowledge of current conditions and our beliefs of what could occur in the future considering available information. We review our estimates and assumptions on an ongoing basis. Actual results may differ from our estimates, which may result in material adverse effects on our consolidated operating results and financial position.

Our critical accounting policies and estimates are discussed in Note 2 to the condensed consolidated financial statements in this report and in the notes to consolidated financial statements in Part II, Item 8 of our 2021 Annual Report and in the MD&A in our 2021 Annual Report. There have been no significant changes to our critical accounting policies since our 2021 Annual Report.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

Foreign Currency Exchange Risk

All of our sales and the majority of our expenses are denominated in U.S. dollars. Since we operate in the People's Republic of China, a percentage of our operational expenses are denominated in Chinese Renminbi ("RMB") and exchange volatility could positively or negatively impact those operating costs. Additionally, we may hold certain assets and liabilities in local currency on our consolidated balance sheet. As the operational expenses in RMB is immaterial, we do not believe that foreign exchange volatility has a material impact on our current business or results of operations.

Item 4. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

We maintain disclosure controls and procedures that are designed to ensure that information required to be disclosed by us in reports we file or submit under the Securities Exchange Act of 1934, as amended (the "Exchange Act") is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms, and is accumulated and communicated to our management, including our principal executive officer and principal financial officer, as appropriate to allow timely decisions regarding required disclosures.

Our management conducted an evaluation, with the participation of our principal executive officer and principal financial officer, of the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) promulgated under the Exchange Act) as of the end of the period covered by this report. Based on this evaluation, due to the elimination of our audit committee in August 2020 and ineffective program change management related to certain information technology ("IT") systems that support the Company's financial reporting processes, our principal executive officer and our principal financial officer concluded that our disclosure controls and procedures were not effective as of October 1, 2022.

Notwithstanding the material weakness in our internal control over financial reporting, we have concluded that the unaudited condensed consolidated financial statements included in this Form 10-Q fairly present, in all material respects, our financial position, results of operations and cash flows for the periods presented in conformity with U.S. GAAP.

Changes in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting that occurred during the quarter ended October 1, 2022 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Remediation Initiatives

In an effort to remediate the identified material weaknesses and enhance our internal controls related to our lack of an independent board and audit committee, we continue to maintain our financial reporting process we followed to prepare consolidated financial statements in accordance with U.S. GAAP for audit committee meetings on a quarterly and annual basis. We engage all departments groups to identify risks to the achievement of our goals as a basis for determining how the risks should be managed. In an effort to remediate the identified material weakness related to our ineffective design and maintenance of controls over user access and program change management related to certain IT systems, we hired a full-time Senior Director of IT in the fourth quarter of 2021 with a primary mandate to focus on Sarbanes-Oxley ("SOX") compliance and mitigation plan for 2022. Our Chief Executive Officer and sole director will oversee the process to ensure all required disclosures are made in our consolidated financial statements on a quarterly and annual basis.

PART II. — OTHER INFORMATION

Item 1. Legal Proceedings

The information under "Litigation and Patent Reexaminations" in Note 7 to the condensed consolidated financial statements included in Part I, Item 1 of this report is incorporated herein by reference.

Item 1A. Risk Factors

Risks Related to Our Business, Operations and Industry

- We face risks related to the impact of the COVID-19 pandemic and the related protective public health measures;
- We have historically incurred losses and may continue to incur losses;
- The vast majority of our net product sales in recent periods have been generated from resales of component products, including products sourced from Samsung and SK hynix, and any decline in these product resales could significantly harm our performance;
- We are subject to risks relating to our focus on developing our HybriDIMM and NVvault products for our target customer markets;
- Sales to a small number of customers have historically represented a significant portion of our net product sales, and the loss of, or a significant reduction in sales to, any one of these customers could materially harm our business;
- We are subject to risks of disruption in the supply of component products;
- Our customers require that our products undergo a lengthy and expensive qualification process without any assurance of sales;
- If we are unable to timely and cost-effectively develop new or enhanced products that achieve customer and market acceptance or technologies we can monetize, our revenues and prospects could be materially harmed;
- We face intense competition in our industry, and we may not be able to compete successfully in our target markets;
- Our operating results may be adversely impacted by worldwide economic and political uncertainties and specific conditions in the markets we address and in which we or our strategic partners or competitors do business, including ongoing effects of the COVID-19 pandemic and the cyclical nature of and volatility in the memory market and semiconductor industry;
- Our lack of a significant backlog of unfilled orders and the difficulty inherent in estimating customer demand makes it difficult to forecast our short-term requirements, and any failure to optimally calibrate our production capacity and inventory levels to meet customer demand could adversely affect our revenues, gross margin and earnings;
- Declines in our average sale prices, driven by volatile prices for components and other factors, may result in declines in our revenues and gross margin;
- Our manufacturing operations involve significant risks;
- We depend on third parties to design and manufacture components for our products and the component products we resell, which exposes us to risks;
- If our products or the component products we resell do not meet quality standards or are defective or used in defective systems, we may be subject to quality holds, warranty claims, recalls or liability claims;
- If a standardized memory solution that addresses the demands of our customers is developed, our net product sales and market share may decline;
- Our indemnification obligations for the infringement by our products of the rights of others could require us to pay substantial damages;
- We depend on certain key employees, and our business could be harmed if we lose the services of any of these employees or are unable to attract and retain other qualified personnel;

- We rely on our internal and third-party sales representatives to market and sell our products and the component products we resell, and any failure by these representatives to perform as expected could reduce our sales;
- Our operations could be disrupted by power outages, natural disasters, cyber-attacks or other factors;
- Difficulties with our global information technology systems, including any unauthorized access or cyber-attacks, could harm our business;
- If we do not effectively manage any future growth we may experience, our resources, systems and controls may be strained and our results of operations may suffer;
- If we acquire businesses or technologies or pursue other strategic transactions or relationships in the future, these transactions could disrupt our business and harm our operating results and financial condition;
- Increased prices and inflation could negatively impact our margin performance and our financial results;
- Geopolitical risks associated with Russia's recent invasion of Ukraine could result in increased market volatility and uncertainty, which could negatively impact our business, financial condition, and results of operations; and
- Significant increases in worldwide supply of semiconductor memory and storage could lead to declines in demand and average selling prices for our products, which could materially and adversely affect our business, results of operations, or financial condition.

Risks Related to Laws and Regulations

- We are exposed to additional business, regulatory, political, operational, financial and economic risks related to our international sales and operations;
- Our failure to comply with environmental and other applicable laws and regulations could subject us to significant fines and liabilities or cause us to incur significant costs;
- Regulations related to "conflict minerals" may cause us to incur additional expenses and could limit the supply and increase the cost of certain metals used in manufacturing our products;
- We have identified a material weakness in our internal control over financial reporting. If we are unable to remediate the material weakness, or if we identify additional material weaknesses in the future or otherwise fail to maintain an effective system of internal controls, we may not be able to accurately or timely report our financial condition or results of operations, which may adversely affect our business; and
- We are required to comply with certain provisions of Section 404 of the Sarbanes-Oxley Act of 2002, as amended, that place significant demands on our resources, and the transition to the higher reporting and control standards that applies to us as a "large accelerated filer" may cause management distraction and increased costs.

Risks Related to Intellectual Property and Litigation

- We may be unsuccessful in monetizing our intellectual property portfolio;
- We are and expect to continue to be involved in other legal and administrative proceedings to enforce or protect our intellectual property rights and to defend against claims that we infringe the intellectual property rights of others;
- If our proprietary rights are not protected, our customers or our competitors might gain access to our proprietary designs, processes and technologies, which could adversely affect our operating results; and
- We may become involved in non-patent related litigation and administrative proceedings that may materially adversely affect us.

Risks Related to Capitalization and Financial Markets

- We may not have sufficient working capital to fund our planned operations, and, as a result, we may need to raise additional capital in the future, which may not be available when needed, on acceptable terms or at all;

- The price and trading volume of our common stock has and may continue to fluctuate significantly in reaction to real or perceived developments in our business;
- We have incurred a material amount of indebtedness to fund our operations, the terms of which have required us to pledge substantially all of our assets as security. Our level of indebtedness and the terms of such indebtedness could adversely affect our operations and liquidity;
- There is a limited market for our common shares, and the trading price of our common shares is subject to volatility;
- Future issuances of our common stock or rights to purchase our common stock, including pursuant to our equity incentive plans, could result in additional dilution to the percentage ownership of our stockholders and could cause the price of our common stock to decline;
- Sales of our common stock, or the perception that such sales could occur, could cause the market price of our stock to drop significantly, regardless of the state of our business;
- As a sole director, Chun K. Hong has significant control over all corporate decisions that may not be in the best interest of our other stockholders;
- Anti-takeover provisions under our charter documents and Delaware law, as well as our rights agreement, could delay or prevent a change of control and could also limit the market price of our common stock; and
- We do not currently intend to pay dividends on our common stock, and any return to investors is expected to result, if at all, only from potential increases in the price of our common stock.

Risks Related to Our Business, Operations and Industry

We face risks related to the impact of the COVID-19 pandemic and the related protective public health measures.

COVID-19 has spread globally and has resulted in authorities imposing, and businesses and individuals implementing, numerous unprecedented measures to try to contain the virus, such as travel bans and restrictions, quarantines, shelter-in-place/stay-at-home and social distancing orders, and shutdowns. These measures have impacted and may further impact our workforce and operations, the operations of our customers, and those of our respective vendors, suppliers, and partners. The ultimate impact and efficacy of government measures and potential future measures is currently unknown. In addition, the continued spread of COVID-19 variants, or the occurrence of other epidemics could result in a widespread health crisis that could adversely affect the economies and financial markets of many countries, resulting in an economic downturn that could affect demand for our products and further adversely impact our results of operations.

There are numerous uncertainties associated with the COVID-19 outbreak, including the number of individuals who will become infected, whether vaccination level will increase sufficiently to stop the spread of COVID-19 and its variants, and the extent of the protective and preventative measures that have been put in place by both governmental entities and other businesses and those that may be put in place in the future. Any or all of the foregoing uncertainties could have a material adverse effect on our results of operations, financial position and/or cash flows.

We have historically incurred losses and may continue to incur losses.

Since the inception of our business in 2000, we have only experienced two fiscal years (2006 and 2021) with profitable results. In order to sustain profitability, or to achieve and sustain positive cash flows from operations, we must reduce operating expenses and/or increase our revenues and gross margin. Although we have in the past engaged in a series of cost reduction actions, such expense reductions alone will not make us profitable or allow us to sustain profitability if it is achieved, and eliminating or reducing strategic initiatives could limit our opportunities and prospects. Our ability to sustain profitability will depend on increased revenue growth from, among other things, increased demand for our product offerings and our ability to monetize our intellectual property. We may not be successful in any of these pursuits, and we may not be able to sustain profitability if achieved.

The vast majority of our net product sales in recent periods have been generated from resales of component products, including products sourced from Samsung and SK hynix, and any decline in these product resales could significantly harm our performance.

