

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

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**Form 10-Q**

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(Mark One)

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

**For the Quarterly Period Ended September 27, 2013**

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

**Commission File No. 000-25826**

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

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**Delaware**  
(State or other jurisdiction of  
incorporation or organization)

**77-0201147**  
(I.R.S. Employer  
Identification Number)

**4300 North First Street  
San Jose, CA 95134  
(408) 542-2500**  
(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

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

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☒ No ☐

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

Large accelerated filer	<input type="checkbox"/>	Accelerated filer	<input checked="" type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/> (Do not check if a smaller reporting company)	Smaller reporting company	<input type="checkbox"/>

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, \$.001 par value, outstanding on October 14, 2013 was 100,808,712.

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# PART I

## FINANCIAL INFORMATION

### ITEM 1. FINANCIAL STATEMENTS

#### HARMONIC INC. CONDENSED CONSOLIDATED BALANCE SHEETS (UNAUDITED)

	September 27, 2013	December 31, 2012
	(In thousands, except par value amounts)	
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents	\$ 93,330	\$ 96,670
Short-term investments	75,966	104,506
Accounts receivable, net	85,069	85,920
Inventories	40,369	64,270
Deferred income taxes	20,144	21,870
Prepaid expenses and other current assets	14,757	23,636
Total current assets	329,635	396,872
Property and equipment, net	35,551	38,122
Goodwill	197,956	212,518
Intangibles, net	37,878	58,447
Other assets	16,133	11,572
Total assets	\$ 617,153	\$ 717,531
<b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>		
Current liabilities:		
Accounts payable	\$ 19,987	\$ 25,447
Income taxes payable	577	1,797
Deferred revenue	34,115	33,235
Accrued liabilities	33,118	42,415
Total current liabilities	87,797	102,894
Income taxes payable, long-term	12,155	49,309
Other non-current liabilities	11,694	11,915
Total liabilities	111,646	164,118
Commitments and contingencies (Note 14)		
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; 100,901 and 114,193 shares issued and outstanding at September 27, 2013 and December 31, 2012, respectively	101	114
Additional paid-in capital	2,345,512	2,432,790
Accumulated deficit	(1,839,639)	(1,879,026)
Accumulated other comprehensive loss	(467)	(465)
Total stockholders' equity	505,507	553,413
Total liabilities and stockholders' equity	\$ 617,153	\$ 717,531

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

**HARMONIC INC.**  
**CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS**  
**(UNAUDITED)**

	Three months ended		Nine months ended	
	September 27, 2013	September 28, 2012	September 27, 2013	September 28, 2012
	(In thousands, except per share amounts)			
Product revenue	\$ 98,713	\$ 97,881	\$ 277,965	\$ 300,731
Service revenue	24,205	22,510	63,753	58,159
Net revenue	122,918	120,391	341,718	358,890
Product cost of revenue	52,747	53,995	146,916	167,039
Service cost of revenue	13,379	11,518	33,953	31,430
Total cost of revenue	66,126	65,513	180,869	198,469
Gross profit	56,792	54,878	160,849	160,421
Operating expenses:				
Research and development	24,560	25,586	75,631	77,205
Selling, general and administrative	32,527	31,132	100,220	93,862
Amortization of intangibles	2,001	2,179	6,099	6,548
Restructuring and related charges	259	—	925	—
Total operating expenses	59,347	58,897	182,875	177,615
Loss from operations	(2,555)	(4,019)	(22,026)	(17,194)
Interest income, net	47	128	141	363
Other income (expense), net	230	(164)	(70)	119
Loss from continuing operations before income taxes	(2,278)	(4,055)	(21,955)	(16,712)
(Benefit from) provision for income taxes	(38,953)	414	(45,723)	367
Income (loss) from continuing operations	36,675	(4,469)	23,768	(17,079)
Income (loss) from discontinued operations, net of taxes (including gain on disposal of \$14,813, net of taxes, for the nine months ended September 27, 2013)	91	(3,761)	15,619	1,338
Net income (loss)	\$ 36,766	\$ (8,230)	\$ 39,387	\$ (15,741)
Basic net income (loss) per share from:				
Continuing operations	\$ 0.36	\$ (0.04)	\$ 0.22	\$ (0.15)
Discontinued operations	\$ —	\$ (0.03)	\$ 0.14	\$ 0.01
Net income (loss)	\$ 0.36	\$ (0.07)	\$ 0.36	\$ (0.13)
Diluted net income (loss) per share from:				
Continuing operations	\$ 0.36	\$ (0.04)	\$ 0.22	\$ (0.15)
Discontinued operations	\$ —	\$ (0.03)	\$ 0.14	\$ 0.01
Net income (loss)	\$ 0.36	\$ (0.07)	\$ 0.36	\$ (0.13)
Shares used in per share calculation:				
Basic	101,144	116,517	108,695	116,946
Diluted	102,723	116,517	109,879	116,946

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

**HARMONIC INC.**  
**CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)**  
**(UNAUDITED)**

	Three months ended		Nine months ended	
	September 27, 2013	September 28, 2012	September 27, 2013	September 28, 2012
	(In thousands)			
Net income (loss)	\$ 36,766	\$ (8,230)	\$ 39,387	\$ (15,741)
Other comprehensive income (loss), net of tax:				
Changes in cumulative translation adjustments	462	403	(8)	317
Foreign currency translation adjustments	462	403	(8)	317
Changes in unrealized gain (loss) on investment arising during the period	52	5	11	30
Gain on investments	52	5	11	30
Other comprehensive income before tax	514	408	3	347
Income tax expense (benefit) related to items of other comprehensive income (loss)	17	3	5	(11)
Other comprehensive income (loss), net of tax	497	405	(2)	358
Comprehensive income (loss)	\$ 37,263	\$ (7,825)	\$ 39,385	\$ (15,383)

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

**HARMONIC INC.**  
**CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS**  
**(UNAUDITED)**

	Nine months ended	
	September 27, 2013	September 28, 2012
	(In thousands)	
Cash flows from operating activities:		
Net income (loss)	\$ 39,387	\$ (15,741)
Adjustments to reconcile net income (loss) to net cash provided by operating activities:		
Amortization of intangibles	20,569	22,004
Depreciation	12,365	11,337
Stock-based compensation	11,953	14,122
Gain on sale of discontinued operations, net of tax	(14,813)	—
Loss on impairment of fixed assets	149	—
Deferred income taxes	(10,647)	1,627
Provision for inventories	2,813	2,466
Allowance for doubtful accounts, returns and discounts	1,161	2,012
Excess tax benefits from stock-based compensation	—	(80)
Other non-cash adjustments, net	1,220	560
Changes in assets and liabilities:		
Accounts receivable	(310)	13,240
Inventories	10,509	(85)
Prepaid expenses and other assets	8,522	1,847
Accounts payable	(5,418)	364
Deferred revenue	5,127	3,307
Income taxes payable	(39,209)	(1,482)
Accrued and other liabilities	(8,244)	(5,352)
Net cash provided by operating activities	35,134	50,146
Cash flows from investing activities:		
Purchases of investments	(54,773)	(94,123)
Proceeds from maturities of investments	50,681	44,876
Proceeds from sales of investments	31,506	30,486
Purchases of property and equipment	(11,249)	(9,850)
Proceeds from sale of discontinued operations, net of selling costs	43,527	—
Net cash provided by (used in) investing activities	59,692	(28,611)
Cash flows from financing activities:		
Payments for repurchase of common stock	(103,496)	(14,388)
Proceeds from issuance of common stock, net	5,355	4,922
Excess tax benefits from stock-based compensation	—	80
Net cash used in financing activities	(98,141)	(9,386)
Effect of exchange rate changes on cash and cash equivalents	(25)	103
Net (decrease) increase in cash and cash equivalents	(3,340)	12,252
Cash and cash equivalents at beginning of period	96,670	90,983
Cash and cash equivalents at end of period	\$ 93,330	\$ 103,235

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 AND SIGNIFICANT ACCOUNTING POLICIES**

*Basis of Presentation*

The accompanying unaudited condensed consolidated financial statements, in the opinion of management, include all adjustments (consisting only of normal recurring adjustments) which Harmonic Inc. (“Harmonic,” or the “Company”) considers necessary for a fair statement of the results of operations for the interim periods covered and the consolidated financial condition of the Company at the date of the balance sheets. This Quarterly Report on Form 10-Q should be read in conjunction with the Company’s audited consolidated financial statements contained in the Company’s Annual Report on Form 10-K, which was filed with the Securities and Exchange Commission on March 1, 2013 (“2012 Form 10-K”). The interim results presented herein are not necessarily indicative of the results of operations that may be expected for the full fiscal year ending December 31, 2013, or any other future period. The Company’s fiscal quarters are based on 13-week periods, except for the fourth quarter, which ends on December 31.

The condensed consolidated financial statements include the accounts of the Company and its subsidiaries. All significant intercompany accounts and transactions have been eliminated in consolidation. The year-end condensed balance sheet was derived from audited financial statements, but does not include all disclosures required by accounting principles generally accepted in the United States of America (“US GAAP”).

*Discontinued Operations*

On March 5, 2013, the Company completed the sale of its cable access HFC business to Aurora Networks (“Aurora”) for \$46.0 million in cash. The Condensed Consolidated Statements of Operations have been retrospectively adjusted to present the cable access HFC business as discontinued operations, as described in “Note 3, Discontinued Operations”. Unless noted otherwise, all discussions herein with respect to the Company’s unaudited condensed consolidated financial statements relate to the Company’s continuing operations.

*Use of Estimates*

The preparation of the condensed consolidated financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting period. Actual results could differ from those estimates.

*Significant Accounting Policies*

The Company’s significant accounting policies are described in Note 2 to its audited Consolidated Financial Statements included in its 2012 Form 10-K. There have been no significant changes to these policies during the nine months ended September 27, 2013.

*Reclassifications*

From time to time the Company reclassifies certain prior period balances to conform to the current year presentation. These reclassifications have no material impact on previously reported total assets, total liabilities, stockholders’ equity, results of operations or cash flows.

**NOTE 2: RECENT ACCOUNTING PRONOUNCEMENTS**

In December 2011, the FASB issued Accounting Standard Update (“ASU”) 2011-11, “Disclosures about offsetting assets and liabilities”. This guidance enhances disclosure requirements about the nature of an entity’s right to offset. The new guidance requires the disclosure of the gross amounts subject to rights of set-off, amounts offset in accordance with the accounting standards followed, and the related net exposure. The new guidance became effective for the Company beginning in the first quarter of fiscal 2013 and it did not have any impact on the Company’s Consolidated Financial Statements.

In July 2012, the FASB issued ASU 2012-2, “Intangibles - Goodwill and Other”, which allows an entity to first assess qualitative factors to determine whether it is more likely than not that an indefinite-lived asset is impaired for determining whether it is necessary to perform the quantitative impairment test. This accounting standard update became effective for the

Company beginning in the first quarter of fiscal 2013 and did not have any impact on the Company's Consolidated Financial Statements.

In February 2013, the FASB issued ASU 2013-2, "Comprehensive Income", which requires reclassification adjustments from other comprehensive income to be presented either in the financial statements or in the notes to the financial statements. The Company adopted this new guidance in the first quarter of fiscal 2013 and included the required disclosures.

In March 2013, the FASB issued ASU 2013-4, "Obligations resulting from joint and several liability arrangements for which the total amount of the obligation is fixed at the reporting date". The update provides requirements for the recognition, measurement and disclosure of an entity's reasonable expectation of its obligations resulting from joint and several liability arrangements for which the total amount of the obligation is fixed at the reporting date. This guidance requires an entity to disclose the nature and amount of any such obligation, as well as other information about the obligation. The Company does not expect the adoption of ASU 2013-04 will have a material impact on its financial position, results of operations or cash flows. The guidance is effective for the Company beginning in the first quarter of its 2014 fiscal year and should be applied prospectively.

In March 2013, the FASB issued ASU 2013-05, "Parent's Accounting for the Cumulative Translation Adjustment upon De-recognition of Certain Subsidiaries or Groups of Assets within a Foreign Entity or of an Investment in a Foreign Entity". The ASU addresses accounting for a cumulative translation adjustment when a parent either sells a part or all of its investment in a foreign entity or no longer holds a controlling financial interest in a subsidiary or group of assets that is a nonprofit activity or a business within a foreign entity. The guidance is effective for the Company beginning in the first quarter of its 2014 fiscal year and should be applied prospectively. The Company does not expect the adoption of ASU 2013-05 will have a material impact on its financial position, results of operations or cash flows.

In July 2013, the FASB issued ASU 2013-11, "Presentation of an unrecognized tax benefit when a net operating loss carryforward, a similar tax loss, or a tax credit carryforward exists". Under certain circumstances, unrecognized tax benefits should be presented in the financial statements as a reduction to a deferred tax asset for a net operating loss carryforward, a similar tax loss, or a tax credit carryforward. The guidance is effective for the Company beginning in the first quarter of 2014. The Company is currently evaluating the impact this guidance may have on its financial position, results of operations and cash flows.

### **NOTE 3: DISCONTINUED OPERATIONS**

On February 18, 2013, the Company entered into an Asset Purchase Agreement with Aurora pursuant to which the Company agreed to sell its cable access HFC business for \$46.0 million in cash. On March 5, 2013, the sale transaction closed and the Company received gross proceeds of \$46.0 million from the sale and recorded a net gain of \$15.0 million in connection with the sale in the first quarter of fiscal 2013, adjusted by (\$0.2) million in the second quarter of fiscal 2013, primarily related to adjustments on inventory and fixed assets sold to Aurora, for a net gain of \$14.8 million.

In accordance with ASC 205 "Presentation of financial statements – Discontinued Operations", a business is classified as a discontinued operation when:

(i) the operations and cash flows of the business can be clearly distinguished and have been or will be eliminated from our ongoing operations; (ii) the business has either been disposed of or is classified as held for sale; and (iii) the Company will not have any significant continuing involvement in the operations of the business after the disposal transactions.

On March 5, 2013, the Company entered into a transition services agreement ("TSA") with Aurora to provide contract manufacturing for up to five months and other various support, including providing order fulfillment, taking warranty calls, attending to product returns from customers, providing cost accounting analysis, receiving payments from customers and remitting such payments to Aurora for up to two months. The TSA fees are a fixed amount per month and were determined based on the Company's estimated cost of delivering the transition services. In addition, on April 24, 2013, the Company and Aurora signed a sublease agreement for the Company's Milpitas warehouse for the remaining period of the lease. The Company and Aurora later agreed to limit the services provided under the agreement to sales order processing support and quote support through May 2013, warehouse facilities support through July 2013, accounts payable support through June 2013, and accounts receivable collection support through October 2013, and the TSA fees were amended accordingly.

The Company determined that the cash flows generated from these transactions are both insignificant and are considered indirect cash flows. As a result, the sale of the cable access HFC business is appropriately presented as discontinued operations. The TSA billing to Aurora in the three and nine months ended September 27, 2013 was \$48,000 and \$977,000, respectively, and it was recorded in the Condensed Consolidated Statements of Operations under income from continuing operations as an



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offset to the expenses incurred to deliver the transition services. The table below provides details on the income statement caption under which the TSA billing was recorded (in thousands):

	Three months ended		Nine months ended	
	September 27, 2013			
Product cost of revenue	\$	41	\$	577
Research and development		—		21
Selling, general and administrative		7		379
Total TSA billing to Aurora	\$	48	\$	977

Included within the “Prepaid expenses and other current assets” ending balance at September 27, 2013 on the Condensed Consolidated Balance Sheet is \$0.2 million in receivables from customers invoiced on Aurora’s behalf. Included within the “Accrued liabilities” ending balance at September 27, 2013 is \$0.2 million due to Aurora primarily for invoicing to customers made on Aurora’s behalf. There is no outstanding payable to third party vendors on Aurora’s behalf and there is no outstanding receivable from Aurora for purchases made on its behalf, as the Company ceased making purchases on Aurora’s behalf at the end of May 2013.

The Company recorded a gain of \$14.8 million for the nine months ended September 27, 2013, in connection with the sale of the cable access HFC business, calculated as follows (in thousands):

Gross Proceeds		\$	46,000
Less : Carrying value of net assets			
Inventories, net	\$	10,579	
Prepaid expenses and other current assets		612	
Property and equipment, net		1,180	
Goodwill de-recognized		14,547	
Deferred revenue		(4,499)	
Accrued liabilities		(939)	
Total net assets sold and de-recognized			\$ 21,480
Less : Selling cost			\$ 2,473
Less : Tax effect			\$ 7,234
Gain on disposal, net of taxes			\$ 14,813

Since the Company has one reporting unit, upon the sale of the cable access HFC business, approximately \$14.5 million of the carrying value of goodwill was allocated to the cable access HFC business based on the relative fair value of the cable access HFC business to the fair value of the Company. The remaining carrying value of goodwill was tested for impairment, and the Company determined that goodwill was not impaired as of March 29, 2013.

The results of operations associated with the cable access HFC business are presented as discontinued operations in the Company’s Condensed Consolidated Statements of Operations for all periods presented. Revenue and the components of net income related to the discontinued operations for the three and nine months ended September 27, 2013 and September 28, 2012 were as follows:

	Three months ended		Nine months ended	
	September 27, 2013	September 28, 2012	September 27, 2013	September 28, 2012
Revenue	\$ 161	\$ 16,291	\$ 9,717	\$ 38,147
Operating income	\$ 154	\$ 3,070	\$ 669	\$ 5,193
Less : provision for (benefit from) income taxes	57	6,831	(137)	3,855
Add : Gain (loss) on disposal, net of taxes	(6)	—	14,813	—
Income (loss) from discontinued operations, net of taxes	\$ 91	\$ (3,761)	\$ 15,619	\$ 1,338

#### NOTE 4: SHORT-TERM INVESTMENTS

The following table summarizes the Company's short-term investments (in thousands):

	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
<b>As of September 27, 2013</b>				
State, municipal and local government agencies bonds	\$ 36,195	\$ 41	\$ (3)	\$ 36,233
Corporate bonds	32,376	16	(11)	32,381
Commercial paper	3,348	—	—	3,348
U.S. federal government bonds	4,001	3	—	4,004
Total short-term investments	<u>\$ 75,920</u>	<u>\$ 60</u>	<u>\$ (14)</u>	<u>\$ 75,966</u>
<b>As of December 31, 2012</b>				
Certificates of deposit	\$ 1,603	\$ —	\$ —	\$ 1,603
State, municipal and local government agencies bonds	59,009	45	(4)	59,050
Corporate bonds	31,568	4	(10)	31,562
Commercial paper	10,287	1	—	10,288
U.S. federal government bonds	2,003	—	—	2,003
Total short-term investments	<u>\$ 104,470</u>	<u>\$ 50</u>	<u>\$ (14)</u>	<u>\$ 104,506</u>

The following table summarizes the maturities of the Company's short-term investments (in thousands):

	September 27, 2013	December 31, 2012
Less than one year	\$ 50,782	\$ 76,779
Due in 1 - 2 years	25,184	27,727
Total short-term investments	<u>\$ 75,966</u>	<u>\$ 104,506</u>

Realized gains and losses from the sale of investments for the three and nine months ended September 27, 2013 and September 28, 2012 were not material.

#### *Impairment of Investments*

The Company monitors its investment portfolio for impairment on a periodic basis. In the event that the carrying value of an investment exceeds its fair value and the decline in value is determined to be other-than-temporary, an impairment charge is recorded and a new cost basis for the investment is established. A decline of fair value below amortized costs of debt securities is considered other-than-temporary if the Company has the intent to sell the security or it is more likely than not that the Company will be required to sell the security before recovery of the entire amortized cost basis. At the present time, the Company does not intend to sell its investments that have unrealized losses in accumulated other comprehensive loss. In addition, the Company does not believe that it is more likely than not that it will be required to sell its investments that have unrealized losses in accumulated other comprehensive loss before the Company recovers the principal amounts invested. The Company believes that the unrealized losses are temporary and do not require an other-than-temporary impairment, based on its evaluation of available evidence as of September 27, 2013.

As of September 27, 2013, there were no individual available-for-sale securities in a material unrealized loss position and the amount of unrealized losses on the total investment balance was insignificant.

#### NOTE 5: FAIR VALUE MEASUREMENTS

The applicable accounting guidance establishes a framework for measuring fair value and requires disclosure about the fair value measurements of assets and liabilities. This guidance requires the Company to classify and disclose assets and liabilities measured at fair value on a recurring basis, as well as fair value measurements of assets and liabilities measured on a nonrecurring basis in periods subsequent to initial measurement, in a three-tier fair value hierarchy as described below.

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The guidance defines fair value as the exchange price that would be received for an asset or paid to transfer a liability, in the principal or most advantageous market for the asset or liability, in an orderly transaction between market participants on the measurement date.

Valuation techniques used to measure fair value must maximize the use of observable inputs and minimize the use of unobservable inputs. The guidance describes three levels of inputs that may be used to measure fair value:

- Level 1 — Observable inputs that reflect quoted prices for identical assets or liabilities in active markets.
- Level 2 — Observable inputs other than Level 1 prices, such as quoted prices for similar assets or liabilities, quoted prices in markets that are not active, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities. The Company primarily uses broker quotes for valuation of its short-term investments. The forward exchange contracts are classified as Level 2 because they are valued using quoted market prices and other observable data for similar instruments in an active market.
- Level 3 — Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

The Company uses the market approach to measure fair value for its financial assets and liabilities. The market approach uses prices and other relevant information generated by market transactions involving identical or comparable assets or liabilities. During the nine months ended September 27, 2013, there were no nonrecurring fair value measurements of assets and liabilities subsequent to initial recognition.

