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 April 1, 2022

☐ **Transition report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934**

Commission File No. 000-25826

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

Delaware	**77-0201147**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification Number)**

2590 Orchard Parkway
San Jose, CA 95131
(408) 542-2500
(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common stock, $0.001 par value	HLIT	NASDAQ Global Select Market

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

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

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See 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 ☒

The number of shares of the registrant’s Common Stock, $0.001 par value, outstanding on May 2, 2022 was 104,489,365.

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PART I

FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

HARMONIC INC.
CONDENSED CONSOLIDATED BALANCE SHEETS
(Unaudited, in thousands, except per share data)

	April 1, 2022	December 31, 2021
ASSETS		
Current assets:		
Cash and cash equivalents	$ 100,739	$ 133,431
Accounts receivable, net	115,594	88,529
Inventories	81,816	71,195
Prepaid expenses and other current assets	27,251	29,972
Total current assets	325,400	323,127
Property and equipment, net	42,577	42,721
Operating lease right-of-use assets	29,556	30,968
Other non-current assets	63,281	56,657
Goodwill	239,631	240,213
Total assets	$ 700,445	$ 693,686
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Convertible debt, current	$ 37,518	$ 36,824
Other debts, current	4,906	4,992
Accounts payable	52,524	64,429
Deferred revenue	75,474	57,226
Operating lease liabilities, current	7,362	7,346
Other current liabilities	53,072	53,644
Total current liabilities	230,856	224,461
Convertible debt, non-current	113,324	98,941
Other debts, non-current	12,740	12,989
Operating lease liabilities, non-current	27,689	29,120
Other non-current liabilities	31,183	31,379
Total liabilities	415,792	396,890
Commitments and contingencies (Note 11)		
Convertible debt (Note 6)	—	883
Stockholders' equity:		
Preferred stock, $0.001 par value, 5,000 shares authorized; no shares issued or outstanding	—	—
Common stock, $0.001 par value, 150,000 shares authorized; 104,603 and 102,959 shares issued and outstanding at April 1, 2022 and December 31, 2021, respectively	105	103
Additional paid-in capital	2,362,873	2,387,039
Accumulated deficit	(2,073,288)	(2,087,957)
Accumulated other comprehensive loss	(5,037)	(3,272)
Total stockholders' equity	284,653	295,913
Total liabilities and stockholders' equity	$ 700,445	$ 693,686

The accompanying notes are an integral part of these condensed consolidated financial statements.

HARMONIC INC.
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(Unaudited, in thousands, except per share data)

	Three Months Ended	
	April 1, 2022	April 2, 2021
Revenue:		
Appliance and integration	$ 112,984	$ 79,976
SaaS and service	34,455	31,600
Total net revenue	147,439	111,576
Cost of revenue:		
Appliance and integration	66,382	42,619
SaaS and service	11,875	13,812
Total cost of revenue	78,257	56,431
Total gross profit	69,182	55,145
Operating expenses:		
Research and development	28,833	23,528
Selling, general and administrative	36,643	34,911
Amortization of intangibles	—	507
Restructuring and related charges	1,170	43
Total operating expenses	66,646	58,989
Income (loss) from operations	2,536	(3,844)
Interest expense, net	(1,433)	(2,603)
Other income (expense), net	62	1,019
Income (loss) before income taxes	1,165	(5,428)
Provision for income taxes	2,694	696
Net loss	$ (1,529)	$ (6,124)
Net loss per share:		
Basic and diluted	$ (0.01)	$ (0.06)
Shares used in per share calculation:		
Basic and diluted	103,994	99,868

The accompanying notes are an integral part of these condensed consolidated financial statements.

HARMONIC INC.
CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS
(Unaudited, in thousands)

	Three Months Ended	
	April 1, 2022	**April 2, 2021**
Net loss	$ (1,529)	$ (6,124)
Change in foreign currency translation adjustments	(1,702)	(4,249)
Other comprehensive loss before tax	(1,702)	(4,249)
Provision for (benefit from) income taxes	63	(268)
Other comprehensive loss, net of tax	(1,765)	(3,981)
Total comprehensive loss	$ (3,294)	$ (10,105)

The accompanying notes are an integral part of these condensed consolidated financial statements.

HARMONIC INC.
CONDENSED CONSOLIDATED STATEMENTS OF STOCKHOLDERS’ EQUITY
(Unaudited, in thousands)

	Three Months Ended April 1, 2022					
	Common Stock		Additional Paid-in Capital	Accumulated Deficit	Accumulated Other Comprehensive Loss	Total Stockholders’ Equity
	Shares	Amount				
Balance at December 31, 2021	102,959	$ 103	$ 2,387,039	$ (2,087,957)	$ (3,272)	$ 295,913
Cumulative effect of ASU 2020-06 adoption	—	—	(32,249)	18,339	—	(13,910)
Balance at January 1, 2022	102,959	103	2,354,790	(2,069,618)	(3,272)	282,003
Net loss	—	—	—	(1,529)	—	(1,529)
Other comprehensive loss, net of tax	—	—	—	—	(1,765)	(1,765)
Issuance of common stock under stock option, award and purchase plans	1,877	2	272	—	—	274
Repurchase of common stock	(233)	—	—	(2,141)	—	(2,141)
Stock-based compensation	—	—	7,811	—	—	7,811
Balance at April 1, 2022	104,603	$ 105	$ 2,362,873	$ (2,073,288)	$ (5,037)	$ 284,653

	Three Months Ended April 2, 2021					
	Common Stock		Additional Paid-in Capital	Accumulated Deficit	Accumulated Other Comprehensive Income (Loss)	Total Stockholders’ Equity
	Shares	Amount				
Balance at December 31, 2020	98,204	$ 98	$ 2,353,559	$ (2,101,211)	$ 5,856	$ 258,302
Net loss	—	—	—	(6,124)	—	(6,124)
Other comprehensive loss, net of tax	—	—	—	—	(3,981)	(3,981)
Issuance of common stock under stock option, award and purchase plans	2,789	3	4,772	—	—	4,775
Stock-based compensation	—	—	8,362	—	—	8,362
Reclassification from equity to mezzanine equity for 2020 Notes	—	—	(1,564)	—	—	(1,564)
Balance at April 2, 2021	100,993	$ 101	$ 2,365,129	$ (2,107,335)	$ 1,875	$ 259,770

The accompanying notes are an integral part of these condensed consolidated financial statements.

HARMONIC INC.
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(Unaudited, in thousands)

	Three Months Ended	
	April 1, 2022	April 2, 2021
Cash flows from operating activities:		
Net loss	$ (1,529)	$ (6,124)
Adjustments to reconcile net loss to net cash provided by (used in) operating activities:		
Depreciation	3,111	3,057
Amortization of intangibles	—	507
Stock-based compensation	7,586	8,398
Amortization of convertible debt discount	297	1,532
Amortization of warrant	429	429
Foreign currency remeasurement	(563)	(2,609)
Deferred income taxes	627	432
Provision for expected credit losses and returns	1,348	1,089
Provision for excess and obsolete inventories	2,738	644
Other adjustments	77	143
Changes in operating assets and liabilities:		
Accounts receivable	(28,479)	(20,758)
Inventories	(11,841)	(1,119)
Other assets	(3,949)	(1,019)
Accounts payable	(12,260)	13,527
Deferred revenues	18,408	11,285
Other liabilities	(3,482)	(7,736)
Net cash provided by (used in) operating activities	(27,482)	1,678
Cash flows from investing activities:		
Purchases of property and equipment	(2,438)	(3,645)
Net cash used in investing activities	(2,438)	(3,645)
Cash flows from financing activities:		
Repurchase of common stock	(2,141)	—
Repayment of other debts	(99)	(108)
Proceeds from common stock issued to employees	2,966	5,685
Payment of tax withholding obligations related to net share settlements of restricted stock units	(2,693)	(913)
Net cash provided by (used in) financing activities	(1,967)	4,664
Effect of exchange rate changes on cash and cash equivalents	(805)	(565)
Net increase (decrease) in cash and cash equivalents	(32,692)	2,132
Cash and cash equivalents at beginning of period	133,431	98,645
Cash and cash equivalents at end of period	$ 100,739	$ 100,777
Supplemental disclosures of cash flow information:		
Income taxes, net of refunds	$ 1,026	$ 537
Interest payments	$ 1,178	$ 1,183
Supplemental schedule of non-cash investing and financing activities:		
Capital expenditures incurred but not yet paid	$ 1,328	$ 973

The accompanying notes are an integral part of these condensed consolidated financial statements.

HARMONIC INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

NOTE 1: BASIS OF PRESENTATION

The condensed consolidated financial statements have been prepared in accordance with U.S. generally accepted accounting principles ("U.S. GAAP") and include the accounts of Harmonic Inc. and its controlled subsidiaries (collectively, “Harmonic” or the “Company”). Intercompany accounts and transactions have been eliminated in consolidation. In the opinion of management, the unaudited condensed consolidated financial statements reflect all adjustments (consisting only of normal recurring adjustments) necessary for a fair presentation of the Company's financial position as of balance sheet dates and its operating results and cash flows for the interim periods presented. Operating results for the three month period ended April 1, 2022 are not necessarily indicative of the results that may be expected for the fiscal year ending December 31, 2022. These unaudited condensed consolidated financial statements should be read in conjunction with the Company's audited consolidated financial statements and notes included in the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2021.

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Actual results could differ from these estimates.

Certain prior period balances have been reclassified to conform to the current period’s presentation. These reclassifications did not have a material impact on previously reported financial statements.

The Company’s significant accounting policies are described in Note 2 to its audited Consolidated Financial Statements included in the 2021 Form 10-K. There have been no significant changes to these policies during the three months ended April 1, 2022.

NOTE 2: RECENT ACCOUNTING PRONOUNCEMENTS

In August 2020, the Financial Accounting Standards Board (“FASB”) issued ASU No. 2020-06, Accounting for Convertible Instruments in an Entity’s Own Equity, which simplifies the accounting for convertible instruments and contracts on an entity’s own equity. The Company adopted this ASU on January 1, 2022 on a modified retrospective basis. Among other changes, ASU No. 2020-06 removes from U.S. GAAP the liability and equity separation model for convertible instruments with a cash conversion feature. As a result, the Company no longer separately presents in equity an embedded conversion feature for such debt. Similarly, the embedded conversion feature is no longer amortized into income as interest expense over the life of the instrument. The cumulative effect of the ASU adoption was as follows:

(in thousands)	Balance at December 31, 2021	Adjustments from Adoption of ASU 2020-06	Balance at January 1, 2022
Liabilities			
Convertible debt, current	$ 36,824	$ 626	$ 37,450
Convertible debt, non-current	98,941	14,167	113,108
Mezzanine equity			
Convertible debt	883	(883)	—
Equity			
Additional paid-capital	2,387,039	(32,249)	2,354,790
Accumulated deficit	(2,087,957)	18,339	(2,069,618)

The impact of ASU adoption on the consolidated statement of operations for the three months ended April 1, 2022 was a decrease of net interest expense by $1.4 million. This had the effect of decreasing the basic and diluted net loss per share for the three months ended April 1, 2022 by approximately $0.01. The required use of if-converted method to calculate the impact of convertible notes on diluted earnings per share does not have a material impact. The Company is contractually required to settle the principal amount of 2022 Notes and 2024 Notes in cash. Accordingly, the dilutive effect of the Company's 2022 Notes and 2024 Notes will be limited to the conversion premium. The adoption of this ASU does not have any impact on the consolidated statement of cash flows.

From time to time, new accounting pronouncements are issued by the FASB, or other standards setting bodies, that are adopted by the Company as of the specified effective date. Unless otherwise discussed, the Company believes the impact of recently issued standards that are not yet effective will not have a material impact on its consolidated financial position, results of operations and cash flows upon adoption.

NOTE 3: REVENUE

Contract assets exist when the Company has satisfied a performance obligation but does not have an unconditional right to consideration (e.g., because the entity first must satisfy another performance obligation in the contract before it is entitled to invoice the customer). Deferred revenue represents the Company’s obligation to transfer goods or services to a customer for which the Company has received consideration (or an amount of consideration is due) from the customer.

Contract assets and deferred revenue consisted of the following:

	As of	
(in thousands)	April 1, 2022	December 31, 2021
Contract assets	$ 4,717	$ 8,101
Deferred revenue	$ 96,508	$ 78,167

Contract assets and the non-current portion of Deferred revenue are reported as components of “Prepaid expenses and other current assets” and “Other non-current liabilities,” respectively, on the Condensed Consolidated Balance Sheets.

Revenue recognized during the three months ended April 1, 2022, that was included within the deferred revenue balance at January 1, 2022, was $23.5 million. Revenue recognized during the three months ended April 2, 2021, that was included within the deferred revenue balance at January 1, 2021 was $30.4 million.

Remaining performance obligations represent contracted revenues that had not yet been recognized and future revenue recognition is expected. The aggregate balance of the Company’s remaining performance obligations as of April 1, 2022 was $518.6 million, of which approximately 82% is expected to be recognized as revenue over the next 12 months and the remainder thereafter.

Refer to Note 10, “Segment Information” for disaggregated revenue information.

NOTE 4: LEASES

The components of lease expense are as follows:

	Three Months Ended	
(in thousands)	April 1, 2022	April 2, 2021
Operating lease cost	$ 1,887	$ 1,866
Variable lease cost	461	1,099
Total lease cost	$ 2,348	$ 2,965

Supplemental information related to leases are as follows:

	Three Months Ended	
(in thousands)	April 1, 2022	April 2, 2021
Cash paid for amounts included in the measurement of operating lease liabilities	$ 1,916	$ 1,838
Right-of-use assets obtained in exchange for operating lease obligations	$ 129	$ —

NOTE 5: OTHER FINANCIAL STATEMENT INFORMATION

The following tables provide details of selected balance sheet components:

Accounts receivable, net:	As of	
(in thousands)	April 1, 2022	December 31, 2021
Accounts receivable	$ 119,414	$ 91,382
Less: allowances for expected credit losses and sales returns	(3,820)	(2,853)
Total	$ 115,594	$ 88,529

Inventories:	As of	
(in thousands)	April 1, 2022	December 31, 2021
Raw materials	$ 26,491	$ 22,245
Work-in-process	5,085	3,993
Finished goods	43,012	37,545
Service-related spares	7,228	7,412
Total	$ 81,816	$ 71,195

Property and equipment, net:	As of	
(in thousands)	April 1, 2022	December 31, 2021
Machinery and equipment	$ 79,483	$ 78,461
Capitalized software	38,243	38,306
Leasehold improvements	40,659	40,658
Furniture and fixtures	2,991	2,820
Construction-in-progress	3,048	1,892
Property and equipment, gross	164,424	162,137
Less: accumulated depreciation and amortization	(121,847)	(119,416)
Total	$ 42,577	$ 42,721

Other current liabilities:	As of	
(in thousands)	April 1, 2022	December 31, 2021
Accrued employee compensation and related expenses	$ 19,749	$ 26,820
Other	33,323	26,824
Total	$ 53,072	$ 53,644

NOTE 6: CONVERTIBLE DEBT

4.375% Convertible Senior Notes due 2022 (the “2022 Notes”)

In June 2020, the Company issued the 2022 Notes with an aggregate principal amount of $37.7 million in a non-cash exchange for its 2020 Notes with an equal principal amount pursuant to an indenture, dated June 2, 2020 (the “2022 Notes Indenture”), by and between the Company and U.S. Bank National Association, as trustee. The 2022 Notes bear interest at a rate of 4.375% per year, payable in cash on June 1 and December 1 of each year. The 2022 Notes will mature on December 1, 2022, unless earlier repurchased or redeemed by the Company, or converted pursuant to their terms.

The 2022 Notes were initially convertible into cash, shares of the Company’s common stock, par value $0.001 (“Common Stock”), or a combination thereof, at the Company’s election, at an initial conversion rate of 173.9978 shares of Common Stock per $1,000 principal amount of 2022 Notes (which is equivalent to an initial conversion price of approximately $5.75 per share). Pursuant to the supplemental indenture entered into by the Company and the trustee during the fourth quarter of fiscal 2021, the Company made an irrevocable election to settle the principal amounts of the 2022 Notes solely with cash and may pay or deliver, as the case may be, any conversion value greater than the principal amount in cash, shares of common stock or a combination thereof, at the Company’s election. The conversion rate, and thus the effective conversion price, may be adjusted under certain circumstances, including in connection with conversions made following certain fundamental changes and under other circumstances as set forth in the 2022 Notes Indenture.