The vast majority of our net product sales in recent periods have been generated from resales of component products, including SSDs, NAND flash and DRAM products. We resell these component products to end-customers that are not reached in the distribution models of the component manufacturers, including storage customers, appliance customers, system builders and cloud and datacenter customers.

These component product resales are subject to a number of risks. For example, demand for these products could decline at any time for a number of reasons, including, among others, changing customer requirements or preferences, product obsolescence, introduction of more advanced or otherwise superior competing products by our competitors, the ability of our customers to obtain these products or substitute products from alternate sources (including from the manufacturer directly), customers reducing their need for these products generally, or the other risk factors described in this report. We have no long-term agreements or other commitments with respect to sales of these or any of the other products we sell. As a result, any decrease in demand for these products from us would reduce our sale levels and could materially adversely impact our revenues. Additionally, opportunistic purchases of products for resale, when coupled with a decrease in demand, may cause us to write off excess inventory which would adversely affect our operating performance.

We may experience supply shortages at any time and for a variety of reasons, including, among others, spikes in customer demand that cannot be satisfied, any problems that arise with Samsung's or SK hynix's manufacturing operations or facilities that cause disruptions or delays, including from the recent COVID-19 pandemic, or any failure to comply with the terms of the agreements regarding the supply of these products. If we choose, or if we are forced, to seek to supply the component products we resell from other suppliers, we may not be able to identify other suppliers that are available and able to produce the particular components with the specific product specifications and in the quantities our customers require, or we may not be able to make arrangements with any other suppliers in a timely manner to avoid delays in satisfying customer orders. Further, even if we are able to make arrangements with other suppliers for sufficient component products to replace any undersupply from Samsung or SK hynix, we may not be able to make these arrangements on financial and other terms comparable to those we have negotiated with Samsung or SK hynix. As a result, any inability to obtain sufficient component products from Samsung or SK hynix could increase our cost of sales for component product resales if we are forced to pay higher prices to obtain the products from other suppliers. Moreover, all of our supply arrangements for these component products and any arrangements we may establish with other suppliers, are subject to the other supply and manufacturing risks discussed elsewhere in these risk factors.

Increased reliance on product resales also has a substantial impact on our results of operations. Because the cost of the component products we purchase for resale is added to our cost of sales for these products, our gross margin on resales of component products is significantly lower than our gross margin on sales of our own memory subsystem products. As a result, increased resales of component products as a percentage of our total product sales have a significant negative impact on our gross margin and gross margin percentage. This gross margin and gross margin percentage differential between memory product sales and component product resales would be amplified if our costs to purchase component products were to increase. The occurrence of any one or more of these risks could cause our performance to materially suffer.

We are subject to risks relating to our focus on developing our HybriDIMM and NVvault products for our target customer markets.

We have historically derived revenues from sales of our high-performance modular memory subsystems to original equipment manufacturers ("OEM") in the server, high-performance computing and communications markets. Although we expect these memory subsystems to continue to account for a portion of our revenues, we have experienced declines in sales of these products in recent periods, and these declines could continue or intensify in the future. We believe market acceptance of these products or derivative products that incorporate our core memory subsystem

technology is critical to our success, and any continued decline in sales of these products could have a material adverse impact on our performance and long-term prospects.

We have invested significant research and development time and capital in the design of application-specific integrated circuits ("ASIC") and hybrid devices, including our NVvault family of products and our next-generation HybriDIMM memory subsystem. These products are subject to significant risks, including:

- we are dependent on a limited number of suppliers for the SSDs, DRAM ICs, NAND flash and ASIC devices that are essential to the functionality of these products, and in the past, we have experienced supply chain disruptions and shortages of SSDs, DRAM and NAND flash required to create these products as a result of issues that are specific to our suppliers or the industry as a whole;
- HybriDIMM and some of our other next-generation products may require additional time including the services and attention of key employees who have competing demands on their available time and may require capital investment to bring the products to market;
- our development and commercialization strategies for these products;
- we are required to demonstrate the quality and reliability of our products to and qualify them with our customers before purchases are made, which requires investments of time and resources in significant and unpredictable amounts prior to the receipt of any revenues from these customers; and
- our NVvault products or other new products, such as HybriDIMM, may contain currently undiscovered flaws, the correction of which could result in increased costs and time to market.

These and other risks associated with our memory subsystem products could impair our ability to obtain customer or market acceptance of these products or obtain such acceptance in a timely manner, which would reduce our achievable revenues from these products and limit our ability to recoup our investments in developing these technologies.

Additionally, if the demand for servers deteriorates, if the demand for our products to be incorporated in servers continues to decline, or if demand for our products deteriorates because customers in our other target markets change their requirements or preferences or otherwise reduce their need for these types of products generally, our operating results would be adversely affected, and we would be forced to diversify our product portfolio and our target customer markets in order to try to replace revenues lost from the further decreases in product sales. We may not be able to achieve this diversification, and any inability to do so may adversely affect our business, operating performance and prospects.

Sales to a small number of customers have historically represented a significant portion of our net product sales, and the loss of, or a significant reduction in sales to, any one of these customers could materially harm our business.

Our target markets are characterized by a limited number of large companies, and consolidation in one or more of these markets may further increase this concentration. As a result, sales to small numbers of customers have historically represented a substantial portion of our net product sales, and we expect this concentration to continue. Additionally, the composition of major customers and their respective contributions to our net product sales have fluctuated and will likely continue to fluctuate from period to period as our existing and prospective customers progress through the life cycle of the products they produce and sell and experience resulting fluctuations in their product demand. We believe our performance depends in significant part on our ability to establish and maintain relationships with and effect substantial sales to our large customers.

We do not have long-term agreements with any of our customers and, as result, any or all of them could decide at any time to decrease, delay or discontinue their purchase of our products or the component products we resell. In addition, the prices customers pay for products are subject to fluctuations, and large or key customers may exert pressure on us to make concessions in the prices at which we sell products to them. Further, we may not be able to sell some of our products developed for one customer to a different customer because our products are often customized to address specific customer requirements, and even if we are able to sell these products to another customer, our margin on these products may be reduced. Additionally, although customers are generally allowed only limited rights of return after

purchasing our products or the component products we resell, we may determine that it is in our best interest to accept returns from certain large or key customers even if we are not contractually obligated to accept them in order to maintain good relations with these customers. Any returns beyond our expectations could negatively impact our operating results. Moreover, because a few customers often account for a substantial portion of our net product sales, the failure of any one of these customers to pay on a timely basis would negatively impact our cash flows. As a result, our net product sales and operating results could be materially adversely affected by the loss of any of our customers, particularly our large or key customers, a decrease in product sales to any of our customers, including as a result of normal fluctuations in demand or other factors, reductions in the prices at which we sell products to any of our customers, including as a result of price concessions or general declines in average sale prices, or difficulties collecting payments from any of our customers.

Our ability to maintain or increase our product sales to our key customers depends on a variety of factors, many of which are beyond our control. These factors include our customers' continued sales of servers and other computing systems that incorporate our memory subsystems, our customers' continued incorporation of our products or the component products we resell into their systems, and our customers' sales activity and business results. Because of these and other factors, sales to these customers may not continue and the amount of such sales may not reach or exceed historical levels in any future period.

We are subject to risks of disruption in the supply of component products.

Our ability to fulfill customer orders for or produce qualification samples of our memory subsystem products, as well as orders for the component products we resell, is dependent on a sufficient supply of SSDs, field-programmable gate arrays ("FPGAs"), ASICs, DRAM ICs and NAND flash, which are essential components of our memory subsystems. Further, there are a relatively small number of suppliers of these components, and we typically purchase from only a subset of these suppliers. As a result, our inventory purchases have historically been concentrated in a small number of suppliers, Samsung and SK hynix, from which we obtained a large portion of our component products purchased for resale. We also use consumables and other components, including printed circuit boards ("PCBs"), to manufacture our memory subsystems, which we sometimes procure from single or limited sources to take advantage of volume pricing discounts.

From time to time, shortages in SSDs, DRAM ICs and NAND flash have required some suppliers to limit the supply of these components. In the past, we have experienced supply chain disruptions and shortages of SSDs, DRAM and NAND flash required to create certain of our memory subsystem products, and we have been forced to procure the component products we resell from other suppliers to the extent sufficient product is not available from Samsung and SK hynix to meet customer demand or in the event of other Samsung and SK hynix supply issues. We are continually working to secure adequate supplies of the components necessary to fill customers' orders in a timely manner. If we are unable to obtain a sufficient supply of SSDs, DRAM ICs, NAND flash or other essential components, as a result of a natural disaster, political unrest military conflict, medical epidemics, such as the COVID-19 pandemic, climate change, economic instability, equipment failure or other cause, to avoid interruptions or failures in the delivery of our products as required by our customers or the delivery of these components to customers to whom we resell them directly, these customers may reduce future orders for these products or not purchase these products from us at all, which could cause our net product sales to decline and harm our operating results. In addition, our reputation could be harmed due to failures to meet our customers' demands and, even assuming we are successful in resolving supply chain disruptions, we may not be able to replace any lost business and we may lose market share to our competitors. Further, if our suppliers are unable to produce qualification samples of our products on a timely basis or at all, we could experience delays in the qualification process with existing or prospective customers, which could have a significant impact on our ability to sell our products. Moreover, if we are not able to obtain these components in the amounts needed on a timely basis and at commercially reasonable prices, we may not be able to develop or introduce new products, we may experience significant increases in our cost of sales if we are forced to procure components from alternative suppliers and are not able to negotiate favorable terms with these suppliers, or we may be forced to cease our sales of products dependent on the components or resales of the components we sell to customers directly.

Our dependence on a small number of suppliers and the components we resell expose us to several risks, including the inability to obtain an adequate supply of these components, increases in their costs, delivery delays and

poor quality. Additionally, our customers qualify certain of the components provided by our suppliers for use in their systems. If one of our suppliers experiences quality control or other problems, it may be disqualified by one or more of our customers. This would disrupt our supplies of these components, and would also reduce the number of suppliers available to us and may require that we qualify a new supplier, which we may not be able to do.

Declines in customer demand for our products in recent periods have caused us to reduce our purchases of SSDs, DRAM ICs and NAND flash for use as components in our products. Such declines or other fluctuations could continue in the future. If we fail to maintain sufficient purchase levels with some suppliers, our ability to obtain supplies of these raw materials may be impaired due to the practice of some suppliers of allocating their products to customers with the highest regular demand.

Frequent technology changes and the introduction of next-generation versions of component products may also result in the obsolescence of our inventory on-hand, which could involve significant time and costs to replace, reduce our net product sales and gross margin and adversely affect our operating performance and financial condition.

Our customers require that our products undergo a lengthy and expensive qualification process without any assurance of sales.

Our prospective customers generally test and evaluate our memory subsystems before purchasing our products and integrating them into their systems. This extensive qualification process involves rigorous reliability testing and evaluation of our products, which may continue for nine months or longer and is often subject to delays. In addition to qualification of specific products, some of our customers may also require us to undergo a technology qualification if our product designs incorporate innovative technologies that the customer has not previously encountered. Such technology qualifications often take substantially longer than product qualifications and can take over a year to complete. Even after our products are qualified with existing or new customers, the customer may take several months to begin purchasing the product or may decide not to purchase the product at all, as qualification does not ensure product sales. As a result, we could receive no or limited revenues from a customer even after our investment of time and resources in the qualification process with this customer, which could adversely affect our operating results.