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The following table sets forth the fair value of the Company's financial assets and liabilities measured at fair value based on the three-tier fair value hierarchy (in thousands):

	Level 1	Level 2	Level 3	Total
<b>As of September 27, 2013</b>				
<b>Cash equivalents</b>				
Money market funds	\$ 58,220	\$ —	\$ —	\$ 58,220
<b>Short-term investments</b>				
State, municipal and local government agencies bonds	—	36,233	—	36,233
Corporate bonds	—	32,381	—	32,381
Commercial paper	—	3,348	—	3,348
U.S. federal government bonds	4,004	—	—	4,004
<b>Prepays and other current assets</b>				
Foreign exchange forward contracts	—	5	—	5
Total assets measured and recorded at fair value	\$ 62,224	\$ 71,967	\$ —	\$ 134,191
<b>Accrued liabilities</b>				
Foreign exchange forward contracts	\$ —	\$ 381	\$ —	\$ 381
Total liabilities measured and recorded at fair value	\$ —	\$ 381	\$ —	\$ 381
	Level 1	Level 2	Level 3	Total
<b>As of December 31, 2012</b>				
<b>Cash equivalents</b>				
Money market funds	\$ 54,923	\$ —	\$ —	\$ 54,923
Corporate bonds with maturity less than 90 days	—	3,614	—	3,614
U.S. federal government bonds with maturity less than 90 days	3,005	—	—	3,005
<b>Short-term investments</b>				
Certificates of deposit	—	1,603	—	1,603
State, municipal and local government agencies bonds	—	59,050	—	59,050
Corporate bonds	—	31,562	—	31,562
Commercial paper	—	10,288	—	10,288
U.S. federal government bonds	2,003	—	—	2,003
<b>Prepays and other current assets</b>				
Foreign exchange forward contracts	—	344	—	344
Total assets measured and recorded at fair value	\$ 59,931	\$ 106,461	\$ —	\$ 166,392
<b>Accrued liabilities</b>				
Foreign exchange forward contracts	\$ —	\$ 143	\$ —	\$ 143
Total liabilities measured and recorded at fair value	\$ —	\$ 143	\$ —	\$ 143

**NOTE 6: BALANCE SHEET COMPONENTS**

The following tables provide details of selected balance sheet components (in thousands):

	September 27, 2013	December 31, 2012
<b>Accounts receivable, net:</b>		
Accounts receivable	\$ 94,283	\$ 95,515
Less: allowances for doubtful accounts, returns and discounts	(9,214)	(9,595)
Accounts receivable, net	<u>\$ 85,069</u>	<u>\$ 85,920</u>
<b>Inventories:</b>		
Raw materials	\$ 3,188	\$ 10,731
Work-in-process	1,378	4,347
Finished goods	35,803	49,192
Total inventories	<u>\$ 40,369</u>	<u>\$ 64,270</u>
<b>Property and equipment, net:</b>		
Furniture and fixtures	\$ 8,104	\$ 7,856
Machinery and equipment	111,182	108,262
Leasehold improvements	7,686	7,612
Property and equipment, gross	126,972	123,730
Less: accumulated depreciation and amortization	(91,421)	(85,608)
Property and equipment, net	<u>\$ 35,551</u>	<u>\$ 38,122</u>

**NOTE 7: GOODWILL AND IDENTIFIED INTANGIBLE ASSETS**

The changes in the carrying amount of goodwill for the nine months ended September 27, 2013 are as follows (in thousands):

Balance at beginning of period	\$ 212,518
Reduction in goodwill associated with the sale of the cable access HFC Business	(14,547)
Foreign currency translation adjustment	(15)
Balance at end of period	<u>\$ 197,956</u>

The following is a summary of identified intangible assets (in thousands):

	September 27, 2013			December 31, 2012		
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
<b>Identifiable intangibles:</b>						
Developed core technology	\$ 136,145	\$ (116,918)	\$ 19,227	\$ 136,145	\$ (102,449)	\$ 33,696
Customer relationships/contracts	67,098	(52,381)	14,717	67,098	(48,150)	18,948
Trademarks and tradenames	11,361	(10,210)	1,151	11,361	(9,145)	2,216
Maintenance agreements and related relationships	7,100	(4,317)	2,783	7,100	(3,513)	3,587
Total identifiable intangibles	<u>\$ 221,704</u>	<u>\$ (183,826)</u>	<u>\$ 37,878</u>	<u>\$ 221,704</u>	<u>\$ (163,257)</u>	<u>\$ 58,447</u>

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Amortization expense for the identifiable purchased intangible assets for the three and nine months ended September 27, 2013 and September 28, 2012 was allocated as follows (in thousands):

	Three months ended		Nine months ended	
	September 27, 2013	September 28, 2012	September 27, 2013	September 28, 2012
Included in cost of revenue	\$ 4,763	\$ 5,048	\$ 14,470	\$ 15,456
Included in operating expenses	2,001	2,179	6,099	6,548
Total amortization expense	\$ 6,764	\$ 7,227	\$ 20,569	\$ 22,004

The estimated future amortization expense of purchased intangible assets with definite lives is as follows (in thousands):

	Cost of Revenue	Operating Expenses	Total
Year ended December 31,			
2013 (remaining 3 months)	\$ 4,763	\$ 1,997	\$ 6,760
2014	13,745	6,775	20,520
2015	719	5,783	6,502
2016	—	4,096	4,096
2017	—	—	—
Total future amortization expense	\$ 19,227	\$ 18,651	\$ 37,878

**NOTE 8: RESTRUCTURING AND RELATED CHARGES**

*Omneon Restructuring*

The Company has restructuring accruals for excess lease facilities related to the closure of the Omneon headquarters in Sunnyvale, California. The accrual was based on future rent payments, net of expected sublease income, to be made through the end of the lease term in June 2013. The following table summarizes the activity in the Omneon restructuring accrual during the nine months ended September 27, 2013 (in thousands):

	Excess Facilities
Balance at December 31, 2012	\$ 869
Cash payments	(897)
Accretion	28
Balance at September 27, 2013	—

*HFC Restructuring*

As a result of the sale of the cable access HFC business in March 2013, the Company recorded \$16,000 and \$617,000 of restructuring charges under "Income from discontinued operations" in the three and nine months ended September 27, 2013, respectively. The restructuring charge for the nine months ended September 27, 2013 consisted of \$522,000 of severance and benefits and \$95,000 of contract termination costs. The severance and benefits are related to the termination of nine of the Company's employees by the Company as a result of the sale of the HFC business, and the reimbursement to Aurora, pursuant to the amended TSA, of severance payable by Aurora as a result of its subsequent termination of ten U.S. employees hired from the Company, in connection with Aurora's purchase of the HFC business. Three of the employees terminated by the Company were required to work to the end of the term of the TSA and, therefore, the Company recorded their severance ratably over their service period. The following table summarizes the activity in the HFC restructuring accrual during the nine months ended September 27, 2013 (in thousands):

	Severance	Contract Termination	Total
Balance at December 31, 2012	\$ —	\$ —	\$ —
Restructuring charges in discontinued operations	403	124	527
Adjustments to restructuring provisions	119	(29)	90
Cash payments	(492)	(95)	(587)
Balance at September 27, 2013	30	—	30

The Company anticipates that the remaining restructuring accrual balance of \$30,000 will be paid out by the end of the fourth quarter of fiscal 2013.

#### *Harmonic 2013 Restructuring*

The Company implemented a series of restructuring plans in fiscal 2013 to reduce costs and improve efficiencies. As a result, the Company recorded restructuring charges of \$0.6 million and \$1.5 million in the three and nine months ended September 27, 2013, respectively. For the nine months ended September 27, 2013, the restructuring charges consisted of severance and benefits of \$1.2 million related to the termination of sixty-three employees worldwide. In addition, the Company wrote-down, to its estimated net realizable value, leasehold improvements and furniture related to its Milpitas warehouse by \$149,000, and wrote-down inventory to reflect \$151,000 of obsolete inventories arising from the restructuring of its Israel facilities. The following table summarizes the activity in the Harmonic 2013 restructuring accrual during the nine months ended September 27, 2013 (in thousands):

	Severance	Impairment of Leasehold Improvement	Obsolete inventories	Total
Balance at December 31, 2012	\$ —	\$ —	\$ —	\$ —
Restructuring charges in continuing operations	1,089	101	151	1,341
Adjustments to restructuring provisions	66	48	—	114
Cash payments	(1,060)	—	—	(1,060)
Non-cash write-offs	—	(149)	(151)	(300)
Balance at September 27, 2013	95	—	—	95

Of the restructuring charges in the nine months ended September 27, 2013, \$530,000 is included in “Product cost of revenue” and the remaining \$925,000 is included in “Operating expenses-restructuring and related charges” in the Condensed Consolidated Statements of Operations. The Company anticipates that the remaining restructuring accrual balance of \$95,000 will be paid out or used by the end of the fourth quarter of fiscal 2013.

#### **NOTE 9: CREDIT FACILITIES**

Harmonic has a bank line of credit facility with Silicon Valley Bank that provides for borrowings of up to \$10.0 million and matures on August 22, 2014. As of September 27, 2013, other than standby letters of credit (Note 14), there were no amounts outstanding under the line of credit facility, and there were no borrowings during the nine months ended September 27, 2013. As of September 27, 2013, the amount available for borrowing under this facility, net of \$0.2 million of standby letters of credit, was \$9.8 million.

This facility, which became effective in August 2011 and was amended in August 2012, contains a financial covenant that requires Harmonic to maintain a ratio of unrestricted cash, accounts receivable and short term investments to current liabilities (less deferred revenue) of at least 1.75 to 1.00. As of September 27, 2013, the Company’s ratio under that covenant was 4.71 to 1. In the event of noncompliance by Harmonic with the covenants under the facility, including the financial covenant referenced above, Silicon Valley Bank would be entitled to exercise its remedies under the facility, including declaring all obligations immediately due and payable. As of September 27, 2013, Harmonic was in compliance with the covenants under the line of credit facility. Borrowings pursuant to the line would bear interest at the bank’s prime rate (3.25% at September 27, 2013,) or at LIBOR for the desired borrowing period (an annualized rate of 0.18% for a one month borrowing period at September 27, 2013) plus 1.75%, or 1.93%. Borrowings are not collateralized.

**NOTE 10: EMPLOYEE BENEFIT PLANS**

Harmonic grants stock options and restricted stock units (“RSUs”) pursuant to stockholder approved equity incentive plans. These equity incentive plans are described in detail in Note 13, “Employee Benefit Plans”, of Notes to Consolidated Financial Statements in the 2012 Form 10-K

*Stock Options and Restricted Stock Units*

The following table summarizes the Company’s stock option and RSU unit activity during the nine months ended September 27, 2013 (in thousands, except per share amounts):

	Stock Options Outstanding			Restricted Stock Units Outstanding	
	Shares Available for Grant	Number of Shares	Weighted Average Exercise Price	Number of Units	Weighted Average Grant Date Fair Value
Balance at December 31, 2012	10,155	8,900	\$ 6.83	3,938	\$ 6.44
Authorized	—	—	—	—	—
Granted	(3,361)	1,360	5.81	1,333	5.84
Options exercised	—	(788)	4.15	—	—
Shares released	—	—	—	(1,622)	6.28
Forfeited or cancelled	2,015	(1,461)	6.92	(418)	6.51
Balance at September 27, 2013	8,809	8,011	\$ 6.90	3,231	\$ 6.27

The following table summarizes information about stock options outstanding as of September 27, 2013 (in thousands, except per share amounts):

	Number of Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term (Years)	Aggregate Intrinsic Value
Vested and expected to vest	7,719	\$ 6.94	3.3	\$ 9,532
Exercisable	5,604	7.27	2.3	5,516

The intrinsic value of options vested and expected to vest and exercisable as of September 27, 2013 is calculated based on the difference between the exercise price and the fair value of the Company’s common stock as of September 27, 2013. The intrinsic value of options exercised during the three and nine months ended September 27, 2013 was \$1.1 million and \$2.0 million, respectively. The intrinsic value of options exercised during the three and nine months ended September 28, 2012 was \$0.1 million and \$0.6 million, respectively. The intrinsic value of options exercised is calculated based on the difference between the exercise price and the fair value of the Company’s common stock as of the exercise date.

The following table summarizes information about restricted stock units outstanding as of September 27, 2013 (in thousands, except per share amounts):

	Number of Shares Underlying Restricted Stock Units	Weighted Average Remaining Vesting Period (Years)	Aggregate Fair Value (1)
Vested and expected to vest	2,934	0.9	\$ 22,824

- (1) Represents the fair value of the Company’s common stock as of September 27, 2013, times the number of restricted stock units vested and expected to vest as of the same date.

*Employee Stock Purchase Plan*

The 2002 Employee Stock Purchase Plan (“ESPP”) provides for the issuance of common stock purchase rights to employees of the Company. The ESPP is intended to qualify as an “employee stock purchase plan” under Section 423 of the Internal Revenue Code. The ESPP enables employees to purchase shares at 85% of the fair market value of the common stock at the beginning or



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end of the offering period, whichever is lower. Offering periods generally begin on the first trading day on or after January 1 and July 1 of each year. Employees may participate through payroll deductions of 1% to 10% of their earnings. In the event that there are insufficient shares in the plan to fully fund the issuance, the available shares will be allocated across all participants based on their contributions relative to the total contributions received for the offering period.

There was a shortage of approved shares in the ESPP to fund the total employee contributions from January 2, 2013 to June 30, 2013. The shares available in the plan were sufficient to fund approximately 53% of the total contributions. As a result, the shares available were issued ratably to the participants based on each of their contributions during the offering period, relative to the total contributions received from all participants. The participants were refunded the remaining 47% of their contributions and the ESPP was suspended for the second half of 2013. The Company's stockholders approved a 1,000,000 share increase in the authorized shares for the ESPP during the Company's annual meeting on August 14, 2013, and contributions under the ESPP will resume in January 2014.

#### 401-K Plan

Harmonic has a retirement/savings plan which qualifies as a thrift plan under Section 401(k) of the Internal Revenue Code. This plan allows participants to contribute up to the applicable Internal Revenue Code limitations under the plan. Harmonic has made discretionary contributions to the plan of 25% of the first 4% contributed by eligible participants, up to a maximum contribution per participant of \$1,000 per year. Harmonic's contributions were suspended from 2009 through 2012, but have been renewed, on the same basis, for 2013.

#### NOTE 11: STOCK-BASED COMPENSATION

Stock-based compensation expense consists primarily of expenses for stock options and restricted stock units granted to employees and shares issued under the ESPP. The following table summarizes stock-based compensation expense (in thousands):

	Three months ended		Nine months ended	
	September 27, 2013	September 28, 2012	September 27, 2013	September 28, 2012
<b>Stock-based compensation in:</b>				
Cost of revenue	\$ 605	\$ 659	\$ 1,838	\$ 2,176
Research and development expense	1,076	1,450	3,400	4,755
Selling, general and administrative expense	2,264	2,388	6,628	6,816
Total stock-based compensation in operating expense	3,340	3,838	10,028	11,571
Total stock-based compensation	\$ 3,945	\$ 4,497	\$ 11,866	\$ 13,747

#### Stock Options

The Company estimated the fair value of all employee stock options using a Black-Scholes valuation model with the following weighted average assumptions:

	Three months ended		Nine months ended	
	September 27, 2013	September 28, 2012	September 27, 2013	September 28, 2012
Expected term (years)	4.70	4.70	4.70	4.70
Volatility	46%	54%	51%	56%
Risk-free interest rate	1.5%	0.7%	0.8%	0.9%
Expected dividends	0.0%	0.0%	0.0%	0.0%

The expected term represents the weighted-average period that the stock options are expected to remain outstanding. The computation of the expected term was determined based on historical experience of similar awards, giving consideration to the contractual terms of the stock-based awards, vesting schedules and expectations of future employee behavior. The Company uses its historical volatility for a period equivalent to the expected term of the options to estimate the expected volatility. The risk-free interest rate that the Company uses in the Black-Scholes option valuation model is based on U.S. Treasury zero-coupon issues with remaining terms similar to the expected term. The Company has never declared or paid any cash dividends

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and does not plan to pay cash dividends in the foreseeable future, and, therefore, used an expected dividend yield of zero in the valuation model.

The Company is required to estimate forfeitures at the time of grant and revise those estimates in subsequent periods if actual forfeitures differ from those estimates. The Company uses historical data to estimate pre-vesting option forfeitures and records stock-based compensation expense only for those awards that are expected to vest. All stock-based payment awards are amortized on a straight-line basis over the requisite service periods of the awards, which are generally the vesting periods.

The weighted-average fair value per share of options granted was \$3.02 and \$1.89 for the three months ended September 27, 2013 and September 28, 2012, respectively. The weighted-average fair value per share of options granted was \$2.51 and \$2.66 for the nine months ended September 27, 2013 and September 28, 2012, respectively.

The fair value of all stock options vested during the three months ended September 27, 2013 and September 28, 2012 was \$0.8 million and \$0.8 million, respectively. The fair value of all stock options vested during the nine months ended September 27, 2013 and September 28, 2012 was \$2.8 million and \$3.8 million, respectively.

The total realized tax benefit attributable to stock options exercised during the nine months ended September 28, 2012, in jurisdictions where this expense is deductible for tax purposes, was \$80,000. The Company did not recognize any tax benefit attributable to stock options exercised during the nine months ended September 27, 2013.

#### *Restricted Stock Units*

The estimated fair value of restricted stock units is based on the market price of the Company's common stock on the grant date. The fair value of all restricted stock units issued during the three months ended September 27, 2013 and September 28, 2012 was \$2.8 million and \$2.6 million, respectively. The fair value of all restricted stock units issued during the nine months ended September 27, 2013 and September 28, 2012 was \$10.2 million and \$10.3 million, respectively.

#### *Employee Stock Purchase Plan*

The value of the stock purchase rights under the ESPP consists of: (1) the 15% discount on the purchase of the stock; (2) 85% of the fair value of the call option; and (3) 15% of the fair value of the put option. The call option and put option were valued using the Black-Scholes option pricing model with the following assumptions:

	Purchase Period Ending	Purchase Period Ending	
	June 30, 2013	June 30, 2012	December 31, 2012
Expected term (years)	0.49	0.50	0.50
Volatility	30%	53%	46%
Risk-free interest rate	0.2%	0.2%	0.2%
Expected dividends	0.0%	0.0%	0.0%

The expected term represents the period of time from the beginning of the offering period to the purchase date. The Company uses its historical volatility for a period equivalent to the expected term of the options to estimate the expected volatility. The risk-free interest rate that the Company uses in the Black-Scholes option valuation model is based on U.S. Treasury zero-coupon issues with remaining terms similar to the expected term. The Company has never declared or paid any cash dividends and does not plan to pay cash dividends in the foreseeable future, and, therefore, used an expected dividend yield of zero in the valuation model.

The fair value per share of stock purchase rights under the ESPP granted for the purchase period ended June 30, 2013 and June 30, 2012, was \$1.23 and \$1.51, respectively. The fair value per share of stock purchase rights under the ESPP granted for the purchase period ended December 31, 2012 was \$1.19. The ESPP is suspended for the second half of 2013 due to all authorized shares under the plan having been issued through the offering period ended June 30, 2013. The Company's stockholders approved a 1,000,000 share increase in the authorized shares for the ESPP during the Company's annual meeting on August 14, 2013, and contributions under the ESPP will resume in January 2014. As a result, the Company will not have any stock-based compensation expense in the second half of fiscal 2013 related to the ESPP.

#### *Unrecognized Stock-Based Compensation*

As of September 27, 2013, total unamortized stock-based compensation cost related to unvested stock options and restricted stock units was \$20.7 million. This amount will be recognized as expense using the straight-line attribution method over the remaining weighted-average amortization period of 2.0 years.

## NOTE 12: INCOME TAXES

The income tax provision includes federal, state and local and foreign income taxes and is based on the application of a forecasted annual income tax rate applied to the current quarter's year-to-date pre-tax income (loss). In determining the estimated annual effective income tax rate, the Company estimates the annual impact of certain factors, including projections of the Company's annual earnings, taxing jurisdictions in which the earnings will be generated, state and local income taxes, the Company's ability to use tax credits and net operating loss carryforwards, and available tax planning alternatives. Discrete items, including the effect of changes in tax laws, tax rates, and certain circumstances with respect to valuation allowances or other unusual or non-recurring tax adjustments, are reflected in the period in which they occur as an addition to, or reduction from, the income tax provision, rather than being included in the estimated annual effective income tax rate.

For the nine months ended September 27, 2013, the difference between the recorded benefit from income taxes and the tax provision, based on the federal statutory rate of 35%, was primarily attributable to the net of various discrete items, non-deductible amortization on foreign intangibles, the differential in foreign tax rates, the federal research and development tax credit, and non-deductible stock-based compensation expense. The discrete items recorded in the first nine months of 2013 primarily related to the benefit associated with the reversal of previously recorded federal and, to a lesser extent, foreign income taxes as a result of the expiration of the applicable statutes of limitations in the U.S. for 2008 and 2009 and in foreign jurisdictions for various years, and the benefit associated with the reinstatement of the federal research and development tax credit for 2012, offset partially by the increase in the valuation allowance on the California research and development tax credit and accrued interest on uncertain tax positions.

For the nine months ended September 28, 2012, the difference between the recorded provision for income taxes and the tax provision, based on the federal statutory rate of 35%, was primarily attributable to the net of various discrete items, the differential in foreign tax rates, non-deductible stock-based compensation expense, and non-deductible amortization on foreign intangibles. The discrete items recorded in the first nine months of 2012 primarily related to the increase in the valuation allowance on the California research and development tax credit and accrued interest on uncertain tax positions, offset partially by the benefit associated with the reversal of previously recorded foreign income taxes due to the expiration of the statute of limitation in the foreign jurisdictions.

The Company files federal, state, and foreign income tax returns in jurisdictions with varying statutes of limitations during which such tax returns may be audited and adjusted by the relevant tax authorities. The U.S. Internal Revenue Service has concluded its audit for the 2008 and 2009 tax years. In addition, the statute of limitations on the Company's 2008 and 2009 U.S. corporate income tax return expired in September 2013 and, as a result, in the third quarter of 2013, the Company recorded a discrete net tax benefit of \$38.4 million related to the release of tax reserves for uncertain tax positions for those tax years. The 2010 through 2012 tax years generally remain subject to examination by federal and most state tax authorities. In significant foreign jurisdictions, the 2006 through 2012 tax years generally remain subject to examination by their respective tax authorities. In the third quarter of 2013, the Israeli tax authority concluded its audit of a subsidiary of the Company for the years 2007 through 2010, and a final settlement was made with the Israeli tax authority. The settlement did not have a material impact on the Company's overall tax expense, deferred tax assets realization, effective tax rate, operating results or cash flow.

In compliance with applicable guidance for accounting for uncertainty in income taxes, the Company had gross unrecognized tax benefits, which include interest and penalties, of approximately \$59.2 million as of December 31, 2012, and approximately \$22.3 million as of September 27, 2013. If all of the unrecognized tax benefits at September 27, 2013 were recognized, the entire amount would impact the provision for income taxes. The unrecognized tax benefits may decrease significantly within the next 12 months if a related statute of limitations that is currently set to expire during that period is not extended.

The realization of our deferred tax assets is dependent upon the generation of sufficient U.S. and foreign taxable income in the future to offset against those assets. We may not have sufficient taxable income in the future to determine that we will be able to realize some significant portion of our deferred tax assets. As a result, an additional valuation allowance against our deferred tax assets may be required in the period in which such a determination is made, and our operating results could be materially and adversely impacted in the period of adjustment.

The Company recognizes interest and possible penalties related to uncertain tax positions in income tax expense. During the nine months ended September 27, 2013, as a result of the expiration of the applicable statutes of limitations in the U.S. for 2008 and 2009 and in foreign jurisdictions for various years, the Company recorded a net decrease of \$5.8 million for interest and possible penalties related to uncertain tax positions, resulting in a balance at September 27, 2013 of \$1.4 million.

**NOTE 13: INCOME (LOSS) PER SHARE**

The following table sets forth the computation of the basic and diluted net loss per share (in thousands, except per share amounts):

	Three months ended		Nine months ended	
	September 27, 2013	September 28, 2012	September 27, 2013	September 28, 2012
Numerator:				
Income (loss) from continuing operations	\$ 36,675	\$ (4,469)	\$ 23,768	\$ (17,079)
Income (loss) from discontinued operations	91	(3,761)	15,619	1,338
Net income (loss)	\$ 36,766	\$ (8,230)	\$ 39,387	\$ (15,741)
Denominator:				
Weighted average number of common shares outstanding				
Basic	101,144	116,517	108,695	116,946
Effect of dilutive securities from stock options, restricted stock units and ESPP	1,579	—	1,184	—
Diluted	102,723	116,517	109,879	116,946
Basic net income (loss) per share from:				
Continuing operations	\$ 0.36	\$ (0.04)	\$ 0.22	\$ (0.15)
Discontinued operations	\$ —	\$ (0.03)	\$ 0.14	\$ 0.01
Net Income (loss)	\$ 0.36	\$ (0.07)	\$ 0.36	\$ (0.13)
Diluted net income (loss) per share from:				
Continuing operations	\$ 0.36	\$ (0.04)	\$ 0.22	\$ (0.15)
Discontinued operations	\$ —	\$ (0.03)	\$ 0.14	\$ 0.01
Net Income (loss)	\$ 0.36	\$ (0.07)	\$ 0.36	\$ (0.13)

The following table sets forth the potentially dilutive shares from stock options, restricted stock units and the ESPP, for the periods presented, that were excluded from the net income (loss) per share computations because their effect was anti-dilutive (in thousands):

	Three months ended		Nine months ended	
	September 27, 2013	September 28, 2012	September 27, 2013	September 28, 2012
Potentially dilutive equity awards outstanding	6,144	13,608	10,447	13,382

**NOTE 14: COMMITMENTS AND CONTINGENCIES**
*Leases*

Future minimum lease payments under non-cancelable operating leases as of September 27, 2013, after giving effect to \$0.5 million of future sublease income from Aurora, are as follows (in thousands):

**Years ending December 31,**

2013 (remaining three months)	\$ 2,645
2014	9,600
2015	9,047
2016	7,811
2017	7,659
Thereafter	21,157
Total	\$ 57,919

### Warranties

The Company accrues for estimated warranty costs at the time of product shipment. Management periodically reviews the estimated fair value of its warranty liability and records adjustments based on the terms of warranties provided to customers, historical and anticipated warranty claims experience, and estimates of the timing and cost of warranty claims. Activity for the Company's warranty accrual, which is included in accrued liabilities, is summarized below (in thousands):

	Three months ended		Nine months ended	
	September 27, 2013	September 28, 2012	September 27, 2013	September 28, 2012
Balance at beginning of period	\$ 3,228	\$ 4,725	\$ 4,292	\$ 5,558
Transfer to Aurora as part of the sale of discontinued operations	—	—	(939)	—
Accrual for current period warranties	1,991	1,314	5,333	4,407
Warranty costs incurred	(1,705)	(1,677)	(5,172)	(5,603)
Balance at end of period	\$ 3,514	\$ 4,362	\$ 3,514	\$ 4,362

### Purchase Commitments with Contract Manufacturers and Other Suppliers

The Company relies on a limited number of contract manufacturers and suppliers to provide manufacturing services for a substantial majority of its products. In addition, some components, sub-assemblies and modules are obtained from a sole supplier or limited group of suppliers. During the normal course of business, in order to reduce manufacturing lead times and ensure adequate component supply, the Company enters into agreements with certain contract manufacturers and suppliers that allow them to procure inventory based upon criteria as defined by the Company. The Company had approximately \$20.8 million of non-cancelable purchase commitments with contract manufacturers and other suppliers as of September 27, 2013.

### Standby Letters of Credit

As of September 27, 2013, the Company's financial guarantees consisted of standby letters of credit outstanding, which were principally related to performance bonds and state requirements imposed on employers. The maximum amount of potential future payments under these arrangements was \$0.2 million as of September 27, 2013.