Prior to the close of business on the business day immediately preceding September 1, 2022, the 2022 Notes will be convertible only under the following circumstances: (1) during any fiscal quarter commencing after the fiscal quarter ended on June 26, 2020 (and only during such fiscal quarter), if the last reported sale price of Common Stock for at least 20 trading days (whether or not consecutive) during a period of 30 consecutive trading days ending on the last trading day of the immediately preceding fiscal quarter is greater than or equal to 130% of the conversion price on each applicable trading day; (2) during the five business day period after any five consecutive trading day period (the “measurement period”) in which the trading price per $1,000 principal amount of 2022 Notes for each trading day of the measurement period was less than 98% of the product of the last reported sale price of Common Stock and the conversion rate on each such trading day; or (3) upon the occurrence of specified corporate events. Commencing on September 1, 2022 until the close of business on the second scheduled trading day immediately preceding the maturity date, the 2022 Notes will be convertible in multiples of $1,000 principal amount regardless of the foregoing circumstances.

The 2022 Notes became convertible as of April 1, 2022, as the last reported sale price of the Company's common stock for at least 20 trading days during a period of 30 consecutive trading days ending on April 1, 2022 was greater than 130% of the conversion price of the 2022 Notes on each applicable trading day. All $37.5 million of the net carrying amount of the 2022 Notes outstanding as of April 1, 2022 was classified as a current liability as of that date.

As the 2022 Notes were issued in exchange for the 2020 Notes, which was accounted for as an extinguishment, the 2022 Notes were initially accounted for at fair value, which was estimated to be $44.4 million. In accordance with the accounting guidance on embedded conversion features, the conversion feature associated with the 2022 Notes was initially valued at $8.3 million and bifurcated from the host debt instrument and recorded in "Additional paid-in capital." The remaining amount of $36.0 million, which represents the fair value of the liability component of the 2022 Notes, was recorded as the initial carrying value of the 2022 Notes. The initial debt discount on the 2022 Notes was $1.7 million, calculated as the difference between the stated principal amount of $37.7 million and the initial carrying value of the liability component of $36.0 million. The debt discount was being amortized, prior to adoption of ASU 2020-06, to interest expense at the effective interest rate over the contractual term of the 2022 Notes.

The following table presents the components of the 2022 Notes:

(in thousands, except for years and percentages)	As of April 1, 2022	As of December 31, 2021
Liability component:		
Principal amount	$ 37,707	$ 37,707
Less: Debt discount, net of amortization	—	(672)
Less: Debt issuance costs, net of amortization	(189)	(211)
Carrying amount	$ 37,518	$ 36,824
Remaining debt discount amortization period (years)	n/a	0.9
Effective interest rate on liability component	n/a	6.95 %

The following table presents interest expense recognized for the 2022 Notes:

(in thousands)	Three Months Ended April 1, 2022	Three Months Ended April 2, 2021
Contractual interest expense	$ 412	$ 412
Amortization of debt discount	—	166
Amortization of debt issuance costs	68	52
Total interest expense recognized	$ 480	$ 630

2.00% Convertible Senior Notes due 2024 (the "2024 Notes")

In September 2019, the Company issued the 2024 Notes with an aggregate principal amount of $115.5 million pursuant to an indenture (the "2024 Notes Indenture"), dated September 13, 2019, by and between the Company and U.S. Bank National Association, as trustee. The 2024 Notes bear interest at a rate of 2.00% per year, payable semiannually on March 1 and September 1 of each year. The 2024 Notes will mature on September 1, 2024, unless earlier repurchased or redeemed by the Company, or converted pursuant to their terms.

The 2024 Notes were initially convertible into cash, shares of the Company's common stock, par value $0.001 ("Common Stock"), or a combination thereof, at the Company's election, at an initial conversion rate of 115.5001 shares of Common Stock per $1,000 principal amount of 2024 Notes (which is equivalent to an initial conversion price of approximately $8.66 per share). Pursuant to the supplemental indenture entered into by the Company and the trustee during the fourth quarter of fiscal 2021, the Company made an irrevocable election to settle the principal amounts of the 2024 Notes solely with cash and may pay or deliver, as the case may be, any conversion value greater than the principal amount in cash, shares of common stock or a combination thereof, at the Company's election. The conversion rate, and thus the effective conversion price, may be adjusted under certain circumstances, including in connection with conversions made following certain fundamental changes or a notice of redemption and under other circumstances, in each case, as set forth in the 2024 Notes Indenture.

The 2024 Notes will be convertible at certain times and upon the occurrence of certain events in the future, in each case, specified in the 2024 Notes Indenture. Further, on or after June 1, 2024, until the close of business on the scheduled trading day immediately preceding the maturity date, holders of the 2024 Notes may convert all or a portion of their 2024 Notes regardless of these conditions.

In accordance with the accounting guidance on embedded conversion features, the conversion feature associated with the 2024 Notes was valued at $24.9 million and bifurcated from the host debt instrument and recorded in “Additional paid-in capital”. The resulting debt discount on the 2024 Notes was being amortized, prior to adoption of ASU 2020-06, to interest expense at the effective interest rate over the contractual term of the 2024 Notes.

The following table presents the components of the 2024 Notes:

	As of	
(in thousands, except for years and percentages)	April 1, 2022	December 31, 2021
Liability component:		
Principal amount	$ 115,500	$ 115,500
Less: Debt discount, net of amortization	—	(14,576)
Less: Debt issuance costs, net of amortization	(2,176)	(1,983)
Carrying amount	$ 113,324	$ 98,941
Remaining debt discount amortization period (years)	n/a	2.7
Effective interest rate on liability component	n/a	7.95 %

The following table presents interest expense recognized for the 2024 Notes:

	Three Months Ended	
(in thousands)	April 1, 2022	April 2, 2021
Contractual interest expense	$ 578	$ 578
Amortization of debt discount	—	1,146
Amortization of debt issuance costs	217	156
Total interest expense recognized	$ 795	$ 1,880

NOTE 7: STOCKHOLDERS’ EQUITY

Share-based Compensation Plans

The following table sets forth the detailed allocation of the share-based compensation expense which was included in the Company’s Condensed Consolidated Statements of Operations:

	Three Months Ended	
(in thousands)	April 1, 2022	April 2, 2021
Cost of revenue	$ 527	$ 1,073
Research and development expense	2,536	2,540
Selling, general and administrative expense	4,523	4,785
Total	$ 7,586	$ 8,398

Restricted Stock Units:

(in thousands, except per share amounts)	Number of Shares	Weighted Average Grant-Date Fair Value Per Share
Balance at December 31, 2021	3,878	$ 7.31
Granted	1,548	9.19
Vested	(1,744)	7.22
Forfeited	(38)	8.11
Balance at April 1, 2022	3,644	$ 8.26

As of April 1, 2022, an aggregate of 5,610,238 shares of common stock were reserved for issuance under the 1995 Stock Plan, of which 1,764,908 shares remained available for future grants. As of April 1, 2022, an aggregate of 713,431 shares of common stock were reserved for issuance under the 2002 Director Plan, of which 527,984 shares remained available for future grants.

Share Repurchase Program

On February 3, 2022, the Board of Directors authorized the Company to repurchase up to $100 million of the Company's outstanding shares of common stock through February 2025. The Company is authorized to repurchase, from time-to-time, shares of its outstanding common stock through open market purchases and 10b5-1 trading plans, in accordance with applicable rules and regulations, at such time and such prices as management may decide. The program does not obligate the Company to repurchase any specific number of shares and may be discontinued at any time. The actual timing and amount of repurchases are subject to business and market conditions, corporate and regulatory requirements, stock price, acquisition opportunities and other factors.

During the three months ended April 1, 2022, the company repurchased and retired approximately 0.2 million shares of the Company's common stock for an aggregate amount of $2.1 million. As of April 1, 2022, approximately $98 million of the share repurchase authorization remained available for repurchases under this program.

NOTE 8: FAIR VALUE MEASUREMENTS

The Company's financial instruments not measured at fair value on a recurring basis were as follows:

	April 1, 2022				December 31, 2021			
	Carrying	Fair Value			Carrying	Fair Value		
(in thousands)	Value	Level 1	Level 2	Level 3	Value	Level 1	Level 2	Level 3
2022 Notes	$ 37,518	$ —	$ 62,405	$ —	$ 36,824	$ —	$ 78,619	$ —
2024 Notes	$ 113,324	$ —	$ 148,432	$ —	$ 98,941	$ —	$ 173,419	$ —

The fair value of the Company's convertible notes is influenced by interest rates, the Company's stock price and stock market volatility. The difference between the carrying value and the fair value is primarily due to the spread between the conversion price and the market value of the shares underlying the conversion as of each respective balance sheet date.

NOTE 9: EARNINGS PER SHARE

The diluted net loss per share was the same as the basic net loss per share for the three months ended April 1, 2022 and April 2, 2021, as the inclusion of potential common shares outstanding would have been anti-dilutive due to the Company's net losses for all periods presented. The following table sets forth the potential weighted common shares outstanding that were excluded from the diluted net income (loss) per share computation:

	Three Months Ended	
(in thousands)	April 1, 2022	April 2, 2021
Convertible debt	4,244	1,795
Stock options	387	1,191
Restricted stock units	3,066	2,828
Stock purchase rights under the ESPP	409	340
Total	8,106	6,154

NOTE 10: SEGMENT INFORMATION

Operating segments are defined as components of an enterprise that engage in business activities for which separate financial information is available and evaluated by the Company's Chief Operating Decision Maker (the "CODM"), which for the Company is its Chief Executive Officer, in deciding how to allocate resources and assess performance. Based on the Company's internal reporting structure, the Company consists of two operating segments: Video and Cable Access. The operating segments were determined based on the nature of the products offered. The Video segment provides video processing and production and playout solutions and services worldwide to broadcast and media companies, streaming new media companies, cable operators, and satellite and telecommunications Pay-TV service providers. The Cable Access segment provides cable access solutions and related services to cable operators globally. A measure of assets by segment is not applicable as segment assets are not included in the discrete financial information provided to the CODM.

The following table provides summary financial information by reportable segment:

(in thousands)	Three Months Ended April 1, 2022	Three Months Ended April 2, 2021
Video		
Revenue	$ 65,842	$ 70,331
Gross profit	38,684	38,774
Operating income	3,139	3,772
Cable Access		
Revenue	$ 81,597	$ 41,245
Gross profit	31,011	17,408
Operating income	8,139	1,296
Total		
Revenue	$ 147,439	$ 111,576
Gross profit	69,695	56,182
Operating income	$ 11,278	$ 5,068

A reconciliation of the Company's consolidated segment operating income to consolidated income (loss) before income taxes is as follows:

(in thousands)	Three Months Ended April 1, 2022	Three Months Ended April 2, 2021
Total consolidated segment operating income	$ 11,278	$ 5,068
Unallocated corporate expenses[1]	(1,156)	(7)
Stock-based compensation	(7,586)	(8,398)
Amortization of intangibles	—	(507)
Consolidated income (loss) from operations	2,536	(3,844)
Non-operating expense, net	(1,371)	(1,584)
Income (loss) before income taxes	$ 1,165	$ (5,428)

(1) Together with amortization of intangibles and stock-based compensation, the Company does not allocate restructuring and related charges to the operating income (loss) for each segment because management does not include this information in the measurement of the performance of the operating segments.

Geographic Information *(in thousands)*	Three Months Ended April 1, 2022	Three Months Ended April 2, 2021
Net revenue [1]		
United States	$ 86,878	$ 67,095
Other countries	60,561	44,481
Total	$ 147,439	$ 111,576

(1) Revenue is attributed to countries based on the location of the customer.

NOTE 11: COMMITMENTS AND CONTINGENCIES

Indemnification

The Company is obligated to indemnify its officers and the members of its Board of Directors pursuant to its bylaws and contractual indemnity agreements. The Company also indemnifies some of its suppliers and most of its customers for specified intellectual property matters pursuant to certain contractual arrangements, subject to certain limitations. The scope of these indemnities varies, but, in some instances, includes indemnification for damages and expenses (including reasonable attorneys' fees). There have been no amounts accrued in respect of these indemnification provisions through April 1, 2022.

Legal proceedings

From time to time, the Company is involved in lawsuits as well as subject to various legal proceedings, claims, threats of litigation, audits of royalty payments for licensed technology and investigations in the ordinary course of business, including claims of alleged infringement of third-party patents and other intellectual property rights, commercial, employment, and other matters. The Company assesses potential liabilities in connection with each lawsuit and threatened lawsuits and accrues an estimated loss for these loss contingencies if both of the following conditions are met: information available prior to issuance of the financial statements indicates that it is probable that a liability has been incurred at the date of the financial statements and the amount of loss can be reasonably estimated. While certain matters to which the Company is a party specify the damages claimed, such claims may not represent reasonably probable losses. Given the inherent uncertainties of litigation, the ultimate outcome of these matters cannot be predicted at this time, nor can the amount of possible loss or range of loss, if any, be reasonably estimated.

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The terms "Harmonic," "Company," "we," "us," "its," and "our," as used in this Quarterly Report on Form 10-Q (this "Form 10-Q"), refer to Harmonic Inc. and its subsidiaries and its predecessors as a combined entity, except where the context requires otherwise.

Some of the statements contained in this Form 10-Q are forward-looking statements that involve risk and uncertainties. The statements contained in this Form 10-Q that are not purely historical are forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, including, without limitation, statements regarding our expectations, beliefs, intentions or strategies regarding the future. In some cases, you can identify forward-looking statements by terminology such as, "may," "will," "should," "expects," "plans," "anticipates," "believes," "intends," "estimates," "predicts," "potential," or "continue" or the negative of these terms or other comparable terminology. These forward-looking statements include, but are not limited to, statements regarding:

- developing trends and demands in the markets we address, particularly emerging markets;
- economic conditions, particularly in certain geographies, and in financial markets;
- new and future products and services;
- spending of our customers;
- our strategic direction, future business plans and growth strategy;
- industry and customer consolidation;
- expected demand for and benefits of our products and services;
- concentration of revenue sources;
- expectations regarding our CableOS solutions and SaaS solutions;
- the impact of the COVID-19 pandemic, and related responses of businesses and governments to the pandemic, on our operations and personnel, on commercial activity in the markets in which we operate and worldwide and regional economies, and on our results of operations;
- potential future acquisitions and dispositions;
- anticipated results of potential or actual litigation;
- our competitive environment;
- the impact of our restructuring plans;
- the impact of governmental regulations, including with respect to tariffs and economic sanctions;
- anticipated revenue and expenses, including the sources of such revenue and expenses;
- expected impacts of changes in accounting rules;
- expectations regarding the usability of our inventory and the risk that inventory will exceed forecasted demand;
- expectations and estimates related to goodwill and intangible assets and their associated carrying value; and
- use of cash, cash needs and ability to raise capital, including repaying our convertible notes or repurchasing our common stock.

These statements are subject to known and unknown risks, uncertainties and other factors, any of which may cause our actual results to differ materially from those implied by the forward-looking statements. Important factors that may cause actual results to differ from expectations include those discussed in "Risk Factors" in Item 1A of Part II of this Form 10-Q. All forward-looking statements included in this Quarterly Report on Form 10-Q are based on information available to us on the date thereof, and we assume no obligation to update any such forward-looking statements.

OVERVIEW

We are a leading global provider of (i) versatile and high performance video delivery software, products, system solutions and services that enable our customers to efficiently create, prepare, store, playout and deliver a full range of high-quality broadcast and streaming video services to consumer devices, including televisions, personal computers, laptops, tablets and smart phones and (ii) cable access solutions that enable cable operators to more efficiently and effectively deploy high-speed internet, for data, voice and video services to consumers' homes.

We classify our total revenue in two categories, "Appliance and integration" and "SaaS and service." The "Appliance and integration" revenue category includes hardware, licenses and professional services and is reflective of non-recurring revenue, while the "SaaS and service" category includes usage fees for our SaaS platform and support service revenue from our appliance-based customers and reflects our recurring revenue stream.