Even after successful qualification and sales of our products to a customer, because the qualification process is both product-specific and platform-specific, our existing customers sometimes require us to re-qualify our products or to qualify our new products for use in new platforms or applications. For example, as our OEM customers transition from prior generation architectures to current generation architectures, we must design and qualify new products for use by these customers. Our net product sales to these customers can decline significantly during this re-qualification process.

Likewise, changes in our products, our manufacturing facilities, our production processes or our component suppliers may require a new qualification process. For example, if our memory, SSDs, NAND flash and DRAM component suppliers discontinue production of these components, it may be necessary for us to design and qualify new products for our customers. As a result, some customers may require us, or we may decide, to purchase an estimated quantity of discontinued memory components necessary to ensure a steady supply of existing products until products with new components can be qualified. Purchases of this nature may affect our liquidity. Additionally, our forecasts of quantities required during the transition may be incorrect, which could adversely impact our results of operations through lost revenue opportunities or charges related to excess and obsolete inventory.

We must devote substantial resources, including design, engineering, sales, marketing and management efforts, to qualify our products with prospective customers in anticipation of sales. Significant delays or other difficulties in the qualification process could result in an inability to keep pace with rapid technology change or new competitive products. If we experience delays or do not succeed in qualifying a product with an existing or prospective customer, we would not be able to sell that product to that customer, which may result in excess and obsolete inventory that we may not be able to sell to another customer and could reduce our net product sales and customer base, any of which could materially harm our operating results and business.

If we are unable to timely and cost-effectively develop new or enhanced products that achieve customer and market acceptance or technologies we can monetize, our revenues and prospects could be materially harmed.

Our industry is characterized by rapid technological change, evolving industry standards and rapid product obsolescence. As a result, continuous development of new technology, processes and product innovations is necessary in order to be successful. We believe the continued and timely development of new products and technologies and improvement of existing products and technologies are critical to our business and prospects for growth.

In order to develop and introduce new or enhanced products and technologies, we need to:

- retain and continue to attract new engineers with expertise in memory subsystems and our key technology competencies;
- identify and adjust to the changing requirements and preferences of our existing and potential future customers and markets;
- identify and adapt to emerging technological trends and evolving industry standards in our markets;
- continue to develop and enhance our design tools, manufacturing processes and other technologies on which we rely to produce new products or product enhancements;
- design and introduce cost-effective, innovative and performance-enhancing features that differentiate our products and technologies from those of our competitors;
- secure licenses to enable us to use any technologies, processes or other rights essential to the manufacture or use of any new products or product enhancements we may develop, which licenses may not be available when needed, on acceptable terms or at all;
- maintain or develop new relationships with suppliers of components required for any new or enhanced products and technologies;
- qualify any new or enhanced products for use in our customers' products; and
- develop and maintain effective commercialization and marketing strategies.

We may not be successful at any of these activities. As a result, we may not be able to successfully develop new or enhanced products or technology or we may experience delays in this process. Failures or delays in product development and introduction could result in the loss of, or delays in generating, net products sales or other revenues and the loss of key customer relationships. Even if we develop new or enhanced products or technologies, they may not meet our customers' requirements, gain market acceptance or attract monetization opportunities, as our product and technology development efforts are inherently risky due to the challenges of foreseeing changes or developments in technology, predicting changes in customer requirements or preferences or anticipating the adoption of new industry standards. Moreover, we have invested significant resources in our product and technology development efforts, which would be lost if we fail to generate revenues from these efforts. If any of these risks occur, our revenues, prospects and reputation could be materially adversely affected.

We face intense competition in our industry, and we may not be able to compete successfully in our target markets.

Our products are primarily targeted to OEMs in the server, high-performance computing and communications markets. In addition, we resell certain component products to storage customers, appliance customers, system builders and cloud and datacenter customers. These markets are intensely competitive, as numerous companies vie for business opportunities at a limited number of large OEMs and other customers. We face competition from DRAM suppliers, memory module providers and logic suppliers for many of our products. We also face competition from the manufacturers and distributors of the component products we resell to customers, as these manufacturers and distributors could decide at any time to sell these component products to these customers directly. Additionally, if and to the extent we enter new markets or pursue licensing arrangements to monetize our technologies and intellectual property portfolio, we may face competition from a large number of competitors that produce solutions utilizing similar or competing technologies.

Some of our customers and suppliers may have proprietary products or technologies that are competitive with our products or the components we resell to them or could develop internal solutions or enter into strategic relationships

with, or acquire, other high-density memory module or component providers. Any of these actions could reduce our customers' demand for our products or the component products we resell. Additionally, some of our significant suppliers could choose to sell component products to customers directly, which would adversely affect our ability to resell these products, or may choose to manufacture competitive memory subsystem products themselves or reduce our supply of essential components of our products, which could adversely affect our ability to manufacture and sell our memory subsystems.

We believe our ability to compete in our current target markets and potential future markets will depend in part on our ability to successfully and timely develop, introduce and sell at attractive prices new and enhanced products or technologies and otherwise respond to changing market requirements, which we may not be able to do faster and better than our competitors. Moreover, many of our competitors have substantially greater financial, technical, marketing, distribution and other resources, broader product lines, lower cost structures, greater brand recognition, more influence on industry standards, more extensive or established patent portfolios and longer standing relationships with customers and suppliers. We may not be able to compete effectively against any of these organizations. If we are unable to compete effectively, then our market position and prospects could deteriorate and our revenues could decline.

Our operating results may be adversely impacted by worldwide economic and political uncertainties and specific conditions in the markets we address and in which we or our strategic partners or competitors do business, including ongoing effects of the COVID-19 pandemic and the cyclical nature of and volatility in the memory market and semiconductor industry.

Changes in domestic and global economic and political conditions make it difficult for our customers, our vendors and us to accurately forecast and plan future business activities, and these conditions have caused and could continue to cause U.S. and foreign businesses to slow or decrease spending on our products and the products we resell.

In addition, sales of our products and the products we resell are dependent on demand by customers in our target markets. These markets are characterized by wide fluctuations in product supply and demand and have been cyclical in the past, which may result in substantial period-to-period fluctuations in our operating results. In addition, these markets have in the past experienced significant downturns, often connected with or in anticipation of maturing product cycles, reductions in technology spending and declines in general economic conditions. During these downturns, product demand diminishes, production capacity exceeds demand, inventory levels increase and average sale prices decline, all of which would materially adversely impact our business and operating results. In addition, because many of our costs and operating expenses are relatively fixed, if we are unable to control our expenses adequately in response to reduced product demand and sales, our gross margin and cash flows would be negatively impacted. Further, such a downturn could decrease the perceived value of our intellectual property portfolio and reduce our ability to pursue our intellectual property monetization objectives.

During challenging economic times, our customers may face challenges gaining timely access to sufficient credit, which could impair their ability to make timely payments to us. This may negatively affect our liquidity and cash flows and require us to increase our allowance for doubtful accounts. Furthermore, our vendors may face similar issues gaining access to credit, which may limit their ability to supply components or provide trade credit to us.

We cannot predict the timing, strength or duration of any economic slowdown or subsequent economic recovery, either generally or in our customer markets. If the economy or markets in which we operate experience such a slowdown, our business, financial condition and results of operations could be materially and adversely affected. The combination of our lengthy sales cycle coupled with any challenging macroeconomic conditions could compound the negative impact of any such downturn on the results of our operations.

Our lack of a significant backlog of unfilled orders and the difficulty inherent in estimating customer demand makes it difficult to forecast our short-term requirements, and any failure to optimally calibrate our production capacity and inventory levels to meet customer demand could adversely affect our revenues, gross margin and earnings.

We make significant decisions regarding the levels of business we will seek and accept, production schedules, component procurement, personnel needs and other resource requirements based on our estimates of customer demand.

We do not have long-term agreements with any of our customers. Instead, our product sales are made primarily pursuant to stand-alone purchase orders that we often receive no more than two weeks in advance of the desired delivery date and that may be rescheduled or cancelled on relatively short notice. The short-term nature of the commitments by many of our customers and our customers' ability to cancel or defer purchase orders for any reason reduces our backlog of firm orders and our ability to accurately estimate future customer requirements for our products or the component products we resell. These facts, combined with the short turnaround times that apply to most orders, makes it difficult to predict our production and inventory needs and allocate production capacity and capital for inventory purchases effectively. As a result, we attempt to forecast the demand for the components needed to manufacture our products and to resell to customers directly, but any such forecasts could turn out to be wrong. Further, lead times for components vary significantly and depend on various factors, such as the specific supplier and the demand and supply for a component at any given time.

Our production expense and component purchase levels are to a large extent fixed in the short term. As a result, we may be unable to adjust spending on a timely basis to compensate for any unexpected shortfall in customer orders. If we overestimate customer demand, we may have excess component or finished goods inventory, which may not be able to be used in other products or resold and may become obsolete before any such use or resale. If there is a subsequent decline in the prices of components, the value of our inventory would fall and we may be required to write-down the value of our component inventory, which may result in a significant increase in our cost of sales and decrease in our gross margin. In the past, we have had to write-down inventory due to obsolescence, excess quantities and declines in market value below our costs. As a result, any significant shortfall of customer orders in relation to our expectations could hurt our operating results, cash flows and financial condition.

Conversely, any rapid increases in demand by our customers could strain our resources. If we underestimate customer demand, we may not have sufficient inventory of necessary components on hand to meet that demand and we may need to try to procure additional quantities, which may not be available or may only be available at high prices or on otherwise unfavorable terms. We also may not have sufficient manufacturing capacity at any given time to meet any demands for rapid increases in production of our memory subsystem products. Any shortages of inventory or manufacturing capacity could lead to delays in the delivery of products, which may force us to forego sales opportunities, reduce our net product sales and damage our customer relationships.

In addition, if our product demand forecasts are wrong, we may understate or overstate the provision required for excess and obsolete inventory. If our inventories are determined to be overvalued, we would be required to recognize additional expense in our cost of sales at the time of the determination. Conversely, if our inventories are determined to be undervalued, we may have over-reported our costs of sales in previous periods and would be required to recognize additional gross margin at the time the inventories are sold.

Declines in our average sale prices, driven by volatile prices for components and other factors, may result in declines in our revenues and gross margin.

Our industry has historically been characterized by declines in average sale prices. If sale price declines are not offset by corresponding decreases in costs or increases in sales volume or sales of products with higher margins, these sale price declines could have a material adverse effect on our operating results.

The prices customers pay for the products we sell can fluctuate due to many factors, including, among others, competitive conditions in our key customer markets, changes in customer requirements or preferences, volatility in the market prices for SSDs, DRAM ICs, NAND flash and other component products, and changes in manufacturing efficiencies or capacities. Market prices for component products have historically constituted a substantial portion of the total cost of our memory subsystems and in recent periods have constituted the vast majority of the cost of resales of these products to customers directly. As a result, fluctuations in the prices for these component products, due to overcapacity in worldwide supply or increased manufacturing efficiencies, implementation of new manufacturing processes or expansion of manufacturing capacity by component suppliers, among other factors, significantly impact our costs to sell our products or component products.