### Indemnification

Harmonic is obligated to indemnify its officers and the members of its Board of Directors pursuant to its bylaws and contractual indemnity agreements. Harmonic 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 September 27, 2013.

### Guarantees

The Company has \$0.5 million of guarantees in Israel as of September 27, 2013, with the majority relating to rent obligations for buildings used by its Israeli subsidiaries.

### Legal proceedings

In October 2011, Avid Technology, Inc. ("Avid") filed a complaint in the United States District Court for the District of Delaware alleging that Harmonic's Media Grid product infringes two patents held by Avid. A jury trial on this initial complaint is scheduled for January 2014. In June 2012, Avid served a subsequent complaint alleging that Harmonic's Spectrum product infringes one patent held by Avid. In September 2013, the U.S. Patent Trial and Appeal Board authorized an inter partes review to be instituted as to claims of the patent asserted in this second complaint. The complaints seek injunctive relief and unspecified damages.

In November 2012, FastVDO served a lawsuit on Harmonic, alleging infringement of a patent allegedly essential to the H.264 standard and that Harmonic encoders, transcoders, software and servers that use H.264 infringe their patent. The complaint seeks injunctive relief and unspecified damages.

At this time, the Company cannot predict the outcome of the above matters.

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An unfavorable outcome on the Avid matters or the FastVDO matter referenced above or any other litigation matter could require that Harmonic pay substantial damages, or, in connection with any intellectual property infringement claims, could require that the Company pay ongoing royalty payments or could prevent the Company from selling certain of its products. As a result, a settlement of, or an unfavorable outcome on, any of such matters could have a material adverse effect on Harmonic's business, operating results, financial position and cash flows.

Harmonic's 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 the Company's customers. Such assertions arise in the normal course of the Company's operations. The resolution of any such assertions and claims cannot be predicted with certainty.

### **NOTE 15: STOCKHOLDERS' EQUITY**

#### *Accumulated Other Comprehensive Loss*

The components of accumulated other comprehensive loss were as follows (in thousands):

	September 27, 2013	December 31, 2012
Foreign currency translation adjustments	\$ (510)	\$ (502)
Unrealized gain on investments	43	37
Accumulated other comprehensive loss	\$ (467)	\$ (465)

#### *Common Stock Repurchases*

On January 28, 2013, our Board of Directors approved a \$75 million increase to our existing \$25 million stock repurchase program. On February 19, 2013, the Board approved a further \$35 million increase to the program upon the closing of a sale of the Company's cable access HFC business, which closed on March 5, 2013. On July 16, 2013, the Board authorized repurchasing an additional \$85.0 million under the Company's stock repurchase program, increasing the aggregate authorized amount to \$220 million under the ongoing program. Under the program, the Company is authorized to repurchase shares of common stock in open market transactions or pursuant to any trading plan that may be adopted in accordance with Rule 10b5-1 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). The timing and actual number of shares repurchased, if any, depends on a variety of factors, including the price and availability of our shares, trading volume and general market conditions. The program may be suspended or discontinued at any time without prior notice.

During the three and nine months ended September 27, 2013, the Company repurchased and retired 1.1 million and 4.5 million shares of common stock for \$7.7 million and \$27.6 million, respectively, under this program. As part of the stock repurchase program, on May 24, 2013, the Company completed a "modified Dutch auction" tender offer and repurchased and retired an additional 12.0 million shares of its common stock at \$6.25 per share. The total cost of the stock repurchase under the tender offer was approximately \$76.0 million, including \$1.0 million of fees and expenses. The Company charges the excess of cost over par value for the repurchase of its common stock to additional paid-in capital. As of September 27, 2013, approximately \$125.2 million had been utilized to repurchase stock under the program, including under the Company's tender offer, which closed on May 24, 2013, and approximately \$94.8 million was available for future purchases under the program.

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

The terms "Harmonic," the "Company," "we," "us," "its," and "our," as used in this Quarterly Report on Form 10-Q ("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:

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- 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;
- capital 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;
- the impact of the possibility that the U.S. government will fail to timely raise its debt limit;
- seasonality of revenue and concentration of revenue sources;
- the potential impact of our continuing stock repurchase plan;
- potential future acquisitions and dispositions;
- anticipated results of potential or actual litigation;
- our competitive environment;
- the impact of governmental regulation;
- the impact of uncertain economic times and markets;
- anticipated revenue and expenses, including the sources of such revenue and expenses;
- expected impacts of changes in accounting rules;
- use of cash, cash needs and ability to raise capital; and
- the condition of our cash investments.

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” beginning on page 34 of this Form 10-Q. All forward-looking statements included in this 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 design, manufacture and sell versatile and high performance video infrastructure products and system solutions. We enable our customers to efficiently create, prepare and deliver a full range of video services to consumer devices, including televisions, personal computers, tablets and mobile phones. Our products generally fall into three principal categories; video production platforms and playout solutions, video processing solutions and cable edge solutions. We also provide technical support services and professional services to our customers worldwide.

On March 5, 2013, the Company completed the sale of its cable access HFC business to Aurora Networks (“Aurora”) for \$46 million in cash. The Condensed Consolidated Statements of Operations have been retrospectively adjusted to present the cable access HFC business as discontinued operations, as described in “Note 3, Discontinued Operations”. Unless noted otherwise, all discussions herein with respect to the Company’s unaudited condensed consolidated financial statements relate to the Company’s continuing operations.

The principal markets we serve are cable television companies, direct broadcast satellite system companies, telecommunications companies, or “telcos”, broadcaster and media companies, as well as, more recently, emerging streaming media providers, that create video programming or offer video-based infrastructure. Historically, a majority of our revenue has been derived from relatively few customers, due in part to the consolidation of the ownership of cable television and direct broadcast satellite system companies. Sales to our ten largest customers in the three and nine months ended September 27, 2013 accounted for approximately 38% and 33%, respectively, of our revenue, compared to 40% and 38%, respectively, for the same periods in 2012.



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Although we are attempting 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 and nine months ended September 27, 2013, revenue from Comcast accounted for 16% and 12%, respectively, of our revenue, compared to 12% and 13%, respectively, for the same periods in 2012.

In the three and nine months ended September 27, 2013, we recognized revenue of \$123 million and \$342 million, respectively, compared to \$120 million and \$359 million, respectively, in the same periods in 2012. Our international sales, which had been growing at a faster pace than our domestic sales in prior periods, decreased 1% and 3%, in the three and nine months ended September 27, 2013, as compared to the same periods in 2012. Our international sales represented 56% of our revenue in each of the three and nine months ended September 27, 2013, compared to 58% and 54% of our total revenue in the same periods in 2012. Domestic sales increased by 6% in the three months ended September 27, 2013, as compared to the same period in 2012, but decreased 7% in the nine months ended September 27, 2013, as compared to the same period in 2012. We expect that international sales will continue to account for a significant portion of our net revenue for the foreseeable future, and expect that, due to sales to emerging markets in particular, our international revenue may increase as a percentage of our total net revenue from year to year.

Historically, our revenue has been dependent upon capital spending in the cable, satellite, telco and broadcast industries. More recently, we also have derived revenue from media companies, including streaming media providers. Industry consolidation has in the past constrained, and may in the future constrain, capital spending by our customers. If our product portfolio and product development plans do not position us well to capture an increased portion of the capital spending of customers in the markets on which we focus, 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 and content providers, adapt our products for new applications, take orders at prices resulting in lower margins, and build internal expertise to handle the particular contractual and technical demands of the media market, which could result in higher operating costs. Implementation issues with our products or those of other vendors have caused in the past, and may cause in the future, delays in project completion for our customers and delay our recognition of revenue.

Our quarterly revenue has been, and may continue to be, affected by seasonal buying patterns. Typically, revenue in the first quarter of the year is seasonally lower than other quarters, as our customers often are still finalizing their annual budget and capital spending projections for the year. Further, we often recognize a substantial portion of our quarterly revenues in the last month of each 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 timing of revenue, particularly from large individual transactions, can cause significant fluctuations in operating results in a particular quarter.

The impact of economic conditions on certain of our customers and changes in our customers' deployment plans have adversely affected our business in the past. In 2010, economic conditions in many of the countries in which we sell products were very weak, and global economic conditions and financial markets experienced a severe downturn. The downturn stemmed from a multitude of factors, including adverse credit conditions, slower economic activity, concerns about inflation and deflation, rapid changes in foreign exchange rates, increased energy costs, decreased consumer confidence, reduced corporate profits and capital spending, adverse business conditions and liquidity concerns. Although there was an increase in global economic activity in the second half of 2010 and the first half of 2011, economic growth appears to have become sluggish in some geographies, and weak in other geographies, since the middle of 2011. Further, economic growth is expected to be sluggish or weak in some geographies during the balance of 2013 and perhaps beyond. If an economic downturn were to occur in the future, customers may delay or reduce capital expenditures, which, in turn, often results in lower demand for our products.

As part of our business strategy, (1) from time to time we have acquired, and continue to consider acquiring, businesses, technologies, assets and product lines that we believe complement or may expand our existing business, and (2) from time to time we consider divesting a product line that we believe may no longer complement or expand our existing business. In September 2010, we completed the acquisition of Omneon, Inc., a company specializing in file-based infrastructure for the production, preparation and playout of video content typically deployed by broadcasters, satellite operators, content owners and other media companies. Omneon's business was complementary to Harmonic's core business, and expanded our customer reach into content providers and extended our product lines into video servers and video-optimized storage for content production and playout. In February 2013, we entered into an agreement to sell our cable access HFC business to Aurora Networks, and the transaction closed in March 2013. See Note 3, "Discontinued Operations" of our Condensed Consolidated Financial Statements.

## **CRITICAL ACCOUNTING POLICIES, JUDGMENTS AND ESTIMATES**



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There have been no material changes to our critical accounting policies, judgments and estimates, during the nine months ended September 27, 2013, from those disclosed in our 2012 Form 10-K.

## RESULTS OF OPERATIONS

### Net Revenue

#### *Net Revenue by Product Line*

Harmonic's consolidated net revenue, by product line, for the three and nine months ended September 27, 2013, compared to the same periods in 2012, are presented in the table below. Also presented are the related dollar and percentage change in consolidated net revenue, by product line, in the three and nine months ended September 27, 2013, as compared to the same periods in 2012.

	Three months ended		Nine months ended	
	September 27, 2013	September 28, 2012	September 27, 2013	September 28, 2012
(In thousands, except percentages)				
<b>Revenue by type:</b>				
Video processing products	\$ 58,047	\$ 49,899	\$ 163,362	\$ 161,880
Production and playout products	19,976	23,786	63,543	65,327
Cable edge products	20,690	24,196	51,060	73,524
Service and support	24,205	22,510	63,753	58,159
Net revenue	<u>\$ 122,918</u>	<u>\$ 120,391</u>	<u>\$ 341,718</u>	<u>\$ 358,890</u>
<b>Increase (Decrease):</b>				
Video processing products	\$ 8,148		\$ 1,482	
Production and playout products	(3,810)		(1,784)	
Cable edge products	(3,506)		(22,464)	
Service and support	1,695		5,594	
Total increase (decrease)	<u>\$ 2,527</u>		<u>\$ (17,172)</u>	
<b>Percent change:</b>				
Video processing products	16 %		1 %	
Production and playout products	(16)%		(3)%	
Cable edge products	(14)%		(31)%	
Service and support	8 %		10 %	
Total percent change	2 %		(5)%	

The 16% increase in our video processing revenue in the three months ended September 27, 2013, compared to the same period in 2012, was primarily due to increased sales of our encoder and decoder products in the U.S. and international broadcast and media markets. The 16% decrease in production and playout revenues was due principally to lower sales of our playout servers in the Asia Pacific region and the Europe, Middle East and Africa ("EMEA") region in the three months ended September 27, 2013. The 14% decrease in our cable edge revenue in the three months ended September 27, 2013, compared to the same period in 2012, was primarily attributable to the softness in the U.S. Pay TV service provider market, as it appears that some providers are looking ahead to the availability of new technologies, including converged cable access platform ("CCAP") enabled products. The 8% increase in our service and support revenues in the three months ended September 27, 2013, compared to the same period in 2012, was primarily due to the recognition of service revenue from a multi-million dollar long-term project in the third quarter of 2013. Service and support revenues are derived primarily from maintenance contracts, but also include professional and integration services and training.

The 1% increase in our video processing revenue in the nine months ended September 27, 2013, compared to the same period in 2012, was primarily due to the increased sales of our encoder and decoder products, principally in the broadcast and media market. The 3% decrease in production and playout revenue was due to lower sales of our playout servers in the Asia Pacific region, offset partially by increased production and playout revenue in the U.S. and the EMEA region, in the nine months ended

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September 27, 2013. The 31% decrease in our cable edge revenue in the nine months ended September 27, 2013, compared to the same period in 2012, was primarily attributable to the softness in the U.S. Pay TV service provider market, as it appears that some of the providers are looking ahead to the availability of new technologies, including CCAP enabled products. The 10% increase in our service and support revenues in the nine months ended September 27, 2013, compared to the same period in 2012, was driven by a higher subscription base from new maintenance contracts, as well as renewed maintenance contracts across all regions, and the recognition of service revenue from a multi-million dollar long-term contract in the third quarter of 2013.

*Net Revenue by Geographic Region*

Harmonic's domestic and international net revenue in the three and nine months ended September 27, 2013, compared with the corresponding periods in 2012, are presented in the table below. Also presented are the related dollar and percentage change in domestic and international net revenue, in the three and nine months ended September 27, 2013, from the corresponding periods in 2012.

	Three months ended		Nine months ended	
	September 27, 2013	September 28, 2012	September 27, 2013	September 28, 2012
(In thousands, except percentages)				
<b>Net revenue:</b>				
United States	\$ 53,878	\$ 50,675	\$ 151,848	\$ 163,476
International	69,040	69,716	189,870	195,414
Total	\$ 122,918	\$ 120,391	\$ 341,718	\$ 358,890
<b>Increase (Decrease):</b>				
United States	\$ 3,203		\$ (11,628)	
International	(676)		(5,544)	
Total increase (decrease)	\$ 2,527		\$ (17,172)	
<b>Percent change:</b>				
United States	6 %		(7)%	
International	(1)%		(3)%	
Total percent change	2 %		(5)%	

U.S. net revenue increased 6% in the three months ended September 27, 2013, compared to the three months ended September 28, 2012, and it decreased 7% in the nine months ended September 27, 2013, compared to the same period in 2012. The increase in U.S. net revenue in the three months ended September 27, 2013 was primarily due to increased sales of our encoder and decoder products to broadcast and media customers, offset partially by a decrease in U.S. revenue from cable customers. The decrease in U.S. revenue for the nine month period was principally due to a decrease in our U.S. cable edge revenue, which was primarily attributable to the softness in the U.S. Pay TV service provider market, as it appears that some of the providers are looking ahead to the availability of new technologies, including CCAP enabled products. This decrease was offset partially by increased sales of our encoder and decoder products to broadcast and media customers.

International net revenue decreased 1% and 3%, respectively, in the three and nine months ended September 27, 2013, compared to the same periods in 2012. The decrease in international net revenue in the three and nine months ended September 27, 2013, compared to the corresponding periods in 2012, was primarily due to decreased demand in Canada and the Asia Pacific region and, to a lesser extent, the Central and Latin America region, offset partially by increased revenue in the EMEA region. The decrease in Canada revenue was mainly with respect to our cable edge products due to the softness in the Pay TV service providers market, as it appears that some of the providers are looking ahead to the availability of new technologies, including CCAP enabled products, and, to a lesser extent, our video processing products. The decrease in Asia Pacific revenue was primarily with respect to our production and playout products, as we saw a reduction in capital spending in that region for those products. In EMEA, we saw some recovery across almost all our product lines in the nine months ended September 27, 2013. In addition, we recognized revenue from a multi-million dollar, long-term European project in the third quarter of 2013. We expect that international sales will continue to account for a significant percentage of our net revenue in 2013 and for the foreseeable future.

**Gross Profit**

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Harmonic's gross profit and gross profit as a percentage of net revenue ("gross margin"), in the three and nine months ended September 27, 2013, as compared to the corresponding period in 2012, are presented in the table below. Also presented are the related dollar and percentage changes in gross profit in the three and nine months ended September 27, 2013, from the corresponding periods in 2012.

	Three months ended		Nine months ended	
	September 27, 2013	September 28, 2012	September 27, 2013	September 28, 2012
(In thousands, except percentages)				
Gross profit	\$ 56,792	\$ 54,878	\$ 160,849	\$ 160,421
As a percentage of net revenue ("gross margin")	46%	46%	47%	45%
Increase	\$ 1,914		\$ 428	
Percent change	3%		—%	

Gross margin was 46% in both the three months ended September 27, 2013 and September 28, 2012. Gross margin in the three months ended September 27, 2013 was positively impacted by our gross margin improvement efforts and a favorable shift in the mix of product sold between the periods. These positive impacts were offset by lower margin from a multi-million dollar, long-term project that was recognized in the third quarter of 2013.

Gross margin was 47% in the nine months ended September 27, 2013, compared to 45% in the corresponding period in 2012. This 2% increase in gross margin was primarily due to the positive impact of a shift between the periods in the mix of products sold. In addition, gross margin for cable edge products in the second quarter of 2013 was higher than the corresponding period in 2012, as we sold more software licenses with these products in the second quarter of 2013. These positive impacts were partially offset by lower margin from a multi-million dollar, long-term European project that was recognized in the third quarter of 2013.

In the three and nine months ended September 27, 2013, \$4.8 million and \$14.5 million of amortization of intangibles was included in cost of revenue, compared to \$5.0 million and \$15.5 million, respectively, in the corresponding periods in 2012.

## Research and Development

Harmonic's research and development expense, and the expense as a percentage of net revenue, in the three and nine months ended September 27, 2013, as compared with the corresponding periods in 2012, are presented in the table below. Also presented are the related dollar and percentage changes in research and development expense in the three and nine months ended September 27, 2013, from the corresponding periods in 2012.

	Three months ended		Nine months ended	
	September 27, 2013	September 28, 2012	September 27, 2013	September 28, 2012
(In thousands, except percentages)				
Research and development	\$ 24,560	\$ 25,586	\$ 75,631	\$ 77,205
As a percentage of net revenue	20 %	21%	22 %	22%
Decrease	\$ (1,026)		\$ (1,574)	
Percent change	(4)%		(2)%	

The 4% decrease in research and development expense in the three months ended September 27, 2013, compared to the corresponding period in 2012, was primarily due to decreased employee compensation expense of \$0.7 million, mainly due to reduction in headcount, and decreased stock-based compensation expense of \$0.4 million. In addition, the research and development expenses in the three months ended September 28, 2012 included \$0.3 million of expenses resulting from the adjustments from our California sales and use tax audit and property tax audit for prior years. These decreases in research and development expenses in the three months ended September 27, 2013 were offset partially by increased expenses on consulting and outside engineering services of \$0.4 million, primarily related to our product development efforts.

The 2% decrease in research and development expense in the nine months ended September 27, 2013, compared to the corresponding period in 2012, was primarily the result of decreased stock-based compensation expense of \$1.5 million, net decreased employee compensation expense of \$0.9 million, mainly due to reduction in headcount, and decreased prototype expenses of \$0.7 million, primarily due to the timing of our development projects and ongoing evolution of our product

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roadmap. In addition, the research and development expenses in the three months ended September 28, 2012 included \$0.3 million of expenses resulting from the adjustments from our California sales and use tax audit and property tax audit for prior years. These decreases in research and development expenses in the nine months ended September 27, 2013 were offset partially by increased expenses on consulting and outside engineering services of \$1.9 million, primarily related to our product development efforts.

### Selling, General and Administrative

Harmonic's selling, general and administrative expense, and the expense as a percentage of net revenue, in the three and nine months ended September 27, 2013, as compared with the corresponding periods in 2012, are presented in the table below. Also presented are the related dollar and percentage change in selling, general and administrative expense in the three and nine months ended September 27, 2013, from the corresponding periods in 2012.

	Three months ended		Nine months ended	
	September 27, 2013	September 28, 2012	September 27, 2013	September 28, 2012
(In thousands, except percentages)				
Selling, general and administrative	\$ 32,527	\$ 31,132	\$ 100,220	\$ 93,862
As a percentage of net revenue	26%	26%	29%	26%
Increase	\$ 1,395		\$ 6,358	
Percent change	4%		7%	

The 4% increase in selling, general and administrative expenses in the three months ended September 27, 2013, compared to the corresponding period of 2012, was primarily the result of increased employee compensation expense of \$1.0 million, principally due to an increase in headcount, and increased depreciation of \$0.6 million related to an increased number of demo equipment.

The 7% increase in selling, general and administrative expenses in the nine months ended September 27, 2013, compared to the corresponding period of 2012, was primarily the result of increased employee compensation expense of \$4.3 million, principally due to an increase in headcount and increased bonus expense, increased legal fees of \$2.1 million, driven mainly by the legal proceedings with Avid Technology, increased depreciation of \$1.3 million related to an increased number of demo equipment, and advisory and legal costs of \$0.7 million related to shareholder activist activity in the second quarter of 2013. This increase was offset partially and principally by decreased other professional fees and outside services, mainly related to accounting and tax planning consultation services, and decreased software and license subscriptions, aggregating \$1.7 million.

### Amortization of Intangibles

Harmonic's amortization of intangible assets charged to operating expenses, and the amortization of intangible assets as a percentage of net revenue, in the three and nine months ended September 27, 2013, as compared with the corresponding periods in 2012, are presented in the table below. Also presented are the related dollar and percentage changes in amortization of intangible assets in the three and nine months ended September 27, 2013, from the corresponding periods in 2012.

	Three months ended		Nine months ended	
	September 27, 2013	September 28, 2012	September 27, 2013	September 28, 2012
(In thousands, except percentages)				
Amortization of intangibles	\$ 2,001	\$ 2,179	\$ 6,099	\$ 6,548
As a percentage of net revenue	2 %	2%	2 %	2%
Decrease	\$ (178)		\$ (449)	
Percent change	(8)%		(7)%	

The decrease in amortization of intangibles expense in the three and nine months ended September 27, 2013, compared to the corresponding periods in 2012, was primarily due to certain purchased intangible assets becoming fully amortized.

## Restructuring and Related Charges

We implemented a series of restructuring plans in 2013 to reduce costs and improve efficiencies. As a result, we recorded restructuring charges of \$0.6 million and \$1.5 million, respectively, in the three and nine months ended September 27, 2013. For the nine months ended September 27, 2013, the restructuring charges consisted of severance and benefits of \$1.2 million related to the termination of 63 employees worldwide. In addition, we wrote-down, to its estimated net realizable value, leasehold improvements and furniture related to our Milpitas warehouse by \$149,000 and wrote-down inventory to reflect \$151,000 of obsolete inventories arising from the restructuring of our Israel facilities. Of the restructuring charges in the nine months ended September 27, 2013, \$530,000 is included in "Product cost of revenue" and the remaining \$925,000 is included in "Operating expenses-restructuring and related charges" in the Condensed Consolidated Statements of Operations.

## Interest Income, Net

Interest income, net was \$47,000 and \$141,000, respectively, in the three and nine months ended September 27, 2013, as compared to \$128,000 and \$363,000, respectively, in the corresponding periods in 2012. The decrease in interest income, net was primarily due to a lower average balance of cash, cash equivalents and short-term investments during the current three and nine month periods and to a decrease in the rate of return on such investments, as compared to the corresponding periods in 2012.

## Other Income (Expense), Net

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 U.S. dollar. In the three months ended September 27, 2013, other income, net was \$0.2 million, compared to \$0.2 million of other expense, net in the same period in 2012. The increase in other income was primarily due to favorable foreign exchange impacts in the three months ended September 27, 2013, as compared to the same period in 2012.

In the nine months ended September 27, 2013, other expense, net was \$0.1 million, compared to \$0.1 million of other income, net in the corresponding period in 2012. The decrease in other income, net in the nine months ended September 27, 2013, was primarily due to a one-time \$0.2 million reimbursement, in the first quarter of 2012, of certain legal and tax claims associated with the acquisition of Omneon for which the Omneon shareholders had provided indemnification.

## Income Taxes

Harmonic's provision for (benefit from) income taxes, and provision for (benefit from) income taxes as a percentage of net revenue, in the three and nine months ended September 27, 2013, are presented in the table below. Also presented are the related dollar and percentage changes in provision for (benefit from) income taxes in the three and nine months ended September 27, 2013, from the corresponding periods in 2012.