We conduct business in three geographic regions - the Americas, EMEA and APAC - and operate in two segments, Video and Cable Access. Our Video business sells video processing, production and playout solutions, and services worldwide to cable operators and satellite and telecommunications ("telco") Pay-TV service providers, which we refer to collectively as "service providers," as well as to broadcast and media companies, including streaming media companies. Our Video business infrastructure solutions are delivered either through shipment of our products, software licenses or as SaaS subscriptions. Our Cable Access business sells cable access solutions and related services, including our CableOS software-based cable access solution, primarily to cable operators globally.

Historically, our revenue has been dependent upon spending in the cable, satellite, telco, broadcast and media industries, including streaming media. Our customers' spending patterns are dependent on a variety of factors, including but not limited to: economic conditions in the United States and international markets, including the impacts of the COVID-19 pandemic; access to financing; annual budget cycles of each of the industries we serve; impact of industry consolidations; and customers suspending or reducing spending in anticipation of new products or new standards, new industry trends and/or technology shifts. If our product portfolio and product development plans do not position us well to capture an increased portion of the spending in the markets in which we compete, our revenue may decline. As we attempt to further diversify our customer base in these markets, we may need to continue to build alliances with other equipment manufacturers, cloud service providers, content providers, resellers and system integrators, managed services providers and software developers; adapt our products for new applications; take orders at prices resulting in lower margins; and build internal expertise to handle the particular operational, payment, financing and/or contractual demands of our customers, which could result in higher operating costs for us.

The worldwide spread of COVID-19 has impacted our business, operations and financial performance. In our Cable Access segment, COVID-19 led to delays in certain deployments and new engagements with some cable operators, which generally occurred in the first half of fiscal 2020 when widespread public health responses were initially implemented, including travel bans and restrictions, social distancing requirements, and shelter-in-place orders. Similarly, in our Video segment, sales of video appliances and services fell during the first several months of the pandemic as transactions or shipments were delayed and we were unable to complete certain field deployment projects as customer facilities closed in the first half of 2020. Since the second half of fiscal 2020, we experienced a rebound and increases in sales activities, transactions and deployments in both business segments, in part due to the loosening of certain COVID-19 restrictions, and customer adaptation to such restrictions. We expect that the COVID-19 pandemic will continue to have an impact on our results of operations.

The extent to which our operations will be impacted by the pandemic will depend largely on future developments, which are highly uncertain and cannot be accurately predicted, including pandemic-related supply chain disruptions and the pricing and availability of certain materials and components, increased costs relating to securing timely and sufficient supply of key product components, new waves of infection in the countries and regions of the world in which we operate or conduct business, the impact of global vaccination efforts, and actions and policies of governments and businesses in response to future phases of the pandemic. As such, given the uncertainty around the duration and severity of the impact on market conditions and the business environment, we cannot reasonably estimate the full impacts of COVID-19 on our future results of operations. Refer to "Risk Factors" in Item 1A of Part II of this Quarterly Report on Form 10-Q for additional information.

We believe a material and growing portion of the opportunities for our Video business are linked to the industry and our customers (i) continuing to adopt streaming technologies to capture, process and deliver video content to consumers and, increasingly, utilizing public cloud solutions like our VOS SaaS platform to do so; (ii) transforming existing broadcast infrastructure workflows into more flexible, efficient and cost-effective operations running in public clouds; and (iii) for those customers maintaining on-premise video delivery infrastructure, continuing to upgrade and replace aging equipment with next-generation software-based appliances that significantly reduce operational complexity. Our Video business strategy is focused on continuing to develop and deliver products, solutions and services to enable and support these trends.

Our Cable Access strategy is focused on continuing to develop and deliver software-based cable access technologies, which we refer to as our CableOS solutions, to our cable operator customers. We believe our CableOS software-based cable access solutions are superior to hardware-based systems and deliver unprecedented scalability, agility and cost savings for our customers. Our CableOS solutions, which can be deployed based on a centralized, DAA or hybrid architecture, enable our customers to migrate to multi-gigabit broadband capacity and the fast deployment of DOCSIS 3.1 and/or FTTH data, video and voice services. We believe our CableOS solutions resolve space and power constraints in cable operator facilities, eliminate dependence on hardware upgrade cycles and significantly reduce total cost of ownership, and are helping us become a major player in the cable access market. In the meantime, we believe our Cable Access segment will continue to gain momentum in the marketplace as our customers adopt and deploy our virtualized DOCSIS 3.1 CMTS and FTHH solutions and distributed access architectures. We continue to make progress in the development of our CableOS solutions and in the growth of our CableOS business, with expanded commercial deployments, field trials, and customer engagements.

CRITICAL ACCOUNTING POLICIES, JUDGMENTS AND ESTIMATES

Our unaudited condensed consolidated financial statements and the related notes included elsewhere in this report are prepared in accordance with U.S. GAAP. The preparation of these unaudited condensed consolidated financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Our critical accounting policies, judgments and estimates are disclosed in our 2021 Annual Report on Form 10-K, as filed with the SEC. There have been no significant changes to these policies during the three months ended April 1, 2022.

ACCOUNTING PRONOUNCEMENTS

For a summary of recent accounting pronouncements applicable to our condensed consolidated financial statements, refer to Note 2 to the Condensed Consolidated Financial Statements in Item 1, which is incorporated herein by reference.

RESULTS OF OPERATIONS

Net Revenue

	Three Months Ended			
(in thousands, except percentages)	**April 1, 2022**	**April 2, 2021**	**Change**	
Appliance and integration	112,984	$ 79,976	$ 33,008	41 %
as % of total net revenue	77 %	72 %		
SaaS and service	34,455	31,600	2,855	9 %
as % of total net revenue	23 %	28 %		
Total net revenue	$ 147,439	$ 111,576	$ 35,863	32 %

Appliance and integration net revenue increased in the three months ended April 1, 2022, compared to the corresponding period in 2021, primarily due to an increase in our Cable Access segment net revenue as a result of increased penetration of existing CableOS customers and new CableOS customer deployments.

SaaS and service net revenue increased in the three months ended April 1, 2022, compared to the corresponding period in 2021, primarily due to increasing SaaS usage from existing customers and activation of new SaaS customers.

Gross Profit

	Three Months Ended			
(in thousands, except percentages)	**April 1, 2022**	**April 2, 2021**	**Change**	
Gross profit	$ 69,182	$ 55,145	$ 14,037	25 %
as % of total net revenue (“gross margin”)	47 %	49 %	(3)%	

Our gross margins are dependent upon, among other factors, the proportion of software sales, product mix, supply chain impacts, customer mix, product introduction costs, price reductions granted to customers and achievement of cost reductions.

Our gross margin decreased in the three months ended April 1, 2022, compared to the corresponding period in 2021, primarily due to unfavorable product mix.

Research and Development Expenses

(in thousands, except percentages)	Three Months Ended April 1, 2022	Three Months Ended April 2, 2021	Change	
Research and development	$ 28,833	$ 23,528	$ 5,305	23 %
as % of total net revenue	20 %	21 %		

Our research and development expenses consist primarily of employee salaries and related expenses, contractors and outside consultants, supplies and materials, equipment depreciation and facilities costs, all of which are associated with the design and development of new products and enhancements of existing products. The research and development expenses are net of French R&D tax credits.

Research and development expenses increased in the three months ended April 1, 2022, compared to the corresponding period in 2021, primarily due to higher employee compensation costs as a result of headcount increases and annual compensation adjustments.

Selling, General and Administrative Expenses

(in thousands, except percentages)	Three Months Ended April 1, 2022	Three Months Ended April 2, 2021	Change	
Selling, general and administrative	$ 36,643	$ 34,911	$ 1,732	5 %
as % of total net revenue	25 %	31 %		

Selling, general and administrative expenses increased in the three months ended April 1, 2022, compared to the corresponding period in 2021, primarily due to higher employee compensation costs as a result of headcount increases and annual compensation adjustments.

Amortization of Intangibles

(in thousands, except percentages)	Three Months Ended April 1, 2022	Three Months Ended April 2, 2021	Change	
Amortization of intangibles	$ —	$ 507	$ (507)	(100)%

The amortization of intangibles expense decreased in the three months ended April 1, 2022, compared to the corresponding period in 2021, as all intangible assets were fully amortized during the first quarter of fiscal 2021.

Restructuring and Related Charges

We have implemented several restructuring plans in the past few years. The goal of these plans is to bring operational expenses to appropriate levels relative to our net revenues, while simultaneously implementing extensive company-wide expense control programs. We account for our restructuring plans under the authoritative guidance for exit or disposal activities. The restructuring and related charges are included in “Cost of revenue” and “Operating expenses-restructuring and related charges” in the Condensed Consolidated Statement of Operations.

(in thousands, except percentages)	Three Months Ended April 1, 2022	Three Months Ended April 2, 2021	Change	
Cost of revenue	$ (14)	$ (36)	$ 22	(61)%
Operating expenses - Restructuring and related charges	1,170	43	1,127	2,621 %
Total restructuring and related charges	$ 1,156	$ 7	$ 1,149	16,414 %

Restructuring and related charges increased in the three months ended April 1, 2022, compared to the corresponding period in 2021, primarily due to higher severance and employee benefit costs recorded in conjunction with restructuring activities during the first quarter of fiscal 2022.

Interest Expense, Net

(in thousands, except percentages)	Three Months Ended April 1, 2022	Three Months Ended April 2, 2021	Change	
Interest expense, net	$ (1,433)	$ (2,603)	$ 1,170	(45)%

Interest expense, net decreased in the three months ended April 1, 2022, compared to the corresponding period in 2021, primarily due to the adoption of ASU 2020-06, Accounting for Convertible Instruments and Contracts in an Entity's Own Equity, on January 1, 2022, which eliminated debt discounts on the 2022 Notes and 2024 Notes resulting in elimination of debt discount amortization expense. Refer to Note 2 of the Notes to our Condensed Consolidated Financial Statements for details of the ASU adoption.

Other Income (Expense), Net

(in thousands, except percentages)	Three Months Ended April 1, 2022	Three Months Ended April 2, 2021	Change	
Other income (expense), net	$ 62	$ 1,019	$ (957)	(94)%

Other income (expense), net is primarily comprised of foreign exchange gains and losses on cash, accounts receivable and intercompany balances denominated in currencies other than the functional currency of the reporting entity. Our foreign currency exposure is primarily driven by fluctuations in the foreign currency exchange rates of the Euro, British pound, Japanese yen and Israeli shekel. Change in other income (expense), net in the three months ended April 1, 2022, compared to the corresponding period in 2021, was primarily due to foreign currency exchange gains resulting from the fluctuation of the Euro against the U.S. dollar during the first quarter of fiscal 2021.

Income Taxes

(in thousands, except percentages)	Three Months Ended April 1, 2022	Three Months Ended April 2, 2021	Change	
Provision for income taxes	$ 2,694	$ 696	$ 1,998	287 %

The provision for income taxes increased in the three months ended April 1, 2022, compared to the corresponding period in 2021, primarily due to mandatory capitalization and amortization of research and development expenses in the United States starting January 1, 2022 as required by the Tax Cuts and Jobs Act, which will result in additional income tax expense in the United States.

Segment Financial Results

(in thousands, except percentages)	Three Months Ended April 1, 2022	Three Months Ended April 2, 2021	Change	
Video				
Revenue	$ 65,842	$ 70,331	$ (4,489)	(6)%
as % of total revenue	45 %	63 %	(18)%	
Gross profit	38,684	38,774	(90)	— %
Gross margin %	59 %	55 %	4 %	
Operating income (loss)	3,139	3,772	(633)	(17)%
Operating margin %	5 %	5 %	— %	
Cable Access				
Revenue	$ 81,597	$ 41,245	$ 40,352	98 %
as % of total revenue	55 %	37 %	18 %	
Gross profit	31,011	17,408	13,603	78 %
Gross margin %	38 %	42 %	(4)%	
Operating income	8,139	1,296	6,843	528 %
Operating margin %	10 %	3 %	7 %	
Total				
Revenue	$ 147,439	$ 111,576	$ 35,863	32 %

Video

Our Video segment net revenue decreased in the three months ended April 1, 2022, compared to the corresponding period in 2021, primarily due to the timing of a few broadcast projects and the impact of ceasing sales activities in Russia. Video segment operating margin was relatively flat in the three months ended April 1, 2022, compared to the corresponding period in 2021, primarily due to lower revenue offset by higher gross margins.

Cable Access

Our Cable Access segment net revenue increased in the three months ended April 1, 2022, compared to the corresponding period in 2021, primarily driven by increased penetration of our existing CableOS customers and new CableOS customer deployments. Cable Access segment operating margin increased in the three months ended April 1, 2022, compared to the corresponding period in 2021, primarily due to the increase in revenue and changes in product mix, partially offset by increased costs related to freight and shipping.

Liquidity and Capital Resources

We expect to continue to generate net positive operating cash flow as we have done in the last three fiscal years. The cash we generate from our operations enables us to fund ongoing operations, our research and development projects for new products and technologies, and other business activities. We continually evaluate our cash needs and may decide it is best to raise additional capital or seek alternative financing sources to fund our operations, the growth of our business, to take advantage of unanticipated strategic opportunities, or to strengthen our financial position, including through drawdowns on existing or new debt facilities or new financing (debt and equity) funds. In the future, we may enter into other arrangements for potential investments in, or acquisitions of, complementary businesses, services or technologies, which could require us to seek additional equity or debt financing. Additional funds may not be available on terms favorable to us or at all. Conversely, we may also from time to time determine that it is in our best interests to voluntarily repay certain indebtedness early. We believe that our current sources of funds will provide us with adequate liquidity during the 12-month period following April 1, 2022, as well as in the long-term.

Material Cash Requirements

Our principal uses of cash will include repayments of debt and related interest, purchases of inventory, payroll, restructuring expenses, and other operating expenses related to the development and marketing of our products, purchases of property and equipment and other contractual obligations for the foreseeable future.

As of April 1, 2022, we had outstanding $170.9 million in aggregate principal amount of indebtedness, consisting of our 2022 Notes, 2024 Notes, and other debts, of which $42.7 million is scheduled to become due in the 12-month period following December 31, 2021. As of April 1, 2022, our total minimum lease payments are $43.4 million, of which $5.8 million is due before December 31, 2022.

On February 3, 2022, the Board of Directors authorized us to repurchase, from time to time, up to $100 million of our outstanding shares of common stock through February 2025, at such time and such prices as management may decide. The program does not obligate us to repurchase any specific number of shares and may be discontinued at any time.

Sources and Conditions of Liquidity

Our sources to fund our material cash requirements are predominately from our sales of our products and services and, when applicable, proceeds from debt facilities and debt and equity offerings.

As of April 1, 2022, our principal sources of liquidity consisted of cash and cash equivalents of $100.7 million, accounts receivable, net, of $115.6 million, and our $25.0 million revolving credit facility with JPMorgan Chase Bank, N.A.

On March 27, 2020, the "Coronavirus Aid, Relief, and Economic Security" Act that was signed into law in the United States. Under provisions of this law, we deferred remittance of $1.7 million in employer's share of payroll taxes incurred from March 27, 2020 to December 31, 2020. During 2021, $0.8 million of the total deferred payroll taxes has been paid, and the remaining deferred amount will be paid before December 31, 2022.

Our cash and cash equivalents of $100.7 million as of April 1, 2022 consisted of bank deposits held throughout the world, of which $79.5 million was held outside of the United States. At present, such foreign funds are considered to be indefinitely reinvested in foreign countries to the extent of indefinitely reinvested foreign earnings. In the event funds from foreign operations are needed to fund cash needs in the United States and if U.S. taxes have not already been previously accrued, we may be required to accrue and pay additional U.S. and foreign withholding taxes in order to repatriate these funds.

Summary of Cash Flows

The table below sets forth selected cash flow data:

	Three Months Ended	
(in thousands)	**April 1, 2022**	**April 2, 2021**
Net cash provided by (used in):		
Operating activities	$ (27,482)	$ 1,678
Investing activities	(2,438)	(3,645)
Financing activities	(1,967)	4,664
Effect of foreign exchange rate changes on cash and cash equivalents	(805)	(565)
Net increase (decrease) in cash and cash equivalents	$ (32,692)	$ 2,132

Operating Activities

Net cash used in operating activities increased $29.2 million in the three months ended April 1, 2022, compared to the corresponding period in 2021, primarily due to an increase of cash used for working capital.

