
UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Form 10-Q

(Mark one)

- Quarterly report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the quarterly period ended October 1, 2004.
- Transition report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the transition period from _____ to _____.

Commission File No. 0-25826

HARMONIC INC.

(Exact name of Registrant as specified in its charter)

Delaware

(State or other jurisdiction of
incorporation or organization)

77-0201147

(I.R.S. Employer
Identification Number)

549 Baltic Way
Sunnyvale, CA 94089
(408) 542-2500

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

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 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 is an accelerated filer (as defined in Rule 12b-2 of the Exchange Act).

Yes No

As of October 1, 2004, there were 72,255,613 shares of the Registrant's Common Stock outstanding.

HARMONIC INC.

INDEX

Page

PART I — FINANCIAL INFORMATION

Item 1. Condensed Consolidated Financial Statements (unaudited):

Condensed Consolidated Balance Sheets at October 1, 2004 and December 31, 2003 (unaudited)	3
Condensed Consolidated Statements of Operations for the Three and Nine Months Ended October 1, 2004 and September 26, 2003 (unaudited)	4
Condensed Consolidated Statements of Cash Flows for the Nine Months Ended October 1, 2004 and September 26, 2003 (unaudited)	5
Notes to Condensed Consolidated Financial Statements (unaudited)	6
Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations	14
Item 3. Quantitative and Qualitative Disclosures About Market Risk	38
Item 4. Controls and Procedures	38
PART II — OTHER INFORMATION	
Item 1. Legal Proceedings	39
Item 6. Exhibits	40
SIGNATURE	41
INDEX TO EXHIBITS	42
EXHIBIT 31.1	
EXHIBIT 31.2	
EXHIBIT 32.1	
EXHIBIT 32.2	

PART I

FINANCIAL INFORMATION

ITEM 1. CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

HARMONIC INC.

CONDENSED CONSOLIDATED BALANCE SHEETS
(UNAUDITED)

(In thousands, except par value amounts)	October 1, 2004	December 31, 2003
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 20,431	\$ 41,877
Short-term investments	68,949	70,720
Accounts receivable, net of allowances of \$4,657 and \$5,318	43,287	38,528
Inventories	37,988	22,425
Prepaid expenses and other current assets	10,262	6,196
Total current assets	180,917	179,746
Property and equipment, net of accumulated depreciation of \$90,650 and \$94,065	19,780	23,458
Goodwill, intangibles and other assets	11,063	21,522
Total Assets	<u>\$ 211,760</u>	<u>\$ 224,726</u>
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Current portion of long-term debt	\$ 915	\$ 1,027
Accounts payable	15,981	14,863
Income taxes payable	6,914	6,935
Deferred revenue	11,671	11,712
Accrued liabilities	43,836	49,820
Total current liabilities	79,317	84,357
Long-term debt, less current portion	904	629
Accrued excess facilities costs, long-term	25,463	28,627
Other non-current liabilities	5,658	4,952
Total liabilities	<u>111,342</u>	<u>118,565</u>
Commitments and contingencies (Notes 12 and 13)		
Stockholders' equity:		
Preferred Stock, \$.001 par value, 5,000 shares authorized; no shares issued or outstanding	—	—
Common Stock, \$.001 par value, 150,000 shares authorized: 72,256 and 71,240 shares issued and outstanding	72	71
Capital in excess of par value	2,039,599	2,036,522
Accumulated deficit	(1,939,142)	(1,930,558)
Accumulated other comprehensive income (loss)	(111)	126
Total stockholders' equity	<u>100,418</u>	<u>106,161</u>
Total Liabilities and Stockholders' Equity	<u>\$ 211,760</u>	<u>\$ 224,726</u>

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

HARMONIC INC.
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(IN THOUSANDS, EXCEPT PER SHARE DATA)
(UNAUDITED)