	Three months ended		Nine months ended	
	September 27, 2013	September 28, 2012	September 27, 2013	September 28, 2012
(In thousands, except percentages)				
(Benefit from) provision for income taxes	\$ (38,953)	\$ 414	\$ (45,723)	\$ 367
As a percentage of net revenue	(32)%	—%	(13)%	—%
Increase in benefit from income taxes	\$ (39,367)		\$ (46,090)	
Percent change	(9,509)%		(12,559)%	

For the three months ended September 27, 2013, we recorded a benefit from income taxes of \$39.0 million, compared to a provision for income taxes of \$0.4 million for the same period a year ago, inclusive of discrete items. The increase in the benefit from income taxes in the three months ended September 27, 2013, compared to the same period in 2012, was primarily attributable to the net benefit related to the release of tax reserves for uncertain tax positions as a result of the expiration of the statute of limitations for our 2008 and 2009 tax years in the U.S. in the third quarter of 2013.

For the nine months ended September 27, 2013, we recorded a benefit from income taxes of \$45.7 million, compared to a provision for income taxes of \$0.4 million for the same period a year ago, inclusive of discrete items. The increase in the

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benefit from income taxes in the nine months ended September 27, 2013, compared to the same period in 2012, was primarily attributable to the net benefit related to the release of tax reserves for uncertain tax positions as a result of the expiration of the statute of limitations for our 2008 and 2009 tax years in the U.S. in the third quarter of 2013, the reinstatement of the federal research and development tax credit retroactively to January 1, 2012, and an increase in loss from continuing operations, principally in the first quarter of fiscal 2013.

## Liquidity and Capital Resources

As of September 27, 2013, our cash and cash equivalents totaled \$93.3 million, and our short-term investments totaled \$76.0 million. A substantial majority of our cash, cash equivalents and short-term investments are held in accounts in the United States. We believe that these funds are sufficient to meet the requirements of our operations for the next twelve months, as well as any stock repurchases under our present stock repurchase program.

In the event we need or desire to access funds from the short-term investments that we hold, it is possible that we may not be able to do so due to adverse market conditions. Our inability to sell all or a material portion of our short-term investments at par or our cost, or rating downgrades of issuers of these securities, could adversely affect our results of operations or financial condition. Nevertheless, we believe that our existing liquidity sources will satisfy our presently contemplated cash requirements for at least the next twelve months. However, if our expectations are incorrect, we may need to raise additional funds to fund our operations, to take advantage of unanticipated opportunities or to strengthen our financial position.

We have a bank line of credit facility with Silicon Valley Bank that provides for borrowings of up to \$10.0 million and matures on August 22, 2014. As of September 27, 2013, there were no amounts outstanding under the line of credit facility and there were no borrowings during the nine months ended September 27, 2013. As of September 27, 2013, the amount available for borrowing under this facility, net of \$0.2 million of standby letters of credit, was \$9.8 million. Future borrowings pursuant to the line would bear interest at the bank's prime rate (3.25% at September 27, 2013) or at LIBOR for the desired borrowing period (an annualized rate of 0.18% for a one month borrowing period at September 27, 2013) plus 1.75%, or 1.93%. Borrowings are not collateralized. This facility contains a financial covenant that requires us to maintain a ratio of unrestricted cash, accounts receivable and short term investments to current liabilities (less deferred revenue) of at least 1.75 to 1.00. As of September 27, 2013, the ratio under that covenant was 4.71 to 1. In the event of noncompliance by us with the covenants under the facility, including the financial covenant referenced above, Silicon Valley Bank would be entitled to exercise its remedies under the facility, including declaring all obligations immediately due and payable.

From time to time, we may consider potential acquisitions that would complement our existing product offerings, enhance our technical capabilities or expand our marketing and sales presence. Any future transaction of this nature could require potentially significant amounts of capital or could require us to issue our stock and dilute existing stockholders.

In addition, our ability to raise funds may be adversely affected by a number of factors relating to Harmonic, as well as factors beyond our control, including any global or regional economic slowdown, market uncertainty surrounding the necessary increases in the U.S. debt limit and its future debt obligations, the impact of increases in oil prices and conditions in financial markets and the industries we serve. There can be no assurance that any financing will be available on terms acceptable to us, if at all.

If, from time to time, adequate financing is not available, or is not available on acceptable terms, to us, we may not be able to take advantage of market opportunities, to develop new products or to otherwise respond to competitive pressures.

The table below sets forth selected cash flow data for the periods presented (in thousands):

	Nine months ended	
	September 27, 2013	September 28, 2012
Net cash provided by (used in):		
Operating activities	\$ 35,134	\$ 50,146
Investing activities	59,692	(28,611)
Financing activities	(98,141)	(9,386)
Effect of foreign exchange rate changes on cash	(25)	103
Net (decrease) increase in cash and cash equivalents	\$ (3,340)	\$ 12,252

### Operating Activities

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Net cash provided by operations in the nine months ended September 27, 2013 was \$35.1 million, resulting from a net income of \$39.4 million, adjusted for \$24.8 million in non-cash gains and charges, and a \$29.0 million decrease in cash associated with the net change in operating assets and liabilities. The non-cash gains and charges principally included amortization of intangible assets, stock-based compensation, depreciation, deferred income taxes, and provisions for excess and obsolete inventories, doubtful accounts, returns and discounts, and a \$14.8 million gain on disposal of discontinued operations, net of tax. The net change in operating assets and liabilities included decreases in income tax payable, accounts payable and accrued and other liabilities, which were offset partially by decreases in inventories, prepaid expenses and other assets, as well as an increase in deferred revenue. The decrease in income tax payable was primarily due to the reversal of previously recorded federal income tax reserves as a result of the expiration of statutes of limitations for our 2008 and 2009 tax years in the U.S. in the third quarter of 2013. The decrease in accrued and other liabilities reflected the settlement of the U.S. employee accrued paid time off benefit balance of \$4.5 million in April 2013, as we implemented a new employee time off program and, as a result, are no longer required to accrue for employee time off benefits in the U.S. In addition, there was no ESPP contributions as of September 27, 2013, as the plan was suspended for the second half of 2013. The decrease in inventory was primarily due to lower purchases resulting from sale of the cable access HFC business and our efforts to better optimize our supply chain.

Net cash provided by operations in the nine months ended September 28, 2012 was \$50.1 million, resulting from a net loss of \$15.7 million, adjusted for \$54.0 million in non-cash charges and a \$11.8 million increase in cash associated with operating assets and liabilities. The non-cash charges principally included amortization of intangible assets, stock-based compensation, depreciation, provisions for excess and obsolete inventories, doubtful accounts, returns and discounts, and deferred income taxes. The net change in operating assets and liabilities included decreases in accounts receivable, prepaid expenses and other assets, as well as an increase in deferred revenue, which were offset partially by decreases in accrued and other liabilities and income tax payable.

We expect that cash provided by operating activities may fluctuate in future periods as a result of a number of factors, including fluctuations in our operating results, shipment linearity, accounts receivable collections performance, inventory and supply chain management, tax benefits from stock-based compensation, and the timing and amount of compensation and other payments. In addition, in order to secure more favorable pricing from a supplier, we may make an advance payment for future inventory requirements to that supplier in the fourth quarter of 2013. Further, we usually pay our annual incentive compensation to employees in the first quarter after the applicable year.

### *Investing Activities*

Net cash provided by investing activities was \$59.7 million in the nine months ended September 27, 2013, resulting from net proceeds from the sale of discontinued operations of \$43.5 million and proceeds from the net sale and maturity of investments of \$82.2 million, partially offset by the purchase of short-term investments of \$54.8 million and capital expenditures of \$11.2 million.

Net cash used in investing activities was \$28.6 million in the nine months ended September 28, 2012, resulting from the purchase of short-term investments of \$94.1 million and capital expenditures of \$9.9 million, partially offset by proceeds from the net sale and maturity of investments of \$75.4 million.

### *Financing Activities*

Net cash used in financing activities was \$98.1 million in the nine months ended September 27, 2013, resulting from \$103.5 million of payments for the repurchase of common stock in connection with our stock repurchase program, of which approximately \$27.6 million was spent on open market transactions and approximately \$75.9 million, including related costs, was spent in our recent “modified Dutch auction” tender offer, which closed on May 24, 2013. The payments for the repurchase of common stock were offset by \$5.4 million of net proceeds from the issuance of common stock related to our equity incentive plans.

Net cash used in financing activities was \$9.4 million in the nine months ended September 28, 2012, resulting from \$14.4 million of payments for the repurchase of common stock in connection with our stock repurchase program announced in April 2012, partially offset by \$4.9 million of net proceeds from the issuance of common stock related to our equity incentive plans.

### **Off-Balance Sheet Arrangements**

We do not have any off-balance sheet arrangements as of September 27, 2013.

### **Contractual Obligations and Commitments**



As of September 27, 2013, we had approximately \$20.8 million of non-cancelable purchase order commitments. There were no other significant changes to our contractual obligations and commitments in the nine months ended September 27, 2013, from such information presented in our 2012 Form 10-K.

### ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Market risk represents the risk of loss that may impact the operating results, financial position or liquidity of Harmonic due to adverse changes in market prices and rates. Harmonic is exposed to market risk because of changes in interest rates, foreign currency exchange rates, as measured against the U.S. dollar and currencies held by Harmonic's subsidiaries, and changes in the value of financial instruments held by Harmonic.

#### Foreign Currency Exchange Risk

Harmonic has a number of international subsidiaries, the sales of which are generally denominated in U.S. dollars. In addition, Harmonic has various international branch offices that provide sales support and systems integration services. Sales denominated in foreign currencies were approximately 12% and 9% of net revenue in the first nine months of 2013 and 2012, respectively. Harmonic enters into foreign currency forward exchange contracts ("forward exchange contracts") to manage exposure related to foreign accounts receivable and reduce the effects of fluctuating exchange rates on expenses denominated in foreign currencies. Harmonic does not enter into derivative financial instruments for trading purposes. The table below presents the impact on the foreign exchange gain (loss) of a hypothetical 10% appreciation and a 10% depreciation of the USD against the forward exchange contracts as of September 27, 2013 (in thousands):

Currency - forward contracts	Position	USD Value of Net Foreign Exchange Contracts	Foreign Exchange Gain (Loss) From 10% Appreciation of USD	Foreign Exchange Gain (Loss) From 10% Depreciation of USD
EUR	Sell EUR	6,354	635	(635)
GBP	Sell GBP	4,728	473	(473)
JPY	Sell JPY	1,955	196	(196)
EUR	Buy EUR	2,414	(241)	241
GBP	Buy GBP	5,048	(505)	505
JPY	Buy JPY	1,985	(199)	199

#### Interest rate and credit risk

Exposure to market risk for changes in interest rates relates primarily to Harmonic's investment portfolio of marketable debt securities of various issuers, types and maturities and to Harmonic's borrowings, if any, under its bank line of credit facility. Harmonic does not use derivative instruments in its investment portfolio, and its investment portfolio only includes highly liquid instruments. These investments are classified as available for sale and are carried at estimated fair value, with unrealized gains and losses reported in "accumulated other comprehensive income (loss)". As of September 27, 2013, gross unrealized gains were nominal. If the credit market deteriorates, we may incur realized losses, which could adversely affect our financial condition and results of operations. There is risk that losses could be incurred if Harmonic were to sell any of its securities prior to stated maturity. As of September 27, 2013, our cash, cash equivalents and short-term investments balance was \$169.3 million. In a declining interest rate environment, as short term investments mature, reinvestment occurs at less favorable market rates. Given the short term nature of certain investments, declining interest rates would negatively impact investment income. Based on our estimates, a 10% change in interest rates would have increased or decreased the fair value of our investments by less than \$0.1 million as of September 27, 2013.

### ITEM 4. CONTROLS AND PROCEDURES

#### Evaluation of disclosure controls and procedures



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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 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.

During the quarterly period covered by this Form 10-Q, there were no changes in our internal control over financial reporting that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

## PART II

### OTHER INFORMATION

#### ITEM 1. LEGAL PROCEEDINGS

In October 2011, Avid Technology, Inc. (“Avid”) filed a complaint in the United States District Court for the District of Delaware alleging that Harmonic’s Media Grid product infringes two patents held by Avid. A jury trial on this initial complaint is scheduled for January 2014. In June 2012, Avid served a subsequent complaint alleging that Harmonic’s Spectrum product infringes one patent held by Avid. In September 2013, the U.S. Patent Trial and Appeal Board authorized an inter partes review to be instituted as to claims of the patent asserted in this second complaint. The complaints seek injunctive relief and unspecified damages.

In November 2012, FastVDO served a lawsuit on Harmonic, alleging infringement of a patent allegedly essential to the H.264 standard and that Harmonic encoders, transcoders, software and servers that use H.264 infringe their patent. The complaint seeks injunctive relief and unspecified damages.

We are subject to other litigation incidental to our business that is not believed to be material to us.

#### ITEM 1A. RISK FACTORS

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

Our revenue has been derived from sales to cable television operators, satellite and telco operators and broadcast and media companies, as well as, more recently, emerging streaming media providers. We expect that these markets will provide our revenue for the foreseeable future. Demand for our products will depend on the magnitude and timing of capital spending by customers in each of these markets for the purpose of creating, expanding or upgrading their systems.

These capital spending patterns are dependent on a variety of factors, including:

- impact of general economic conditions, actual and projected;
- access to financing;
- annual capital spending budget cycles of each of the industries we serve;
- impact of industry consolidation;
- customers suspending or reducing capital spending in anticipation of the introduction of announced new standards, such as HEVC, and products, such as CCAP;
- 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; and
- discretionary end-user customer spending patterns.

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

- weak or uncertain economic and financial conditions in domestic or one or more international markets;
- uncertainty related to development of digital video industry standards;
- delays in evaluations of new services, new standards and systems architectures by many operators;
- emphasis by operators on generating revenue from existing customers, rather than from new 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' capital spending in those geographies and, as a result, our business. In 2008, 2009 and the first half of 2010, economic conditions in many of the geographies in which we offer our products were weak, and global economic conditions and financial markets experienced a severe downturn. The downturn stemmed from a multitude of factors, including adverse credit conditions, slower economic activity, concerns about inflation and deflation, rapid changes in foreign exchange rates, increased energy costs, decreased consumer confidence, reduced corporate profits and capital spending, adverse business conditions and liquidity concerns. Although there was an increase in global economic activity in the second half of 2010 and the first half of 2011, economic growth has become sluggish in some geographies, and weak in other geographies, since the middle of 2011, as a result of the re-occurrence of many of the adverse factors listed above, as well as the European sovereign debt crisis and uncertainty in the global and many regional economies. Further, economic growth is expected to be sluggish or weak in some geographies during the balance of 2013 and perhaps beyond.

The severity or length of time that economic and financial market conditions may be weak or sluggish, whether certain or all of such adverse factors will persist, or whether a severe down turn may occur in the U.S., Europe or in other geographies, is unknown. During challenging or uncertain economic times, and particularly in tight credit markets, many customers may delay or reduce capital expenditures, which often results in lower demand for our products.

Further, we have a number of international customers to whom sales are denominated in U.S. dollars. The value of the U.S. dollar fluctuates significantly against many foreign currencies, including the Euro and other local currencies of many of our international customers. If the U.S. dollar appreciates relative to the local currencies of our customers, then the prices of our products correspondingly increase for such customers. Such an effect could adversely impact sales of our products to such customers and result in longer sales cycles, difficulties in collection of accounts receivable, slower adoption of new technologies and increased price competition in the affected countries. 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 capital spending.

In addition, industry consolidation has in the past constrained, and may in the future constrain, capital 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 capital spending of customers in the markets on which we focus, our revenue may decline.

As a result of these capital spending issues, 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 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. Pressure on average sales prices was particularly severe during previous economic downturns, including in 2008 and 2009, as equipment suppliers competed aggressively for customers' reduced capital spending. We have experienced similar pressure during the economic slowdown that began in the second half of 2011 and has continued through the third quarter of 2013.

In the digital video solutions market, we compete broadly with products from vertically integrated system suppliers, including Arris, Cisco Systems, Ericsson, and Thomson Video Networks and, in certain product lines, with a number of smaller companies. Our principal competitors for our production and playout products are Harris, Grass Valley, Miranda and Avid. Our principal competitors for edge products are Cisco Systems and Arris.

Many of our competitors are substantially larger, and have greater financial, technical, marketing and other resources than we have. Many of these large enterprises are in a better position to withstand any significant reduction in capital spending by customers in our markets. 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 that have greater financial resources 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. Reductions in prices for any of our products could materially and adversely affect our operating margins and revenue.

If any of our competitors' products or technologies were to become the industry standard, our business would 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. In addition, certain companies that have not had a large presence in the broadband communications equipment market have expanded their presence in this market through mergers and acquisitions. The continued consolidation of our competitors, including, without limitation, the Arris acquisition of Motorola Home from Google's Motorola Mobility unit, could have a significant negative impact on our business. Further, our competitors, particularly companies that offer products that are competitive with our digital video systems, may bundle their products or incorporate functionality into existing products in a manner that discourages users from purchasing our products or which may require us to lower our selling prices, resulting in lower revenue and decreased gross margins.

If we are unable to compete at the same level as we have in the past, in any of our markets, or are forced to reduce the prices of our products in order to continue to be competitive, our operating results, financial condition and cash flows would be materially and adversely affected.

***We need to develop and introduce new and enhanced products 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 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:

- 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.

We are currently developing and marketing products based on established video compression standards, such as MPEG-4 AVC/H.264, which provides significantly greater compression efficiency, thereby making more bandwidth available to operators. We are also involved in research and development efforts with respect to products utilizing new technologies, such as high efficiency video coding, or "HEVC". At the same time, we need to devote development resources to the existing MPEG-2 standard that many of our customers continue to require. There can be no assurance that these efforts will be successful in the near future, or at all, or that our competitors will not take significant market share in encoding or transcoding.

In order to attempt to meet fast paced, dynamic, evolving standards and customer requirements, we are intensifying our development efforts on products that will facilitate and enhance multi-screen applications, on media ("playout") servers utilizing integrated channel playout, and on converged cable access platform ("CCAP") products that are intended to address customers' cost reduction efforts through the use of IP technology. Many of these products are intended to integrate existing and new features and functions in response to shifts in customer demands in the relevant market. The success of these significant and costly development efforts will be predicated, in substantial part, on the timing of market adoption of the new standards on which the resulting products are based. If any of the new standards are not adopted or are adopted later than we predict or adoption occurs earlier than we are able to deliver products based on the new standards, we risk spending research and development time and dollars on products that may never achieve market acceptance or introducing products that miss the customer demand window and thus do not produce the revenue that a timely introduction would have likely produced.

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. We cannot provide assurances that we will be able to timely enter into any necessary technology development or licensing agreements on reasonable terms, or at all, and, if we fail to do so, we will likely not be able to introduce one or more of such planned products on a timely basis and perhaps be effectively prohibited from introducing such product(s).

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

***Conditions and changes in some national and global economic environments may adversely affect our business and thus our financial results.***

Adverse economic conditions in geographic markets in which we operate may harm our business. As described in the first risk factor in this section, economic conditions in some countries in which we sell products were weak in 2008, 2009, the first half of 2010, the second half of 2011, and 2012 and continued to be weak or sluggish in the first nine months of 2013. Global or regional economic slowdowns have led many of our affected customers to decrease their expenditures and caused certain of our customers to reduce or delay orders for our products. Many of our international customers have been exposed to tight credit markets and depreciating currencies, further restricting their ability to build, expand or upgrade their networks. Some customers have had difficulty in servicing or retiring existing debt, and the financial constraints on certain international customers have, in the past, required us to significantly increase our allowance for doubtful accounts. It is possible that adverse economic conditions may continue during the balance of 2013 and perhaps beyond.

Beginning in the second quarter of 2011, the possible inability of some developed countries, including Greece, Italy, Ireland, Portugal, Spain and Cyprus, or major financial institutions in those countries, to meet their debt payment obligations has put substantial strain, both direct and indirect, on economic conditions in those countries, in Europe and in many other parts of the world, including the U.S. If one or more of the Euro-zone countries were to default on its sovereign debt, or one of more of their major financial institutions were to fail, the adverse impact on European and other economies, including the U.S., could be severe. Further, the lowering of the U.S. government's credit rating in 2011 had an adverse affect on U.S. and international financial markets. Any further lowering of that credit rating, whether as a result of the U.S. government failing to timely increase its debt limit or to take steps to reduce its deficit, or the impact of the U.S. government forced reductions in spending due to sequestration, may have a material and adverse affect on the U.S. economy, and possibly the economies of most, if not all, of the other countries in the world. The impact of any of these issues, which may continue to negatively affect Europe during the balance of 2013, and perhaps beyond, could have a material adverse effect on our business, operating results, financial condition and cash flows.

During challenging economic times, and in tight credit markets, many customers may delay or reduce capital expenditures. This could result in reductions in revenue of 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 U.S., Europe or other key markets, deteriorate, we could experience a material and adverse effect on our business, results of operations, financial condition and cash flows.

***Our customer base is concentrated and we are regularly involved in relatively large transactions. The loss of one or more of our key customers, a failure to diversify our customer base, or a decrease in the number of such larger transactions could harm our business and our operating results.***

Historically, a majority of our revenue has been derived from relatively few customers, due in part to the consolidation of the ownership of cable television and direct broadcast satellite system companies. Over the last two fiscal years, revenue from our ten largest customers has remained relatively flat as a percentage of revenue. Nevertheless, sales to our ten largest customers in the first nine months of 2013 and the fiscal year ended December 31, 2012 accounted for approximately 33% and 31% of revenue, respectively. Although we are attempting to broaden our customer base by further penetrating new markets and expanding internationally, we expect to see continuing industry consolidation and customer concentration.

In the first nine months of 2013 and in the fiscal year ended December 31, 2012, revenue from Comcast accounted for approximately 12% and 11%, respectively, of our revenue. Revenue from Comcast accounted for approximately 16% of our revenue for the three months ended September 27, 2013. The loss of Comcast or any other significant customer, any material reduction in orders by Comcast or any other significant customer, or our failure to qualify our new products with a significant customer could materially and adversely affect, either long term or in a particular quarter, our operating results, financial condition and cash flows. In addition, we are involved in most quarters in one or more relatively large individual transactions, including, from time to time, projects in which we act much like a systems integrator. 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 depend significantly on our international revenue and are subject to the risks associated with international operations, including those of our contract manufacturers, which may negatively affect our operating results.***

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Revenue derived from customers outside of the U.S. in the first nine months of 2013 and the fiscal year ended December 31, 2012, each represented approximately 56% of our revenue for the respective period. Although no assurances can be given with respect to international sales growth in any one or more regions, we expect that international revenue is likely to continue to represent, from year to year, a majority, and potentially increasing, percentage of our annual revenue for the foreseeable future. Furthermore, most of our contract manufacturing occurs overseas.

Our international operations, the international operations of our contract manufacturers, 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 impact on our business and our operating results, financial condition and cash flows, whether direct or indirect, of:

- growth and stability of the economy in one or more international regions;
- fluctuations in currency exchange rates;
- changes in foreign government regulations and telecommunications standards;
- import and export license requirements, tariffs, taxes and other trade barriers;
- our significant reliance on distributors, resellers and others to sell our products and solutions, particularly in emerging market countries;
- availability of credit, particularly in emerging market countries;
- difficulty in collecting accounts receivable, especially from smaller customers and resellers, particularly in emerging market countries;
- compliance with the U.S. Foreign Corrupt Practices Act, or FCPA, and the U.K. Bribery Act, 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;
- political and economic instability, including risks related to terrorist activity, particularly in emerging market countries;
- changes in economic policies by foreign governments;
- lack of basic infrastructure, particularly in emerging market countries;
- impact of continuing social and political unrest in the Middle East and resulting regime changes; and
- impact of “saber rattling” by the North Korean government, the threat of Iran developing a nuclear capability or the risk of Syria continuing to use chemical weapons, and the risk of war resulting from such action, threat or risk.

In the past, certain of our international customers accumulated significant levels of debt and engaged in reorganizations and financial restructurings, including bankruptcy proceedings. Even where these restructurings have been completed, in some cases these customers have not been in a position to purchase new equipment at levels we had seen in the past.

While our international revenue and operating expenses have typically been denominated in U.S. dollars, fluctuations in currency exchange rates could cause our products to become relatively more expensive to customers in a particular country, leading to a reduction in revenue or profitability from sales in that country. A portion of our European business is denominated in Euros, which subjects us to increased foreign currency risk. 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 U.S. Unpredictable payment cycles could cause us to fail to meet or exceed the expectations of security analysts and investors for any given period.

Our operations outside the U.S. also require us to comply with a number of U.S. and international regulations. For example, our operations in countries outside the U.S. are subject to the FCPA and similar laws, including the U.K. Bribery Act, which prohibits companies or their agents and employees from providing anything of value to a foreign official for the

purposes of influencing any act or decision of these individuals, in their official capacity, to help obtain or retain business, direct business to any person or corporate entity, or obtain any unfair advantage. Our activities in countries outside the U.S., and particularly in emerging market countries, create the inherent risk of unauthorized payments or offers of payments by one of our employees or agents, including those companies to which we outsource certain of our business operations, which could be in violation of the FCPA or similar laws, even though these parties are not always subject to our control. 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 distributors and 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.