We expect that cash provided by or used in operating activities may fluctuate in future periods as a result of a number of factors, including, but not limited to, the impact of COVID-19 on demand for our offerings, fluctuations in our operating results, shipment linearity, accounts receivable collections performance, inventory and supply chain management, and the timing and amount of compensation and other payments.

Investing Activities

Net cash used in investing activities decreased $1.2 million in the three months ended April 1, 2022, compared to the corresponding period in 2021, primarily due to lower purchases of property and equipment in the first quarter of fiscal 2022.

Financing Activities

Net cash provided by financing activities decreased $6.6 million in the three months ended April 1, 2022, compared to the corresponding period in 2021, primarily due to lower proceeds from issuance of common stock to employees through stock option exercises and stock repurchase transactions initiated in the first quarter of fiscal 2022.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Market risk represents the risk of loss that may impact our operating results, financial position or liquidity due to adverse changes in market prices and rates. We are exposed to market risk because of changes in interest rates, foreign currency exchange rates, when other currencies held by our subsidiaries are measured against the U.S. dollar, and to changes in the value of financial instruments held by us.

For quantitative and qualitative disclosures about market risk (including foreign currency exchange risk and interest rate risk) affecting the Company, see Item 7A “Quantitative and Qualitative Disclosures about Market Risk” in our Annual Report on Form 10-K for the fiscal year ended December 31, 2021. Our exposure related to market risk has not changed materially since December 31, 2021.

ITEM 4. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

We maintain “disclosure controls and procedures,” as such term is defined in Rule 13a-15(e) under the Exchange Act, that are designed to ensure that information required to be disclosed by us in reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in SEC rules and forms, and that such information is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure.

In designing and evaluating our disclosure controls and procedures, management recognized that disclosure controls and procedures, no matter how well conceived and operated, can provide only reasonable, and not absolute, assurance that the objectives of the disclosure controls and procedures are met. Additionally, in designing disclosure controls and procedures, our management necessarily was required to apply its judgment in evaluating the cost-benefit relationship of possible disclosure controls and procedures. The design of any disclosure controls and procedures also is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions.

Based on their evaluation as of the end of the period covered by this Quarterly Report on Form 10-Q, our Chief Executive Officer and Chief Financial Officer have concluded that our disclosure controls and procedures were effective at a reasonable assurance level.

Changes in Internal Control over Financial Reporting

Our Chief Executive Officer and Chief Financial Officer evaluated the changes in our internal control over financial reporting that occurred during the period covered by this Quarterly Report on Form 10-Q. Based on their evaluation, it is concluded that there had been no change in our internal control over financial reporting during the quarter ended April 1, 2022 that have materially affected, or is reasonably likely to materially affect, our internal control over financial reporting. Although most of our employees are working remotely due to the COVID-19 pandemic, we have not experienced any material impact to our internal controls over financial reporting. We are continually monitoring and assessing the COVID-19 situation on our internal controls to minimize the impact on their design and operating effectiveness.

PART II

OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

From time to time, we are involved in lawsuits as well as subject to various legal proceedings, claims, threats of litigation, audits of royalty payments for licensed technology and investigations in the ordinary course of business, including claims of alleged infringement of third-party patents and other intellectual property rights, and commercial, employment, and other matters. While certain matters to which we are a party may specify the damages claimed, such claims may not represent reasonably possible losses. Given the inherent uncertainties of litigation, the ultimate outcome of these matters cannot be predicted at this time, nor can the amount of possible loss or range of loss, if any, be reasonably estimated.

An unfavorable outcome on any litigation matters could require us to pay substantial damages, or, in connection with any intellectual property infringement claims, could require us to pay ongoing royalty payments or could prevent us from selling certain of our products. As a result, a settlement of, or an unfavorable outcome on, any of the matters referenced above or other litigation matters could have a material adverse effect on our business, operating results, financial condition and cash flows.

Our industry is characterized by the existence of a large number of patents and frequent claims and related litigation regarding patent and other intellectual property rights. From time to time, third parties have asserted, and may in the future assert, exclusive patent, copyright, trademark and other intellectual property rights against us or our customers. Such assertions arise in the normal course of our operations. The resolution of any such assertions and claims cannot be predicted with certainty.

ITEM 1A. RISK FACTORS

Risk Factor Summary

Our business is subject to significant risks and uncertainties that make an investment in us speculative and risky. Below we summarize what we believe are the principal risk factors but these risks are not the only ones we face, and you should carefully review and consider the full discussion of our risk factors in the section titled “Risk Factors,” together with the other information in this Quarterly Report on Form 10-Q. If any of the following risks actually occurs (or if any of those listed elsewhere in this Quarterly Report on Form 10-Q occur), our business, reputation, financial condition, results of operations, revenue, and future prospects could be seriously harmed. In that event, the market price of our common stock could decline, and you could lose part or all of your investment. Additional risks and uncertainties that we are unaware of, or that we currently believe are not material, may also become important factors that adversely affect our business.

- We depend on cable, satellite and telecommunications (“telco”), and broadcast and media industry spending for our revenue and any material decrease or delay in spending in any of these industries would negatively impact our operating results, financial condition and cash flows;
- The loss of one or more of our key customers, a failure to continue diversifying our customer base, or a decrease in the number of larger transactions could harm our business and our operating results;
- We need to develop and introduce new and enhanced products and solutions in a timely manner to meet the needs of our customers and to remain competitive;
- The markets in which we operate are intensely competitive;
- Our future growth depends on a number of video and broadband industry trends;
- Our software-based cable access product initiatives expose us to certain technology transition risks that may adversely impact our operating results, financial condition and cash flows;
- Our operating results are likely to fluctuate significantly and, as a result, may fail to meet or exceed the expectations of securities analysts or investors, causing our stock price to decline;
- We purchase several key components, subassemblies and modules used in the manufacture or integration of our products from sole or limited sources, and we rely on contract manufacturers and other subcontractors;
- The COVID-19 pandemic has disrupted and harmed, and may continue to disrupt and harm, our business, financial condition and operating results;
- We face risks associated with having outsourced engineering resources located in Ukraine; and
- We rely on resellers, value-added resellers and systems integrators for a significant portion of our revenue, and disruptions to, or our failure to develop and manage our relationships with these customers or the processes and procedures that support them could adversely affect our business.

Risks Related to Our Business and Our Industry

We depend on cable, satellite and telco, and broadcast and media industry spending for our revenue and any material decrease or delay in spending in any of these industries would negatively impact our operating results, financial condition and cash flows.

Our revenue has been derived from worldwide sales to service providers and broadcast and media companies, as well as, in recent years, streaming media companies. We expect that these markets will provide our revenue for the foreseeable future. Demand for our products and solutions will depend on the magnitude and timing of spending by customers in each of these markets for the purpose of creating, expanding or upgrading their systems. These spending patterns are dependent on a variety of factors, including:

- the impact of general economic conditions, actual and projected, including the impact of the COVID-19 pandemic and government and business responses thereto on the global economy and regional economies;
- access to financing;
- annual budget cycles of customers in each of the industries we serve;

- the impact of industry consolidation;
- customers suspending, reducing or shifting spending due to: (i) new video or cable industry standards; (ii) industry trends and technology shifts, such as virtualization and cloud-based solutions, and (iii) new products and solutions, such as products and services based on our VOS software platform or our CableOS software-based cable access solutions;
- delayed or reduced near-term spending as customers transition away from video appliance solutions and adopt new business and operating models enabled by software- and cloud-based solutions, including SaaS unified video processing solutions;
- federal, state, local and foreign government regulation of telecommunications, television broadcasting and streaming media;
- overall demand for communication services and consumer acceptance of new video and data technologies and services;
- competitive pressures, including pricing pressures;
- the impact of fluctuations in currency exchange rates; and
- discretionary end-user customer spending patterns.

In the past, specific factors contributing to reduced spending have included:

- uncertainty and deteriorated market conditions regionally and globally due to the COVID-19 pandemic;
- weak or uncertain economic and financial conditions in the United States or one or more international markets;
- uncertainty related to development of industry technology;
- delays in evaluations of new services, new standards and systems architectures by certain customers;
- emphasis by certain of our customers on generating revenue from existing subscribers or end-customers, rather than from new subscribers or end-customers, through construction, expansion or upgrades;
- a reduction in the amount of capital available to finance projects of our customers and potential customers;
- proposed and completed business combinations and divestitures by our customers and the length of regulatory review of each;
- completion of a new system or significant expansion or upgrade to a system; and
- bankruptcies and financial restructuring of major customers.

In the past, adverse economic conditions in one or more of the geographies in which we offer our products have adversely affected our customers' spending in those geographies and, as a result, our business. During challenging economic times, such as the ongoing COVID-19 pandemic, and in tight credit markets, many customers have delayed and reduced and may continue to delay or reduce capital expenditures. This has resulted and could continue to result in reductions in revenue from our products, longer sales cycles, difficulties in collection of accounts receivable, slower adoption of new technologies and increased price competition. If global economic and market conditions, or economic conditions in the United States, Europe or other key markets, remain uncertain or deteriorate, we could experience a material and adverse effect on our business, results of operations, financial condition and cash flows. Additionally, since most of our international revenue is denominated in U.S. dollars, global economic and market conditions may impact currency exchange rates and cause our products to become relatively more expensive to customers in a particular country or region, which could lead to delayed or reduced spending in those countries or regions, thereby negatively impacting our business and financial condition.

In addition, industry consolidation has in the past constrained, and may in the future constrain or delay, spending by our customers. Further, if our product portfolio and product development plans do not position us well to capture an increased portion of the spending of customers in the markets on which we focus, our revenue may decline.

As a result of these various factors and potential issues related to customer spending, we may not be able to maintain or increase our revenue in the future, and our operating results, financial condition and cash flows could be materially and adversely affected.

The loss of one or more of our key customers, a failure to continue diversifying our customer base, or a decrease in the number of larger transactions could harm our business and our operating results.

Historically, a significant portion of our revenue has been derived from relatively few customers, due in part to the consolidation of media customers. Sales to our top 10 customers in the three months ended April 1, 2022 accounted for approximately 70% of our net revenue, compared to 61% for the corresponding period in 2021. Although we continue to seek to broaden our customer base by penetrating new markets and further expanding internationally, we expect to see continuing industry consolidation and customer concentration.

During the three months ended April 1, 2022 and April 2, 2021, Comcast accounted for approximately 31% and 23% of our net revenue, respectively. During the three months ended April 1, 2022, Intelsat and Vodafone accounted for approximately 13% and 10% of our net revenue, respectively. During the three months ended April 2, 2021, SES accounted for 16% of our net revenue. Further consolidation in the cable industry could lead to additional revenue concentration for us. The loss of any significant customer, or any material reduction in orders from any other significant customer, or our failure to qualify our new products with any significant customer could materially and adversely affect, either long term or in a particular quarter, our operating results, financial condition and cash flows. Further, while Comcast's election to license our CableOS software contains commitments in license fees to us, if Comcast deploys our solutions more slowly or at a scale that is lower than we anticipate, our operating results, financial condition and cash flows could be materially and adversely effected.

In addition, we are involved in most quarters in one or more relatively large individual transactions. A decrease in the number of the relatively larger individual transactions in which we are involved in any quarter could materially and adversely affect our operating results for that quarter.

As a result of these and other factors, we may be unable to increase our revenues from some or all of the markets we address, or to do so profitably, and any failure to increase revenues and profits from these customers could materially and adversely affect our operating results, financial condition and cash flows.

We need to develop and introduce new and enhanced products and solutions in a timely manner to meet the needs of our customers and to remain competitive.

All of the markets we address are characterized by continuing technological advancement, changes in customer requirements and evolving industry standards. To compete successfully, we must continually design, develop, manufacture and sell new or enhanced products and solutions that provide increasingly higher levels of performance and reliability and meet our customers' changing needs. However, we may not be successful in those efforts if, among other things, our products and solutions:

- are not cost effective;
- are not brought to market in a timely manner;
- are not in accordance with evolving industry standards;
- fail to meet market acceptance or customer requirements; or
- are ahead of the needs of their markets.

If new standards or some of our new products are adopted later than we predict or not adopted at all, or if adoption occurs earlier than we are able to deliver the applicable products or functionality, we risk spending significant research and development time and dollars on products or features that may never achieve market acceptance or that miss the customer demand window and thus do not produce the revenue that a timely introduction would have likely produced.

If we fail to develop and market new and enhanced products and solutions on a timely basis, our operating results, financial condition and cash flows could be materially and adversely affected.

The markets in which we operate are intensely competitive.

The markets for our products are extremely competitive and have been characterized by rapid technological change and declining average sales prices in the past.

Our competitors in our Video appliance business include ATEME, MediaKind, Synamedia, Grass Valley, Evertz Microsystems, CommScope and Imagine Communications. Our competitors in our Video SaaS business include Amazon Web Services ("AWS"), Kaltura, iStreamPlanet, Brightcove and Edgecast. Our competitors in our Cable Access business include CommScope, Casa Systems and Cisco Systems, Vecima Networks and Calix.

A number of our principal business competitors in both of our business segments are substantially larger and/or may have access to greater financial, technical, marketing or other resources than we have. Consolidation in the Video industry has led to the acquisition of a number of our historic competitors over the last several years by private equity firms and by AWS. With respect to our Cable Access business, our competitors are generally substantially larger than us.

In addition, some of our larger competitors may have more long-standing and established relationships with certain domestic and foreign customers. Many of these large enterprises are in a better position to withstand any significant reduction in spending by customers in our markets and may be better able to navigate periods of market uncertainty, such as the uncertainty caused by the COVID-19 pandemic. They often have broader product lines and market focus, and may not be as susceptible to downturns in a particular market. These competitors may also be able to bundle their products together to meet the needs of a particular customer, and may be capable of delivering more complete solutions than we are able to provide. To the extent large enterprises that currently do not compete directly with us choose to enter our markets by acquisition or otherwise, competition would likely intensify.

Further, some of our competitors have offered, and in the future may offer, their products at lower prices than we offer for our competing products or on more attractive financing or payment terms, which has in the past caused, and may in the future cause, us to lose sales opportunities and the resulting revenue or to reduce our prices in response to that competition. Also, some competitors that are smaller than we are have engaged in, and may continue to engage in, aggressive price competition in order to gain customer traction and market share. Reductions in prices for any of our products could materially and adversely affect our operating margins and revenue.

Additionally, certain customers and potential customers have developed, and may continue to develop, their own solutions that may cause such customers or potential customers to not consider our product offerings or to displace our installed products with their own solutions. The growing availability of open source codecs and related software, as well as new server chipsets that incorporate encoding technology, has, in certain respects, lowered the barriers to entry for the video processing industry. The development of solutions by potential and existing customers and the reduction of the barriers to entry to enter the video processing industry could result in increased competition and adversely affect our results of operations and business.

If any of our competitors' products or technologies were to become the industry standard, our business could be seriously harmed. If our competitors are successful in bringing their products to market earlier than us, or if these products are more technologically capable than ours, our revenue could be materially and adversely affected.

Our future growth depends on a number of video and broadband industry trends.

Technology, industry and regulatory trends and requirements may affect the growth of our business. These trends and requirements include the following:

- convergence, whereby network operators bundle video, voice and data services to consumers, including mobile delivery options;
- continued strong consumer demand for streaming video services;
- continued adoption of public cloud SaaS platforms to stream video content to consumers, as well as for broadcast infrastructure workflows;
- continued growth in targeted advertising as a key revenue source for video streaming service providers;
- the pace of adoption and deployment of high-bandwidth technology, such as DOCSIS 3.x, DOCSIS 4.0, next generation LTE and fiber-to-the-premises ("FTTP");
- the use of digital video by businesses, governments and educational institutions globally;
- efforts by regulators and governments in the United States and internationally to encourage the adoption of broadband and digital technologies, including 5G broadband networks, as well as to regulate broadband access and delivery;
- the need to develop partnerships with other companies involved in video infrastructure workflow and broadband services;
- the extent and nature of regulatory attitudes towards issues such as network neutrality, competition between operators, access by third parties to networks of other operators, local franchising requirements for telcos to offer video, and other new services, such as mobile video; and

- the outcome of disputes and negotiations between content owners and service providers regarding rights of service providers to store and distribute recorded broadcast content, which outcomes may drive adoption of one technology over another in some cases.