Once our prices with a customer are negotiated, we are generally unable to revise pricing with that customer until our next regularly scheduled price adjustment. As a result, if market prices for essential components increase, we generally cannot pass the price increases through to our customers for products purchased under an existing purchase order. Consequently, we are exposed to the risks associated with the volatility of prices for these components and our cost of sales could increase and our gross margin could decrease in the event of sudden price increases. Alternatively, if there are declines in the prices of these components, we may be required to reduce our selling prices for subsequent purchase orders, which may result in a decline in our net product sales.

Our manufacturing operations involve significant risks.

We maintain a manufacturing facility in the People's Republic of China ("PRC") at which we produce a portion of our products. These manufacturing activities require significant resources to maintain. For instance, we must continuously review and improve our manufacturing processes in order to maintain satisfactory manufacturing yields and product performance, try to lower our costs and otherwise remain competitive. As we manufacture new and more complex products, the risk of encountering delays, difficulties or higher costs increases. In addition, the start-up costs associated with implementing new manufacturing technologies, methods and processes, including the purchase of new equipment and any resulting manufacturing delays and inefficiencies, could negatively impact our results of operations.

Additionally, we could experience a prolonged disruption, material malfunction, interruption or other loss of operations at our manufacturing facility for any number of reasons, including the occurrence of a contagious disease or illness, such as COVID-19, or cyber-attacks, or catastrophic weather events, or we may need to add manufacturing capacity to satisfy any increased demand for our products. Under these circumstances, we may be forced to rely on third parties for our manufacturing needs, which could increase our manufacturing costs, decrease our gross margin, decrease our control over manufacturing processes, limit our ability to satisfy customer requirements and demand and delay new product development until we could secure a relationship with a third-party manufacturer, which we may not be able to do in a timely manner, on acceptable terms or at all. If any of these risks occur, our operations, performance and customer relationships could be severely harmed.

We also may need to expand our existing manufacturing facility or establish a new facility in the future. Any need to expand or replace our manufacturing facility would be expensive and time-consuming and could also subject us to factory audits by our customers that could themselves result in delays, unexpected costs or customer losses if we cannot meet the standards of any such audits. Further, we may not be able to replace or increase our manufacturing capacity at all. The occurrence of any of these events could have a material adverse effect on our business, financial condition and results of operations.

We depend on third parties to design and manufacture components for our products and the component products we resell, which exposes us to risks.

Components that are used in our products, as well as all of the component products we resell, are designed and manufactured by third parties. In addition, some of our memory subsystem products rely on significantly customized components. The ability and willingness of third parties to enter into these engagements with us and perform in accordance with these engagements is largely outside our control. If one or more of our design or manufacturing partners experiences a manufacturing disruption for any number of factors including labor disruptions, catastrophic weather events and the occurrence of a contagious disease or illness, such as COVID-19, fails to dedicate adequate resources to the production of the components we use in our products or the components we resell, experiences financial instability or otherwise fails to perform its obligations to us in a timely manner or at satisfactory quality levels, our ability to bring products to market or deliver products to our customers, as well as our reputation, could suffer and our business and prospects could be materially harmed. In the event of any failure by our component manufacturers, we may have no readily available alternative source of supply for these components, since, in our experience, the lead time needed to establish a relationship with a new design or manufacturing partner is substantial, and the time for our OEM customers to re-qualify our products with components from a new vendor is also significant. Additionally, even if an alternative manufacturer is available, we may not be able to engage the manufacturer on acceptable terms, which could result in increased costs, timing requirements or other adverse changes. Further, we may not be able to redesign the customized components used in our products to be manufactured by a new manufacturer, in which case we could infringe on the

intellectual property of our current design or manufacturing partner when we manufacture the products with a new design or manufacturing partner. Such an occurrence could force us to stop selling certain of our products or could expose us to lawsuits, license payments or other liabilities.

Our dependence on third-party manufacturers exposes us to many other risks, including, among others: reduced control over delivery schedules, quality, manufacturing yields and costs; the potential lack of adequate capacity during periods of excess demand; limited warranties on products supplied to us; and potential infringement or misappropriation of our intellectual property or the intellectual property of others. We are dependent on our manufacturing partners to manufacture components with acceptable quality and manufacturing yields, to deliver these components to us on a timely basis and at an acceptable cost and to allocate a portion of their manufacturing capacity sufficient to meet our needs. However, these component manufacturers may not be able to achieve these tasks. Additionally, our manufacturing partners may not continue to devote adequate resources to produce our products or the component products we resell, or continue to advance the process design technologies on which the customer qualifications of our products are based. Any of these risks could limit our ability to meet customer demand and materially adversely affect our business and operating results.

If our products or the component products we resell do not meet quality standards or are defective or used in defective systems, we may be subject to quality holds, warranty claims, recalls or liability claims.

Our customers require our products and the component products we resell to meet strict quality standards. If the products fail to meet these standards, our customers may discontinue purchases from us until we are able to resolve the quality issues that are causing these failures, which we may not be able to do. These “quality holds” can be costly and time-consuming to resolve. In addition, if the products we sell are defectively manufactured, contain defective components or are used in defective or malfunctioning systems, we could be subject to warranty and product liability claims, product recalls, safety alerts or advisory notices.

Although we generally attempt to contractually limit our exposure to incidental and consequential damages, if these contract provisions are not enforced or if liabilities arise that are not effectively limited, we could incur substantial costs in defending or settling product liability claims. While we currently have product liability insurance, it may not provide coverage under certain circumstances and it may not be adequate to satisfy claims made against us. We also may be unable to maintain insurance in the future at satisfactory rates or in adequate amounts.

Warranty and product liability claims, product “quality holds,” product recalls, safety alerts or advisory notices, regardless of their coverage by insurance or their ultimate outcome, could have a material adverse effect on our business, performance and financial condition, as well as our ability to attract and retain customers.

If a standardized memory solution that addresses the demands of our customers is developed, our net product sales and market share may decline.

Many of our memory subsystems are specifically designed for our OEM customers’ high-performance systems. In a drive to reduce costs and assure supply of their memory module demand, our OEM customers may endeavor to design Joint Electron Device Engineering Council (“JEDEC”) standard DRAM modules into their new products. Although we also manufacture JEDEC modules, this trend could reduce the demand for our higher-priced customized memory solutions, which would have a negative impact on our operating results. In addition, the adoption of a JEDEC standard module instead of a previously custom module might allow new competitors to participate in a share of our customers’ memory module business that previously belonged to us.

If our OEM customers were to adopt JEDEC standard modules, our future business may be limited to identifying the next generation of high-performance memory demands of OEM customers and developing solutions that address these demands. Until fully implemented, any next generation of products may constitute a significantly smaller market, which could reduce our revenues and harm our competitive position.

Our indemnification obligations for the infringement by our products of the rights of others could require us to pay substantial damages.

As is common in our industry, we have a number of agreements in which we have agreed to defend, indemnify and hold harmless our customers and suppliers from damages and costs that may arise from the infringement by our products of third-party patents, trademarks or other proprietary rights. The scope of these indemnities varies, the duration of these indemnities is generally perpetual after execution of an agreement, and the maximum potential amount of future payments we could be required to make under these indemnities is often unlimited. Any indemnification claims by customers could require us to incur significant legal fees and could potentially result in our payment of substantial damages, and our insurance generally would not cover these fees or damages. As a result, the occurrence of any of these risks could have a material adverse effect on our business and results of operations.

We depend on certain key employees, and our business could be harmed if we lose the services of any of these employees or are unable to attract and retain other qualified personnel.

To date, we have been highly dependent on the experience, relationships and technical knowledge of certain key employees. We believe our future success will be dependent on our ability to retain the services of these key employees, develop their successors and properly manage the transition of their roles should departures occur. The loss of these key employees or their inability to continue to provide their services could delay the development and introduction of new or enhanced products or technologies, negatively impact our ability to sell our existing products, limit our ability to pursue our other business goals and strategies and otherwise harm our business. We do not have employment agreements with any of our employees other than Chun K. Hong, our President, Chief Executive Officer and sole member of our board of directors, and as a result most of our employees may terminate their employment with us at any time.

Our future success also depends on our ability to attract, retain and motivate highly skilled engineering, manufacturing and other technical and sales personnel. Competition for these personnel is intense. We may not be successful in attracting new engineers or other technical personnel or in retaining or motivating our existing personnel. If we are unable to hire and retain personnel with the skills necessary to keep pace with the evolving technologies in our markets, our ability to continue to provide our existing products and to develop new or enhanced products and technologies would be negatively impacted, which could harm our business. In addition, a general shortage of experienced engineers or other technical personnel could lead to increased recruiting, relocation and compensation costs to attract new recruits, which may increase our operating expenses or make these hires more difficult or impossible if increased recruiting costs exceed our resources.

A significant portion of our workforce consists of contract personnel. We invest considerable time and expense to train these contract personnel; however, they typically may terminate their relationships with us at any time. As a result, we may experience high turnover rates in this contract personnel workforce, which may require us to expend additional resources to attract, train and retain replacements. Additionally, if we convert any of these contract personnel to permanent employees, we may have to pay finder's fees to the contract agency. These risks associated with our contract personnel workforce may involve increased costs or delays or failures in meeting customer requirements or developing new or enhanced products or technologies, any of which could materially adversely affect our business and operating performance.

We are also subject to employment laws and regulations, including the changing regulatory landscape. For example, in California, State Assembly Bill 5 ("AB5"), which went into effect in January 2020, codifies a test to determine whether a worker is an employee under California law. AB5 provides a mechanism for determining whether workers of a hiring entity are employees or independent contractors, but AB5 does not result in any immediate change in how workers are classified. If the State of California, cities or municipalities, or workers disagree with how a hiring entity classifies workers, AB5 sets forth the test for evaluating their classification. The legal and other costs associated with any misclassification of our personnel can be substantial and could materially adversely affect our results of operations and financial condition.

We rely on our internal and third-party sales representatives to market and sell our products and the component products we resell, and any failure by these representatives to perform as expected could reduce our sales.

We primarily market and sell our products and the component products we resell through a direct sales force and a network of independent sales representatives. We have expended significant resources to build our internal sales and marketing function, but compared to many of our competitors, we have relatively little experience creating a sales and marketing platform and developing a team to implement it. We may be unsuccessful in these efforts.

Our sales representatives generally may terminate their relationships with us at any time. As a result, our performance depends in part on our ability to retain existing and attract additional sales representatives that will be able to effectively market and support our products or the component products we resell, especially in markets in which we have not previously distributed these products. Our efforts to attract, train and retain these sales representatives to be knowledgeable about our industry, products and technologies are costly and time-consuming. If these efforts fail, our investments in these sales representatives may not produce the expected or any benefits and our ability to market and sell our products or the component products we resell may be limited, which could materially harm our financial condition and operating results. Further, our reliance on independent sales representatives subjects us to risks, as we have very little control over their activities and they are generally free to market and sell other, potentially competing, products. As a result, these independent sales representatives could devote insufficient time or resources to marketing our products or the component products we resell, could market them in an ineffective manner or could otherwise be unsuccessful in selling adequate quantities of these products.