***Our future growth depends on market acceptance of several broadband services, on the adoption of new broadband technologies, and on several other broadband industry trends.***

Future demand for many of our products will depend significantly on the growing market acceptance of emerging broadband services, including digital video, VOD, HDTV, IPTV, mobile video services (particularly streaming to tablet computers and other mobile devices), and very high-speed data services. The market demand for such emerging services is rapidly growing, with many de facto or proprietary systems in use, which increases the challenge of delivering interoperable products intended to address the requirements of such services.

The effective delivery of these services will depend, in part, on a variety of new network architectures, standards and devices, such as:

- video compression standards, such as high efficiency video coding (“HEVC”);
- the converged cable access platform (“CCAP”);
- fiber to the premises, or FTTP, networks designed to facilitate the delivery of video services by telcos;
- the greater use of protocols such as IP;
- the further adoption of bandwidth-optimization techniques, such as switched digital video and DOCSIS 3.0; and
- the introduction of new consumer devices, such as advanced set-top boxes, personal video recorders (or PVRs), iPads and other tablet computers, and a variety of smartphone mobile devices.

If adoption of these emerging services and/or technologies is not as widespread or as rapid as we expect, or if we are unable to develop new products based on these technologies on a timely basis, our operating results, financial condition and cash flows could be materially and adversely affected.

Furthermore, other technological, industry and regulatory trends and requirements will affect the growth of our business. These trends and requirements include the following:

- convergence, or the need of network operators to deliver a package of video, voice and data services to consumers, including mobile delivery options;
- the increasing availability of traditional broadcast video content on the Internet;
- adoption of high bandwidth wireless technology, such as 4 G-LTE;
- the use of digital video by businesses, governments and educational institutions;
- efforts by regulators and governments in the U.S. and abroad to encourage the adoption of broadband and digital technologies;
- consumer interest in Ultra HDTV;
- the need to develop partnerships with other companies involved in the new broadband services;



- the extent and nature of regulatory attitudes towards such issues 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 litigation 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.

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

Many components, subassemblies and modules necessary for the manufacture or integration of our products are obtained from a sole supplier or a limited group of suppliers. For example, we depend on a small public company for certain video encoding chips which are incorporated into several products. Our reliance on sole or limited suppliers, particularly foreign suppliers, and our increasing reliance on contractors for manufacturing and installation, 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, and timely installation of products.

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. 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., which manufactures our products at its facilities in Malaysia, acts as our primary contract manufacturer, and currently provides us with a substantial majority of the products that we purchase from our contract manufacturers. Most of the products manufactured by our Israeli operations are outsourced to another third party manufacturer in Israel. 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 until October 2014.

Difficulties in managing relationships with any of our current contract manufacturers, particularly Plexus, that manufacture our products off-shore, could impede our ability to meet our customers' requirements and adversely affect our operating results. An inability to obtain adequate and timely deliveries, or any other circumstance that would require us to seek alternative sources of supply, could 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. We attempt to limit this risk by maintaining safety stocks of certain components, subassemblies and modules. Increases, from time to time, in demand on our suppliers and subcontractors from other parties have caused sporadic shortages of certain components and products. In response, we have increased our inventories of certain components and products and expedited shipments of our products when necessary, which has increased our costs. As a result of this investment in inventories, we have in the past been, and in the future may be, subject to risk of excessive or obsolete inventories, which, despite our use of a demand order fulfillment model, could materially and adversely affect our business, operating results, financial position and cash flows. In this regard, our gross margins and operating results have, in the past, been adversely affected by significant excess and obsolete inventory charges.

Our ability to meet customer demand depends significantly on the availability of components and other materials, as well as the ability of our contract manufacturers to scale their production, and because we purchase several key components, subassemblies and modules used in the manufacture or integration of our products from sole or limited sources, the risk of not meeting customer demand is increased. Our ability to meet customer requirements depends in part on our ability to obtain sufficient volumes of these materials in a timely fashion. Increases in demand on our suppliers and subcontractors from other customers may cause sporadic shortages of certain components and products. In order to be able to respond to these issues, we have increased our inventories of certain components and products, particularly for our customers that order significant dollar amounts of our products, and expedited shipments of components, subassemblies and modules when necessary, which has increased our costs and could increase our risk of holding obsolete or excessive inventory. We also employ a demand order



fulfillment model which is designed to reduce the effects of increases or decreases in demand for any products. Nevertheless, we may be unable to respond to customer demand that increases more quickly than we expect. If we fail to meet customers' supply expectations, our revenue would be adversely affected and we may lose business, which could materially and adversely affect 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.***

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 capital spending of our customers in the U.S., Europe and in other foreign markets, due in part to access to financing for capital spending;
- economic and financial conditions specific to each of the cable, satellite and telco, and broadcast and media industries;
- changes in market demand for our products or our customers' services or products;
- the timing and amount of orders, especially from our significant customers;
- general economic and financial markets conditions, whether global or in certain geographic areas;
- the mix of our products sold and the effect it has on gross margins;
- the timing of revenue recognition from solution contracts, which may span several quarters;
- changes in the number and size of relatively large individual transactions and projects in which we are involved from quarter to quarter;
- the timing of revenue recognition on sales arrangements;
- the timing of acquisitions and dispositions by us and the financial impact of such transactions;
- 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;
- lack of predictability in our revenue cycles;
- the level and mix of our domestic and international revenue;
- new product introductions by our competitors or by us;
- changes in domestic and international regulatory environments affecting our business;
- market acceptance of our products, particularly our new products;
- 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;
- impairment of our goodwill and intangibles;
- the impact of litigation, such as related litigation expenses and settlement costs;
- write-downs of inventory and investments;
- whether the research and development tax is renewed for 2014 and beyond;

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- 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;
- 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; and
- the timing of our development of custom products and software.

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 the 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.

### ***Fluctuations in our future effective tax rates, or the outcome of tax audits, 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. Accordingly, we have performed such evaluation, from time to time, based on historical evidence, trends in profitability, expectations of future taxable income and implemented tax planning strategies. We continue to maintain a valuation allowance for certain foreign and California deferred tax assets. The realization of our deferred tax assets is dependent upon the generation of sufficient U.S. and foreign taxable income in the future to offset these assets. We may not have sufficient taxable income in the future to determine that we will be able to realize some significant portion of our deferred tax assets. As a result, an additional valuation allowance against our deferred tax assets may be required in the period in which such a determination is made, and our operating results could be materially and adversely impacted in the period of adjustment.

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 U.S. 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 is 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 short fall is determined would result. Either such charge to expense could have a material and adverse effect on our operating results for the applicable period.

In addition, recent statements from the Internal Revenue Service have indicated their intent to seek greater disclosure by companies of their reserves for uncertain tax positions.

Our 2008, 2009 and 2010 U.S. corporate income tax returns were audited by the Internal Revenue Service ("IRS") and a subsidiary of the Company was under audit by the Israel tax authority for the years 2007 through 2010. However, the statute of limitations for the audit of our 2008 and 2009 tax years by the IRS expired during the third quarter, effectively ending the IRS audits for those years. As a result, we recorded a discrete net tax benefit of \$38.4 million related to the release of tax reserves for those tax years. Further, the audits by the Israel tax authority for our 2007 through 2010 tax years ended in the third quarter, and we reached a settlement with the Israel tax authority that did not involve any material adjustments. If, upon the conclusion of the remaining IRS audit for 2010 and the expiration of the related statute of limitations, the ultimate determination of taxes

owed in the U.S. is for an amount in excess of the tax provision we recorded in 2010, our overall tax expense, effective tax rate, operating results and cash flow could be materially and adversely impacted in the period of adjustment.

We requested an Advanced Pricing Agreement ("APA") with the IRS regarding our non-exclusive license of our intellectual property rights to one of our international subsidiaries in 2008 and our sharing of research and development costs with our international subsidiaries. We completed the same non-exclusive license of Omneon intellectual property in the fourth quarter of 2010, upon the closing of the Omneon acquisition, but did not request an APA with the IRS concerning the Omneon license. In 2012, we withdrew our request for the APA with the IRS with respect to our initial 2008 non-exclusive license of intellectual property. As noted above, although the statutes of limitations with respect to our 2008 and 2009 tax returns have expired, our U.S. corporate tax return for 2010 remains subject to examination by the IRS. If the IRS, in connection with such audit or otherwise, were to disagree with our tax treatment of the Omneon license, we may be required to take a charge to expense related to such disagreement in excess of the tax provision we recorded for 2010, which could have a material and adverse effect on our operating results and cash flow in the period in which the charge is taken.

We continue to be in the process of expanding our international operations and staffing to better support our expansion into international markets. This expansion involves the implementation of an international structure that includes, among other things, an international support center in Europe, a research and development cost sharing arrangement, and certain licenses and other contractual arrangements between us and our wholly-owned domestic and foreign subsidiaries. As a result of these changes, we anticipate that our consolidated pre-tax income will be subject to foreign tax at relatively lower tax rates when compared to the U.S. federal statutory tax rate and, as a consequence, our effective income tax rate is expected to be lower than the U.S. federal statutory rate.

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 income tax rate will be less than the U.S. federal statutory rate in future periods.

***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. 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.

In October 2011, Avid Technology, Inc. filed a complaint in the United States District Court for the District of Delaware, alleging that our Media Grid product infringes two patents held by Avid. A jury trial on the initial complaint is scheduled for January 2014. In June 2012, Avid served a subsequent complaint, alleging that Harmonic's Spectrum product infringes one patent held by Avid. The complaints seek injunctive relief and unspecified damages. At this time, we cannot predict the outcome of either of these matters. An unfavorable outcome of either of these matters, or any other intellectual property infringement action brought against us, could materially and adversely affect our business, operating results, financial position 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.***

In addition to the litigation discussed elsewhere herein, 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.

As an example, from time to time, we have received letters from several of our customers, notifying us that the customer intends to exercise its indemnification rights in agreements between the customer and us with respect to a patent infringement claim brought against the customer that may cover products sold to the customer by Harmonic or its acquired companies. Many of these notices arise out of a spate of patent infringement claims, and related litigation, brought by the Multimedia Patent Trust (“MPT”), an affiliate of Alcatel-Lucent, against end-users of products used in the industries we address. Any such litigation by MPT may be very expensive to defend, and there could be significant financial exposure to each of such customers if MPT is successful in such litigation or in extracting a settlement of such claims. Few of the notices we have received from customers with respect to their indemnification rights related to the MPT litigation have demanded that we provide a defense for the customer against such claims or litigation or currently reimburse the customer for its costs of such defense. We cannot predict whether the claims by MPT are legitimate or actually cover any of our products, whether the claims are likely to result in a settlement or judgment against a customer defendant (although some such settlements have occurred), or whether we would have liability under our indemnification obligations for defense or settlement costs or damages paid by any customer defendant. In the event one or more of our other customers makes a written indemnification claim against us with respect to a specific amount of defense or settlement costs or damages it suffers as a result of such MPT claims or litigation, we may be obligated to pay amounts to such customer(s) that, either individually or in the aggregate, could materially and adversely affect our operating results, financial condition and cash flows in the quarter such amounts are paid.

***We rely on distributors, 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 distributors, value-added resellers, or 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. Further, our reliance on VARs and systems integrators that specialize in video delivery solutions, products and services has increased since the completion of our acquisition of Omneon in 2010. 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 distributor, 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 distributor, VAR or systems integrator customers to favor their products or, in effect, to prevent or reduce sales of our products. Any of our distributor, VAR or systems integrator customers may independently choose not to purchase or offer our products. Many of our distributors, 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, 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 distributor, VAR and systems integrator customers could likewise materially and adversely affect our business, operating results, financial condition and cash flows.

***Changes in telecommunications legislation and regulations could harm our prospects and future revenue.***

Changes in telecommunications legislation and regulations in the U.S. and other countries could affect the revenue from our products. In particular, regulations dealing with access by competitors to the networks of incumbent operators could slow or stop additional construction or expansion by these operators. 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.

Federal laws will likely impact the demand for product features by our customers. These laws include the Commercial Advertisement Loudness Mitigation Act and the Twenty-First Century Communications and Video Accessibility Act of 2010,

which deals with accessibility for the hearing and visually impaired. While we have added some features to our products in response to these laws, others (driven by the regulatory process related to the laws) may require feature development on a schedule which may be inflexible and difficult to meet. This could result in our inability to develop other product features necessary for particular transactions at the same time, and thus we could lose some business and the related revenue.

***The ongoing threat of terrorism, social and political instability and tensions among countries have created uncertainty and may harm our business.***

Conditions in the U.S. and global economies improved from mid-2010 to mid-2011, but have remained uncertain since mid-2011. The terrorist attacks in the U.S. in 2001, subsequent and continuing attempted and accomplished terrorist attacks in other parts of the world, and the threat of future attacks have created many economic and political uncertainties that have adversely impacted the global economy and, as a result, have adversely affected our business. The long-term effects of such attacks, the threat of future attacks, the ongoing war on terrorism, recent increased social and political instability and regime changes, particularly in the Middle East, the war in Syria and the U.S. response, and tensions among countries, including between Iran and Israel and the U.S., and North Korea and South Korea and the U.S., on our business and the global economy remain uncertain. Such uncertainty has increased the price of certain commodities, particularly oil, which could have an indirect material and adverse impact on the cost of manufacturing and shipping our products. Moreover, the potential for future terrorist attacks, including hacking attacks on government and commercial computer systems, and regional wars, increases in such social and political instability, and such tensions, particularly if Israel or any other country were to attack any of Iran's nuclear development facilities or North Korea were to attack South Korea or any other country, make it difficult to estimate the long-term stability and strength of the U.S. and other economies, particularly those in certain emerging market countries and certain European countries, and the impact of resulting economic conditions on our business.

***We face risks associated with having important facilities and resources located in Israel.***

We maintain facilities in two locations in Israel with a total of 197 employees, or approximately 19% of our worldwide workforce, as of September 30, 2013. Our employees in Israel engage in a number of activities, including research and development, the development of, and supply chain management for, certain product lines, and sales activities.

We are directly influenced 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, reluctance to travel within, or to or from, 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 15% of those employees were called for active military duty in 2012. In the event that more employees are called to active duty, certain of our research and development activities may be adversely affected, including significantly delayed. In addition, 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 any other cause, could significantly harm our business. Current or future tensions in the Middle East could materially and adversely affect our business, operating results, financial condition and cash flows.

***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. In 2010, we completed the acquisition of Omneon, a privately-held company that provides broadcast video server and storage systems used for video production and play-to-air workflows. It is possible that we will make additional acquisitions, from time to time, in the future.

We may face challenges as a result of these acquisition activities, because such activities entail numerous risks, including:

- the possibility that an acquisition may not close because of, among other things, a failure of a party to satisfy the conditions to closing or an acquisition target entering into an alternative transaction;
- unanticipated costs or delays associated with the acquisition;
- difficulties in the assimilation and integration of acquired operations, technologies and/or products;
- 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;

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- difficulties in integrating acquired companies' systems, controls, policies and procedures, particularly to comply with the internal control over financial reporting requirements of the Sarbanes-Oxley Act of 2002;
- adverse effects on new and existing business relationships with suppliers, contract manufacturers and customers;
- channel conflicts and disputes between distributors and other partners of ours and the acquired companies;
- potential difficulties in completing projects associated with in-process research and development;
- risks associated with entering markets in which we may have no or limited prior experience;
- the potential loss of key employees of acquired businesses;
- difficulties in the assimilation of different corporate cultures and practices;
- difficulties in bringing acquired products and businesses into compliance with applicable legal requirements in jurisdictions in which we operate and sell products;
- substantial charges for acquisition costs, which are required to be expensed under accounting guidance on business combinations;
- substantial charges 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;
- delays in realizing, or failure to realize, the anticipated benefits of an acquisition or disposal; and
- the possibility that any acquisition or disposal 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, or both. 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.

As of September 27, 2013, we have approximately \$198 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. Any such divestiture could adversely affect our continuing business and expenses, revenues, results of operations, cash flows and financial position.

On February 18, 2013, we entered into an Asset Purchase Agreement with Aurora Networks pursuant to which we agreed to sell our cable access HFC business (the “Business”) for \$46 million in cash. This disposition of the Business closed on March 5, 2013. Revenue from this Business in 2012 was approximately \$53 million, which represented approximately 10% of our revenue for the year.

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 sale of the Business will reduce future annual potential revenue, likely in the range of \$50 million to \$55 million, future annual expenses, including cost of sales, likely in the range of \$45 million to \$50 million, and cash flow. With this reduction in revenue and cash flow, the sale could also have an adverse affect on our continuing business, results of operations and financial position.

***Broadband communications markets are characterized by rapid technological change.***

Broadband communications markets are subject to rapid changes, making it difficult to accurately predict the markets’ future growth rates, sizes or technological directions. In view of the evolving nature of these markets, it is possible that pay TV service providers, broadcasters, content providers and other video production and delivery companies will decide to adopt alternative architectures, new business models, and/or technologies that are incompatible with our current or future products. In addition, successful new entrants into the media markets, both domestic and international, may impact existing industry business models, resulting in decreased spending by our existing customer base. Finally, decisions by customers to adopt new technologies or products are often delayed by extensive evaluation and qualification processes, which can result in delays in revenue from current and new products. If we are unable to design, develop, manufacture and sell products that incorporate, or are compatible with, these new architectures or technologies, our business, operating results, financial condition and cash flows would be materially and adversely affected.

***Our operating results could be adversely affected by natural disasters affecting the Company or impacting our third-party manufacturers, suppliers, distributors or customers.***

Our headquarters and the majority of our operations are located in California, which is prone to earthquakes. In the event that any of our business centers are adversely affected by an earthquake 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 manufacturers for the production of most 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 third-party manufacturer and several of their and our suppliers and our distributors have operations in locations that are subject to natural disasters, such as severe weather, tsunamis, floods and earthquakes, which could disrupt their operations and, in turn, our operations.

In addition, if there is a major earthquake or other 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, a major earthquake or other 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.

***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, whether in the context of an acquisition or otherwise. 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, 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 and ownership of inventions, we generally do not have employment contracts or non-competition agreements with any of 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 could be negatively affected as a result of a future proxy contest and the actions of activist stockholders.***

In April 2013, we received a notice from Voce Capital Partners LP and certain of its affiliates (collectively, “Voce”) that announced their intent to nominate three individuals for election to our Board of Directors-at our 2013 Annual Meeting of Stockholders. On July 9, 2013, Voce announced that it would not, in fact, nominate any individuals for election at our 2013 Annual Meeting of Stockholders, but would continue to “monitor” the Company. If a proxy contest with respect to election of our directors is initiated in the future, by Voce or any other activist stockholder, or if other activist stockholder activities occur, our business could be adversely affected because:

- responding to a proxy contest and other actions by activist stockholders can be costly and time-consuming, disrupting our operations and diverting the attention of management and our employees;
- perceived uncertainties as to our future direction caused by activist activities may result in the loss of potential business opportunities, and may make it more difficult to attract and retain qualified personnel and business partners; and
- if individuals are elected to our Board of Directors with a specific agenda, it may adversely affect our ability to effectively and timely implement our strategic plans.

***We may not be able to effectively manage our operations.***

In recent years, the Company has grown significantly, principally through acquisitions, and expanded our international operations. Upon the closing of our acquisition of Scopus in 2009, we added 221 employees, most of whom are based in Israel. Upon the closing of the acquisition of Omneon in 2010, we added 286 employees, most of whom are based in the U.S.

As of September 27, 2013, we have 484 employees in our international operations, representing approximately 46% of our worldwide workforce. Our ability to manage our business effectively in the future, including with respect to any future growth, the integration of recent and any future acquisitions, 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 our operational, financial and management systems. There can be no assurances that we will be successful in any of those regards, 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.

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

At September 27, 2013, we held 51 issued U.S. patents and 24 issued foreign patents, and have a number of 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 believe that patents and patent applications are not currently significant to our business, and we do not rely on our patent portfolio to give us a competitive advantage over others in our industry. We believe that the future success of our business will depend on our ability to translate the technological expertise and innovation of our personnel into new and enhanced products. We generally 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.

Recently reported hacking attacks on government and commercial computer systems, particularly attacks sponsored by foreign governments or enterprises, raise the risks that such an attack may compromise, in a material respect, one or more of our computer systems and permit hackers access to our proprietary information and data. If such an attack does, in fact, allow access to or theft of our proprietary information or data, our business, operating results, financial condition and cash flows could be materially and adversely affected.

***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.

***We cannot assure you that our stock repurchase program will result in repurchases of our common stock or enhance long-term stockholder value, and repurchases, if any, could affect our stock price and increase its volatility and will diminish our cash reserves.***

In April 2013, our Board of Directors approved a modified “Dutch Auction” tender offer to repurchase up to \$100 million of shares of our common stock. The tender offer expired on May 24, 2013, and resulted in our repurchasing approximately 12 million shares of our common stock, at \$6.25 per share, for an aggregate purchase price of approximately \$75 million.

Now that the tender offer is completed, we have resumed purchases under our stock repurchase program. Under the program, we are authorized to repurchase up to \$220 million of our common stock in open market transactions or pursuant to any trading plan that may be adopted in accordance with Rule 10b5-1 of the Exchange Act. As of September 27, 2013, we had purchased an aggregate of \$125.2 million of our common stock under this program, including under the tender offer. The timing and actual number of shares repurchased, if any, will depend on a variety of factors, including the price and availability of our shares, trading volume, general market conditions and projected cash positions. The program was suspended prior to the announcement of the tender offer, and may be suspended or discontinued at any time in the future without prior notice.

Repurchases pursuant to our tender offer and our stock repurchase program could affect our stock price and increase its volatility and will reduce the market liquidity for our stock. Additionally, these repurchases will diminish our cash reserves, which could impact our ability to pursue possible future strategic opportunities and acquisitions and would result in lower overall returns on our cash balances. There can be no assurance that any stock repurchases will, in fact, occur, or, if they occur, that they will enhance stockholder value because the market price of our common stock may decline below the levels at which we repurchased shares of stock. Although our tender offer and our stock repurchase program are intended to enhance long-term stockholder value, short-term stock price fluctuations could reduce the effectiveness of these repurchases.

***We are subject to import and export controls that could subject us to liability or impair our ability to compete in international markets.***

Our products are subject to U.S. export controls, and may be exported outside the U.S. only with the required level of export license or through an export license exception, in most cases because we incorporate encryption technology into our products. 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. Changes in our products or changes in export and import regulations may delay the introduction of our products in international markets, prevent our customers with international operations from deploying our products throughout their global systems or, in some cases, prevent the export or import of our products to certain countries altogether. Any change in export or import regulations or related legislation, shift in approach to the enforcement or scope of existing regulations, or change in the countries, persons or technologies targeted by such regulations, could result in decreased use of our products by, or in our decreased ability to export or sell our products to, existing or potential international customers.

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.

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

We have been engaged in the design, manufacture and sale of a variety of video products and system solutions since inception, which has required, and will continue to require, significant research and development expenditures.

We believe that our existing cash and short-term investments of approximately \$169 million, at September 27, 2013, even as it may be reduced through possible future repurchases of our common stock under the stock repurchase program discussed on page 49, will satisfy our cash requirements for at least the next twelve 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.

In addition, we may, in the future, consider potential acquisitions that would complement our existing product offerings, enhance our technical capabilities, or expand our marketing and sales presence. Any future transaction of this nature could require potentially significant amounts of capital to finance the acquisition and related expenses, as well as to integrate operations following the acquisition, and could require us to issue our stock and dilute existing stockholders.

We may raise additional financing through public or private equity 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. 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.

***Negative conditions in the global credit and financial markets may impair the liquidity or the value of a portion of our investment portfolio.***

Negative conditions in the global credit and financial markets have adversely affected the liquidity of certain of our investments in the past. In the event we need or desire to access funds from the short-term investments that we hold, it is possible that we may not be able to do so due to market conditions. If a buyer is found, but is unwilling to purchase the investments at par or our cost, we may incur a loss. Further, rating downgrades of the security issuer or the third parties insuring such investments may require us to adjust the carrying value of these investments through an impairment charge. Our inability to sell all or some of our short-term investments at par or our cost, or rating downgrades of issuers or insurers of these securities, could materially and adversely affect our operating results, financial condition and cash flows.

In addition, we invest our cash, cash equivalents and short-term investments in a variety of investment vehicles, in a number of countries, with, and in the custody of, financial institutions with high credit ratings. While our investment policy and strategy attempt to manage interest rate risk, limit credit risk, and ensure we only invest in what we view as very high-quality securities, the outlook for our investment holdings is dependent on general economic conditions, interest rate trends and volatility in the financial marketplace, both internationally and in the U.S., which can all affect, directly and indirectly, the income that we receive, the value of our investments and our ability to sell those investments.