If we fail to recognize and respond to these trends, by timely developing products, features and services required by these trends, we are likely to lose revenue opportunities and our operating results, financial condition and cash flows could be materially and adversely affected.

***Our software-based cable access product initiatives expose us to certain technology transition risks that may adversely impact our operating results, financial condition and cash flows*.**

We believe our CableOS software-based cable access solutions, supporting centralized, DAA or hybrid configurations, will significantly reduce cable headend costs and increase operational efficiency, and are an important step in cable operators' transition to all-IP networks. If we are unsuccessful in continuing to innovate and develop and deploy our cable access solutions in a timely manner, or are otherwise delayed in making our solutions available to our customers, our business may be adversely impacted, particularly if our competitors develop and market similar or superior products and solutions.

We believe our software-based cable access solutions will continue to replace and make obsolete current CMTS solutions, which is a market our products have historically not addressed, as well as cable edge-QAM products. If demand for our software-based cable access solutions is weaker than expected, our near and long-term operating results, financial condition and cash flows could be adversely impacted. Moreover, if competitors adapt new cable industry technology standards into competing cable access solutions faster than we do, or promulgate a new or competitive architecture for next-generation cable access solutions that renders our CableOS solution obsolete, our business may be adversely impacted.

The sales cycle for our CableOS solutions tends to be long. For cable operators, upgrading or expanding network infrastructure is complex and expensive, and investing in a CableOS solution is a significant strategic decision that may require considerable time to evaluate, test and qualify. Potential customers need to ensure our CableOS solution will interoperate with the various components of its existing network infrastructure, including third-party equipment, servers and software. In addition, since we are a relatively new entrant into the CMTS market, we need to demonstrate significant performance, functionality and/or cost advantages with our CableOS solutions that outweigh customer switching costs. If sales cycles are significantly longer than anticipated or we are otherwise unsuccessful in growing our CableOS sales, our operating results, financial condition and cash flows could be materially and adversely affected.

Our operating results are likely to fluctuate significantly and, as a result, may fail to meet or exceed the expectations of securities analysts or investors, causing our stock price to decline.

Our operating results have fluctuated in the past and are likely to continue to fluctuate in the future, on an annual and a quarterly basis, as a result of several factors, many of which are outside of our control. Some of the factors that may cause these fluctuations include:

- the level and timing of spending of our customers in the United States, Europe and in other markets;
- economic and financial conditions specific to each of the cable, satellite and telco, and broadcast and media industries, as well as general economic and financial market conditions, including the global economic uncertainty caused by the COVID-19 pandemic and government and business responses thereto as well as related supply chain and labor shortage issues;
- changes in market acceptance of and demand for our products or our customers' services or products;
- the timing and amount of orders, especially from large individual transactions and transactions with our significant customers;
- the mix of our products sold and the effect it has on gross margins;
- the timing of revenue recognition, including revenue recognition on sales arrangements and from transactions with significant service and support components, which may span several quarters;
- our transition to a SaaS subscription model for our Video business, which may cause near-term declines in revenue;
- the timing of completion of our customers' projects;
- the length of each customer product upgrade cycle and the volume of purchases during the cycle;

- competitive market conditions, including pricing actions by our competitors;
- the level and mix of our domestic and international revenue;
- new product introductions by our competitors or by us;
- uncertainty in the European Union due to unrest or violence in Ukraine that the on going military conflict with the Russian Federation have caused, which could adversely affect our results, financial condition and prospects;
- changes in domestic and international regulatory environments affecting our business;
- the evaluation of new services, new standards and system architectures by our customers;
- the cost and timely availability to us of components, subassemblies and modules;
- the mix of our customer base, by industry and size, and sales channels;
- changes in our operating and extraordinary expenses;
- the timing of acquisitions and dispositions by us and the financial impact of such transactions;
- impairment of our goodwill and intangibles;
- the impact of litigation, such as related litigation expenses and settlement costs;
- write-downs of inventory and investments;
- changes in our effective federal tax rate, including as a result of changes in our valuation allowance against our deferred tax assets, and changes in our effective state tax rates, including as a result of apportionment;
- changes to tax rules related to the deferral of foreign earnings and compliance with foreign tax rules;
- the impact of applicable accounting guidance on accounting for uncertainty in income taxes that requires us to establish reserves for uncertain tax positions and accrue potential tax penalties and interest; and
- the impact of applicable accounting guidance on business combinations that requires us to record charges for certain acquisition related costs and expenses and generally to expense restructuring costs associated with a business combination subsequent to the acquisition date.

The timing of deployment of our products by our customers can be subject to a number of other risks, including the availability of skilled engineering and technical personnel, the availability of third-party equipment and services, our customers’ ability to negotiate and enter into rights agreements with video content owners that provide our customers with the right to deliver certain video content, and our customers’ need for local franchise and licensing approvals.

We often recognize a substantial portion of our quarterly revenue in the last month of the quarter. We establish our expenditure levels for product development and other operating expenses based on projected revenue levels for a specified period, and expenses are relatively fixed in the short term. Accordingly, even small variations in the timing of revenue, particularly from relatively large individual transactions, can cause significant fluctuations in operating results in a particular quarter.

As a result of these factors and other factors, our operating results in one or more future periods may fail to meet or exceed the expectations of securities analysts or investors. In that event, the trading price of our common stock would likely decline.

We purchase several key components, subassemblies and modules used in the manufacture or integration of our products from sole or limited sources, and we rely on contract manufacturers and other subcontractors.

Our reliance on sole or limited suppliers, particularly foreign suppliers, and our reliance on contractors for manufacturing and installation of our products, involves several risks, including a potential inability to obtain an adequate supply of required components, subassemblies or modules; reduced control over costs, quality and timely delivery of components, subassemblies or modules; supplier discontinuation of components, subassemblies or modules we require; and timely installation of products. In addition, our financial results may be impacted by tariffs imposed by the United States on goods from other countries and tariffs imposed by other countries on U.S. goods. If any such tariffs are imposed on products or components that we import, including those obtained from a sole supplier or a limited group of suppliers, we could experience reduced revenues or may have to raise our prices, either of which could have an adverse effect on our business, financial condition and operating results.

These risks could be heightened during a substantial economic slowdown because our suppliers and subcontractors are more likely to experience adverse changes in their financial condition and operations during such a period. Further, these risks could materially and adversely affect our business if one of our sole sources, or a sole source of one of our suppliers or contract manufacturers, is adversely affected by a natural disaster or the outbreak of disease, epidemics and other pandemics, such as the COVID-19 pandemic, which has adversely impacted and may continue to adversely impact our supply chain. While we expend resources to qualify additional component sources, consolidation of suppliers and the small number of viable alternatives have limited the results of these efforts. Managing our supplier and contractor relationships is particularly difficult during time periods in which we introduce new products and during time periods in which demand for our products is increasing, especially if demand increases more quickly than we expect.

Plexus Services Corp. (“Plexus”), which manufactures our products at its facilities in Malaysia, currently serves as our primary contract manufacturer, and currently accounts for a majority, by dollar amount, of the products that we purchase from our contract manufacturers. Most of the products manufactured by our French and Israeli operations are outsourced to another third-party manufacturer in France and Israel, respectively. From time to time we assess our relationship with our contract manufacturers, and we do not generally maintain long-term agreements with any of our suppliers or contract manufacturers. Our agreement with Plexus has automatic annual renewals, unless prior notice is given by either party, and has been automatically renewed for a term expiring in October 2022.

Difficulties in managing relationships with any of our current contract manufacturers, particularly Plexus, that manufacture our products off-shore, or any of our suppliers of key components, subassemblies and modules used in our products, could impede our ability to meet our customers’ requirements and adversely affect our operating results. An inability to obtain adequate and timely deliveries of our products or any materials used in our products, or the inability of any of our contract manufacturers to scale their production to meet demand, such as the inability of certain of our contract manufacturers to operate at capacity for periods of time due to the COVID-19 pandemic, which may occur again in future periods, or any other circumstance that would require us to seek alternative sources of supply, had negatively impacted and could continue to negatively affect our ability to ship our products on a timely basis, which could damage relationships with current and prospective customers and harm our business and materially and adversely affect our revenue and other operating results. Furthermore, if we fail to meet customers’ supply expectations, our revenue would be adversely affected and we may lose sales opportunities, both short and long term, which could materially and adversely affect our business and our operating results, financial condition and cash flows. Increases, from time to time, in demand on our suppliers and subcontractors from our customers or from other parties have, on occasion, caused delays in the availability of certain components and products. In response, we may increase our inventories of certain components and products and expedite shipments of our products when necessary. These actions could increase our costs and could also increase our risk of holding obsolete or excess inventory, which, despite our use of a demand order fulfillment model, could materially and adversely affect our business, operating results, financial condition and cash flows.

The COVID-19 pandemic has disrupted and harmed, and may continue to disrupt and harm, our business, financial condition and operating results. We are unable to predict the extent to which the pandemic and related impacts will continue to adversely impact our business, financial condition and operating results and the achievement of our strategic objectives.

Our business, operations and financial performance have been negatively impacted by the COVID-19 pandemic and related public health responses, such as travel bans and restrictions, social distancing requirements and shelter-in-place orders. The pandemic and these related responses have caused, and may continue to cause, decreased demand for our offerings or delayed purchasing decisions by our customers, a global slowdown of economic activity (including a decrease in demand for a broad variety of goods and services), supply chain constraints, and significant volatility and disruption of financial markets.

The COVID-19 pandemic has subjected our operations, financial performance and financial condition to a number of risks, including, but not limited to, those discussed below:

- Declines in demand for our offerings or delays in purchasing decisions as a result of the initial COVID-19 outbreak, which generally occurred in the first half of 2020 and may occur in the future, including as a result of social distancing requirements and shelter-in-place orders limiting our ability to deploy our products, and general economic uncertainty causing a number of businesses to delay or reduce costs;

- Supply chain disruptions and component shortages, exacerbated by overall increased demand for such components, and increased costs related to freight and shipping and securing timely and sufficient supply of certain product components;

- Delays in payments or defaults by our customers or if customers terminate their relationships with us or do not renew their agreements on economic or other terms that are favorable to us;

- Challenges in establishing certain new customer relationships due to travel and meeting restrictions as a result of COVID-19; and
- Our modified business practices in response to the pandemic, such as having most of our employees work remotely, canceling all non-essential employee travel, and cancelling, postponing or holding virtually events and meetings. We may in the future be required to, or choose voluntarily to, take additional actions for the health and safety of our workforce, whether in response to government orders or based on our own determinations of what is in the best interests of our employees, we have been and will continue to be flexible in allowing or limiting access to our various office locations based on local conditions. To the extent our current or future measures result in decreased productivity, harm our company culture or otherwise negatively affect our business, our financial condition and operating results could be adversely affected.

While we have seen improvements in our markets in recent periods, we remain cautious given recent COVID-19 surges across the globe and the impact the pandemic continues to have on global supply chains and the pricing and availability of certain materials and components. The severity, magnitude and duration of the COVID-19 pandemic, the public health responses and its economic consequences continue to be uncertain, dynamic and difficult to predict, and the pandemic's impact on our operations and financial performance, as well as its impact on our ability to successfully execute our business strategies and initiatives, remains uncertain and difficult to predict. Further, the ultimate impact of the COVID-19 pandemic on our customers and on our business, operations and financial performance, depends on many factors that are not within our control, including, but not limited, to: government, business and individual actions that have been and continue to be taken in response to the pandemic (including restrictions on travel and transport, prohibitions on, or voluntary cancellation of, large gatherings of people and social distancing requirements, and modified workplace activities); the impact of the pandemic and actions taken in response to local or regional economies, travel, and economic activity; the availability of government funding programs; general economic uncertainty in key markets and financial market volatility; volatility in our stock price, global economic conditions and levels of economic growth; and the success of vaccination efforts and pace of recovery in the regions and countries where we conduct business, including the impact of any faltering or unsuccessful reopening of economic activity or subsequent outbreaks of COVID-19. As a result of the uncertainty and disrupted market conditions due to the COVID-19 pandemic, our business, operating results and financial condition has been and may continue to be adversely affected.

Operational Risks

We rely on resellers, value-added resellers and systems integrators for a significant portion of our revenue, and disruptions to, or our failure to develop and manage our relationships with these customers or the processes and procedures that support them could adversely affect our business.

We generate a significant percentage of our revenue through sales to resellers, value-added resellers ("VARs") and systems integrators that assist us with fulfillment or installation obligations. We expect that these sales will continue to generate a significant percentage of our revenue in the future. Accordingly, our future success is highly dependent upon establishing and maintaining successful relationships with a variety of channel partners.

We generally have no long-term contracts or minimum purchase commitments with any of our reseller, VAR or system integrator customers, and our contracts with these parties do not prohibit them from purchasing or offering products or services that compete with ours. Our competitors may provide incentives to any of our reseller, VAR or systems integrator customers to favor their products or, in effect, to prevent or reduce sales of our products. Any of our reseller, VAR or systems integrator customers may independently choose not to purchase or offer our products. Many of our resellers, and some of our VARs and system integrators are small, are based in a variety of international locations, and may have relatively unsophisticated processes and limited financial resources to conduct their business. Any significant disruption of our sales to these customers, including as a result of the inability or unwillingness of these customers to continue purchasing our products, or their failure to properly manage their business with respect to the purchase of, and payment for, our products, or their ability to comply with our policies and procedures as well as applicable laws, could materially and adversely affect our business, operating results, financial condition and cash flows. In addition, our failure to continue to establish or maintain successful relationships with reseller, VAR and systems integrator customers could likewise materially and adversely affect our business, operating results, financial condition and cash flows.

We face risks associated with having outsourced engineering resources located in Ukraine.

We outsource a portion of our research and development and product support activities to our third-party partner, GlobalLogic, a Hitachi group company. Through GlobalLogic, we have a significant number of engineering resources located in Kyiv, Ukraine that are dedicated to our Cable Access and Video business segments. Political, social and economic instability and unrest or violence in Ukraine from the ongoing military conflict with the Russian Federation have caused, and may continue to cause, disruptions to the business and operations of GlobalLogic, which could slow or delay the development work our outsourced engineering teams are undertaking for us. Any escalation of political tensions, military activity, instability, unrest or conflict could limit or prevent our employees from traveling to, from, or within Ukraine to direct and coordinate our outsourced engineering teams, or cause us to shift all or portions of the development work occurring in Ukraine, and/or cause GlobalLogic to relocate personnel to other locations or countries pursuant to its business continuity plans. Any resulting delays could negatively impact our product development efforts, operating results and our business. In addition, increased costs associated with managing or relocating our outsourced engineering teams in Ukraine, or engaging with alternative engineering resources outside of Ukraine, could negatively impact our operating results and financial condition.

We may not be able to effectively manage our operations.

As of April 1, 2022, we had 911 employees in our international operations, representing approximately 71% of our worldwide workforce. In recent years, we have expanded our international operations significantly. For example, upon the closing of our acquisition of Thomson Video Networks (“TVN”) on February 29, 2016, we added 438 employees, most of whom were based in France. Our ability to manage our business effectively in the future, including with respect to any future growth, our operation as both a hardware and increasingly software- and SaaS-centric business, the integration of any acquisition efforts such as our acquisition of TVN, and the breadth of our international operations, will require us to train, motivate and manage our employees successfully, to attract and integrate new employees into our overall operations, to retain key employees and to continue to improve and evolve our operational, financial and management systems. The COVID-19 pandemic has resulted in a significant majority of our employees working mostly or completely from home, which has required us to allocate additional resources towards IT and operations, and which may create new challenges for our operational and management systems. There can be no assurance that we will be successful in any of these efforts, and our failure to effectively manage our operations could have a material and adverse effect on our business, operating results, cash flows and financial condition.

We face risks associated with having facilities and employees located in Israel.