Our operations could be disrupted by power outages, natural disasters, cyber-attacks or other factors.

Due to the geographic concentration of our manufacturing operations in our PRC facility and our small number of component suppliers, including Samsung and SK hynix for many of the component products we resell, a disruption resulting from equipment or power failures, quality control issues, human errors, government intervention, cyber-attacks or natural disasters, including earthquakes and floods, could require significant costs to repair and could interrupt or interfere with product manufacture and sale and cause significant delays in product shipments, which could harm our customer relationships, financial condition and results of operations. In the past, our PRC facility has suffered water damage as a result of heavy rains and floods, which forced us to temporarily halt manufacturing at the facility while necessary repairs or equipment replacements were made. This incident caused us to incur additional expenses because we were forced to shift our manufacturing activities to a third-party facility in the PRC to mitigate the disruption in product shipments to our customers. If manufacturing at the PRC facility is disrupted for similar or other reasons in the future, we may again be subject to increased expenses in order to engage a third-party manufacturer, or, if we are not able to secure alternative manufacturing capabilities, our ability to sell products and our relationships with our customers could be materially harmed. Additionally, we may be forced to bear significant costs in order to repair any damage to our manufacturing equipment and facility. Any of these outcomes could have a material adverse effect on our business and results of operations.

Difficulties with our global information technology systems, including any unauthorized access or cyber-attacks, could harm our business.

We store key data about our business, including certain customer data, information about our and our customers' intellectual property and other proprietary information, on our global information technology systems. Any failure or malfunctioning of our global information technology systems, errors or misuse by system users, cyber-attacks, difficulties migrating stand-alone systems to our centralized systems or inadequacy of the systems in addressing the needs of our operations could disrupt our ability to timely and accurately manufacture and ship products, divert management's and key employees' attention from other business matters and involve significant costs and other resources to repair or otherwise resolve, any of which could have a material adverse effect on our business, financial condition and results of operations. Any such event could also disrupt our ability to timely and accurately process, report and evaluate key operating metrics and key components of our results of operations, financial position and cash flows and could adversely affect our ability to complete other important business processes, such as maintenance of our disclosure controls and procedures and internal control over financial reporting.

While our information technology systems include security measures designed to prevent unauthorized access, employee error, employee malfeasance or other causes, including intentional misconduct by computer hackers, could circumvent these measures and result in unauthorized access to these systems. Because the techniques used to gain unauthorized access to information technology systems evolve frequently and often are not recognized until successful, we may be unable to anticipate these techniques or implement adequate preventative measures in a timely manner. Any security breach could require significant resources to correct, if correction is possible, and could result in disruption to our business, misappropriation or loss of data, loss of confidence in us by our customers, damage to our reputation and legal liability. Further, any failure to implement appropriate security measures to protect our information or any breach or other failure of our systems that results in unauthorized access, manipulation, disclosure or loss of this information could result in our violation of any U.S. or foreign data protection laws that are applicable to us, including the California Consumer Privacy Act which went into effect in January 2020. These laws and their interpretation and application are constantly evolving, and they could be interpreted and applied in a manner that is inconsistent with our current practices or they could become more stringent over time. Efforts to comply with applicable data protection laws or any new interpretations of their application could involve significant time and substantial costs or require us to change our business practices and compliance procedures, and any failures to so comply could subject us to substantial civil or criminal fines or sanctions. Any of these outcomes could have a material negative impact on our business, performance and prospects.

Our independent registered public accounting firm conducted an audit of our internal control over financial reporting as of January 1, 2022 and determined that we have ineffective design and maintenance of controls over user access and program change management related to certain IT systems that support our financial reporting processes. User and privileged access were not appropriately provisioned, and program changes were not adequately reviewed prior to being placed in production. As a result, process level automated controls and manual controls that are dependent on the completeness and accuracy of information derived from the affected IT systems were also ineffective because they could have been adversely impacted. This material weakness was due to us having an insufficient number of IT personnel to identify and assess risks associated with changes in the IT environment resulting in inappropriate assignment of user and privileged access as well as insufficient documentation for control operations. This weakness has the potential to increase the likelihood and severity of the risks we face with respect to our global information technology systems.

If we do not effectively manage any future growth we may experience, our resources, systems and controls may be strained and our results of operations may suffer.

Any future growth we may experience could strain our resources, management, information and telecommunication systems and operating and financial controls. To manage future growth effectively, including any expansion of volume in our manufacturing facility in the PRC, we must be able to improve and expand our systems and controls, which we may not be able to do in a timely or cost-effective manner. In addition, our management team has relatively limited experience managing a rapidly growing business. As a result, they may not be able to manage any future growth we may experience. A failure to manage any growth we may experience or improve or expand our existing systems and controls, or unexpected difficulties in doing so, could harm our business and results of operations.

If we acquire businesses or technologies or pursue other strategic transactions or relationships in the future, these transactions could disrupt our business and harm our operating results and financial condition.

From time to time, we evaluate opportunities to acquire businesses or technologies or pursue other strategic transactions or relationships, including collaboration or joint development arrangements, that might complement our current product offerings or enhance our intellectual property portfolio or technical capabilities. We have no experience acquiring other businesses or technologies.

Acquisitions and other strategic transactions or relationships entail a number of risks that could adversely affect our business and operating results, including, among others:

- difficulties integrating the operations, technologies or products of acquired companies or working with third parties with which we may partner on joint development or collaboration relationships;
- the diversion of management's time and attention from the daily operations of our business;
- insufficient increases in revenues to offset increased expenses associated with an acquisition or strategic transaction or relationship;
- difficulties retaining business relationships with our existing suppliers and customers or the suppliers and customers of an acquired company;
- overestimation of potential synergies or other benefits, or a delay in realizing these synergies or other benefits;
- entering markets in which we have no or limited experience and in which competitors have stronger market positions;
- the potential loss of our key employees or an acquired company;
- exposure to contingent liabilities of an acquired company;
- depletion of cash resources to fund an acquisition or other strategic transaction or establish a strategic relationship, or dilution of existing stockholders or increased leverage relative to our earnings or to our equity capitalization if we issue debt or equity securities for these purposes;
- adverse tax consequences; and
- incurrence of material charges, such as depreciation, deferred compensation charges, in-process research and development charges, the amortization of amounts related to deferred stock-based compensation expense and identifiable purchased intangible assets or impairment of goodwill.

If any of these risks occur, we may not be able to realize the intended benefits of an acquisition or strategic transaction or relationship, and our operating results, financial condition and business prospects could be materially negatively affected.

Increased prices and inflation could negatively impact our margin performance and our financial results.

Increased inflation, including rising prices for raw materials, parts and components, freight, packaging, labor and energy increases, the costs to manufacture and distribute our products, and we may be unable to pass these costs on to our customers. Additionally, we are exposed to fluctuations in other costs such as packaging, freight, labor and energy prices. If inflation in these costs increases beyond our ability to control for them through measures such as implementing operating efficiencies, we may not be able to increase prices to sufficiently offset the effect of various cost increases without negatively impacting customer demand, thereby negatively impacting our margin performance and results of operations.

Geopolitical risks associated with Russia's recent invasion of Ukraine could result in increased market volatility and uncertainty, which could negatively impact our business, financial condition, and results of operations.

The uncertain nature, scope, magnitude, and duration of hostilities stemming from Russia's recent military invasion of Ukraine, including the potential effects of such hostilities as well as sanctions, embargoes, asset freezes, cyberattacks and other actions taken in response to such hostilities on the world economy and markets, have disrupted global markets and contributed to increased market volatility and uncertainty, which could have an adverse impact on macroeconomic and other factors that affect our business and supply chain. Any disruption in our supply chain could reduce our revenue and adversely impact our financial results. Such a disruption could occur as a result of any number of events, including, but not limited to, military conflicts, geopolitical developments, war or terrorism, including the ongoing conflict in Ukraine, regional or global pandemics like COVID-19, and disruptions in utility and other services. Any inability to obtain adequate deliveries or any other circumstance that would require us to seek alternative sources of supply or to manufacture, assemble, and test such components internally could significantly delay our ability to ship our products, which could damage relationships with current and prospective customers and could harm our reputation and brand and could adversely affect our business, financial condition, and results of operations.

In February 2022, in response to the military conflict between Russia and Ukraine, the United States and other North Atlantic Treaty Organization member states, as well as non-member states, announced targeted economic sanctions on Russia, including certain Russian citizens and enterprises, and the continuation of the conflict may trigger additional economic and other sanctions. The potential impacts of the conflict and related sanctions could include supply chain and logistics disruptions, macro financial impacts resulting from the exclusion of Russian financial institutions from the global banking system, volatility in foreign exchange rates and interest rates, inflationary pressures on raw materials and energy and heightened cybersecurity threats. We do not and cannot know if the conflict, which remains ongoing, could escalate and result in broader economic and security concerns which could adversely affect our, supply chain, suppliers, customers, and potential customers. It is not possible to predict the broader consequences of this conflict, which could include further sanctions, embargoes, regional instability, geopolitical shifts and adverse effects on macroeconomic conditions, the availability and cost of materials, supplies, labor, currency exchange rates and financial markets, all of which could have a material adverse effect on our business, financial condition and results of operations.

Significant increases in worldwide supply of semiconductor memory and storage could lead to declines in demand and average selling prices.

Our suppliers generally seek to increase wafer output, improve yields, and reduce die size, which could result in significant increases in worldwide supply and downward pressure on prices. Increases in worldwide supply of semiconductor memory and storage also result from fabrication capacity expansions, either by way of new facilities, increased capacity utilization, or reallocation of other semiconductor production to semiconductor memory and storage production. Increases in worldwide supply of semiconductor memory and storage could lead to declines in average selling prices and a decrease in short-term and/or long-term demand resulting in industry oversupply and could materially adversely affect our business, results of operations, or financial condition.

Risks Related to Laws and Regulations

We are exposed to additional business, regulatory, political, operational, financial and economic risks related to our international sales and operations.

We sell products to foreign corporations and deliver products to facilities located in foreign countries. To facilitate this process and to meet the long-term projected demand for our products, we have established a manufacturing facility in the PRC that performs most of the manufacturing activities for our memory subsystem products.

Selling and manufacturing in foreign countries subjects us to additional risks not present with our domestic operations, as we are operating in business and regulatory environments in which we have limited experience and that may impose materially different requirements. Further, the geographic distance from our headquarters in Irvine, California, compounds the difficulties of maintaining a manufacturing operation in the PRC. For instance, we may not be able to maintain the desired amount of control over production capacity and timing, inventory levels, product quality, delivery schedules, manufacturing yields or costs. Moreover, we will need to continue to overcome language and cultural barriers to effectively conduct these international operations. Failures in any of these areas could result in legal consequences or production delays and increased turnaround times, which could adversely affect our business. In addition, changes to the labor or other laws of the PRC or the economic and political conditions in the PRC, including increased industrialization in recent years, natural disasters, public health crises, including the occurrence of a contagious disease or illness, such as COVID-19, and other catastrophic events, could increase the costs of employing a local workforce or conducting our manufacturing operations in the PRC. Any of these factors could negatively impact any cost savings we experience from locating our manufacturing facility in the PRC. Additionally, our management has limited experience creating or overseeing foreign operations generally, and the ongoing administration and operation of our PRC facility may require substantial amounts of time and attention by our management team, particularly if we encounter operational, legal or cultural difficulties or disruptions at our PRC facility.