We believe that our investment securities are carried at fair value. However, over time the economic and market environment in which we conduct business may provide us with additional insight regarding the fair value of certain securities in our portfolio that could change our judgment regarding impairment of those securities. This could result in unrealized or realized losses in our securities, relating to other than temporary declines, being charged against income. Given current market conditions, particularly in Europe, there is continuing risk that declines in fair value of our portfolio securities may occur and impairments may be charged to income in future periods, which could materially and adversely affect our operating results, financial position and cash flows.

***If demand for our products increases more quickly than we expect, we may be unable to meet our customers' requirements.***

If demand for our products increases, the difficulty of accurately forecasting and meeting our customers' requirements will increase. Forecasting to meet customers' needs and effectively managing our supply chain is particularly difficult in connection with newer products. Our ability to meet customer demand depends significantly on the availability of components and other materials, as well as the ability of our contract manufacturers to scale their production. Furthermore, we purchase several key components, subassemblies and modules used in the manufacture or integration of our products from sole or limited sources. Our ability to meet customer requirements depends in part on our ability to obtain sufficient volumes of these materials in a timely fashion. Increases in demand on our suppliers and subcontractors from other customers may cause sporadic shortages of certain components and products.

In order to be able to respond to these issues, we have increased our inventories of certain components and products, particularly for our customers that order significant dollar amounts of our products, and expedited shipments of our products when necessary. These actions have increased our costs and could also increase our risk of holding obsolete or excessive inventory. We also employ a demand order fulfillment model which is designed to reduce the effects of increases or decreases in demand for any products. Nevertheless, we may be unable to respond to customer demand that increases more quickly than we expect. 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.

***We are subject to various laws and regulations related to the environment and potential climate change that could impose substantial costs upon us and may adversely affect our business, operating results, cash flows and financial condition.***

Our operations are regulated under various federal, state, local and international laws relating to the environment and potential climate change, including those governing the management, disposal and labeling of hazardous substances and wastes and the cleanup of contaminated sites. We could incur costs and fines, third-party property damage or personal injury claims, or could be required to incur substantial investigation or remediation costs, if we were to violate or become liable under environmental or other similar laws. The ultimate costs to us under these laws and the timing of these costs are difficult to predict.

We also face increasing complexity in our product design as we adjust to new and future requirements relating to the presence of certain substances in electronic products and making producers of those products financially responsible for the collection, treatment, recycling, and disposal of certain products. For example, the European Parliament and the Council of the European Union have enacted the Waste Electrical and Electronic Equipment (WEEE) directive, which regulates the collection, recovery and recycling of waste from electrical and electronic products, and the Restriction on the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS) directive, which bans the use of certain hazardous materials, including lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls (PBBs) and polybrominated diphenyl ethers (PBDEs) that exceed certain specified levels. Legislation similar to RoHS and WEEE has been or may be enacted in other jurisdictions, including in the U.S., Japan and China. 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 also 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 will 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.

***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 of Directors. 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 of Directors;
- controlling the procedures for conduct and scheduling of Board of Directors and stockholder meetings; and
- providing the Board of Directors with the express power to postpone previously scheduled annual meetings and to cancel previously scheduled special meetings.

These provisions, alone or together, 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;
- 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;
- our recent completion of a tender offer in which we repurchased over 10% of our outstanding shares and any future repurchases under our stock repurchase program;
- 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 Stock 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.

***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 will be required to issue substantial amounts of additional shares upon exercise of stock options, including under our Employee Stock Purchase Plan, or grants of restricted stock units. 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. If one or more of the analysts who do cover us downgrade our stock, our stock price may decline. If one or more of these analysts cease coverage of us, we could lose visibility in the market, which in turn could cause the liquidity of our stock and our stock price to decline.

***We are exposed to additional costs and risks associated with complying with increasing regulation of corporate governance and disclosure standards.***

We have spent, and expect to continue to spend, a substantial amount of management time and costly external resources to comply with changes in laws, regulations and standards relating to corporate governance and public disclosure, including the Sarbanes-Oxley Act of 2002, SEC regulations, the NASDAQ Stock Market rules and applicable provisions of the Dodd-Frank Act of 2010. In particular, Section 404 of the Sarbanes-Oxley Act requires management's annual review and evaluation of our internal control over financial reporting and attestation of the effectiveness of our internal control over financial reporting by our independent registered public accounting firm in connection with the filing of our Form 10-K for each fiscal year. We have documented and tested our internal control systems and procedures and have made improvements in order for us to comply with the requirements of Section 404. This process has required us to hire additional personnel and outside advisory services and has resulted in significant additional expenses.

While our management's assessment of our internal control over financial reporting resulted in our conclusion that, as of December 31, 2012, our internal control over financial reporting was effective, and our independent registered public accounting firm has attested that our internal control over financial reporting was effective in all material respects as of December 31, 2012, we cannot predict the outcome of our testing and that of our independent registered public accounting firm in future periods. 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 the price of our stock will likely decrease in the short term, until we correct such problems, and perhaps in the long term, as well.

In addition, all public companies are subject to new requirements under the Dodd-Frank Act of 2010 that will require us to diligence, disclose, and report whether or not our products contain conflict minerals. The implementation of these new requirements could adversely affect the sourcing, availability, and pricing of the materials used in the manufacture of semiconductor devices or other components used in our products. In addition, we will incur 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.

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

On April 24, 2012, the Board of Directors approved a stock repurchase program that provided for the repurchase of up to \$25 million of the Company's outstanding common stock during the term of the program. On January 28, 2013, our Board of Directors approved a \$75 million increase to the existing \$25 million stock repurchase program. On February 19, 2013, the Board approved a further \$35 million increase to the program upon the closing of a sale of the Company's cable access HFC business. On July 16, 2013, the Board approved a further \$85 million increase to the program, resulting in an aggregate of \$220 million in purchases approved under the program.

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Under the program, we are authorized to repurchase shares of common stock in open market transactions or pursuant to any trading plan that may be adopted in accordance with Rule 10b5-1 of the Exchange Act. The timing and actual number of shares repurchased, if any, will depend on a variety of factors, including the price and availability of our shares, trading volume and general market conditions. The program may be suspended or discontinued at any time without prior notice.

As of September 27, 2013, the Company has repurchased approximately \$125.2 million of its common stock, approximately \$50.2 million of which was spent on open market transactions under the stock repurchase program and approximately \$75 million of which was spent in the Company's recent "modified Dutch auction" tender offer, which closed on May 24, 2013. In the tender offer, the Company repurchased approximately 12.0 million shares at \$6.25 per share. The total cost of the stock repurchase under the tender offer was approximately \$76 million, including \$1.0 million of fees and expenses. On June 16, 2013, our Board approved the reinitiating of the Company's repurchase program, which was suspended during the tender offer.

The table below sets forth the stock repurchase activity for the quarter ended September 27, 2013 (in thousands, except per share amounts):

Period	Total Number of Shares Repurchased	Average Price Paid per Share	Total Number of Shares Repurchased as Part of Publicly Announced Plan or Program	Approximate Dollar Value of Shares that May Yet be Purchased Under the Plan or Program
June 29, 2013 - July 26, 2013	303	\$ 6.38	303	\$ 100,571
July 27, 2013 - August 23, 2013	280	\$ 7.75	280	\$ 98,402
August 24, 2013 - September 27, 2013	482	\$ 7.44	482	\$ 94,815
	<u>1,065</u>	<u>\$ 7.22</u>	<u>1,065</u>	

**ITEM 3. DEFAULTS UPON SENIOR SECURITIES**

None.

**ITEM 4. MINE SAFETY DISCLOSURES**

Not applicable.

**ITEM 5. OTHER INFORMATION**

None.

**ITEM 6. EXHIBITS**

<b><u>Exhibit Number</u></b>	<b><u>Exhibit Index</u></b>
3.2	Amended and Restated Bylaws of Harmonic Inc.
10.1	Amendment No. 2 to Loan Agreement between Harmonic Inc. and Silicon Valley Bank
31.1 <sup>(1)</sup>	Section 302 Certification of Principal Executive Officer
31.2 <sup>(1)</sup>	Section 302 Certification of Principal Financial Officer
32.1 <sup>(2)</sup>	Section 906 Certification of Principal Executive Officer
32.2 <sup>(2)</sup>	Section 906 Certification of Principal Financial Officer
101	<p>The following materials from Registrant's Quarterly Report on Form 10-Q for the quarter ended September 27, 2013, formatted in Extensible Business Reporting Language (XBRL) includes:</p> <p>(i) Condensed Consolidated Balance Sheets at September 27, 2013 and December 31, 2012, (ii) Condensed Consolidated Statements of Operations for the three and nine months ended September 27, 2013 and September 28, 2012, (iii) Condensed Consolidated Statements of Comprehensive Income (Loss) for the three and nine months ended September 27, 2013 and September 28, 2012, (iv) Condensed Consolidated Statements of Cash Flows for the nine months ended September 27, 2013 and September 28, 2012, and (v) Notes to Condensed Consolidated Financial Statements.</p>
(1)	Filed herewith
(2)	Furnished herewith

## SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

HARMONIC INC.

By: /s/ Carolyn V. Aver

Carolyn V. Aver

Chief Financial Officer

(Principal Financial and Accounting Officer)

Date: November 4, 2013



**AMENDED AND RESTATED**  
**BYLAWS**  
**OF**  
**HARMONIC INC.**  
**(a Delaware corporation)**

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**AMENDED AND RESTATED**

**BYLAWS**

**OF**

**HARMONIC INC.  
(a Delaware corporation)**

**ARTICLE I**

**CORPORATE OFFICES**

**1.1 REGISTERED OFFICE**

The registered office of the corporation shall be fixed in the certificate of incorporation of the corporation.

**1.2 OTHER OFFICES**

The board of directors may at any time establish branch or subordinate offices at any place or places where the corporation is qualified to do business.

**ARTICLE II**

**MEETINGS OF STOCKHOLDERS**

**2.1 PLACE OF MEETINGS**

Meetings of stockholders shall be held at any place within or outside the State of Delaware designated by the board of directors. In the absence of any such designation, stockholders' meetings shall be held at the principal executive office of the corporation.

**2.2 ANNUAL MEETING**

The annual meeting of stockholders shall be held each year on a date and at a time designated by the board of directors. In the absence of such designation, the annual meeting of stockholders shall be held on the first Tuesday in May in each year at 9:00 a.m. However, if such day falls on a legal holiday, then the meeting shall be held at the same time and place on the next succeeding full business day. At the meeting, directors shall be elected, and any other proper business may be transacted.

**2.3 SPECIAL MEETING**

A special meeting of the stockholders may be called at any time by the board of directors, the chairman of the board of directors, or by the president, but such special meetings may not be called by any other person or persons except as otherwise required by General Corporation Law of

Delaware or Section 3.4 herein. Only such business shall be considered at a special meeting of stockholders as shall have been stated in the notice for such meeting.

## 2.4 NOTICE OF STOCKHOLDERS' MEETINGS

All notices of meetings of stockholders shall be sent or otherwise given in accordance with Section 2.5 of these bylaws not less than ten (10) nor more than sixty (60) days before the date of the meeting. The notice shall specify the place, date and hour of the meeting and (i) in the case of a special meeting, the purpose or purposes for which the meeting is called (no business other than that specified in the notice may be transacted) or (ii) in the case of the annual meeting, those matters which the board of directors, at the time of giving the notice, intends to present for action by the stockholders (but any proper matter may be presented at the meeting for such action). The notice of any meeting at which directors are to be elected shall include the name of any nominee or nominees who, at the time of the notice, the board intends to present for election. Any previously scheduled meeting of the stockholders may be postponed, and (unless the certificate of incorporation otherwise provides) any special meeting of the stockholders may be cancelled, by resolution of the board of directors upon public notice given prior to the date previously scheduled for such meeting of stockholders.

## 2.5 ADVANCE NOTICE OF STOCKHOLDER NOMINEES AND STOCKHOLDER BUSINESS

(a) To be properly brought before an annual meeting or special meeting, nominations for the election of directors or other business must be (i) specified in the notice of meeting (or any supplement thereto) given by or at the direction of the board of directors, (ii) otherwise properly brought before the meeting by or at the direction of the board of directors or (iii) otherwise properly brought before the meeting by a stockholder who (x) is a stockholder of record at the time of the giving of notice required by this Section 2.5 and on the record date for the determination of stockholders entitled to vote at the meeting and (y) has timely complied in proper written form with the notice procedures set forth in this Section 2.5. In addition, for business to be properly brought before an annual meeting by a stockholder, such business must be a proper matter for stockholder action pursuant to these bylaws and applicable law. Except as otherwise required by General Corporation Law of Delaware or Section 3.4 herein, stockholders may not bring business before a special meeting of stockholders.

(b) For business to be properly brought before an annual meeting by a stockholder, the stockholder must have given timely notice thereof in proper written form to the Secretary of the corporation. To be timely, a stockholder's notice must be received by the Secretary at the principal executive offices of the corporation not less than sixty (60) calendar days nor earlier than ninety (90) calendar days before the one-year anniversary of the date of the preceding year's annual meeting of stockholders; provided, however, that in the event that no annual meeting was held in the preceding year or the date of the annual meeting has been changed by more than thirty (30) days from the date of the preceding year's annual meeting, then notice by the stockholder to be timely must be so received not later than the close of business on the later of (i) ninety (90) calendar days prior to such annual meeting, or (ii) ten (10) calendar days following the day on which Public Announcement (as defined below) of the date of such annual meeting is first made. In no event shall

any adjournment or postponement of an annual meeting or the announcement thereof commence a new time period for the giving of a stockholder's notice as described in this Section 2.5. "Public Announcement" shall mean disclosure in a press release reported by the Dow Jones News Service, Associated Press or a comparable national news service or in a document publicly filed by the corporation with the Securities and Exchange Commission pursuant to Section 13, 14 or 15(d) of the Securities Exchange Act of 1934, as amended, or any successor thereto (the "1934 Act"). To be in proper written form, a stockholder's notice to the Secretary shall set forth as to each matter the stockholder proposes to bring before the annual meeting: (1) a brief description of the business desired to be brought before the annual meeting and the reasons for conducting such business at the annual meeting, (2) the name and address, as they appear on the corporation's books, of the stockholder proposing such business and any Stockholder Associated Person (as defined below), (3) the class and number of shares of the corporation which are held of record or are beneficially owned by the stockholder or any Stockholder Associated Person and any derivative positions held or beneficially held by the stockholder or any Stockholder Associated Person, (4) whether and the extent to which any hedging or other transaction or series of transactions has been entered into by or on behalf of such stockholder or any Stockholder Associated Person with respect to any securities of the corporation, and a description of any other agreement, arrangement or understanding (including any short position or any borrowing or lending of shares), the effect of which is to mitigate loss to, or manage the risk or benefit from share price changes for, or increase or decrease the voting power of, such stockholder or any Stockholder Associated Person with respect to any securities of the corporation, (5) any material interest of the stockholder or a Stockholder Associated Person in such business and (6) a statement whether either such stockholder or any Stockholder Associated Person will deliver a proxy statement and form of proxy to holders of at least the percentage of the corporation's voting shares required under applicable law to carry the proposal (such information provided and statements made as required by clauses (1) through (6) constitute a "Business Solicitation Statement"). In addition, to be in proper written form, a stockholder's notice to the Secretary must be supplemented not later than ten (10) calendar days following the record date to disclose the information contained in clauses (3) and (4) above as of the record date (the "Supplement"). For purposes of this Section 2.5, a "Stockholder Associated Person" of any stockholder shall mean (x) any person controlling, directly or indirectly, or acting in concert with, such stockholder, (y) any beneficial owner of shares of stock of the corporation owned of record or beneficially by such stockholder and on whose behalf the proposal or nomination, as the case may be, is being made, or (z) any person controlling, controlled by or under common control with such person referred to in the preceding clauses (x) and (y). Without exception, no business proposed by a stockholder shall be conducted at any annual meeting except in accordance with the procedures set forth in this Section 2.5. In addition, business proposed to be brought by a stockholder may not be brought before the annual meeting if such stockholder or a Stockholder Associated Person, as applicable, takes action contrary to the representations made in the Business Solicitation Statement or if the Business Solicitation Statement contains an untrue statement of a material fact or omits to state a material fact necessary to make the statements therein not misleading. The chairperson of the annual meeting shall, if the facts warrant, determine and declare at the meeting that business was not properly brought before the meeting and in accordance with the provisions of this Section 2.5, and, if the chairperson should so determine, he or she shall so declare at the meeting that any such business not properly brought before the meeting shall not be transacted.

(c) Only persons who are nominated in accordance with the procedures set forth in this Section 2.5(c) shall be eligible for election as directors. Nominations of persons for election to the board of directors of the corporation may be made at an annual meeting of stockholders by or at the direction of the board of directors or by any stockholder of the corporation entitled to vote in the election of directors at the meeting who timely complies with the notice procedures set forth in this paragraph 2.5(c). To be timely, such nominations, other than those made by or at the direction of the board of directors, shall be made pursuant to the notice provisions of Section 2.5(b), and shall be in proper written form as set forth in this Section 2.5(c). Nominations of persons for election to the board of directors of the corporation may be made at a special meeting of stockholders by a stockholder (if the business to be conducted at such meeting, as specified in the notice described in Section 2.4(i), includes the election of directors) if the notice required by this Section 2.5(c) shall be delivered to the Secretary of the corporation not later than the close of business on the later of ninety (90) calendar days prior to such special meeting or ten (10) calendar days following the day on which Public Announcement (as defined above) is first made of the date of the special meeting and of the nominees proposed by the board of directors to be elected at such meeting. To be in proper written form, a stockholder's notice delivered pursuant to this Section 2.5(c) shall set forth (i) as to each person (a "nominee") whom the stockholder proposes to nominate for election or re-election as a director: (A) the name, age, business address and residence address of the nominee, (B) the principal occupation or employment of the nominee, (C) the class and number of shares of the corporation which are held of record or are beneficially owned by the nominee and any derivative positions held or beneficially held by the nominee, (D) whether and the extent to which any hedging or other transaction or series of transactions has been entered into by or on behalf of the nominee with respect to any securities of the corporation, and a description of any other agreement, arrangement or understanding (including any short position or any borrowing or lending of shares), the effect or intent of which is to mitigate loss to, or manage the risk or benefit from share price changes for, or increase or decrease the voting power of the nominee with respect to any securities of the corporation, (E) a description of all arrangements or understandings between the stockholder and each nominee and any other person or persons (naming such person or persons) pursuant to which the nominations are to be made by the stockholder, (F) a written statement executed by the nominee acknowledging that as a director of the corporation, the nominee will owe fiduciary duties under Delaware law with respect to the corporation and its stockholders, and (G) any other information relating to the nominee that would be required to be disclosed about such nominee if proxies were being solicited for the election of the nominee as a director, or is otherwise required, in each case pursuant to Regulation 14A under the 1934 Act (including without limitation the nominee's written consent to being named in the proxy statement, if any, as a nominee and to serving as a director if elected); and (ii) as to such stockholder giving notice, (x) the information required to be provided in a stockholder's notice pursuant to clauses (2) through (5) of Section 2.5(b) and the Supplement referenced in Section 2.5(b) (except that the references to "business" in such Section 2.5(b) shall instead refer to nominations of directors for purposes of this Section 2.5(c)), and (y) a statement whether either such stockholder or Stockholder Associated Person will deliver a proxy statement and form of proxy to holders of a number of the corporation's voting shares reasonably believed by such stockholder or Stockholder Associated Person to be necessary to elect such nominee(s) (such information provided and statements made as required by preceding clauses (i) and (ii) above constitute a "Nominee Solicitation Statement"). At the request of the board of directors, any person nominated by a stockholder for election as a director shall furnish to the Secretary of the corporation



(1) that information required to be set forth in the stockholder's Nominee Solicitation Statement as of a date subsequent to the date on which the notice of such person's nomination was given and (2) such other information as may reasonably be required by the corporation to determine the eligibility of such proposed nominee to serve as independent director of the corporation or that could be material to a reasonable stockholder's understanding of the independence, or lack thereof, of such nominee; in the absence of the furnishing of such information if requested, such stockholder's nomination shall not be considered in proper form pursuant to this Section 2.5(c). Without exception, no person nominated by a stockholder shall be eligible for election or re-election as a director of the corporation unless nominated in accordance with the procedures set forth in this Section 2.5(c). In addition, a nominee shall not be eligible for election or re-election if a stockholder or Stockholder Associated Person, as applicable, takes action contrary to the representations made in the Nominee Solicitation Statement or if the Nominee Solicitation Statement contains an untrue statement of a material fact or omits to state a material fact necessary to make the statements therein not misleading. The chairperson of the meeting shall, if the facts warrant, determine and declare at the meeting that a nomination was not made in accordance with the procedures prescribed by these bylaws, and if the chairperson should so determine, he or she shall so declare at the meeting, and the defective nomination shall be disregarded.

(d) In addition to the foregoing provisions of this Section 2.5, a stockholder must also comply with all applicable requirements of state law and of the 1934 Act and the rules and regulations thereunder with respect to the matters set forth in this Section 2.5, including with respect to business such stockholder intends to bring before the annual meeting that involves a proposal or nomination that such stockholder requests to be included in the corporation's proxy statement, the requirements of Rule 14a-8 (or any successor provision) under the 1934 Act. Nothing in this Section 2.5 shall be deemed to affect any right of the corporation to omit a proposal from the corporation's proxy statement pursuant to Rule 14a-8 (or any successor provision) under the 1934 Act.

## 2.6 MANNER OF GIVING NOTICE; AFFIDAVIT OF NOTICE

Written notice of any meeting of stockholders shall be given either personally or by first-class mail or by telegraphic or other written communication. Notices not personally delivered shall be sent charges prepaid and shall be addressed to the stockholder at the address of that stockholder appearing on the books of the corporation or given by the stockholder to the corporation for the purpose of notice. Notice shall be deemed to have been given at the time when delivered personally or deposited in the mail or sent by telegram or other means of written communication. If any notice addressed to a stockholder at the address of that stockholder appearing on the books of the corporation is returned to the corporation by the United States Postal Service marked to indicate that the United States Postal Service is unable to deliver the notice to the stockholder at that address, then all future notices or reports shall be deemed to have been duly given without further mailing if the same shall be available to the stockholder on written demand of the stockholder at the principal executive office of the corporation for a period of one (1) year from the date of the giving of the notice.

An affidavit of the mailing or other means of giving any notice of any stockholders' meeting, executed by the secretary, assistant secretary or any transfer agent of the corporation giving the notice, shall be prima facie evidence of the giving of such notice.

## 2.7 QUORUM

The holders of a majority in voting power of the stock issued and outstanding and entitled to vote thereat, present in person or represented by proxy at the meeting, shall constitute a quorum at all meetings of the stockholders for the transaction of business except as otherwise provided by statute or by the certificate of incorporation. If, however, such quorum is not present or represented at any meeting of the stockholders, then either (i) the chairman of the meeting or (ii) the holders of a majority of the shares represented at the meeting and entitled to vote thereat, present in person or represented by proxy, shall have power to adjourn the meeting in accordance with Section 2.8 of these bylaws.

When a quorum is present at any meeting, the vote of the holders of a majority of the stock having voting power present in person or represented by proxy shall decide any question brought before such meeting, unless the question is one upon which, by express provision of the laws of the State of Delaware or of the certificate of incorporation or these bylaws, a different vote is required, in which case such express provision shall govern and control the decision of the question.

If a quorum be initially present, the stockholders may continue to transact business until adjournment, notwithstanding the withdrawal of enough stockholders to leave less than a quorum, if any action taken is approved by a majority of the stockholders initially constituting the quorum.

## 2.8 ADJOURNED MEETING; NOTICE

Any stockholders' meeting, annual or special, whether or not a quorum is present, may be adjourned from time to time by (i) the chairman of the meeting or (ii) the stockholders by the vote of the holders of a majority of the shares represented at that meeting and entitled to vote thereat, either in person or by proxy. In the absence of a quorum, no other business may be transacted at that meeting except as provided in Section 2.7 of these bylaws.

When a meeting is adjourned to another time and place, unless these bylaws otherwise require, notice need not be given of the adjourned meeting if the time and place thereof are announced at the meeting at which the adjournment is taken. In no event shall the public announcement of an adjournment of a stockholders meeting commence a new time period for the giving of a stockholder's notice as described in Section 2.5(b) or 2.5(c) herein. At the adjourned meeting the corporation may transact any business that might have been transacted at the original meeting. If the adjournment is for more than thirty (30) days, or if after the adjournment a new record date is fixed for the adjourned meeting, a notice of the adjourned meeting shall be given to each stockholder of record entitled to vote at the meeting.

## 2.9 VOTING

The stockholders entitled to vote at any meeting of stockholders shall be determined in accordance with the provisions of Section 2.12 of these bylaws, subject to the provisions of Sections 217 and 218 of the General Corporation Law of Delaware (relating to voting rights of fiduciaries, pledgors and joint owners, and to voting trusts and other voting agreements).