As of April 1, 2022, we maintained facilities in Israel with a total of 232 employees, or approximately 18% of our worldwide workforce. Our employees in Israel engage in a number of activities, for both our Video and Cable Access business segments, including research and development, product development, product management, supply chain management for certain product lines and sales activities.

As such, we are directly affected by the political, economic and military conditions affecting Israel. Any significant conflict involving Israel could have a direct effect on our business or that of our Israeli contract manufacturers, in the form of physical damage or injury, restrictions from traveling or reluctance to travel to from or within Israel by our Israeli and other employees or those of our subcontractors, or the loss of Israeli employees to active military duty. Most of our employees in Israel are currently obligated to perform annual reserve duty in the Israel Defense Forces, and approximately 8% of those employees were called for active military duty in 2021. In the event that more of our employees are called to active duty, certain of our research and development activities may be significantly delayed and adversely affected. Further, the interruption or curtailment of trade between Israel and its trading partners, as a result of terrorist attacks or hostilities, conflicts between Israel and any other Middle Eastern country or organization, or any other cause, could significantly harm our business. Additionally, current or future tensions or conflicts in the Middle East could materially and adversely affect our business, operating results, financial condition and cash flows.

In order to manage our growth, we must be successful in addressing management succession issues and attracting and retaining qualified personnel.

Our future success will depend, to a significant extent, on the ability of our management to operate effectively, both individually and as a group. We must successfully manage transition and replacement issues that may result from the departure or retirement of members of our executive management. We cannot provide assurances that changes of management personnel in the future would not cause disruption to operations or customer relationships or a decline in our operating results.

We are also dependent on our ability to retain and motivate our existing highly qualified personnel, in addition to attracting new highly qualified personnel. Competition for qualified management, technical and other personnel is often intense, particularly in Silicon Valley, Israel and Hong Kong where we have significant research and development activities, and we may not be successful in attracting and retaining such personnel. Competitors and others have in the past attempted, and are likely in the future to attempt, to recruit our employees. While our employees are required to sign standard agreements concerning confidentiality, non-solicitation and ownership of inventions, we generally do not have non-competition agreements with our personnel. The loss of the services of any of our key personnel, the inability to attract or retain highly qualified personnel in the future or delays in hiring such personnel, particularly senior management and engineers and other technical personnel, could negatively affect our business and operating results. We may need to increase our existing compensation levels in certain markets or for certain roles in response to competition, rising inflation or labor shortages, which may increase our operating costs. Furthermore, a certain portion of our personnel in the United States is comprised of foreign nationals whose ability to work for us depends on obtaining the necessary visas. Our ability to hire and retain foreign nationals in the United States, and their ability to remain and work in the United States, is affected by various laws and regulations, including limitations on the availability of visas. Changes in United States laws or regulations affecting the availability of visas have, and may continue to adversely affect, our ability to hire or retain key personnel and as a result may impair our operations.

Our products include third-party technology and intellectual property, and our inability to acquire new technologies or use third-party technology in the future could harm our business.

In order to successfully develop and market certain of our planned products, we may be required to enter into technology development or licensing agreements with third parties. Although companies with technology useful to us are often willing to enter into technology development or licensing agreements with respect to such technology, we cannot provide assurances that such agreements may be negotiated on commercially reasonable terms, or at all. The failure to enter, or a delay in entering, into such technology development or licensing agreements, when necessary or desirable, could limit our ability to develop and market new products and could materially and adversely affect our business.

We incorporate certain third-party technologies, including software programs, into our products, and, as noted, intend to utilize additional third-party technologies in the future. In addition, the technologies that we license may not operate properly or as specified, and we may not be able to secure alternatives in a timely manner, either of which could harm our business. We could face delays in product releases until alternative technology can be identified, licensed or developed, and integrated into our products, if we are able to do so at all. These delays, or a failure to secure or develop adequate technology, could materially and adversely affect our business, operating results, financial condition and cash flows.

Cybersecurity incidents, including data security breaches or computer viruses, could harm our business by disrupting our business operations, compromising our products and services, damaging our reputation or exposing us to liability.

Cyber criminals and hackers may attempt to penetrate our network security, misappropriate our proprietary information or cause business interruptions. Because the techniques used by such computer programmers to access or sabotage networks change frequently and may not be recognized until launched against a target, we may be unable to anticipate these techniques or to implement adequate preventative measures. In the past, we have faced compromises to our network security, and companies are facing additional attacks as workforces become more distributed following shelter-in-place orders. While we have invested in and continue to update our network security and cybersecurity infrastructure and systems, if our cybersecurity systems fail to protect against unauthorized access, sophisticated cyber-attacks, phishing schemes, ransomware, data protection breaches, computer viruses, denial-of-service attacks and similar disruptions from unauthorized tampering or human error, our ability to conduct our business effectively could be damaged in a number of ways, including:

- our intellectual property and other proprietary data, or financial assets, could be stolen;
- our ability to manage and conduct our business operations could be seriously disrupted;
- defects and security vulnerabilities could be introduced into our product, software and SaaS offerings, thereby damaging the reputation and perceived reliability and security of our products; and
- personally identifiable data of our customers, employees and business partners could be compromised.

Should any of the above events occur, our reputation, competitive position and business could be significantly harmed, and we could be subject to claims for liability from customers, third parties and governmental authorities. Additionally, we could incur significant costs in order to upgrade our cybersecurity systems and remediate damages. Consequently, our business, operating results, financial condition and cash flows could be materially and adversely affected. In addition, our business operations utilize and rely upon numerous third-party vendors, manufacturers, solution providers, partners and consultants, and any failure of such third parties' cybersecurity measures could materially and adversely affect or disrupt our business.

Our operating results could be adversely affected by natural disasters affecting us or impacting our third-party manufacturers, suppliers, resellers or customers.

Our corporate headquarters is located in California, which is prone to earthquakes. In addition, climate change is contributing to an increase in erratic weather patterns globally and intensifying the impact of certain types of catastrophes, such as floods, wildfires and droughts. We have employees, consultants and contractors located in regions and countries around the world. In the event that any of our business, sales or research and development centers or offices in the United States or internationally are adversely affected by an earthquake, flood, wildfire or by any other natural disaster, we may sustain damage to our operations and properties, which could cause a sustained interruption or loss of affected operations, and cause us to suffer significant financial losses.

We rely on third-party contract manufacturers for the production of our products. Any significant disruption in the business or operations of such manufacturers or of their or our suppliers could adversely impact our business. Our principal contract manufacturers and several of their and our suppliers and our resellers have operations in locations that are subject to natural disasters, such as severe weather, tsunamis, floods, fires and earthquakes, which could disrupt their operations and, in turn, our operations.

In addition, if there is a natural disaster in any of the locations in which our significant customers are located, we face the risk that our customers may incur losses or sustained business interruption, or both, which may materially impair their ability to continue their purchase of products from us. Accordingly, natural disaster in one of the geographies in which we, or our third-party manufacturers, their or our suppliers or our customers, operate could have a material and adverse effect on our business, operating results, cash flows and financial condition.

Financial, Transactional and Tax Risks

We may need additional capital in the future and may not be able to secure adequate funds at all or on terms acceptable to us.

We engage in the design, development and manufacture and sale of a variety of video and cable access products and system solutions, which has required, and will continue to require, significant research and development expenditures.

We are monitoring and managing our cash position in light of ongoing market conditions due to COVID-19. We believe that our existing cash of approximately $100.7 million at April 1, 2022 will satisfy our cash requirements for at least the next 12 months. However, we may need to raise additional funds to take advantage of presently unanticipated strategic opportunities, satisfy our other cash requirements from time to time, or strengthen our financial position. Our ability to raise funds may be adversely affected by a number of factors, including factors beyond our control, such as weakness in the economic conditions in markets in which we sell our products and continued uncertainty in financial, capital and credit markets. There can be no assurance that equity or debt financing will be available to us on reasonable terms, if at all, when and if it is needed.

We may raise additional financing through public or private equity or convertible debt offerings, debt financings, or corporate partnership or licensing arrangements. To the extent we raise additional capital by issuing equity securities or convertible debt, our stockholders may experience dilution, and any new equity or convertible debt securities we issue could have rights, preferences, and privileges superior to holders of our common stock. To the extent that we raise additional funds through collaboration and licensing arrangements, it may be necessary to relinquish some rights to our technologies or products, or grant licenses on terms that are not favorable to us. To the extent we raise capital through debt financing arrangements, we may be required to pledge assets or enter into covenants that could restrict our operations or our ability to incur further indebtedness and the interest on such debt may adversely affect our operating results.

If adequate capital is not available, or is not available on reasonable terms, when needed, we may not be able to take advantage of acquisition or other market opportunities, to timely develop new products, or to otherwise respond to competitive pressures.

Servicing our debt requires a significant amount of cash, and we may not have sufficient cash flow from our business to pay our substantial debt.

Our ability to make scheduled payments of the principal of, to pay interest on or to refinance our indebtedness, including the 2022 Notes and the 2024 Notes (together, the "Notes"), or to make cash payments in connection with any conversion of the Notes or in connection with any repurchase of Notes upon the occurrence of a fundamental change before the applicable maturity date at a repurchase price equal to 100% of the principal amount of such Notes to be repurchased, plus any accrued and unpaid interest thereon, as set forth in the applicable indenture governing the Notes, depends on our future performance, which is subject to economic, financial, competitive and other factors beyond our control. Our business may not continue to generate cash flow from operations in the future sufficient to service our debt and make necessary capital expenditures. If we are unable to generate such cash flow, we may be required to adopt one or more alternatives, such as selling assets, restructuring debt or obtaining additional equity capital on terms that may be onerous or highly dilutive. Our ability to refinance our indebtedness, including the Notes will depend on the capital markets and our financial condition at such time. We may not be able to engage in any of these activities or engage in these activities on desirable terms, which could result in a default on our debt obligations, including the Notes.

In addition, our ability to repurchase the Notes of the applicable series or to pay cash upon conversions of the Notes or at their respective maturity may be limited by law, regulatory authority, or agreements governing our future indebtedness. Our failure to repurchase such Notes at a time when the repurchase is required by the applicable indenture governing the Notes or to pay cash upon conversions of such Notes or at their respective maturity as required by the applicable indenture governing the Notes would constitute a default under such indenture. A default under such indenture, or the fundamental change itself, could also lead to a default under agreements governing our future indebtedness. Moreover, the occurrence of a fundamental change under the applicable indenture governing the Notes could constitute an event of default under any such agreement. If the repayment of the related indebtedness were to be accelerated after any applicable notice or grace periods, we may not have sufficient funds to repay the indebtedness and repurchase such series of Notes or make cash payments upon conversions thereof.

Despite our current debt levels, we may still incur substantially more debt or take other actions which would intensify the risks discussed above.

Despite our current consolidated debt levels, we and our subsidiaries may be able to incur substantial additional debt in the future, subject to the restrictions contained in our debt instruments, some of which may be secured debt. We are not restricted under the terms of each indenture governing the Notes from incurring additional debt, securing existing or future debt, recapitalizing our debt or taking a number of other actions that are not limited by the terms of the indenture governing the notes that could have the effect of diminishing our ability to make payments on our debt (including the Notes) when due. In addition, the Credit Agreement we entered into with JPMorgan Chase Bank, N.A., as lender, and Harmonic International GmbH, as co-borrower, on December 19, 2019 and amended in 2020, permits us to incur certain additional indebtedness and grant certain liens on our assets that could intensify the risks discussed above.

The conditional conversion feature of the Notes, if triggered, may adversely affect our financial condition and operating results.

In the event the conditional conversion feature of the Notes is triggered, holders of Notes will be entitled under the respective indenture governing such Notes to convert the Notes at any time during specified periods at their option. During the fourth quarter of fiscal 2021, the Company made an irrevocable election under the terms of the indentures governing each series of the Notes to settle the principal portion of such Notes solely with cash and may pay or deliver, as the case may be, any conversion value greater than the principal amount in cash, shares of common stock or a combination thereof, at the Company's election. Accordingly, if one or more holders elect to convert their Notes, we would be required to settle the principal portion of our conversion obligation through the payment of cash, which could adversely affect our liquidity. In addition, even if holders do not elect to convert their series of Notes, we could be required under applicable accounting rules to reclassify all or a portion of the outstanding principal of such series of Notes as a current rather than long-term liability, which would result in a material reduction of our net working capital.

The accounting method for convertible debt securities that may be settled in cash, such as the Notes, could have a material effect on our reported financial results.

In May 2008, the Financial Accounting Standards Board ("FASB") issued FASB Staff Position No. APB 14-1, Accounting for Convertible Debt Instruments That May Be Settled in Cash upon Conversion (Including Partial Cash Settlement), which has subsequently been codified as Accounting Standards Codification 470-20, Debt with Conversion and Other Options ("ASC 470-20"), an entity must separately account for the liability and equity components of the convertible debt instruments (such as the Notes) that may be settled entirely or partially in cash upon conversion in a manner that reflects the issuer's economic interest cost. The effect of ASC 470-20 on the accounting for each series of the Notes is that the equity component is required to be included in the additional paid-in capital section of stockholders' equity on our consolidated balance sheet at the issuance date, and the value of the equity component is treated as debt discount for purposes of accounting for the debt component of each series of Notes. This requires us to record a greater amount of non-cash interest expense as a result of the amortization of the discounted carrying value of each series of Notes to their face amount over the respective terms of the Notes. We report lower net income in our financial results because ASC 470-20 requires interest to include both the amortization of the debt discount and the instrument's coupon interest rate, which could adversely affect our future financial results or the trading price of our common stock.

In addition, under certain circumstances, convertible debt instruments (such as the Notes) that may be settled entirely or partly in cash are currently accounted for utilizing the treasury stock method, the effect of which is that the shares issuable upon conversion of the Notes are not included in the calculation of diluted earnings per share except to the extent that the conversion value of the Notes exceeds their principal amount. Under the treasury stock method, for diluted earnings per share purposes, the transaction is accounted for as if the shares of common stock that would be necessary to settle such excess, if we elected to settle such excess in shares, are issued.

In August 2020, the FASB issued ASU No. 2020-06, Accounting for Convertible Instruments in an Entity's Own Equity, which simplifies the accounting for convertible instruments and contracts on an entity's own equity. Among other changes, ASU No. 2020-06 removes from United States generally accepted accounting principles ("U.S. GAAP") the liability and equity separation model for convertible instruments with a cash conversion feature, and as a result, after adoption, entities will no longer separately present in equity an embedded conversion feature for such debt. Similarly, the embedded conversion feature will no longer be amortized into income as interest expense over the life of the instrument. Instead, entities will account for a convertible debt instrument wholly as debt unless (1) a convertible instrument contains features that require bifurcation as a derivative under ASC Topic 815, Derivatives and Hedging, or (2) a convertible debt instrument was issued at a substantial premium. This ASU is effective for interim and annual periods beginning after December 15, 2021 and can be adopted either on a modified retrospective or full retrospective basis.

The Company adopted this ASU on January 1, 2022 on a modified retrospective basis. Refer to Note 2 of the Notes to our Condensed Consolidated Financial Statements for details of the ASU adoption. During the fourth quarter of fiscal 2021, the Company and the trustee for 2022 Notes and 2024 Notes entered into supplemental indentures for both 2022 Notes and 2024 Notes. Pursuant to the supplemental indentures, the Company eliminated its option to settle the principal of the Notes in shares of the Company's common stock upon conversion. Accordingly, the dilutive effect of the Company's 2022 Notes and 2024 Notes will be limited to the conversion premium.

We have made, and may continue to make, acquisitions, and any acquisition could disrupt our operations, cause dilution to our stockholders and materially and adversely affect our business, operating results, cash flows and financial condition.