To date, all of our net product sales have been denominated in U.S. dollars. In the future, however, some of our net product sales may be denominated in RMB. The Chinese government controls the procedures by which RMB is converted into other currencies, which generally requires government consent. As a result, RMB may not be freely

convertible into other currencies at all times. If the Chinese government institutes changes in currency conversion procedures or imposes additional restrictions on currency conversion, our operations and our operating results could be negatively impacted. In addition, Chinese law imposes restrictions on the movement of funds outside of the PRC. If we need or decide to repatriate funds from our Chinese operations, we would be required to comply with the procedures and regulations of applicable Chinese law, and any failure to so comply could adversely affect our liquidity and financial condition. Further, if we are able to repatriate funds from our Chinese operations, these funds would be subject to U.S. taxes. In addition, fluctuations in the exchange rate between RMB and U.S. dollars may adversely affect our expenses, the value of our assets and liabilities and the comparability of our period-to-period results.

Our international operations and sales are subject to a number of additional risks, including, among others, timing and availability of export licenses; difficulties in accounts receivable collections; difficulties managing distributors; lack of a significant local sales presence in a number of markets; difficulties obtaining government approvals; compliance with anti-bribery, data protection and other applicable U.S. and foreign laws, including the U.S. Foreign Corrupt Practices Act and similar anti-bribery laws in the non-U.S. jurisdictions in which we operate, as well as a wide variety of other complex foreign laws, regulations and treaties; and potentially adverse tax consequences. In addition, the United States or foreign countries may implement quotas, duties, tariffs, taxes or other charges or restrictions on the importation or exportation of our products or the component products we resell, which could lead to a reduction in sales and profitability in that country. The implementation of tariffs by the United States on goods manufactured in other countries, including PRC, could cause the costs of our products to increase, which could significantly impair the gross margin we receive and thereby harm our operating results significantly.

In addition, international turmoil and the threat of future terrorist attacks have contributed to an uncertain political and economic climate, both in the United States and globally, and have negatively impacted the worldwide economy. The economies of the PRC and other countries in which we make sales have been volatile in recent years, resulting in significant fluctuations in local currencies and other instabilities. These conditions could continue or worsen, which could adversely affect our foreign operations and our performance. The occurrence of any of these risks related to our international operations, including our manufacturing facility in the PRC and our international sales, could have a material adverse effect on our business, financial condition and prospects for growth.

Our failure to comply with environmental and other applicable laws and regulations could subject us to significant fines and liabilities or cause us to incur significant costs.

We are subject to various and frequently changing U.S. federal, state and local and foreign laws and regulations relating to the protection of the environment, including laws governing the discharge of pollutants into the air and water, the management and disposal of hazardous substances and wastes and the clean-up of contaminated sites. In particular, some of our manufacturing processes may require us to handle and dispose of hazardous materials from time to time. For example, in the past our manufacturing operations have used lead-based solder in the assembly of our products. Today, we use lead-free soldering technologies in our manufacturing processes, as this is required for products entering the European Union. We could incur substantial costs, including clean-up costs, civil or criminal fines or sanctions and third-party claims for property damage or personal injury, as a result of violations of or noncompliance with these and other environmental laws and regulations. Although we have not incurred significant costs to date to comply with these laws and regulations, new laws or changes to current laws and regulations to make them more stringent could require us to incur significant costs to remain in compliance.

We also may be subject to a variety of laws and regulations relating to other matters, including workplace health and safety, labor and employment, foreign business practices (including the U.S. Foreign Corrupt Practices Act and applicable foreign anti-bribery laws), data protection, public reporting and taxation, among others. It is difficult and costly to manage the requirements of every authority having jurisdiction over our various activities and to comply with their varying standards. Additionally, any changes to existing regulations or adoption of new regulations may result in significant additional expense to us or our customers. Further, our failure to comply with any applicable laws and regulations may result in a variety of administrative, civil and criminal enforcement measures, including monetary penalties or imposition of sanctions or other corrective requirements, any of which could materially adversely affect our reputation and our business.

Regulations related to "conflict minerals" may cause us to incur additional expenses and could limit the supply and increase the cost of certain metals used in manufacturing our products.

The U.S. Congress has enacted laws, and the SEC has adopted rules, requiring disclosure of specified minerals, known as conflict minerals, that are necessary to the functionality or production of products manufactured or contracted to be manufactured by public companies. These laws and rules require companies to verify and disclose whether or not such minerals, as used in a company's products or their manufacture, originate from the Democratic Republic of Congo or an adjoining country. Because our products contain certain conflict minerals and we or our manufacturers use these conflict minerals in the manufacture of our products, we are required to comply with these laws and disclosure rules. To comply, we are required to conduct a reasonable country of origin inquiry each year and, depending on the results of that inquiry, we may be required to exercise due diligence on the source and chain of custody of conflict minerals contained in or used to manufacture our products. Such due diligence must conform to a nationally or internationally recognized due diligence framework. We are also required to file a disclosure report with the SEC each year relating to our conflict mineral use.

The due diligence activities required to determine the source and chain of custody of minerals contained in our products or used in their manufacture are time-consuming and may result in significant costs. Due to the size and complexity of our supply chain, we face significant challenges verifying the origins of the minerals used in our products or their manufacture. Further, these rules could affect the availability in sufficient quantities and at competitive prices of certain minerals used in our products and their manufacture, which could result in increased material and component costs and additional costs associated with potential changes to our products, processes or sources of supply. Additionally, if we are unable to sufficiently verify the origin of the minerals used in our products through the due diligence measures we implement, we may not be able to satisfy customer preferences or requirements regarding the use of conflict minerals in the products they purchase, which could place us at a competitive disadvantage.

We have identified a material weakness in our internal control over financial reporting. If we are unable to remediate the material weakness, or if we identify additional material weaknesses in the future or otherwise fail to maintain an effective system of internal controls, we may not be able to accurately or timely report our financial condition or results of operations, which may adversely affect our business.

A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting such that there is a reasonable possibility that a material misstatement of our annual or interim condensed consolidated financial statements will not be prevented or detected on a timely basis. As described in Part I, Item 4, Controls and Procedures, we have concluded that our internal control over financial reporting was ineffective as of October 1, 2022 due to two material weaknesses. The identified material weaknesses, at October 1, 2022, relates to the lack of an independent audit committee and ineffective program change management related to certain IT systems that support the Company's financial reporting processes.

While the control deficiency identified did not result in any identified misstatements, a reasonable possibility exists that a material misstatement to the annual or interim condensed consolidated financial statements and disclosures will not be prevented or detected on a timely basis.

In an effort to remediate the identified material weakness and enhance our internal controls, our finance and accounting personnel are continuing to follow all of the same procedures that they undertook in preparation for independent audit committee meetings on a quarterly and annual basis. Our CEO and sole director will oversee these processes and review materials prepared by the finance and accounting staff as well as our independent auditors on a quarterly and annual basis. If our remedial measures are insufficient to address the material weakness, or if additional material weaknesses or significant deficiencies in our internal control over financial reporting occur in the future, we may not be able to timely or accurately report our results of operations or maintain effective disclosure controls and procedures. If we are unable to report financial information timely or accurately, or to maintain effective disclosure controls and procedures, we could be required to restate our financial statements and be subject to, among other things, regulatory or enforcement actions, securities litigation, limitations on our ability to access capital markets, debt rating agency downgrades or rating withdrawals, or loss in confidence of our investors, any one of which could adversely affect the valuation of our common stock and our business prospects. We can give no assurance that the measures we have

taken and plan to take in the future will remediate the material weakness identified or that any additional material weaknesses will not arise in the future due to a failure to implement and maintain adequate internal control over financial reporting.

We are required to comply with certain provisions of Section 404 of the Sarbanes-Oxley Act of 2002, as amended, that place significant demands on our resources, and the transition to the higher reporting and control standards that applies to us as a "large accelerated filer" may cause management distraction and increased costs.

Section 404 of the Sarbanes-Oxley Act of 2002 and the related rules and regulations of the SEC ("Section 404") require us to evaluate our internal control over financial reporting and require management to report on the effectiveness of this internal control as of the end of each fiscal year. In addition, due to the increase in the value of our worldwide non-affiliate public float, we lost our status as a "smaller reporting company" under applicable SEC rules at the end of last fiscal year ending January 1, 2022. As a result, Section 404 requires us to obtain an attestation report from our independent registered public accounting firm as to our internal control over financial reporting.

Our Section 404 evaluations confirmed that enhancements, modifications and changes to our internal control over financial reporting are necessary and desirable. Implementing changes related to ineffective design and maintenance of controls over user access and program change management related to IT systems may divert the attention of management, involve significant time and costs and could negatively impact our financial reporting functions during the transition, any of which could have a material negative effect on our results of operations and financial condition.

Risks Related to Intellectual Property and Litigation

We may be unsuccessful in monetizing our intellectual property portfolio.

We dedicate substantial resources to developing technology innovations we believe are essential to our business. We intend to pursue monetization avenues for our intellectual property portfolio, potentially including licensing, royalty or other revenue-producing arrangements. However, other than monies received from SK hynix, we have not generated any such revenue stream from our intellectual property to date, and we may never be successful in achieving this objective.

Although we may pursue agreements with third parties to commercially license certain of our products or technologies, we may never successfully enter into any such agreement. Further, the terms of any such agreements we may reach with third-party licensees are uncertain and may not provide sufficient royalty or other licensing revenues to us to justify our costs of developing and maintaining the licensed intellectual property or may otherwise include terms that are not favorable to us. Additionally, the pursuit of licensing arrangements would require by its nature that we relinquish certain of our rights to our technologies and intellectual property that we license to third parties, which could limit our ability to base our own products on such technologies or could reduce the economic value we receive from such technologies and intellectual property. Additionally, the establishment of arrangements to monetize our intellectual property may be more difficult or costly than expected, may require additional personnel and investments and may be a significant distraction for management.

Our ability to establish licensing, royalty or similar revenues, and maintain or increase any such revenues we are able to establish, depends on a variety of factors, including, among others, the novelty, utility, performance, quality, breadth, depth and overall perceived value of our intellectual property portfolio, all as compared to that of our competitors, as well as our sales and marketing capabilities. Even if we are able to secure these revenues, they may be negatively affected by factors that are entirely or partially outside our control, including reductions in our customers' sales prices, sales volumes and the general state of their business, as well as the terms of the license arrangements.

If we are not successful in monetizing our intellectual property portfolio, we may never recoup our investments of time, capital and other resources in the development, maintenance, defense and enforcement of this portfolio, which could materially harm our financial condition and prospects.