Except as may be otherwise provided in the certificate of incorporation or these bylaws, each stockholder shall be entitled to one vote for each share of capital stock held by such stockholder. Any stockholder entitled to vote on any matter may vote part of the shares in favor of the proposal and refrain from voting the remaining shares or, except when the matter is the election of directors, may vote them against the proposal; but, if the stockholder fails to specify the number of shares which the stockholder is voting affirmatively, it will be conclusively presumed that the stockholder's approving vote is with respect to all shares which the stockholder is entitled to vote.

## 2.10 VALIDATION OF MEETINGS; WAIVER OF NOTICE; CONSENT

The transactions of any meeting of stockholders, either annual or special, however called and noticed, and wherever held, shall be as valid as though they had been taken at a meeting duly held after regular call and notice, if a quorum be present either in person or by proxy, and if, either before or after the meeting, each person entitled to vote, who was not present in person or by proxy, signs a written waiver of notice or a consent to the holding of the meeting or an approval of the minutes thereof. The waiver of notice or consent or approval need not specify either the business to be transacted or the purpose of any annual or special meeting of stockholders. All such waivers, consents, and approvals shall be filed with the corporate records or made a part of the minutes of the meeting.

Attendance by a person at a meeting shall also constitute a waiver of notice of and presence at that meeting, except when the person objects at the beginning of the meeting to the transaction of any business because the meeting is not lawfully called or convened. Attendance at a meeting is not a waiver of any right to object to the consideration of matters required by law to be included in the notice of the meeting but not so included, if that objection is expressly made at the meeting.

## 2.11 STOCKHOLDER ACTION BY WRITTEN CONSENT WITHOUT A MEETING

Any action required or permitted to be taken at any annual or special meeting of stockholders may be taken without a meeting, without prior notice and without a vote, if a consent or consents in writing setting forth the action so taken shall be signed by the holders of outstanding stock having not less than the minimum number of votes that would be necessary to authorize or take such action at a meeting at which all shares entitled to vote thereon were present and voted. Such consents shall be delivered to the corporation by delivery to its registered office in the state of Delaware, its principal place of business, or an officer or agent of the corporation having custody of the book in which proceedings of meetings of stockholders are recorded. Delivery made to a corporation's registered office shall be by hand or by certified or registered mail, return receipt requested.

## 2.12 RECORD DATE FOR STOCKHOLDER NOTICE; VOTING

For purposes of determining the stockholders entitled to notice of any meeting or to vote thereat or entitled to give consent to corporate action without a meeting, the board of directors may fix, in advance, a record date, which shall not precede the date upon which the resolution fixing the record date is adopted by the board of directors and which shall not be more than sixty (60) days nor less than ten (10) days before the date of any such meeting, and in such event only stockholders of record on the date so fixed are entitled to notice and to vote, notwithstanding any transfer of any shares on the books of the corporation after the record date.

If the board of directors does not so fix a record date:

(a) the record date for determining stockholders entitled to notice of or to vote at a meeting of stockholders shall be at the close of business on the business day next preceding the day on which notice is given, or, if notice is waived, at the close of business on the business day next preceding the day on which the meeting is held; and

(b) the record date for determining stockholders entitled to give consent to corporate action in writing without a meeting, (i) when no prior action by the board is required, shall be the day on which the first written consent is delivered to the corporation as provided in Section 2.3(b) of the General Corporation Law of Delaware, or (ii) when prior action by the board is required, shall be at the close of business on the day on which the board adopts the resolution relating to that action.

A determination of stockholders of record entitled to notice of or to vote at a meeting of stockholders shall apply to any adjournment of the meeting unless the board of directors fixes a new record date for the adjourned meeting, but the board of directors shall fix a new record date if the meeting is adjourned for more than thirty (30) days from the date set for the original meeting.

The record date for any other purpose shall be as provided in Section 8.1 of these bylaws.

## 2.13 PROXIES

Every person entitled to vote for directors, or on any other matter, shall have the right to do so either in person or by one or more agents authorized by a written proxy signed by the person and filed with the secretary of the corporation, but no such proxy shall be voted or acted upon after three (3) years from its date, unless the proxy provides for a longer period. A proxy shall be deemed signed if the stockholder's name is placed on the proxy (whether by manual signature, typewriting, telegraphic transmission, telefacsimile or otherwise) by the stockholder or the stockholder's attorney-in-fact. The revocability of a proxy that states on its face that it is irrevocable shall be governed by the provisions of Section 212(e) of the General Corporation Law of Delaware.

## 2.14 ORGANIZATION

The president, or in the absence of the president, the chairman of the board, shall call the meeting of the stockholders to order, and shall act as chairman of the meeting. In the absence of the president, the chairman of the board, and all of the vice presidents, the stockholders shall appoint a chairman for such meeting. The chairman of any meeting of stockholders shall determine the order of business and the procedures at the meeting, including such matters as the regulation of the manner

of voting and the conduct of business. The secretary of the corporation shall act as secretary of all meetings of the stockholders, but in the absence of the secretary at any meeting of the stockholders, the chairman of the meeting may appoint any person to act as secretary of the meeting.

## 2.15 LIST OF STOCKHOLDERS ENTITLED TO VOTE

The officer who has charge of the stock ledger of the corporation shall prepare and make, at least ten (10) days before every meeting of stockholders, a complete list of the stockholders entitled to vote at the meeting, arranged in alphabetical order, and showing the address of each stockholder and the number of shares registered in the name of each stockholder. Such list shall be open to the examination of any stockholder, for any purpose germane to the meeting, during ordinary business hours, for a period of at least ten (10) days prior to the meeting, either at a place within the city where the meeting is to be held, which place shall be specified in the notice of the meeting, or, if not so specified, at the place where the meeting is to be held. The list shall also be produced and kept at the time and place of the meeting during the whole time thereof, and may be inspected by any stockholder who is present.

## 2.16 INSPECTORS OF ELECTION

Before any meeting of stockholders, the board of directors may appoint an inspector or inspectors of election to act at the meeting or its adjournment. If no inspector of election is so appointed, then the chairman of the meeting may, and on the request of any stockholder or a stockholder's proxy shall, appoint an inspector or inspectors of election to act at the meeting. The number of inspectors shall be either one (1) or three (3). If inspectors are appointed at a meeting pursuant to the request of one (1) or more stockholders or proxies, then the holders of a majority of shares or their proxies present at the meeting shall determine whether one (1) or three (3) inspectors are to be appointed. If any person appointed as inspector fails to appear or fails or refuses to act, then the chairman of the meeting may, and upon the request of any stockholder or a stockholder's proxy shall, appoint a person to fill that vacancy.

Such inspectors shall:

(a) determine the number of shares outstanding and the voting power of each, the number of shares represented at the meeting, the existence of a quorum, and the authenticity, validity, and effect of proxies;

(b) receive votes, ballots or consents;

(c) hear and determine all challenges and questions in any way arising in connection with the right to vote;

(d) count and tabulate all votes or consents;

(e) determine when the polls shall close;

(f) determine the result; and

- (g) do any other acts that may be proper to conduct the election or vote with fairness to all stockholders.

## ARTICLE III

### DIRECTORS

#### 3.1 POWERS

Subject to the provisions of the General Corporation Law of Delaware and to any limitations in the certificate of incorporation or these bylaws relating to action required to be approved by the stockholders or by the outstanding shares, the business and affairs of the corporation shall be managed and shall be exercised by or under the direction of the board of directors. In addition to the powers and authorities these bylaws expressly confer upon them, the board of directors may exercise all such powers of the corporation and do all such lawful acts and things as are not by the General Corporation Law of Delaware or by the certificate of incorporation or by these bylaws required to be exercised or done by the stockholders.

#### 3.2 NUMBER OF DIRECTORS

The board of directors shall consist of seven (7) members. The number of directors may be changed by an amendment to this bylaw, duly adopted by the board of directors or by the stockholders, or by a duly adopted amendment to the certificate of incorporation. No reduction of the authorized number of directors shall have the effect of removing any director before that director's term of office expires. If for any cause, the directors shall not have been elected at an annual meeting, they may be elected as soon thereafter as convenient at a special meeting of the stockholders called for that purpose in the manner provided in these Bylaws.

#### 3.3 ELECTION AND TERM OF OFFICE OF DIRECTORS

Except as provided in Section 3.4 of these bylaws, directors shall be elected at each annual meeting of stockholders to hold office until the next annual meeting. Each director, including a director elected or appointed to fill a vacancy, shall hold office until the expiration of the term for which elected and until such director's successor has been elected and qualified or until such director's earlier resignation or removal.

#### 3.4 RESIGNATION AND VACANCIES

Any director may resign effective on giving written notice to the chairman of the board, the president, the secretary or the board of directors, unless the notice specifies a later time for that resignation to become effective. If the resignation of a director is effective at a future time, the board of directors may elect a successor to take office when the resignation becomes effective.

Vacancies in the board of directors may be filled by a majority of the remaining directors, even if less than a quorum, or by a sole remaining director; however, a vacancy created by the removal of a director by the vote of the stockholders or by court order may be filled only by the affirmative vote of a majority of the shares represented and voting at a duly held meeting at which a

quorum is present (which shares voting affirmatively also constitute a majority of the required quorum). Each director so elected shall hold office until the next annual meeting of the stockholders and until a successor has been elected and qualified.

Unless otherwise provided in the certificate of incorporation or these bylaws:

(i) Vacancies and newly created directorships resulting from any increase in the authorized number of directors elected by all of the stockholders having the right to vote as a single class may be filled by a majority of the directors then in office, although less than a quorum, or by a sole remaining director.

(ii) Whenever the holders of any class or classes of stock or series thereof are entitled to elect one or more directors by the provisions of the certificate of incorporation, vacancies and newly created directorships of such class or classes or series may be filled by a majority of the directors elected by such class or classes or series thereof then in office, or by a sole remaining director so elected.

Any directors chosen pursuant to this Section 3.4 shall hold office for a term expiring at the next annual meeting of stockholders and until such director's successor shall have been duly elected and qualified.

If at any time, by reason of death or resignation or other cause, the corporation should have no directors in office, then any officer or any stockholder or an executor, administrator, trustee or guardian of a stockholder, or other fiduciary entrusted with like responsibility for the person or estate of a stockholder, may call a special meeting of stockholders in accordance with the provisions of the certificate of incorporation or these bylaws, or may apply to the Court of Chancery for a decree summarily ordering an election as provided in Section 211 of the General Corporation Law of Delaware.

If, at the time of filling any vacancy or any newly created directorship, the directors then in office constitute less than a majority of the whole board (as constituted immediately prior to any such increase), then the Court of Chancery may, upon application of any stockholder or stockholders holding at least ten percent (10%) of the total number of the shares at the time outstanding having the right to vote for such directors, summarily order an election to be held to fill any such vacancies or newly created directorships, or to replace the directors chosen by the directors then in office as aforesaid, which election shall be governed by the provisions of Section 211 of the General Corporation Law of Delaware as far as applicable.

### 3.5 REMOVAL OF DIRECTORS

Unless otherwise restricted by statute, by the certificate of incorporation or by these bylaws, any director or the entire board of directors may be removed, with or without cause, by the holders of a majority of the shares then entitled to vote at an election of directors; provided, however, that, if and so long as stockholders of the corporation are entitled to cumulative voting, if less than the entire board is to be removed, no director may be removed without cause if the votes cast against his

removal would be sufficient to elect him if then cumulatively voted at an election of the entire board of directors.

### 3.6 PLACE OF MEETINGS; MEETINGS BY TELEPHONE

Regular meetings of the board of directors may be held at any place within or outside the State of Delaware that has been designated from time to time by resolution of the board. In the absence of such a designation, regular meetings shall be held at the principal executive office of the corporation. Special meetings of the board may be held at any place within or outside the State of Delaware that has been designated in the notice of the meeting or, if not stated in the notice or if there is no notice, at the principal executive office of the corporation.

Any meeting of the board, regular or special, may be held by conference telephone or similar communication equipment, so long as all directors participating in the meeting can hear one another; and all such participating directors shall be deemed to be present in person at the meeting.

### 3.7 FIRST MEETINGS

The first meeting of each newly elected board of directors shall be held at such time and place as shall be fixed by the vote of the stockholders at the annual meeting. In the event of the failure of the stockholders to fix the time or place of such first meeting of the newly elected board of directors, or in the event such meeting is not held at the time and place so fixed by the stockholders, the meeting may be held at such time and place as shall be specified in a notice given as hereinafter provided for special meetings of the board of directors, or as shall be specified in a written waiver signed by all of the directors.

### 3.8 REGULAR MEETINGS

Regular meetings of the board of directors may be held without notice at such time as shall from time to time be determined by the board of directors. If any regular meeting day shall fall on a legal holiday, then the meeting shall be held at the same time and place on the next succeeding full business day.

### 3.9 SPECIAL MEETINGS; NOTICE

Special meetings of the board of directors for any purpose or purposes may be called at any time by the chairman of the board of directors, the president, any vice president, the secretary or any two directors.

The person or persons authorized to call special meetings of the board of directors may fix the time and place of the meetings. Notice of the time and place of special meetings shall be delivered personally or by telephone to each director or sent by first-class mail, courier service or telegram, telecopy or other electronic or wireless means, charges prepaid, addressed to each director at that director's address as it is shown on the records of the corporation. If the notice is by mail, such notice shall be deposited in the United States mail at least four (4) days before the time of the holding of the meeting. If the notice is by courier service, telegram, overnight mail, telecopy or other electronic or wireless means, such notice shall be deemed adequately delivered when the notice is



transmitted at least twenty-four (24) hours prior to the time set for such meeting. If the notice is by telephone or by hand delivery, such notice shall be deemed adequately delivered when the notice is given at least twenty-four (24) hours prior to the time set for such meeting. Any oral notice given personally or by telephone may be communicated either to the director or to a person at the office of the director who the person giving the notice has reason to believe will promptly communicate it to the director. The notice need not specify the purpose or the place of the meeting, if the meeting is to be held at the principal executive office of the corporation.

### 3.10 QUORUM

A majority of the authorized number of directors shall constitute a quorum for the transaction of business, except to adjourn as provided in Section 3.12 of these bylaws. Every act or decision done or made by a majority of the directors present at a duly held meeting at which a quorum is present shall be regarded as the act of the board of directors, subject to the provisions of the certificate of incorporation and applicable law.

A meeting at which a quorum is initially present may continue to transact business notwithstanding the withdrawal of directors, if any action taken is approved by at least a majority of the quorum for that meeting.

### 3.11 WAIVER OF NOTICE

Notice of a meeting need not be given to any director (i) who signs a waiver of notice, whether before or after the meeting, or (ii) who attends the meeting without protesting, prior thereto or at its commencement, the lack of notice to such directors. All such waivers shall be filed with the corporate records or made part of the minutes of the meeting. A waiver of notice need not specify the purpose of any regular or special meeting of the board of directors.

### 3.12 ADJOURNMENT

A majority of the directors present, whether or not constituting a quorum, may adjourn any meeting of the board to another time and place.

### 3.13 NOTICE OF ADJOURNMENT

Notice of the time and place of holding an adjourned meeting of the board need not be given unless the meeting is adjourned for more than twenty-four (24) hours. If the meeting is adjourned for more than twenty-four (24) hours, then notice of the time and place of the adjourned meeting shall be given before the adjourned meeting takes place, in the manner specified in Section 3.9 of these bylaws, to the directors who were not present at the time of the adjournment.

### 3.14 BOARD ACTION BY WRITTEN CONSENT WITHOUT A MEETING

Any action required or permitted to be taken by the board of directors may be taken without a meeting, provided that all members of the board individually or collectively consent in writing to that action. Such action by written consent shall have the same force and effect as a unanimous vote

of the board of directors. Such written consent and any counterparts thereof shall be filed with the minutes of the proceedings of the board of directors.

### 3.15 FEES AND COMPENSATION OF DIRECTORS

Directors and members of committees may receive such compensation, if any, for their services and such reimbursement of expenses as may be fixed or determined by resolution of the board of directors. This Section 3.15 shall not be construed to preclude any director from serving the corporation in any other capacity as an officer, agent, employee or otherwise and receiving compensation for those services.

### 3.16 APPROVAL OF LOANS TO OFFICERS

The corporation may lend money to, or guarantee any obligation of, or otherwise assist any officer or other employee of the corporation or any of its subsidiaries, including any officer or employee who is a director of the corporation or any of its subsidiaries, whenever, in the judgment of the directors, such loan, guaranty or assistance may reasonably be expected to benefit the corporation. The loan, guaranty or other assistance may be with or without interest and may be unsecured, or secured in such manner as the board of directors shall approve, including, without limitation, a pledge of shares of stock of the corporation. Nothing contained in this section shall be deemed to deny, limit or restrict the powers of guaranty or warranty of the corporation at common law or under any statute.

### 3.17 SOLE DIRECTOR PROVIDED BY CERTIFICATE OF INCORPORATION

In the event only one director is required by these bylaws or the certificate of incorporation, then any reference herein to notices, waivers, consents, meetings or other actions by a majority or quorum of the directors shall be deemed to refer to such notice, waiver, etc., by such sole director, who shall have all the rights and duties and shall be entitled to exercise all of the powers and shall assume all the responsibilities otherwise herein described as given to the board of directors.

## ARTICLE IV

### COMMITTEES

#### 4.1 COMMITTEES OF DIRECTORS

The board of directors may, by resolution adopted by a majority of the authorized number of directors, designate one (1) or more committees, each consisting of two or more directors, to serve at the pleasure of the board. The board may designate one (1) or more directors as alternate members of any committee, who may replace any absent or disqualified member at any meeting of the committee. The appointment of members or alternate members of a committee requires the vote of a majority of the authorized number of directors. Any committee, to the extent provided in the resolution of the board, shall have and may exercise all the powers and authority of the board, but no such committee shall have the power or authority to (i) amend the certificate of incorporation (except that a committee may, to the extent authorized in the resolution or resolutions providing for

the issuance of shares of stock adopted by the board of directors as provided in Section 151(a) of the General Corporation Law of Delaware, fix the designations and any of the preferences or rights of such shares relating to dividends, redemption, dissolution, any distribution of assets of the corporation or the conversion into, or the exchange of such shares for, shares of any other class or classes or any other series of the same or any other class or classes of stock of the corporation), (ii) adopt an agreement of merger or consolidation under Sections 251 or 252 of the General Corporation Law of Delaware, (iii) recommend to the stockholders the sale, lease or exchange of all or substantially all of the corporation's property and assets, (iv) recommend to the stockholders a dissolution of the corporation or a revocation of a dissolution or (v) amend the bylaws of the corporation; and, unless the board resolution establishing the committee, the bylaws or the certificate of incorporation expressly so provide, no such committee shall have the power or authority to declare a dividend, to authorize the issuance of stock, or to adopt a certificate of ownership and merger pursuant to Section 253 of the General Corporation Law of Delaware.

#### 4.2 MEETINGS AND ACTION OF COMMITTEES

Meetings and actions of committees shall be governed by, and held and taken in accordance with, the following provisions of Article III of these bylaws: Section 3.6 (place of meetings; meetings by telephone), Section 3.8 (regular meetings), Section 3.9 (special meetings; notice), Section 3.10 (quorum), Section 3.11 (waiver of notice), Section 3.12 (adjournment), Section 3.13 (notice of adjournment) and Section 3.14 (board action by written consent without meeting), with such changes in the context of those bylaws as are necessary to substitute the committee and its members for the board of directors and its members; provided, however, that the time of regular meetings of committees may be determined either by resolution of the board of directors or by resolution of the committee, that special meetings of committees may also be called by resolution of the board of directors, and that notice of special meetings of committees shall also be given to all alternate members, who shall have the right to attend all meetings of the committee. The board of directors may adopt rules for the government of any committee not inconsistent with the provisions of these bylaws.

#### 4.3 COMMITTEE MINUTES

Each committee shall keep regular minutes of its meetings and report the same to the board of directors when required.

### ARTICLE V

#### OFFICERS

##### 5.1 OFFICERS

The Corporate Officers of the corporation shall be a president, a secretary and a chief financial officer. The corporation may also have, at the discretion of the board of directors, a chairman of the board, one or more vice presidents (however denominated), one or more assistant secretaries, one or more assistant treasurers and such other officers as may be appointed in

accordance with the provisions of Section 5.3 of these bylaws. Any number of offices may be held by the same person.

In addition to the Corporate Officers of the Company described above, there may also be such Administrative Officers of the corporation as may be designated and appointed from time to time by the president of the corporation in accordance with the provisions of Section 5.12 of these bylaws.

## 5.2 ELECTION OF OFFICERS

The Corporate Officers of the corporation, except such officers as may be appointed in accordance with the provisions of Section 5.3 or Section 5.5 of these bylaws, shall be chosen by the board of directors, subject to the rights, if any, of an officer under any contract of employment, and shall hold their respective offices for such terms as the board of directors may from time to time determine.

## 5.3 SUBORDINATE OFFICERS

The board of directors may appoint, or may empower the president to appoint, such other Corporate Officers as the business of the corporation may require, each of whom shall hold office for such period, have such power and authority, and perform such duties as are provided in these bylaws or as the board of directors may from time to time determine.

The president may from time to time designate and appoint Administrative Officers of the corporation in accordance with the provisions of Section 5.12 of these bylaws.

## 5.4 REMOVAL AND RESIGNATION OF OFFICERS

Subject to the rights, if any, of a Corporate Officer under any contract of employment, any Corporate Officer may be removed, either with or without cause, by the board of directors at any regular or special meeting of the board or, except in case of a Corporate Officer chosen by the board of directors, by any Corporate Officer upon whom such power of removal may be conferred by the board of directors.

Any Corporate Officer may resign at any time by giving written notice to the corporation. Any resignation shall take effect at the date of the receipt of that notice or at any later time specified in that notice; and, unless otherwise specified in that notice, the acceptance of the resignation shall not be necessary to make it effective. Any resignation is without prejudice to the rights, if any, of the corporation under any contract to which the Corporate Officer is a party.

Any Administrative Officer designated and appointed by the president may be removed, either with or without cause, at any time by the president. Any Administrative Officer may resign at any time by giving written notice to the president or to the secretary of the corporation.

## 5.5 VACANCIES IN OFFICES

A vacancy in any office because of death, resignation, removal, disqualification or any other cause shall be filled in the manner prescribed in these bylaws for regular appointments to that office.

#### 5.6 CHAIRMAN OF THE BOARD

The chairman of the board, if such an officer be elected, shall, if present, preside at meetings of the board of directors and exercise such other powers and perform such other duties as may from time to time be assigned to him by the board of directors or as may be prescribed by these bylaws. If there is no president, then the chairman of the board shall also be the chief executive officer of the corporation and shall have the powers and duties prescribed in Section 5.7 of these bylaws.

#### 5.7 PRESIDENT

Subject to such supervisory powers, if any, as may be given by the board of directors to the chairman of the board, if there be such an officer, the president shall be the chief executive officer of the corporation and shall, subject to the control of the board of directors, have general supervision, direction and control of the business and the officers of the corporation. He or she shall preside at all meetings of the stockholders and, in the absence or nonexistence of a chairman of the board, at all meetings of the board of directors. He or she shall have the general powers and duties of management usually vested in the office of president of a corporation, and shall have such other powers and perform such other duties as may be prescribed by the board of directors or these bylaws.

#### 5.8 VICE PRESIDENTS

In the absence or disability of the president, and if there is no chairman of the board, the vice presidents, if any, in order of their rank as fixed by the board of directors or, if not ranked, a vice president designated by the board of directors, shall perform all the duties of the president and when so acting shall have all the powers of, and be subject to all the restrictions upon, the president. The vice presidents shall have such other powers and perform such other duties as from time to time may be prescribed for them respectively by the board of directors, these bylaws, the president or the chairman of the board.

#### 5.9 SECRETARY

The secretary shall keep or cause to be kept, at the principal executive office of the corporation or such other place as the board of directors may direct, a book of minutes of all meetings and actions of the board of directors, committees of directors and stockholders. The minutes shall show the time and place of each meeting, whether regular or special (and, if special, how authorized and the notice given), the names of those present at directors' meetings or committee meetings, the number of shares present or represented at stockholders' meetings and the proceedings thereof.

The secretary shall keep, or cause to be kept, at the principal executive office of the corporation or at the office of the corporation's transfer agent or registrar, as determined by resolution of the board of directors, a share register or a duplicate share register, showing the names of all stockholders and their addresses, the number and classes of shares held by each, the number

and date of certificates evidencing such shares and the number and date of cancellation of every certificate surrendered for cancellation.

The secretary shall give, or cause to be given, notice of all meetings of the stockholders and of the board of directors required to be given by law or by these bylaws. He or she shall keep the seal of the corporation, if one be adopted, in safe custody and shall have such other powers and perform such other duties as may be prescribed by the board of directors or by these bylaws.