	Three Months Ended		Nine Months Ended	
	October 1, 2004	September 26, 2003	October 1, 2004	September 26, 2003
Net sales	\$ 50,610	\$ 47,253	\$ 162,727	\$ 125,947
Cost of sales	30,072	32,593	98,005	87,788
Gross profit	<u>20,538</u>	<u>14,660</u>	<u>64,722</u>	<u>38,159</u>
Operating expenses:				
Research and development	8,348	9,211	25,509	26,145
Selling, general and administrative	14,418	11,127	41,942	37,598
Amortization of intangibles	1,933	1,933	5,799	5,799
Total operating expenses	<u>24,699</u>	<u>22,271</u>	<u>73,250</u>	<u>69,542</u>
Loss from operations	(4,161)	(7,611)	(8,528)	(31,383)
Interest income, net	392	82	1,148	330
Other income (expense), net	(369)	175	(904)	550
Loss before income taxes	(4,138)	(7,354)	(8,284)	(30,503)
Provision for income taxes	100	100	300	300
Net loss	<u>\$ (4,238)</u>	<u>\$ (7,454)</u>	<u>\$ (8,584)</u>	<u>\$ (30,803)</u>
Net loss per share				
Basic and Diluted	<u>\$ (0.06)</u>	<u>\$ (0.12)</u>	<u>\$ (0.12)</u>	<u>\$ (0.51)</u>
Weighted average shares				
Basic and Diluted	<u>72,246</u>	<u>63,813</u>	<u>71,929</u>	<u>60,572</u>

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

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

	Nine Months Ended	
	October 1, 2004	September 26, 2003
Cash flows from operating activities:		
Net loss	\$ (8,584)	\$ (30,803)
Adjustments to reconcile net loss to cash used in operating activities:		
Amortization of intangibles	10,420	10,420
Depreciation	7,054	9,399
Non-employee stock option charge	18	34
Benefit from sale of previously written-off inventory	(3,075)	(3,237)
Loss on disposal of fixed assets	415	69
Deferred income taxes	(45)	3
Changes in assets and liabilities:		
Accounts receivable	(4,646)	(6,722)
Inventories	(12,443)	7,977
Prepaid expenses and other assets	(3,972)	881
Accounts payable	1,118	5,252
Deferred revenue	(41)	(2,540)
Income taxes payable	85	221
Accrued excess facilities costs	(3,857)	(5,571)
Accrued and other liabilities	(4,873)	1,075
Net cash used in operating activities	<u>(22,426)</u>	<u>(13,542)</u>
Cash flows from investing activities:		
Purchases of investments	(68,218)	(3,735)
Proceeds from sale of investments	69,711	19,413
Acquisition of property and equipment, net	(3,792)	(2,171)
Restricted cash	—	(7,022)
Net cash provided by (used in) investing activities	<u>(2,299)</u>	<u>6,485</u>
Cash flows from financing activities:		
Borrowings under bank line and term loan	1,175	537
Repayments under bank line and term loan	(1,012)	(1,299)
Proceeds from issuance of common stock, net	3,060	1,689
Net cash provided by financing activities	<u>3,223</u>	<u>927</u>
Effect of exchange rate changes on cash and cash equivalents	56	(32)
Net decrease in cash and cash equivalents	(21,446)	(6,162)
Cash and cash equivalents at beginning of period	41,877	21,542
Cash and cash equivalents at end of period	<u>\$ 20,431</u>	<u>\$ 15,380</u>
Supplemental disclosure of cash flow information:		
Interest paid during the period	\$ 63	\$ 121
Income tax payments, net	\$ 447	\$ 280

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

HARMONIC INC.**NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)****NOTE 1 — BASIS OF PRESENTATION**

The accompanying unaudited condensed consolidated financial statements 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 unaudited interim periods covered and the consolidated financial condition of the Company at the date of the balance sheets. The quarterly financial information is unaudited. 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 9, 2004. 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, 2004, or any other future period. The Company’s fiscal quarters end on the Friday nearest the calendar quarter end, except for the fourth quarter which ends on December 31.