We are and expect to continue to be involved in other legal and administrative proceedings to enforce or protect our intellectual property rights and to defend against claims that we infringe the intellectual property rights of others.

As is common in the semiconductor industry, we have experienced substantial litigation regarding patent and other intellectual property rights. We are currently involved in litigation and proceedings at the USPTO and PTAB based on alleged third-party infringement of our patents, and lawsuits claiming we are infringing others' intellectual property rights also have been and may in the future be brought against us.

Our business strategy includes litigating claims against others, such as our competitors and customers, to enforce our intellectual property, contractual and commercial rights, including, in particular, our patent portfolio and our trade secrets, as well as to challenge the validity and scope of the proprietary rights of others. This or other similar proceedings could also subject us to counterclaims or countersuits against us, or the parties we sue could seek to invalidate our patents or other intellectual property rights through reexamination or similar processes at the USPTO or similar bodies. Further, any legal disputes with customers could cause them to cease buying or using our products or the component products we resell or delay their purchase of these products and could substantially damage our relationship with them.

Moreover, our ability to continue to pursue this strategy depends on our ability to obtain and protect patents, which is governed by an uncertain process. In addition to the patent issuance process established by law and the procedures of the USPTO, we must also comply with administrative procedures of the JEDEC to protect our intellectual property within its industry standard-setting process. These procedures evolve over time, are subject to variability in their application and may be inconsistent with each other. Any failure to comply with the USPTO's or JEDEC's administrative procedures could jeopardize our ability to claim that our patents have been infringed.

Making use of new technologies and entering new markets increases the likelihood that others might allege that our products or the component products we resell infringe their intellectual property rights. The likelihood of this type of lawsuit may also be increased due to the limited pool of experienced technical personnel that we can draw on to meet our hiring needs. As a result, a number of our existing employees have worked for our existing or potential competitors at some point during their careers, and we anticipate a number of our future employees will have similar work histories. Moreover, lawsuits of this type may be brought, even if there is no merit to the claim, as a strategy to prevent us from hiring qualified candidates, drain our financial resources and divert management's attention away from our business.

Litigation is inherently uncertain. An adverse outcome in existing or any future litigation could force us to, among other things:

- relinquish patents or other protections of our technologies if they are invalidated, which would enable our competitors and others to freely use this technology;
- compete with products that rely on technologies and other intellectual property rights that we believe we have the right to protect from third-party use;
- accept terms of an arrangement to license our technologies to a third party that are not as favorable as we might expect;
- receive little or no returns for our time and capital investments in the litigation;
- cease manufacturing and/or selling products or using certain processes that are claimed to be infringing a third party's intellectual property;
- pay damages (which in some instances may be three times actual damages), including royalties on past or future sales, if we are found to infringe a third party's intellectual property;
- seek a license from a third-party intellectual property owner to use its technology in our products or the component products we resell, which may not be available on reasonable terms or at all; or
- redesign any products that are claimed to be infringing a third party's intellectual property, which may not be possible to do in a timely manner, without incurring significant costs or at all.

Moreover, any litigation, regardless of its outcome, involves a significant dedication of resources, including time and capital, and diverts management's attention from our other activities. As a result, any current or future

infringement claims or patent challenges by or against third parties, whether or not eventually decided in our favor or settled, could materially adversely affect our business, financial condition and results of operations. Additionally, the outcome of pending or future litigation and related patent reviews and reexaminations, as well as any delay in their resolution, could affect our ability to continue to sell our products, protect against competition in the current and expected markets for our products or license or otherwise monetize our intellectual property rights in the future.

If our proprietary rights are not protected, our customers or our competitors might gain access to our proprietary designs, processes and technologies, which could adversely affect our operating results.

We rely on a combination of patent protection, trade secret laws and restrictions on disclosure to protect our intellectual property and other proprietary rights. We have submitted a number of patent applications regarding our proprietary processes and technology, many of which have resulted in issued patents. For our pending patent applications, it is uncertain when or if any of the claims in these applications will be allowed or result in issued patents, in which case the technologies or processes sought to be patented would remain unprotected from use by third parties. In addition, although we intend to continue filing patent applications with respect to new processes and technologies we develop, patent protection may not be available for some of these processes or technologies. Further, even if we are successful in obtaining patent protection, these protections could be limited in scope by the USPTO, a court or applicable foreign authorities or challenged by third parties by way of review or reexamination proceedings and subsequently invalidated, which would reduce the protections these patents are able to provide. Moreover, patent protection is limited as to duration and all of our issued patents will eventually expire, at which time the previously protected technologies would become widely available for use by third parties, including our competitors.

Despite our efforts to protect our intellectual property rights, these efforts may not:

- prevent challenges to or the invalidation or circumvention of our intellectual property rights;
- keep our competitors or other third parties from independently developing similar products or technologies, duplicating, reverse engineering or otherwise using our products or technologies without our authorization or designing around any patents that may be issued to us;
- prevent disputes with third parties regarding ownership of our intellectual property rights;
- prevent disclosure of our trade secrets and know-how to third parties or into the public domain;
- result in valid patents, including international patents, from any of our pending or future applications; or
- otherwise adequately protect our intellectual property rights.

Moreover, monitoring for any unauthorized use of our technologies is costly, time-consuming and difficult. This is particularly true in foreign countries, such as the PRC, where we have established a manufacturing facility and where the laws may not protect our proprietary rights to the same extent as applicable U.S. laws.

If some or all of the claims in our patent applications are not allowed, if any of our issued patents or other intellectual property protections are limited, invalidated or circumvented by third parties, or if we are not able to obtain extensions of existing patents upon their expiration or issuance of new patents to maintain protections provided by expiring patents, we could face increased competition for our products and technologies and be unable to execute on our strategy of monetizing our intellectual property. Any of these outcomes could significantly harm our business, operating results and prospects.

We may become involved in non-patent related litigation and administrative proceedings that may materially adversely affect us.

From time to time, we may become involved in various legal proceedings relating to matters incidental to the ordinary course of our business, including commercial, employment, class action, whistleblower and other litigation and claims, as well as governmental and other regulatory investigations and proceedings. Such matters can be time-consuming, divert management's attention and resources and cause us to incur significant expenses. Furthermore, because litigation is inherently unpredictable, the results of these actions could subject us to monetary damages or other liabilities and have a material adverse effect on our business, results of operations and financial condition.

Risks Related to Capitalization and Financial Markets

We may not have sufficient working capital to fund our planned operations, and, as a result, we may need to raise additional capital in the future, which may not be available when needed, on acceptable terms or at all.

To support our activities in the near term, we expect to rely on cash generated from our business, the cash received under the SK hynix Strategic Agreement and proceeds from issuances of debt and equity securities, including our equity line with Lincoln Park, and borrowing availability under our credit facility with SVB. Taking into account our planned activities and sources of capital, we believe we have sufficient cash resources to satisfy our capital needs for at least the next 12 months. However, our estimates of our operating revenues and expenses and working capital requirements could be incorrect, and we may use our cash resources faster than we anticipate. Further, some or all of our ongoing or planned investments may not be successful and could further deplete our capital without immediate, or any, cash returns.

Our capital requirements will depend on many factors, including, among others:

- the costs associated with maintaining, defending and enforcing our intellectual property rights;
- the acceptance of, and demand for, our products and the component products we resell to customers;
- our success, and that of our strategic partners, in developing and selling products derived from our technology;
- the extent and timing of any investments in developing, marketing and launching new or enhanced products or technologies;
- the costs of developing, improving and maintaining our internal design, testing and manufacturing processes;
- our results of operations, including our levels of net product sales and any other revenues we may receive, including non-recurring engineering, license, royalty or other fees;
- the amount and timing of vendor payments and the collection of receivables, among other factors affecting our working capital;
- our receipt of cash proceeds from the exercise of outstanding stock options or warrants to acquire our common stock;
- the nature and timing of acquisitions or other strategic transactions or relationships in which we engage, if any; and
- the costs associated with the continued operation, and any future growth, of our business.

Until we can generate sufficient revenues to finance our cash requirements from our operations, which we may never do, we may need to increase our liquidity and capital resources by one or more measures, which may include, among others, reducing operating expenses, restructuring our balance sheet by negotiating with creditors and vendors, entering into strategic partnerships or alliances, raising additional financing through the issuance of debt, equity or convertible securities or pursuing alternative sources of capital, such as through asset or technology sales or licenses or other alternative financing arrangements. Further, even if our near-term liquidity expectations prove correct, we may still seek to raise capital through one or more of these financing alternatives. However, we may not be able to obtain capital when needed or desired, on terms acceptable to us or at all.

Inadequate working capital would have a material adverse effect on our business and operations and could cause us to fail to execute our business plan, fail to take advantage of future opportunities or fail to respond to competitive pressures or customer requirements. A lack of sufficient funding may also require us to significantly modify our business model and/or reduce or cease our operations, which could include implementing cost-cutting measures or delaying, scaling back or eliminating some or all of our ongoing and planned investments in corporate infrastructure, research and development projects, legal proceedings, business development initiatives and sales and marketing activities, among other activities. Modification of our business model and operations could result in an impairment of assets, the effects of which cannot be determined. Furthermore, if we continue to issue equity or convertible debt securities to raise additional funds, our existing stockholders may experience significant dilution, and the new equity or debt securities may have rights, preferences and privileges that are superior to those of our existing stockholders.

Additionally, because our common stock is no longer listed on The Nasdaq Capital Market, the challenges and risks of equity financings may significantly increase, including potentially increasing the dilution of any such financing or decreasing our ability to affect such a financing at all. If we incur additional debt, it may increase our leverage relative to our earnings or to our equity capitalization or have other material consequences. If we pursue asset or technology sales or licenses or other alternative financing arrangements to obtain additional capital, our operational capacity may be limited and any revenue streams or business plans that are dependent on the sold or licensed assets may be reduced or eliminated. Moreover, we may incur substantial costs in pursuing any future capital-raising transactions, including investment banking, legal and accounting fees, printing and distribution expenses and other similar costs, which would reduce the benefit of the capital received from the transaction.

The price and trading volume of our common stock has and may continue to fluctuate significantly in reaction to real or perceived developments in our business.

Our common stock has been publicly traded since November 2006. The price and trading volume of our common stock are volatile and have in the past fluctuated significantly. This volatility could continue, in which case an active trading market in our common stock may not be sustained and stockholders may not be able to sell their shares at a desired time or a desired price.

The market price at which our common stock trades may be influenced by many factors, including, among others, the following:

- the ongoing impacts of the COVID-19 pandemic;
- the results of legal proceedings in which we are involved;
- our operating and financial performance and prospects;
- investor perceptions of us and the industry in which we operate;
- our ability to meet investor and analyst expectations for our operating results;
- the availability and level of research coverage of and market-making in our common stock;
- changes in buy/sell recommendations by analysts;
- any financial projections we may provide to the public, any changes to these projections or our failure to meet these projections;
- our announcement of significant strategic transactions or relationships or the initiation of legal proceedings, including patent infringement actions;
- general political, economic and market conditions, including volatility or uncertainty in these conditions; and
- the other risk factors described in this report.