#### 5.10 CHIEF FINANCIAL OFFICER

The chief financial officer shall keep and maintain, or cause to be kept and maintained, adequate and correct books and records of accounts of the properties and business transactions of the corporation, including accounts of its assets, liabilities, receipts, disbursements, gains, losses, capital, retained earnings and shares. The books of account shall at all reasonable times be open to inspection by any director for a purpose reasonably related to his position as a director.

The chief financial officer shall deposit all money and other valuables in the name and to the credit of the corporation with such depositaries as may be designated by the board of directors. He or she shall disburse the funds of the corporation as may be ordered by the board of directors, shall render to the president and directors, whenever they request it, an account of all of his or her transactions as chief financial officer and of the financial condition of the corporation, and shall have such other powers and perform such other duties as may be prescribed by the board of directors or these bylaws.

#### 5.11 ASSISTANT SECRETARY

The assistant secretary, if any, or, if there is more than one, the assistant secretaries in the order determined by the board of directors (or if there be no such determination, then in the order of their election) shall, in the absence of the secretary or in the event of his or her inability or refusal to act, perform the duties and exercise the powers of the secretary and shall perform such other duties and have such other powers as the board of directors may from time to time prescribe.

#### 5.12 ADMINISTRATIVE OFFICERS

In addition to the Corporate Officers of the corporation as provided in Section 5.1 of these bylaws and such subordinate Corporate Officers as may be appointed in accordance with Section 5.3 of these bylaws, there may also be such Administrative Officers of the corporation as may be designated and appointed from time to time by the president of the corporation. Administrative Officers shall perform such duties and have such powers as from time to time may be determined by the president or the board of directors in order to assist the Corporate Officers in the furtherance of their duties. In the performance of such duties and the exercise of such powers, however, such Administrative Officers shall have limited authority to act on behalf of the corporation as the board of directors shall establish, including but not limited to limitations on the dollar amount and on the scope of agreements or commitments that may be made by such Administrative Officers on behalf of the corporation, which limitations may not be exceeded by such individuals or altered by the president without further approval by the board of directors.

## 5.13 AUTHORITY AND DUTIES OF OFFICERS

In addition to the foregoing powers, authority and duties, all officers of the corporation shall respectively have such authority and powers and perform such duties in the management of the business of the corporation as may be designated from time to time by the board of directors.

## ARTICLE VI

### INDEMNIFICATION OF DIRECTORS, OFFICERS, EMPLOYEES AND OTHER AGENTS

#### 6.1 INDEMNIFICATION OF DIRECTORS AND OFFICERS

The corporation shall, to the maximum extent and in the manner permitted by the General Corporation Law of Delaware as the same now exists or may hereafter be amended, indemnify any person against expenses (including attorneys' fees), judgments, fines, and amounts paid in settlement actually and reasonably incurred in connection with any threatened, pending or completed action, suit, or proceeding in which such person was or is a party or is threatened to be made a party by reason of the fact that such person is or was a director or officer of the corporation. For purposes of this Section 6.1, a "director" or "officer" of the corporation shall mean any person (i) who is or was a director or officer of the corporation, (ii) who is or was serving at the request of the corporation as a director or officer of another corporation, partnership, joint venture, trust or other enterprise or (iii) who was a director or officer of a corporation which was a predecessor corporation of the corporation or of another enterprise at the request of such predecessor corporation.

The corporation shall be required to indemnify a director or officer in connection with an action, suit, or proceeding (or part thereof) initiated by such director or officer only if the initiation of such action, suit, or proceeding (or part thereof) by the director or officer was authorized by the board of Directors of the corporation.

The corporation shall pay the expenses (including attorney's fees) incurred by a director or officer of the corporation entitled to indemnification hereunder in defending any action, suit or proceeding referred to in this Section 6.1 in advance of its final disposition; provided, however, that payment of expenses incurred by a director or officer of the corporation in advance of the final disposition of such action, suit or proceeding shall be made only upon receipt of an undertaking by the director or officer to repay all amounts advanced if it should ultimately be determined that the director or officer is not entitled to be indemnified under this Section 6.1 or otherwise.

The rights conferred on any person by this Article shall not be exclusive of any other rights which such person may have or hereafter acquire under any statute, provision of the corporation's certificate of incorporation, these bylaws, agreement, vote of the stockholders or disinterested directors or otherwise.

Any repeal or modification of the foregoing provisions of this Article shall not adversely affect any right or protection hereunder of any person in respect of any act or omission occurring prior to the time of such repeal or modification.

## 6.2 INDEMNIFICATION OF OTHERS

The corporation shall have the power, to the maximum extent and in the manner permitted by the General Corporation Law of Delaware as the same now exists or may hereafter be amended, to indemnify any person (other than directors and officers) against expenses (including attorneys' fees), judgments, fines, and amounts paid in settlement actually and reasonably incurred in connection with any threatened, pending or completed action, suit, or proceeding, in which such person was or is a party or is threatened to be made a party by reason of the fact that such person is or was an employee or agent of the corporation. For purposes of this Section 6.2, an "employee" or "agent" of the corporation (other than a director or officer) shall mean any person (i) who is or was an employee or agent of the corporation, (ii) who is or was serving at the request of the corporation as an employee or agent of another corporation, partnership, joint venture, trust or other enterprise or (iii) who was an employee or agent of a corporation which was a predecessor corporation of the corporation or of another enterprise at the request of such predecessor corporation.

## 6.3 INSURANCE

The corporation may purchase and maintain insurance on behalf of any person who is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against any liability asserted against him or her and incurred by him or her in any such capacity, or arising out of his or her status as such, whether or not the corporation would have the power to indemnify him or her against such liability under the provisions of the General Corporation Law of Delaware.

# ARTICLE VII

## RECORDS AND REPORTS

### 7.1 MAINTENANCE AND INSPECTION OF RECORDS

The corporation shall, either at its principal executive office or at such place or places as designated by the board of directors, keep a record of its stockholders listing their names and addresses and the number and class of shares held by each stockholder, a copy of these bylaws as amended to date, accounting books and other records of its business and properties.

Any stockholder of record, in person or by attorney or other agent, shall, upon written demand under oath stating the purpose thereof, have the right during the usual hours for business to inspect for any proper purpose the corporation's stock ledger, a list of its stockholders, and its other books and records and to make copies or extracts therefrom. A proper purpose shall mean a purpose reasonably related to such person's interest as a stockholder. In every instance where an attorney or other agent is the person who seeks the right to inspection, the demand under oath shall be accompanied by a power of attorney or such other writing that authorizes the attorney or other agent to so act on behalf of the stockholder. The demand under oath shall be directed to the corporation at its registered office in Delaware or at its principal place of business.



## 7.2 INSPECTION BY DIRECTORS

Any director shall have the right to examine the corporation's stock ledger, a list of its stockholders and its other books and records for a purpose reasonably related to his or her position as a director.

## 7.3 ANNUAL STATEMENT TO STOCKHOLDERS

The board of directors shall present at each annual meeting, and at any special meeting of the stockholders when called for by vote of the stockholders, a full and clear statement of the business and condition of the corporation.

## 7.4 REPRESENTATION OF SHARES OF OTHER CORPORATIONS

The chairman of the board, if any, the president, any vice president, the chief financial officer, the secretary or any assistant secretary of this corporation, or any other person authorized by the board of directors or the president or a vice president, is authorized to vote, represent and exercise on behalf of this corporation all rights incident to any and all shares of the stock of any other corporation or corporations standing in the name of this corporation. The authority herein granted may be exercised either by such person directly or by any other person authorized to do so by proxy or power of attorney duly executed by such person having the authority.

## 7.5 CERTIFICATION AND INSPECTION OF BYLAWS

The original or a copy of these bylaws, as amended or otherwise altered to date, certified by the secretary, shall be kept at the corporation's principal executive office and shall be open to inspection by the stockholders of the corporation, at all reasonable times during office hours.

# ARTICLE VIII

## GENERAL MATTERS

### 8.1 RECORD DATE FOR PURPOSES OTHER THAN NOTICE AND VOTING

For purposes of determining the stockholders entitled to receive payment of any dividend or other distribution or allotment of any rights or the stockholders entitled to exercise any rights in respect of any change, conversion or exchange of stock, or for the purpose of any other lawful action, the board of directors may fix, in advance, a record date, which shall not precede the date upon which the resolution fixing the record date is adopted and which shall not be more than sixty (60) days before any such action. In that case, only stockholders of record at the close of business on the date so fixed are entitled to receive the dividend, distribution or allotment of rights, or to exercise such rights, as the case may be, notwithstanding any transfer of any shares on the books of the corporation after the record date so fixed, except as otherwise provided by law.

If the board of directors does not so fix a record date, then the record date for determining stockholders for any such purpose shall be at the close of business on the day on which the board of directors adopts the applicable resolution.

## 8.2 CHECKS; DRAFTS; EVIDENCES OF INDEBTEDNESS

From time to time, the board of directors shall determine by resolution which person or persons may sign or endorse all checks, drafts, other orders for payment of money, notes or other evidences of indebtedness that are issued in the name of or payable to the corporation, and only the persons so authorized shall sign or endorse those instruments.

## 8.3 CORPORATE CONTRACTS AND INSTRUMENTS: HOW EXECUTED

The board of directors, except as otherwise provided in these bylaws, may authorize and empower any officer or officers, or agent or agents, to enter into any contract or execute any instrument in the name of and on behalf of the corporation; such power and authority may be general or confined to specific instances. Unless so authorized or ratified by the board of directors or within the agency power of an officer, no officer, agent or employee shall have any power or authority to bind the corporation by any contract or engagement or to pledge its credit or to render it liable for any purpose or for any amount.

## 8.4 STOCK CERTIFICATES; TRANSFER; PARTLY PAID SHARES

The shares of the corporation shall be represented by certificates, provided that the board of directors of the corporation may provide by resolution or resolutions that some or all of any or all classes or series of its stock shall be uncertificated shares. Any such resolution shall not apply to shares represented by a certificate until such certificate is surrendered to the corporation. Notwithstanding the adoption of such a resolution by the board of directors, every holder of stock represented by certificates and, upon request, every holder of uncertificated shares, shall be entitled to have a certificate signed by, or in the name of the corporation by, the chairman or vice-chairman of the board of directors, or the president or vice-president, and by the treasurer or an assistant treasurer, or the secretary or an assistant secretary of such corporation representing the number of shares registered in certificate form. Any or all of the signatures on the certificate may be a facsimile. In case any officer, transfer agent or registrar who has signed or whose facsimile signature has been placed upon a certificate has ceased to be such officer, transfer agent or registrar before such certificate is issued, it may be issued by the corporation with the same effect as if he or she were such officer, transfer agent or registrar at the date of issue.

Certificates for shares shall be of such form and device as the board of directors may designate and shall state the name of the record holder of the shares represented thereby; its number; date of issuance; the number of shares for which it is issued; a summary statement or reference to the powers, designations, preferences or other special rights of such stock and the qualifications, limitations or restrictions of such preferences and/or rights, if any; a statement or summary of liens, if any; a conspicuous notice of restrictions upon transfer or registration of transfer, if any; a statement as to any applicable voting trust agreement; if the shares be assessable, or, if assessments are collectible by personal action, a plain statement of such facts.

Upon surrender to the secretary or transfer agent of the corporation of a certificate for shares duly endorsed or accompanied by proper evidence of succession, assignment or authority to transfer,

it shall be the duty of the corporation to issue a new certificate to the person entitled thereto, cancel the old certificate and record the transaction upon its books.

The corporation may issue the whole or any part of its shares as partly paid and subject to call for the remainder of the consideration to be paid therefor. Upon the face or back of each stock certificate issued to represent any such partly paid shares, or upon the books and records of the corporation in the case of uncertificated partly paid shares, the total amount of the consideration to be paid therefor and the amount paid thereon shall be stated. Upon the declaration of any dividend on fully paid shares, the corporation shall declare a dividend upon partly paid shares of the same class, but only upon the basis of the percentage of the consideration actually paid thereon.

#### 8.5 SPECIAL DESIGNATION ON CERTIFICATES

If the corporation is authorized to issue more than one class of stock or more than one series of any class, then the powers, the designations, the preferences and the relative, participating, optional or other special rights of each class of stock or series thereof and the qualifications, limitations or restrictions of such preferences and/or rights shall be set forth in full or summarized on the face or back of the certificate that the corporation shall issue to represent such class or series of stock; provided, however, that, except as otherwise provided in Section 202 of the General Corporation Law of Delaware, in lieu of the foregoing requirements there may be set forth on the face or back of the certificate that the corporation shall issue to represent such class or series of stock a statement that the corporation will furnish without charge to each stockholder who so requests the powers, the designations, the preferences and the relative, participating, optional or other special rights of each class of stock or series thereof and the qualifications, limitations or restrictions of such preferences and/or rights.

#### 8.6 LOST CERTIFICATES

Except as provided in this Section 8.6, no new certificates for shares shall be issued to replace a previously issued certificate unless the latter is surrendered to the corporation and cancelled at the same time. The board of directors may, in case any share certificate or certificate for any other security is lost, stolen or destroyed, authorize the issuance of replacement certificates on such terms and conditions as the board may require; the board may require indemnification of the corporation secured by a bond or other adequate security sufficient to protect the corporation against any claim that may be made against it, including any expense or liability, on account of the alleged loss, theft or destruction of the certificate or the issuance of the replacement certificate.

#### 8.7 TRANSFER AGENTS AND REGISTRARS

The board of directors may appoint one or more transfer agents or transfer clerks, and one or more registrars, each of which shall be an incorporated bank or trust company — either domestic or foreign, who shall be appointed at such times and places as the requirements of the corporation may necessitate and the board of directors may designate.

## 8.8 CONSTRUCTION; DEFINITIONS

Unless the context requires otherwise, the general provisions, rules of construction and definitions in the General Corporation Law of Delaware shall govern the construction of these bylaws. Without limiting the generality of this provision, as used in these bylaws, the singular number includes the plural, the plural number includes the singular, and the term “person” includes both an entity and a natural person.

## ARTICLE IX

### AMENDMENTS

The original or other bylaws of the corporation may be adopted, amended or repealed by the stockholders entitled to vote; provided, however, that the corporation may, in its certificate of incorporation, confer the power to adopt, amend or repeal bylaws upon the directors. The fact that such power has been so conferred upon the directors shall not divest the stockholders of the power, nor limit their power to adopt, amend or repeal bylaws.

Whenever an amendment or new bylaw is adopted, it shall be copied in the book of bylaws with the original bylaws, in the appropriate place. If any bylaw is repealed, the fact of repeal with the date of the meeting at which the repeal was enacted or the filing of the operative written consent(s) shall be stated in said book.

## ARTICLE X

### DISSOLUTION

If it should be deemed advisable in the judgment of the board of directors of the corporation that the corporation should be dissolved, the board, after the adoption of a resolution to that effect by a majority of the whole board at any meeting called for that purpose, shall cause notice to be mailed to each stockholder entitled to vote thereon of the adoption of the resolution and of a meeting of stockholders to take action upon the resolution.

At the meeting a vote shall be taken for and against the proposed dissolution. If a majority of the outstanding stock of the corporation entitled to vote thereon votes for the proposed dissolution, then a certificate stating that the dissolution has been authorized in accordance with the provisions of Section 275 of the General Corporation Law of Delaware and setting forth the names and residences of the directors and officers shall be executed, acknowledged, and filed and shall become effective in accordance with Section 103 of the General Corporation Law of Delaware. Upon such certificate's becoming effective in accordance with Section 103 of the General Corporation Law of Delaware, the corporation shall be dissolved.

Whenever all the stockholders entitled to vote on a dissolution consent in writing, either in person or by duly authorized attorney, to a dissolution, no meeting of directors or stockholders shall be necessary. The consent shall be filed and shall become effective in accordance with Section 103 of the General Corporation Law of Delaware. Upon such consent's becoming effective in accordance

with Section 103 of the General Corporation Law of Delaware, the corporation shall be dissolved. If the consent is signed by an attorney, then the original power of attorney or a photocopy thereof shall be attached to and filed with the consent. The consent filed with the Secretary of State shall have attached to it the affidavit of the secretary or some other officer of the corporation stating that the consent has been signed by or on behalf of all the stockholders entitled to vote on a dissolution; in addition, there shall be attached to the consent a certification by the secretary or some other officer of the corporation setting forth the names and residences of the directors and officers of the corporation.

## ARTICLE XI

### CUSTODIAN

#### 11.1 APPOINTMENT OF A CUSTODIAN IN CERTAIN CASES

The Court of Chancery, upon application of any stockholder, may appoint one or more persons to be custodians and, if the corporation is insolvent, to be receivers, of and for the corporation when:

- (i) at any meeting held for the election of directors the stockholders are so divided that they have failed to elect successors to directors whose terms have expired or would have expired upon qualification of their successors; or
- (ii) the business of the corporation is suffering or is threatened with irreparable injury because the directors are so divided respecting the management of the affairs of the corporation that the required vote for action by the board of directors cannot be obtained and the stockholders are unable to terminate this division; or
- (iii) the corporation has abandoned its business and has failed within a reasonable time to take steps to dissolve, liquidate or distribute its assets.

#### 11.2 DUTIES OF CUSTODIAN

The custodian shall have all the powers and title of a receiver appointed under Section 291 of the General Corporation Law of Delaware, but the authority of the custodian shall be to continue the business of the corporation and not to liquidate its affairs and distribute its assets, except when the Court of Chancery otherwise orders and except in cases arising under Sections 226(a)(3) or 352(a)(2) of the General Corporation Law of Delaware.

Effective August 14, 2013

**AMENDMENT NO. 2  
TO  
LOAN AGREEMENT**

THIS **AMENDMENT NO. 2** to Loan Agreement (this “**Amendment**”) is entered into this 20<sup>th</sup> day of August, 2013, by and between **SILICON VALLEY BANK** (“**Bank**”) and **HARMONIC, INC.**, a Delaware corporation (“**Borrower**”). Capitalized terms used herein without definition shall have the same meanings given them in the Loan Agreement (as defined below).

**RECITALS**

**A.** Bank and Borrower have entered into that certain Loan Agreement dated as of August 26, 2011, as amended by that certain Amendment No. 1 to Loan Agreement by and between Bank and Borrower dated as of August 23, 2012 (as the same may from time to time be further amended, modified, supplemented or restated, the “**Loan Agreement**”).

**B.** Bank has extended credit to Borrower for the purposes permitted in the Loan Agreement.

**C.** Borrower has requested that Bank amend the Loan Agreement to extend the maturity date.

**D.** Bank has agreed to so amend certain provisions of the Loan Agreement, but only to the extent, in accordance with the terms, subject to the conditions and in reliance upon the representations and warranties set forth below.

**AGREEMENT**

**NOW, THEREFORE**, in consideration of the foregoing recitals and other good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, and intending to be legally bound, the parties hereto agree as follows:

**1. Amendments to Loan Agreement.**

**1.1 Section 13.1 (Definitions).** Each of the following definitions is hereby: (a) to the extent already defined in Section 13.1 of the Loan Agreement, amended and restated in its entirety as follows, and (b) to the extent not already defined in Section 13.1 of the Loan Agreement, added to Section 13.1 of the Loan Agreement, in its appropriate alphabetical order, as follows:

“**Second Amendment Effective Date**” is August 20, 2013.”

“**Revolving Line Maturity Date**” is August 22, 2014.”

**2. Limitation of Amendments.** The amendments set forth in Section 1, above, shall be limited precisely as written and shall not be deemed (a) to be a forbearance, waiver or modification of any other term or condition of the Loan Documents or of any other instrument or agreement referred to therein; (b) to prejudice any right or remedy which Bank may now have or may have in the future under or in connection with the Loan Agreement or any instrument or agreement referred to therein; (c) to be a consent to any future amendment or modification, forbearance or waiver to any instrument or agreement the execution and delivery of which is consented to hereby, or to any waiver of any of the provisions thereof; or (d) to limit or impair Bank's right to demand strict performance of all terms and covenants as of any date. Except as expressly amended hereby, the Loan Agreement shall continue in full force and effect.

**3. Representations and Warranties.** To induce Bank to enter into this Amendment, Borrower hereby represents and warrants to Bank as follows:

**3.1** Immediately after giving effect to this Amendment (a) the representations and warranties contained in the Loan Documents are true, accurate and complete in all material respects as of the date hereof (except to the extent such representations and warranties relate to an earlier date, in which case they are true and correct as of such date), and (b) no Event of Default has occurred and is continuing;

**3.2** Borrower has the power and authority to execute and deliver this Amendment and to perform its obligations under the Loan Agreement, as amended by this Amendment;

**3.3** The organizational documents of Borrower delivered to Bank on the Effective Date remain true, accurate and complete and have not been amended, supplemented or restated and are and continue to be in full force and effect;

**3.4** The execution and delivery by Borrower of this Amendment and the performance by Borrower of its obligations under the Loan Agreement, as amended by this Amendment, have been duly authorized;

**3.5** The execution and delivery by Borrower of this Amendment and the performance by Borrower of its obligations under the Loan Agreement, as amended by this Amendment, do not and will not contravene (a) any law or regulation binding on or affecting Borrower, (b) any contractual restriction with a Person binding on Borrower, (c) any order, judgment or decree of any court or other governmental or public body or authority, or subdivision thereof, binding on Borrower, or (d) the organizational documents of Borrower;

**3.6** The execution and delivery by Borrower of this Amendment and the performance by Borrower of its obligations under the Loan Agreement, as amended by this Amendment, do not require any order, consent, approval, license, authorization or validation of, or filing, recording or registration with, or exemption by any governmental or public body or authority, or subdivision thereof, binding on Borrower, except as already has been obtained or made or except for any filing, recording, or registration required by the Securities Exchange Act of 1934; and

**3.7** This Amendment has been duly executed and delivered by Borrower and is the binding obligation of Borrower, enforceable against Borrower in accordance with its terms, except as such enforceability may be limited by bankruptcy, insolvency, reorganization, liquidation, moratorium or other similar laws of general application and equitable principles relating to or affecting creditors' rights.

**4. Integration.** This Amendment and the Loan Documents represent the entire agreement about this subject matter and supersede all prior agreements, understandings, offers and negotiations, oral or written, with respect thereto and no extrinsic evidence whatsoever may be introduced in any judicial, reference or arbitration proceeding, if any, involving this Amendment; except that any financing statements or other agreements or instruments filed by Bank with respect to Borrower shall remain in full force and effect.

**5. Counterparts.** This Amendment may be executed in any number of counterparts and all of such counterparts taken together shall be deemed to constitute one and the same instrument. All counterparts shall be deemed an original of this Amendment. Any signature delivered by a party by facsimile transmission or by electronic transmission of a PDF file shall be deemed to be an original signature hereto.

**6. Loan Document.** This Amendment is a Loan Document.

**7. Effectiveness.** This Amendment shall be deemed effective on the Second Amendment Effective Date upon (a) the due execution and delivery to Bank of this Amendment by each party hereto and (b) Borrower's payment of all Bank Expenses incurred and invoiced as of the date hereof.

**8. CHOICE OF LAW LAW; VENUE; JURY TRIAL WAIVER; JUDICIAL REFERENCE.** THIS AMENDMENT SHALL BE SUBJECT TO THE PROVISIONS REGARDING CHOICE OF LAW, VENUE, JURY TRIAL WAIVER, AND JUDICIAL REFERENCE SET FORTH IN SECTION 11 OF THE LOAN AGREEMENT, AND SUCH PROVISIONS ARE INCORPORATED HEREIN BY REFERENCE, *MUTATIS MUTANDIS*.

[Signature page follows.]



**IN WITNESS WHEREOF**, the parties hereto have caused this Amendment to be duly executed and delivered as of the date first written above.

**BORROWER**

HARMONIC, INC.,  
a Delaware corporation

By: /s/ Carolyn V. Aver

Name: Carolyn V. Aver

Title: CFO

[Signature Page to Amendment No. 2 to Loan Agreement]

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**IN WITNESS WHEREOF**, the parties hereto have caused this Amendment to be duly executed and delivered as of the date first written above.

**BANK**

SILICON VALLEY BANK

By: /s/ Alina Zinchik

Name: Alina Zinchik

Title: Vice President

[Signature Page to Amendment No. 2 to Loan Agreement]

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; and
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: November 4, 2013

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

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

I, Carolyn V. Aver, 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; and
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: November 4, 2013

By: /s/ Carolyn V. Aver  
Carolyn V. Aver  
Chief Financial Officer  
(Principal Financial Officer)

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 September 27, 2013, 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: November 4, 2013

/s/ Patrick J. Harshman

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Patrick J. Harshman

President and Chief Executive Officer

(Principal Executive Officer)

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, Carolyn V. Aver, 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 September 27, 2013, 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: November 4, 2013

/s/ Carolyn V. Aver  
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Carolyn V. Aver  
Chief Financial Officer  
(Principal Financial Officer)