NOTE 2 — EMPLOYEE STOCK PLANS

Harmonic accounts for employee stock option plans in accordance with Accounting Principles Board No. 25 (“APB 25”), “Accounting for Stock Issued to Employees,” and has adopted the disclosure requirements under SFAS No. 148, “Accounting for Stock-Based Compensation — Transition and Disclosure.” If charges for Harmonic’s stock plans had been determined based on the fair value method at the grant dates, as prescribed in SFAS No. 123, “Accounting for Stock-Based Compensation,” the Company’s net loss and net loss per share would have been as follows:

In thousands, except per share data (Unaudited)	Three Months Ended		Nine Months Ended	
	October 1, 2004	September 26, 2003	October 1, 2004	September 26, 2003
Net loss as reported	\$ (4,238)	\$ (7,454)	\$ (8,584)	\$ (30,803)
Add: Total stock compensation expense determined under fair value based method for all awards, net of related tax effects	(3,092)	(2,293)	(8,229)	(8,232)
Pro forma net loss	<u>\$ (7,330)</u>	<u>\$ (9,747)</u>	<u>\$ (16,813)</u>	<u>\$ (39,035)</u>
Basic and Diluted net loss per share:				
As reported	<u>\$ (0.06)</u>	<u>\$ (0.12)</u>	<u>\$ (0.12)</u>	<u>\$ (0.51)</u>
Pro forma net loss	<u>\$ (0.10)</u>	<u>\$ (0.16)</u>	<u>\$ (0.23)</u>	<u>\$ (0.64)</u>

These pro forma amounts may not be representative of the effects for future years as options vest over several years and additional awards are generally made each year.

In accordance with SFAS No. 123, stock options granted to non-employees are valued using the Black-Scholes option-pricing model and stock expense is recognized as earned. Stock expense is recognized on an accelerated basis using the multiple option method presented in Financial Accounting Standards Board Interpretation No. 28 (“FIN 28”), “Accounting for Stock Appreciation Rights and Other Variable Stock Option or Award Plans”. For the three and nine month periods ended October 1, 2004, Harmonic recorded \$5 thousand and \$18 thousand, respectively, of non-employee stock expenses. For the three and nine month periods ended September 26, 2003, Harmonic recorded \$11 thousand and \$34 thousand, respectively, of non-employee stock expenses.

[Table of Contents](#)

Amendments to Stock Plans

At the Annual Meeting of Stockholders of the Company, held on May 27, 2004, the following matters were acted upon and approved by the stockholders of the Company:

- An amendment to the 2002 Employee Stock Purchase Plan to increase the number of shares of common stock reserved for issuance thereunder by 2,000,000 shares.
- Amendments to the 1995 Stock Plan to: (i) extend the term of the Plan by 9 years to 2014, (ii) to increase the number of shares of common stock reserved for issuance by 2,500,000 shares, (iii) to transfer to the 1995 Stock Plan all shares remaining available to be granted under the 1999 Non-Statutory Stock Plan, including up to 1,800,000 shares subject to outstanding options if they expire, (iv) to add the ability to grant restricted stock, stock appreciation rights, performance shares, performance units and deferred stock units (subject to limits on discounted awards), and (v) to approve the material terms of the 1995 Plan and the performance goals thereunder for purposes of Internal Revenue Code Section 162(m).
- Amendments to the 2002 Director Plan to increase the initial grant to 30,000 shares, to authorize a one-time grant of 10,000 shares to each non-employee director re-elected at the May 27, 2004 Annual Stockholders Meeting, and to extend the exercisability period of all new options granted under this plan to three years following a director's resignation from Harmonic's Board of Directors.