As part of our business strategy, from time to time we have acquired, and we may continue to acquire, businesses, technologies, assets and product lines that we believe complement or expand our existing business. Acquisitions involve numerous risks, including the following:

- unanticipated costs or delays associated with an acquisition;
- difficulties in the assimilation and integration of acquired operations, technologies and/or products;
- potential disruption of our business and the diversion of management's attention from the regular operations of the business during the acquisition process;
- the challenges of managing a larger and more geographically widespread operation and product portfolio after the closing of the acquisition;
- potential adverse effects on new and existing business relationships with suppliers, contract manufacturers, resellers, partners and customers;

- compliance with regulatory requirements, such as local employment regulations and organized labor in France;
- risks associated with entering markets in which we may have no or limited prior experience;
- the potential loss of key employees of acquired businesses and our own business as a result of integration;
- difficulties in bringing acquired products and businesses into compliance with applicable legal requirements in jurisdictions in which we operate and sell products;
- impact of known potential liabilities or unknown liabilities, including litigation and infringement claims, associated with companies we acquire;
- substantial charges for acquisition costs or for the amortization of certain purchased intangible assets, deferred stock compensation or similar items;
- substantial impairments to goodwill or intangible assets in the event that an acquisition proves to be less valuable than the price we paid for it;
- difficulties in establishing and maintaining uniform financial and other standards, controls, procedures and policies;
- delays in realizing, or failure to realize, the anticipated benefits of an acquisition; and
- the possibility that any acquisition may be viewed negatively by our customers or investors or the financial markets.

Competition within our industry for acquisitions of businesses, technologies, assets and product lines has been, and is likely to continue to be, intense. As such, even if we are able to identify an acquisition that we would like to consummate, we may not be able to complete the acquisition on commercially reasonable terms or because the target chooses to be acquired by another company. Furthermore, in the event that we are able to identify and consummate any future acquisitions, we may, in each of those acquisitions:

- issue equity securities which would dilute current stockholders' percentage ownership;
- incur substantial debt to finance the acquisition or assume substantial debt in the acquisition;
- incur significant acquisition-related expenses;
- assume substantial liabilities, contingent or otherwise; or
- expend significant cash.

These financing activities or expenditures could materially and adversely affect our operating results, cash flows and financial condition or the price of our common stock. Alternatively, due to difficulties in the capital or credit markets at the time, we may be unable to secure capital necessary to complete an acquisition on reasonable terms, or at all. Moreover, even if we were to obtain benefits from acquisitions in the form of increased revenue and earnings per share, there may be a delay between the time the expenses associated with an acquisition are incurred and the time we recognize such benefits.

In addition to the risks outlined above, if we are unable to successfully receive payment of any significant portion of our existing French R&D credit receivables from the French authority as expected, or are unable to successfully apply for or otherwise obtain the financial benefit of new French R&D credits in future years, our ability to achieve the anticipated benefits of the acquisition as well as our business, operating results and financial condition could be adversely affected.

As of April 1, 2022, we had approximately $239.6 million of goodwill recorded on our balance sheet associated with prior acquisitions. In the event we determine that our goodwill is impaired, we would be required to write down all or a portion of such goodwill, which could result in a material non-cash charge to our results of operations in the period in which such write-down occurs.

If we are unable to successfully address one or more of these risks, our business, operating results, financial condition and cash flows could be materially and adversely affected.

We may sell one or more of our product lines, from time to time, as a result of our evaluation of our products and markets, and any such divestiture could adversely affect our continuing business and our expenses, revenues, results of operation, cash flows and financial position.

We periodically evaluate our various product lines and may, as a result, consider the divestiture of one or more of those product lines. We have sold product lines in the past, and any prior or future divestiture could adversely affect our continuing business and expenses, revenues, results of operations, cash flows and financial position.

Divestitures of product lines have inherent risks, including the expense of selling the product line, the possibility that any anticipated sale will not occur, delays in closing any sale, the risk of lower-than-expected proceeds from the sale of the divested business, unexpected costs associated with the separation of the business to be sold from the seller’s information technology and other operating systems, and potential post-closing claims for indemnification or breach of transition services obligations of the seller. Expected cost savings, which are offset by revenue losses from divested businesses, may also be difficult to achieve or maximize due to the seller’s fixed cost structure, and a seller may experience varying success in reducing fixed costs or transferring liabilities previously associated with the divested business.

The nature of our business requires the application of complex revenue and expense recognition rules and the current legislative and regulatory environment affecting generally accepted accounting principles is uncertain. Significant changes in current principles could affect our financial statements going forward and changes in financial accounting standards or practices may cause adverse, unexpected financial reporting fluctuations and harm our operating results.

U.S. GAAP are subject to interpretation by the FASB, the SEC and various bodies formed to promulgate and interpret appropriate accounting principles. We are also subject to evolving rules and regulations of the countries in which we do business. Changes to accounting standards or interpretations thereof may result in different accounting principles under U.S. GAAP that have a significant effect on our reported financial results and require us to incur costs and expenses in order to comply with the updated standards or interpretations.

In addition, we have in the past and may in the future need to modify our customer contracts, accounting systems and processes when we adopt future or proposed changes in accounting principles. The cost and effect of these changes may negatively impact our results of operations during the periods of transition.

Fluctuations in our future effective tax rates could affect our future operating results, financial condition and cash flows.

We are required to periodically review our deferred tax assets and determine whether, based on available evidence, a valuation allowance is necessary. The realization of our deferred tax assets, which are predominantly in the United States, is dependent upon the generation of sufficient U.S. and foreign taxable income in the future to offset these assets. Based on our evaluation, we recorded a net increase in valuation allowance of $0.3 million and $6.7 million in 2021 and 2020, respectively, against the net deferred tax assets. The increases in valuation allowance in 2021 and 2020 were offset by the valuation allowance release of $9.6 million and $2.6 million, respectively, related to deferred taxes for certain foreign jurisdictions. The Company reduced its valuation allowance in 2021 based on continued improved operating results over the past few years and expectations about generating foreign taxable income in the future. Changes in the amount of the U.S. and foreign jurisdictions valuation allowance could result in a material non-cash expense or benefit in the period in which the valuation allowance is adjusted and our results of operations could be materially affected.

The calculation of tax liabilities involves dealing with uncertainties in the application of complex global tax regulations. We recognize potential liabilities for anticipated tax audit issues in the United States and other tax jurisdictions based on our estimate of whether, and the extent to which, additional taxes will be due. In the event we determine that it is appropriate to create a reserve or increase an existing reserve for any such potential liabilities, the amount of the additional reserve will be charged as an expense in the period in which it is determined. If payment of these amounts ultimately proves to be unnecessary, the reversal of the liabilities would result in tax benefits being recognized in the period when we determine the liabilities are no longer necessary. If the estimate of tax liabilities proves to be less than the ultimate tax assessment for the applicable period, a further charge to expense in the period such shortfall is determined would result. Either such charge to expense could have a material and adverse effect on our operating results for the applicable period.

Our future effective income tax rates could be adversely affected if tax authorities challenge our international tax structure or if the relative mix of U.S. and international income changes for any reason. Accordingly, there can be no assurance that our effective income tax rate will be less than the U.S. federal statutory rate in future periods.

Legal, Regulatory and Compliance Risks

We or our customers may face intellectual property infringement claims from third parties.

Our industry is characterized by the existence of a large number of patents and frequent claims and related litigation regarding patent and other intellectual property rights. In particular, leading companies in the telecommunications industry have extensive patent portfolios. Also, patent infringement claims and litigation by entities that purchase or control patents, but do not produce goods or services covered by the claims of such patents (so-called “non-practicing entities” or “NPEs”), have increased rapidly over the last decade or so. From time to time, third parties, including NPEs, have asserted, and may assert in the future, patent, copyright, trademark and other intellectual property rights against us or our customers, and have initiated audits to determine whether we have missed royalty payments for technology that we license. Our suppliers and their customers, including us, may have similar claims asserted against them. A number of third parties, including companies with greater financial and other resources than us, have asserted patent rights to technologies that are important to us.

Any intellectual property litigation, regardless of its outcome, could result in substantial expense and significant diversion of the efforts of our management and technical personnel. An adverse determination in any such proceeding could subject us to significant liabilities and temporary or permanent injunctions and require us to seek licenses from third parties or pay royalties that may be substantial. Furthermore, necessary licenses may not be available on terms satisfactory to us, or at all. An unfavorable outcome on any such litigation matter could require that we pay substantial damages, could require that we pay ongoing royalty payments, or could prohibit us from selling certain of our products. Any such outcome could have a material and adverse effect on our business, operating results, financial condition and cash flows.

Our suppliers and customers may have intellectual property claims relating to our products asserted against them. We have agreed to indemnify some of our suppliers and most of our customers for patent infringement relating to our products. The scope of this indemnity varies, but, in some instances, includes indemnification for damages and expenses (including reasonable attorney’s fees) incurred by the supplier or customer in connection with such claims. If a supplier or a customer seeks to enforce a claim for indemnification against us, we could incur significant costs defending such claim, the underlying claim or both. An adverse determination in either such proceeding could subject us to significant liabilities and have a material and adverse effect on our operating results, cash flows and financial condition.

We may be the subject of litigation which, if adversely determined, could harm our business and operating results.

We may be subject to claims arising in the normal course of business. The costs of defending any litigation, whether in cash expenses or in management time, could harm our business and materially and adversely affect our operating results and cash flows. An unfavorable outcome on any litigation matter could require that we pay substantial damages, or, in connection with any intellectual property infringement claims, could require that we pay ongoing royalty payments or prohibit us from selling certain of our products. In addition, we may decide to settle any litigation, which could cause us to incur significant settlement costs. A settlement or an unfavorable outcome on any litigation matter could have a material and adverse effect on our business, operating results, financial condition and cash flows.

Our failure to adequately protect our proprietary rights and data may adversely affect us.

At April 1, 2022, we held 113 issued U.S. patents and 46 issued foreign patents, and had 53 patent applications pending. Although we attempt to protect our intellectual property rights through patents, trademarks, copyrights, licensing arrangements, maintaining certain technology as trade secrets and other measures, we can give no assurances that any patent, trademark, copyright or other intellectual property rights owned by us will not be invalidated, circumvented or challenged, that such intellectual property rights will provide competitive advantages to us, or that any of our pending or future patent applications will be issued with the scope of the claims sought by us, if at all. We can give no assurances that others will not develop technologies that are similar or superior to our technologies, duplicate our technologies or design around the patents that we own. In addition, effective patent, copyright and trade secret protection may be unavailable or limited in certain foreign countries in which we do business or may do business in the future.

We may enter into confidentiality or license agreements with our employees, consultants, and vendors and our customers, as needed, and generally limit access to, and distribution of, our proprietary information. Nevertheless, we cannot provide assurances that the steps taken by us will prevent misappropriation of our technology. In addition, we have taken in the past, and may take in the future, legal action to enforce our patents and other intellectual property rights, to protect our trade secrets, to determine the validity and scope of the proprietary rights of others, or to defend against claims of infringement or invalidity. Such litigation could result in substantial costs and diversion of management time and other resources, and could materially and adversely affect our business, operating results, financial condition and cash flows.

Our use of open source software in some of our products may expose us to certain risks.

Some of our products contain software modules licensed for use from third-party authors under open source licenses. Use and distribution of open source software may entail greater risks than use of third-party commercial software, as open source licensors generally do not provide warranties or other contractual protections regarding infringement claims or the quality of the code. Some open source licenses contain requirements that we make available source code for modifications or derivative works we create based upon the type of open source software we use. If we combine our proprietary software with open source software in a certain manner, we could, under certain of the open source licenses, be required to release the source code of our proprietary software to the public. This could allow our competitors to create similar products with lower development effort and in less time and ultimately could result in a loss of product sales for us.

Although we monitor our use of open source closely, it is possible our past, present or future use of open source has triggered or may trigger the foregoing requirements. Furthermore, the terms of many open source licenses have not been interpreted by U.S. courts, and there is a risk that such licenses could be construed in a manner that could impose unanticipated conditions or restrictions on our ability to commercialize our products. In such event, we could be required to seek licenses from third parties in order to continue offering our products, to re-engineer our products or to discontinue the sale of our products in the event re-engineering cannot be accomplished on a timely basis, any of which could materially and adversely affect our operating results, financial condition and cash flows.

We are subject to import and export control and trade and economic sanction laws and regulations that could subject us to liability or impair our ability to compete in international markets.

Our products are subject to U.S. export control laws, and may be exported outside the U.S. only with the required export license or through an export license exception, in most cases because we incorporate encryption technology into certain of our products. We are also subject to U.S. trade and economic sanction regulations which include prohibitions on the sale or supply of certain products and services to the United States embargoed or sanctioned countries, governments, persons and entities. In addition, various countries regulate the import of certain technology and have enacted laws that could limit our ability to distribute our products, or could limit our customers' ability to implement our products, in those countries. Although we take precautions and have processes in place to prevent our products and services from being provided in violation of such laws, our products may have been in the past, and could in the future be, provided inadvertently in violation of such laws, despite the precautions we take. In March 2020, we received an administrative subpoena from the U.S. Treasury Department's office of Foreign Assets Control ("OFAC") requesting information about transactions involving Iran. The transactions were by the French company TVN, which we acquired in early 2016. Pursuant to regulations that remained in place until 2018, foreign subsidiaries of U.S. companies were allowed to engage in transactions with Iran if certain requirements were met. Harmonic is fully cooperating in the OFAC investigation. If we are found to have violated U.S. export control laws as a result of the pending OFAC investigation or future investigations, we and certain of our employees could be subject to civil or criminal penalties, including the possible loss of export privileges, monetary penalties, and, in extreme cases, imprisonment of responsible employees for knowing and willful violations of these laws. While we do not anticipate the impact of the OFAC investigation to be material on our business, our business and operating results could be adversely affected through penalties, reputational harm, loss of access to certain markets, or otherwise.

In addition, we may be subject to customs duties that could have a significant adverse impact on our operating results or, if we are able to pass on the related costs in any particular situation, would increase the cost of the related product to our customers. As a result, the future imposition of significant increases in the level of customs duties or the creation of import quotas on our products in Europe or in other jurisdictions, or any of the limitations on international sales described above, could have a material adverse effect on our business, operating results, financial condition and cash flows. Further, some of our customers in Europe have been, or are being, audited by local governmental authorities regarding the tariff classifications used for importation of our products. Import duties and tariffs vary by country and a different tariff classification for any of our products may result in higher duties or tariffs, which could have an adverse impact on our operating results and potentially increase the cost of the related products to our customers.

Our business and industry are subject to various laws and regulations that could adversely affect our business, operating results, cash flows and financial condition.

Our business and industry are regulated under various federal, state, local and international laws. For example, we are subject to environmental regulations such as the European Union's Waste Electrical and Electronic Equipment ("WEEE") and Restriction on the Use of Certain Hazardous Substances in Electrical and Electronic Equipment ("RoHS") directives and similar legislation enacted in other jurisdictions worldwide. Our failure to comply with these laws could result in our being directly or indirectly liable for costs, fines or penalties and third-party claims, and could jeopardize our ability to conduct business in such regions and countries. We expect that our operations will be affected by other new environmental laws and regulations on an ongoing basis. Although we cannot predict the ultimate impact of any such new laws and regulations, they would likely result in additional costs, and could require that we redesign or change how we manufacture our products, any of which could have a material and adverse effect on our operating results, financial condition and cash flows.

We are subject to the Sarbanes-Oxley Act of 2002 which, among other things, requires an annual review and evaluation of our internal control over financial reporting. If we conclude in future periods that our internal control over financial reporting is not effective or if our independent registered public accounting firm is unable to provide an unqualified attestation as of future year-ends, we may incur substantial additional costs in an effort to correct such problems, and investors may lose confidence in our financial statements, and our stock price may decrease in the short term, until we correct such problems, and perhaps in the long term, as well.

We are subject to requirements under the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 that require us to conduct research, disclose, and report whether or not our products contain certain conflict minerals sourced from the Democratic Republic of Congo or its surrounding countries. The implementation of these requirements could adversely affect the sourcing, availability, and pricing of the materials used in the manufacture of components used in our products. In addition, we may incur certain additional costs to comply with the disclosure requirements, including costs related to conducting diligence procedures to determine the sources of conflict minerals that may be used or necessary to the production of our products and, if applicable, potential changes to products, processes or sources of supply as a consequence of such verification activities. It is also possible that we may face reputational harm if we determine that certain of our products contain minerals not determined to be conflict-free and/or we are unable to alter our products, processes or sources of supply to avoid such materials.