In addition, shares of our common stock and the public stock markets in general have experienced, and may continue to experience, extreme price and trading volume volatility, at times irrespective of the state of the business of any particular company. These fluctuations may adversely affect the market price of our common stock. Further, following periods of volatility in the overall market and the market price of a particular company's securities, securities litigation can sometimes be instituted against us. Securities litigation, like other types of litigation, is expensive and time-consuming, and if such litigation is instituted against us in the future, we may incur substantial costs, management's attention and resources may be diverted, and we could be subject to damages in the event of unfavorable results.

We have incurred a material amount of indebtedness to fund our operations, the terms of which have required us to pledge substantially all of our assets as security. Our level of indebtedness and the terms of such indebtedness could adversely affect our operations and liquidity.

The SVB debt instrument contains customary representations, warranties and indemnification provisions, as well as affirmative and negative covenants that, among other things, restrict our ability to:

- incur additional indebtedness or guarantees;
- incur liens;

- make investments, loans and acquisitions;
- consolidate or merge;
- sell or exclusively license assets, including capital stock of subsidiaries;
- alter our business;
- change any provision of our organizational documents;
- engage in transactions with affiliates;
- make certain decisions regarding certain of our outstanding legal proceedings without consulting with or obtaining consent from certain of these parties; and
- pay dividends or make distributions.

The SVB debt instrument also includes events of default, including, among other things, payment defaults, any breach by us of representations, warranties or covenants, certain bankruptcy events and certain material adverse changes. If an event of default were to occur under this agreement and we were unable to obtain a waiver for the default, the counterparties could, among other remedies, accelerate our obligations under the debt instrument or other agreement and exercise their rights to foreclose on their security interests, which would cause substantial harm to our business and prospects.

In the past we had incurred a funding arrangement with TR Global Funding V, LLC (the "TRGP Agreement"), an affiliate of TRGP Capital Management ("TRGP"). We believe that the SK hynix Strategic Agreement falls outside the scope of the TRGP Agreement and the First Amendment to the TRGP Agreement, and we do not anticipate that we will be obligated to make payments to TRGP under the TRGP Agreement or the First Amendment to the TRGP Agreement.

Additionally, incurrence and maintenance of debt could have material adverse consequences on our business and financial condition, such as:

- requiring us to dedicate a portion of our cash flows from operations and other capital resources to debt service, thereby reducing our ability to fund working capital, capital expenditures and other cash requirements;
- increasing our vulnerability to adverse economic and industry conditions;
- limiting our flexibility in planning for or reacting to changes and opportunities in our business and industry, which may place us at a competitive disadvantage; and
- limiting our ability to incur additional debt when needed, on acceptable terms or at all.

There is a limited market for our common shares, and the trading price of our common shares is subject to volatility.

Netlist common shares began trading on the Over-the-Counter market (the "OTC") in October 2018, following the decision to move trading of our common stock from The Nasdaq Capital Market. Because our stock is no longer listed on a registered national securities exchange, we are subject to certain "blue sky" laws of the various states which impose restrictions on our ability to offer and sell our securities. These "blue sky" laws may make it more difficult for us to raise capital or to issue our common stock for equity compensation or other strategic purposes, which could adversely affect our ability to fund our operations or to attract and retain employees. In addition, our stock may be defined as a "penny stock" under Rule 3a51-1 under the Exchange Act. "Penny stocks" are subject to Rule 15g-9, which imposes additional sales practice requirements on broker-dealers that sell low-priced securities to persons other than established customers and institutional accredited investors. For transactions covered by this rule, a broker-dealer must make a special suitability determination for the purchaser and have received the purchaser's written consent to the transaction prior to sale. Consequently, the rule may affect the ability of broker-dealers to sell our common stock and affect the ability of holders to sell their shares of our common stock in the secondary market. To the extent our common stock is subject to the penny stock regulations, the market liquidity for the shares will be adversely affected.

Future issuances of our common stock or rights to purchase our common stock, including pursuant to our equity incentive plans, could result in additional dilution to the percentage ownership of our stockholders and could cause the price of our common stock to decline.

We have historically funded our operations in large part with proceeds from equity and convertible debt financings, and we expect to continue to do so in the future. In addition to capital-raising purposes, we may also issue securities from time to time at prices and on other terms as we determine for acquiring other businesses or assets in exchange for shares of our common stock or other securities, issuing securities to collaborators in connection with strategic partnerships, attracting and retaining employees with equity compensation, or other purposes. If we sell common stock or other equity or convertible debt securities in the future, our then-existing stockholders could be materially diluted by such issuances and new investors could gain rights, preferences and privileges senior to the holders of our common stock, which could cause the price of our common stock to decline.

Sales of our common stock, or the perception that such sales could occur, could cause the market price of our stock to drop significantly, regardless of the state of our business.

As of October 1, 2022, there were 232,094,023 shares of our common stock outstanding. In addition, 4,890,052 shares of our common stock are subject to outstanding stock options and 3,337,304 shares of our common stock are subject to outstanding unvested restricted stock units. All outstanding shares of our common stock are eligible for sale in the public market under applicable federal securities laws, subject in certain cases to the requirements of Rule 144 under the Securities Act of 1933, as amended, and shares issued upon the exercise or conversion of outstanding stock options, warrants or convertible notes may also be eligible for sale in the public market, to the extent permitted by Rule 144 or other applicable securities laws and the provisions of the applicable stock option, warrant and convertible note agreements. If these shares are sold, or if it is perceived that they may be sold, in the public market, the trading price of our common stock could fall.

As a sole director, Chun K. Hong has significant control over all corporate decisions that may not be in the best interest of our other stockholders.

Our President, Chief Executive Officer and the sole member of our board of directors, Chun K. Hong, has the ability to exert substantial control over all matters requiring approval by our stockholders and our board of directors, including the election and removal of directors, any proposed merger, consolidation or sale of all or substantially all of our assets and other significant corporate transactions. This concentration of control could be disadvantageous to other stockholders with interests different from those of Mr. Hong.

Anti-takeover provisions under our charter documents and Delaware law, as well as our rights agreement, could delay or prevent a change of control and could also limit the market price of our common stock.

Our certificate of incorporation and bylaws contain provisions that could delay or prevent a change of control of our Company or changes in our board of directors that our stockholders might consider favorable, including:

- our board of directors is authorized, without prior stockholder approval, to designate and issue preferred stock, commonly referred to as “blank check” preferred stock, which may have rights senior to those of our common stock;
- stockholder action by written consent is prohibited;
- nominations for election to our board of directors and the submission of matters to be acted upon by stockholders at a meeting are subject to advance notice requirements; and
- our board of directors is expressly authorized to make, alter or repeal our bylaws.

In addition, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, which may prohibit certain business combinations with stockholders owning 15% or more of our outstanding voting stock. Further, we adopted a rights agreement that would, under certain specified circumstances and for so long as the rights issued under the rights agreement are outstanding, give the holders of our common stock the right to acquire additional

shares of our capital stock, which would make it more difficult for a third party to acquire a significant percentage of our outstanding capital stock or attempt a hostile takeover of our Company.

These and other provisions in our certificate of incorporation and bylaws and of Delaware law, as well as the existence of our rights agreement, could make it more difficult for stockholders or potential acquirers to obtain control of our board of directors or initiate actions that are opposed by our board of directors, including a merger, tender offer, proxy contest or other change of control transaction involving our Company. Any delay or prevention of a change of control transaction or changes in our board of directors could prevent the consummation of a transaction in which our stockholders could receive a substantial premium over the then-current market price for our common stock. In addition, these anti-takeover provisions could reduce the price that investors are willing to pay for shares of our common stock.

We do not currently intend to pay dividends on our common stock, and any return to investors is expected to result, if at all, only from potential increases in the price of our common stock.

We intend to use all available funds to finance our operations. Accordingly, while all decisions about dividends are at the discretion of our board of directors, we have never declared or paid cash dividends on our capital stock in the past, and we have no intention of declaring or paying any such dividends in the foreseeable future. As a result, any return to investors is expected to result, if at all, only from potential increases in the price of our common stock.

Item 6. Exhibits

Exhibit No.	Exhibit Description	Filed Herewith	Incorporated by Reference		
			Form	File No.	Filing Date
3.1	Restated Certificate of Incorporation of Netlist, Inc.		10-Q	001-33170	August 15, 2017
3.1.1	Certificate of Amendment to the Restated Certificate of Incorporation of Netlist, Inc.		10-Q	001-33170	August 15, 2017
3.1.2	Certificate of Amendment of the Restated Certificate of Incorporation of Netlist, Inc.		8-K	001-33170	August 17, 2018
3.1.3	Certificate of Designation of the Series A Preferred Stock of Netlist, Inc.		10-Q	001-33170	August 15, 2017
3.2	Amended and Restated Bylaws of Netlist, Inc.		8-K	001-33170	December 20, 2012
3.2.1	Certificate of Amendment to Amended and Restated Bylaws of Netlist, Inc.		8-K	001-33170	December 29, 2017
31.1	Rule 13a-14(a) / 15d-14(a) Certification of Chief Executive Officer	X			
31.2	Rule 13a-14(a) / 15d-14(a) Certification of Chief Financial Officer	X			
32+	Section 1350 Certifications of Chief Executive Officer and Chief Financial Officer	X			
101.INS	Inline XBRL Instance Document	X			
101.SCH	Inline XBRL Taxonomy Extension Schema Document	X			
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document	X			
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document	X			
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document	X			
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document	X			
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)				

+ Furnished herewith.

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 2, 2022

Netlist, Inc.

By: /s/ Chun K. Hong
Chun K. Hong
President, Chief Executive Officer and Sole Director
(Principal Executive Officer)

By: /s/ Gail Sasaki
Gail Sasaki
Executive Vice President and Chief Financial Officer
(Principal Financial and Accounting Officer)

Exhibit 31.1

CERTIFICATION

I, Chun K. Hong, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Netlist, 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 2, 2022

/s/ Chun K. Hong
Chun K. Hong
President, Chief Executive Officer and Sole Director

Exhibit 31.2

CERTIFICATION

I, Gail Sasaki, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Netlist, 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 2, 2022

/s/ Gail Sasaki
Gail Sasaki
Executive Vice President and Chief Financial Officer

Exhibit 32

CERTIFICATION 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 on Form 10-Q of Netlist, Inc., a Delaware corporation ("Netlist") for the quarter ended October 1, 2022, as filed with the Securities and Exchange Commission on or about the date hereof (the "Report"), each of the undersigned officers of Netlist certifies, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to the best of such officer's knowledge:

(1) the Report fully complies with the requirements of Section 13(a) of the Securities Exchange Act of 1934; and

(2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of Netlist.

Date: November 2, 2022

/s/ Chun K. Hong
Chun K. Hong
President, Chief Executive Officer and Sole Director

Date: November 2, 2022

/s/ Gail Sasaki
Gail Sasaki
Executive Vice President and Chief Financial Officer

A signed original of this written statement required by Section 906 has been provided to Netlist and will be retained by Netlist and furnished to the Securities and Exchange Commission or its staff upon request.