NOTE 3 — CASH, CASH EQUIVALENTS AND INVESTMENTS

Cash equivalents are comprised of highly liquid investment-grade investments with original maturities of three months or less at the date of purchase. Harmonic's short-term investments are stated at fair value, and are principally comprised of government and corporate debt securities. The Company classifies its investments as available for sale in accordance with SFAS No. 115, "Accounting for Certain Investments in Debt and Equity Securities," and states its investments at estimated fair value, with unrealized gains and losses reported in accumulated other comprehensive income. The specific identification method is used to determine the cost of securities disposed of, with realized gains and losses reflected in other income (expense), net. Investments are anticipated to be used for current operations and are therefore classified as current assets, even though maturities may extend beyond one year. At October 1, 2004 and December 31, 2003, cash, cash equivalents and short-term investments are summarized as follows:

In Thousands	October 1, 2004	December 31, 2003
	(Unaudited)	
Cash and cash equivalents	\$ 20,431	\$ 41,877
Short-term investments:		
Less than one year	38,881	38,031
Due in 1-2 years	30,068	32,689
Total short-term investments	68,949	70,720
Total cash, cash equivalents and short-term investments	\$ 89,380	\$ 112,597

[Table of Contents](#)

At October 1, 2004 and December 31, 2003, short-term investments are summarized as follows:

In Thousands	October 1, 2004				December 31, 2003			
	Gross Amortized Cost	(Unaudited)		Estimated Fair Value	Gross Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
		Gross Unrealized Gains	Gross Unrealized Losses					
Corporate securities	\$ 45,538	\$ 1	\$ (132)	\$ 45,407	\$ 57,428	\$ 52	\$ (10)	\$ 57,470
Government securities	23,592	2	(52)	23,542	13,192	58	—	13,250
Total	\$ 69,130	\$ 3	\$ (184)	\$ 68,949	\$ 70,620	\$ 110	\$ (10)	\$ 70,720

At October 1, 2004, our gross unrealized losses on short-term investments were all in a loss position for less than 12 months.

NOTE 4 — INVENTORIES

Inventories consist of:

In Thousands	October 1, 2004	December 31, 2003
	(Unaudited)	
Raw materials	\$ 12,306	\$ 9,594
Work-in-process	4,391	1,135
Finished goods	21,291	11,696
	\$ 37,988	\$ 22,425

NOTE 5 — GOODWILL AND IDENTIFIED INTANGIBLES

Harmonic accounts for goodwill and other intangibles in accordance with SFAS No. 142, "Goodwill and Other Intangible Assets", which requires, among other things, that goodwill and intangible assets with indefinite useful lives no longer be amortized, and the testing of existing goodwill and other intangibles for impairment at least annually. Management believes that the operating segments, Convergent Systems, or CS, for digital headend systems, and Broadband Access Networks, or BAN, for fiber optic systems, represent the Company's reporting units. CS is the only reporting unit with goodwill and intangible assets. For the three and nine months ended October 1, 2004, the Company recorded \$3.5 million and \$10.4 million, respectively, of amortization expense in each period for identified intangibles, of which \$1.5 million and \$4.6 million, respectively, was included in cost of sales in each period. For the three and nine months ended September 26, 2003, the Company recorded \$3.5 million and \$10.4 million, respectively, of amortization expense in each period for identified intangibles, of which \$1.5 million and \$4.6 million, respectively, was included in cost of sales in each period. Estimated future amortization expense of identified intangibles is \$3.5 million for the remaining three months of 2004, and \$4.6 million for the fiscal year 2005. Future amortization expense to be included in cost of sales is estimated to be \$1.5 million for the remainder of 2004, and \$2.1 million for the fiscal year 2005.