Changes in telecommunications legislation and regulations in the United States and other countries could affect our sales and the revenue we are able to derive from our products. In particular, on December 14, 2017, the U.S. Federal Communications Commission ("FCC") voted to repeal the "net neutrality" rules and return to a "light-touch" regulatory framework. The FCC's new rules, which took effect in June 2018, granted providers of broadband internet access services greater freedom to make changes to their services, including, potentially, changes that may discriminate against or otherwise harm our business. However, a number of parties have appealed these rules, which appeals are currently being reviewed by the D.C. Circuit Court of Appeals; thus the future impact of the FCC's repeal and any changes thereto remains uncertain. Additionally, on September 30, 2018, California enacted the California Internet Consumer Protection and Net Neutrality Act of 2018. Since the FCC repealed its nationwide regulations, seven states have also enacted a state-level net neutrality law and a number of other states are considering legislation or executive actions that would regulate the conduct of broadband providers. We cannot predict whether the FCC order or state initiatives will be modified, overturned, or vacated by legal action of the court, federal legislation, or the FCC. The repeal of the net neutrality rules or other regulations dealing with access by competitors to the networks of incumbent operators could slow or stop infrastructure and services investments or expansion by service providers. Increased regulation of our customers' pricing or service offerings could limit their investments and, consequently, revenue from our products. The impact of new or revised legislation or regulations could have a material adverse effect on our business, operating results, financial condition and cash flows.

We depend significantly on our international revenue and are subject to the risks associated with international operations, including those of our resellers, contract manufacturers and outsourcing partners, which may negatively affect our operating results.

Revenue for the three months ended April 1, 2022 and April 2, 2021 derived from customers outside of the United States represented approximately 41% and 40% of our revenue, respectively. Although no assurance can be given with respect to international sales growth in any one or more regions, we expect that international revenue will likely continue to represent, from year to year, a majority, and potentially increasing, percentage of our annual revenue for the foreseeable future. A significant percentage of our revenue is generated from sales to resellers, VARs and systems integrators, particularly in emerging market countries. Furthermore, the majority of our employees are based in our international offices and locations, and most of our contract manufacturing occurs outside of the United States. In addition, we outsource a portion of our research and development activities to certain third-party partners with development centers located in different countries, particularly Ukraine and India.

Our international operations, international operations of our resellers, contract manufacturers and outsourcing partners, and our efforts to maintain and increase revenue in international markets are subject to a number of risks, which are generally greater with respect to emerging market countries, including the following:

- growth and stability of the economy in one or more international regions, including regional economic impacts of the COVID-19 pandemic;
- fluctuations in currency exchange rates;
- changes in foreign government regulations and telecommunications standards;
- import and export license requirements, tariffs, taxes, economic sanctions, contractual limitations and other trade barriers;
- our significant reliance on resellers and others to purchase and resell our products and solutions, particularly in emerging market countries;
- availability of credit, particularly in emerging market countries;
- longer collection periods and greater difficulty in enforcing contracts and collecting accounts receivable, especially from smaller customers and resellers, particularly in emerging market countries;
- compliance with the U.S. Foreign Corrupt Practices Act (the “FCPA”), the U.K. Bribery Act and/or similar anti-corruption and anti-bribery laws, particularly in emerging market countries;
- the burden of complying with a wide variety of foreign laws, treaties and technical standards;
- fulfilling “country of origin” requirements for our products for certain customers;
- difficulty in staffing and managing foreign operations;
- business and operational disruptions or delays caused by political, social and/or economic instability and unrest (e.g., Ukraine), including risks related to terrorist activity, particularly in emerging market countries;
- changes in economic policies by foreign governments, including the imposition and potential continued expansion of economic sanctions by the United States and the European Union on the Russian Federation;
- changes in diplomatic and trade relationships, including the imposition of new trade restrictions, trade protection measures, import or export requirements, trade embargoes and other trade barriers, including those between the United States and China;
- any negative economic impacts resulting from the political environment in the United States or the United Kingdoms’ exit from the European Union; and
- business and economic disruptions and delays caused by outbreaks of disease, epidemics and potential pandemics, such as the COVID-19 pandemic, which has led and may continue to lead to trade shows and in-person meetings being canceled or delayed and employees working remotely, and which has impacted our supply chain and may continue to impact our supply chain or general business in other manners.

We have certain international customers who are billed in their local currency, primarily the Euro, British pound and Japanese yen, which subjects us to foreign currency risk. In addition, a portion of our operating expenses relating to the cost of certain international employees, are denominated in foreign currencies, primarily the Euro, Israeli shekel, British pound, Singapore dollar, Chinese yuan and Indian rupee. Although we do hedge against the Euro, British pound, Israeli shekel and Japanese yen, gains and losses on the conversion to U.S. dollars of accounts receivable, accounts payable and other monetary assets and liabilities arising from international operations may contribute to fluctuations in our operating results. Furthermore, payment cycles for international customers are typically longer than those for customers in the United States. Unpredictable payment cycles could cause us to fail to meet or exceed the expectations of security analysts and investors for any given period.

Most of our international revenue is denominated in U.S. dollars, and fluctuations in currency exchange rates could cause our products to become relatively more expensive to customers in a particular country or region, leading to a reduction in revenue or profitability from sales in that country or region. The potential negative impact of a strong U.S. dollar on our business may be exacerbated by the significant devaluation of a number of foreign currencies. Also, if the U.S. dollar were to weaken against many foreign currencies, there can be no assurance that a weaker dollar would lead to growth in customer spending in foreign markets.

Our operations outside the United States also require us to comply with a number of U.S. and international regulations that prohibit improper payments or offers of payments to foreign governments and their officials and political parties for corrupt purposes. For example, our operations in countries outside the United States are subject to the FCPA and similar laws, including the U.K. Bribery Act. Our activities in certain emerging countries create the risk of unauthorized payments or offers of payments by one of our employees, consultants, sales agents or channel partners that could be in violation of various anti-corruption laws, even though these parties may not be under our control. Under the FCPA and U.K. Bribery Act, companies may be held liable for the corrupt actions taken by their directors, officers, employees, channel partners, sales agents, consultants, or other strategic or local partners or representatives. We have internal control policies and procedures with respect to FCPA compliance, have implemented FCPA training and compliance programs for our employees, and include in our agreements with resellers a requirement that those parties comply with the FCPA. However, we cannot provide assurances that our policies, procedures and programs will prevent violations of the FCPA or similar laws by our employees or agents, particularly in emerging market countries, and as we expand our international operations. Any such violation, even if prohibited by our policies, could result in criminal or civil sanctions against us.

The effect of one or more of these international risks could have a material and adverse effect on our business, financial condition, operating results and cash flows.

Risks Related to Ownership of Our Common Stock

Some anti-takeover provisions contained in our certificate of incorporation and bylaws, as well as provisions of Delaware law, could impair a takeover attempt.

We have provisions in our certificate of incorporation and bylaws that could have the effect of rendering more difficult or discouraging an acquisition deemed undesirable by our Board. These include provisions:

- authorizing blank check preferred stock, which could be issued with voting, liquidation, dividend and other rights superior to our common stock;
- limiting the liability of, and providing indemnification to, our directors and officers;
- limiting the ability of our stockholders to call, and bring business before, special meetings;
- requiring advance notice of stockholder proposals for business to be conducted at meetings of our stockholders and for nominations of candidates for election to our Board;
- controlling the procedures for conducting and scheduling of Board and stockholder meetings; and
- providing our Board with the express power to postpone previously scheduled annual meetings and to cancel previously scheduled special meetings.

These provisions could delay hostile takeovers, changes in control of the Company or changes in our management. As a Delaware corporation, we are also subject to provisions of Delaware law, including Section 203 of the Delaware General Corporation law, which prevents some stockholders holding more than 15% of our outstanding common stock from engaging in certain business combinations without approval of the holders of substantially all of our outstanding common stock. Any provision of our certificate of incorporation or bylaws or Delaware law that has the effect of delaying or deterring a change in control could limit the opportunity for our stockholders to receive a premium for their shares of our common stock, and could also affect the price that some investors are willing to pay for our common stock.

Our common stock price may be extremely volatile, and the value of an investment in our stock may decline.

Our common stock price has been highly volatile. We expect that this volatility will continue in the future due to factors such as:

- general market and economic conditions, including market volatility due to the COVID-19 pandemic;
- actual or anticipated variations in operating results;
- increases or decreases in the general stock market or to the stock prices of technology companies;
- announcements of technological innovations, new products or new services by us or by our competitors or customers;
- changes in financial estimates or recommendations by stock market analysts regarding us or our competitors;
- announcements by us or our competitors of significant acquisitions, dispositions, strategic partnerships, joint ventures or capital commitments;
- announcements by our customers regarding end user market conditions and the status of existing and future infrastructure network deployments;
- additions or departures of key personnel; and
- future equity or debt offerings or our announcements of these offerings.

In addition, in recent years, the stock market in general, and The NASDAQ Global Select Market and the securities of technology companies in particular, have experienced extreme price and volume fluctuations. These fluctuations have often been unrelated or disproportionate to the operating performance of individual companies. These broad market fluctuations have in the past, and may in the future, materially and adversely affect our stock price, regardless of our operating results. In these circumstances, investors may be unable to sell their shares of our common stock at or above their purchase price over the short term, or at all.

We cannot guarantee that our stock repurchase program will be fully implemented or that it will enhance long-term stockholder value.

In February 2022, our Board of Directors approved a stock repurchase program for the repurchase of up to $100 million of the outstanding shares of our common stock. The repurchase program expires in February 2025 and we are not obligated to repurchase a specified number or dollar value of shares. Share repurchases will be made from time to time in open market purchases and 10b5-1 trading plans, as permitted by securities laws and other legal requirements. Any share repurchases remain subject to the circumstances in place at that time, including prevailing market prices. As a result, there can be no guarantee around the timing or volume of our share repurchases. The stock repurchase program could affect the price of our common stock, increase volatility and diminish our cash reserves. Our repurchase program may be suspended or terminated at any time and, even if fully implemented, may not enhance long-term stockholder value.

Our stock price may decline if additional shares are sold in the market or if analysts drop coverage of or downgrade our stock.

Future sales of substantial amounts of shares of our common stock by our existing stockholders in the public market, or the perception that these sales could occur, may cause the market price of our common stock to decline. In addition, we issue additional shares upon exercise of stock options, including under our 2002 Employee Stock Purchase Plan, and in connection with grants of restricted stock units on an ongoing basis. To the extent we do not elect to pay solely cash upon conversion of the Notes, we will also be required to issue additional shares of common stock upon conversion. Increased sales of our common stock in the market after exercise of outstanding stock options or grants of restricted stock units could exert downward pressure on our stock price. These sales also might make it more difficult for us to sell equity or equity-related securities in the future at a time and price we deem appropriate.

The trading market for our common stock relies in part on the availability of research and reports that third-party industry or securities analysts publish about us and our business. If we do not maintain adequate research coverage or if one or more of the analysts who do cover us downgrade our stock or publishes inaccurate or unfavorable research about our business, our stock price may decline. If one or more of these analysts cease coverage of us or fails to publish reports on us regularly, we could lose visibility in the market, which in turn could cause the liquidity of our stock and our stock price to decline.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

Issuer Purchases of Equity Securities

On February 3, 2022, the Board of Directors authorized the Company to repurchase up to $100 million of the Company's outstanding shares of common stock through February 2025. The Company is authorized to repurchase, from time-to-time, shares of its outstanding common stock through open market purchases and 10b5-1 trading plans, in accordance with applicable rules and regulations, at such time and such prices as management may decide. The program does not obligate the Company to repurchase any specific number of shares and may be discontinued at any time. The actual timing and amount of repurchases are subject to business and market conditions, corporate and regulatory requirements, stock price, acquisition opportunities and other factors. As of April 1, 2022, approximately $98 million of the share repurchase authorization remained available.

The following table summarizes the repurchase activity for the three months ended April 1, 2022:

Period	Total Number of Shares Purchased	Average Price Paid per Share (1)	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Approximate Dollar Value of Shares that May Yet Be Purchased Under Publicly Announced Plan or Program (in millions)
January 1, 2022 - January 28, 2022	n/a	n/a	n/a	n/a
January 29, 2022 - February 25, 2022	57,438	$9.29	57,438	$99
February 26, 2022 - April 1, 2022	175,889	$9.15	175,889	$98
Total	233,327		233,327	

(1) Average price paid per share in the period includes commission.

ITEM 6. EXHIBITS

Exhibit Number	Exhibit Index
10.1(i)	Amendment to Cooperation Agreement, dated as of March 24, 2022, by and between Harmonic Inc. and Scopia Capital Management LP.
31.1	Section 302 Certification of Principal Executive Officer
31.2	Section 302 Certification of Principal Financial Officer
32.1*	Section 906 Certification of Principal Executive Officer
32.2*	Section 906 Certification of Principal Financial Officer
101	The following materials from Registrant’s Quarterly Report on Form 10-Q for the quarter ended April 1, 2022, formatted in Inline Extensible Business Reporting Language (iXBRL) include: (i) Condensed Consolidated Balance Sheets at April 1, 2022 and December 31, 2021, (ii) Condensed Consolidated Statements of Operations for the three months ended April 1, 2022 and April 2, 2021, (iii) Condensed Consolidated Statements of Comprehensive Loss for the three months ended April 1, 2022 and April 2, 2021, (iv) Condensed Consolidated Statements of Stockholders’ Equity for the three months ended April 1, 2022 and April 2, 2021, (v) Condensed Consolidated Statements of Cash Flows for the three months ended April 1, 2022 and April 2, 2021, and (vi) Notes to Condensed Consolidated Financial Statements.
104	Cover Page Interactive Data File (formatted as inline XBRL and contained in Exhibit 101)

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

(i) Previously filed as an Exhibit to the Company’s Current Report on Form 8-K dated March 29, 2022.

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.

HARMONIC INC.

By: /s/ Sanjay Kalra
Sanjay Kalra
Chief Financial Officer
Date: May 5, 2022

Exhibit 31.1

Harmonic Inc.
Certification of Principal Executive Officer
Pursuant to Section 302 of
The Sarbanes-Oxley Act of 2002

I, Patrick J. Harshman, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Harmonic 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(s) 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.

5. The registrant's other certifying officer(s) 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: May 5, 2022

By: /s/ Patrick J. Harshman
Patrick J. Harshman
President and Chief Executive Officer

Exhibit 31.2

Harmonic Inc.
Certification of Principal Financial Officer
Pursuant to Section 302 of
The Sarbanes-Oxley Act of 2002

I, Sanjay Kalra, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Harmonic 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(s) 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.

5. The registrant's other certifying officer(s) 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: May 5, 2022

By: /s/ Sanjay Kalra
Sanjay Kalra
Chief Financial Officer

Exhibit 32.1

Harmonic Inc.
Certification of Principal Executive Officer
Pursuant to 18 U.S.C. Section 1350 as Adopted Pursuant to
Section 906 of the Sarbanes-Oxley Act of 2002

As of the date hereof, I, Patrick J. Harshman, President and Chief Executive Officer of Harmonic Inc. (the “Company”), certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that the Company’s Quarterly Report on Form 10-Q for the quarter ended April 1, 2022, as filed with the Securities and Exchange Commission (the “Report”), fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended, and that information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company. This written statement is being furnished to the Securities and Exchange Commission as an exhibit accompanying such Report and shall not be deemed filed pursuant to the Securities Exchange Act of 1934, as amended.

Date: May 5, 2022

/s/ Patrick J. Harshman
Patrick J. Harshman
President and Chief Executive Officer

Exhibit 32.2

Harmonic Inc.
Certification of Principal Financial Officer
Pursuant to 18 U.S.C. Section 1350 as Adopted Pursuant to
Section 906 of the Sarbanes-Oxley Act of 2002

As of the date hereof, I, Sanjay Kalra, Chief Financial Officer of Harmonic Inc. (the “Company”), certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that the Company’s Quarterly Report on Form 10-Q for the quarter ended April 1, 2022, as filed with the Securities and Exchange Commission (the “Report”), fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended, and that information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company. This written statement is being furnished to the Securities and Exchange Commission as an exhibit accompanying such Report and shall not be deemed filed pursuant to the Securities Exchange Act of 1934, as amended.

Date: May 5, 2022

/s/ Sanjay Kalra
Sanjay Kalra
Chief Financial Officer