[Table of Contents](#)

The following is a summary of goodwill and intangible assets as of October 1, 2004 and December 31, 2003:

In Thousands	October 1, 2004			December 31, 2003		
	Gross Carrying Amount	(Unaudited) Accumulated Amortization	Net Carrying Amount	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Identified intangibles:						
Developed core technology	\$29,059	\$ (25,841)	\$ 3,218	\$29,059	\$ (21,703)	\$ 7,356
Customer base	33,295	(29,278)	4,017	33,295	(24,112)	9,183
Trademark and tradename	4,076	(3,583)	493	4,076	(2,949)	1,127
Supply agreement	3,107	(2,731)	376	3,107	(2,248)	859
Total of identified intangibles	69,537	(61,433)	8,104	69,537	(51,012)	18,525
Goodwill	1,780	—	1,780	1,780	—	1,780
Total goodwill and other intangibles	<u>\$71,317</u>	<u>\$ (61,433)</u>	<u>\$ 9,884</u>	<u>\$71,317</u>	<u>\$ (51,012)</u>	<u>\$20,305</u>

NOTE 6 — CREDIT FACILITIES AND LONG-TERM DEBT

Harmonic has a bank line of credit facility with Silicon Valley Bank, which provides for borrowings up to \$13.5 million, including \$3.5 million for equipment under a secured term loan. This facility, which was amended and restated in December 2003 and expires in December 2004, contains financial and other covenants, including the requirement for Harmonic to maintain cash, cash equivalents and short-term investments, net of credit extensions, of not less than \$65.0 million. If Harmonic is unable to maintain this cash, cash equivalents and short-term investments balance or satisfy the additional affirmative covenant requirements, Harmonic would be in noncompliance with the facility. In the event of noncompliance by Harmonic with the covenants under the facility, Silicon Valley Bank would be entitled to exercise its remedies under the facility which include declaring all obligations immediately due and payable and disposing of the collateral if obligations were not repaid. At October 1, 2004, Harmonic was in compliance with the covenants under this line of credit facility. Future borrowings pursuant to the line bear interest at the bank's prime rate or prime rate plus 1.0% depending upon the Company's total cash position and previous six months' revenue. Borrowings are payable monthly and are collateralized by all of Harmonic's assets. As of October 1, 2004, \$1.8 million was outstanding under the equipment term loan portion of this facility, of which \$1.2 million was borrowed during 2004 through September 18, the expiration of the equipment advance period. The term loan is payable monthly, including principal and interest at 5.25% per annum on outstanding borrowings as of October 1, 2004 and matures at various dates through October 2007. The draw period under the term loan expired on September 18, 2004, effectively capping the term loan's borrowings at \$1.8 million. Other than standby letters of credit and guarantees (Note 12), there were no other outstanding borrowings or commitments under the line of credit facility as of October 1, 2004.

NOTE 7 — NET LOSS PER SHARE

The basic net loss per share is computed by dividing the net loss attributable to common stockholders for the period by the weighted average number of common shares outstanding during the period. The diluted net loss per share is the same as the basic net loss per share for the three and nine month periods ended October 1, 2004 and September 26, 2003, respectively, because common shares issuable upon the exercise of stock options are only considered when their effect would be dilutive. During the three and nine month periods ended October 1, 2004, 8.0 million and 7.5 million, respectively, of weighted average antidilutive options were excluded from the net loss per share computations because their effect was antidilutive. For the three and nine month periods ended September 26, 2003, 6.8 million and 6.9 million, respectively, of weighted average antidilutive options were excluded from the net loss per share computations because their effect was antidilutive.

[Table of Contents](#)

NOTE 8 — COMPREHENSIVE LOSS

The Company's total comprehensive loss was as follows:

In Thousands (Unaudited)	Three Months Ended		Nine Months Ended	
	October 1, 2004	September 26, 2003	October 1, 2004	September 26, 2003
Net loss	\$ (4,238)	\$ (7,454)	\$ (8,584)	\$ (30,803)
Change in unrealized gain on investments, net	35	—	(174)	—
Foreign currency translation	25	85	(63)	58
Total comprehensive loss	\$ (4,178)	\$ (7,369)	\$ (8,821)	\$ (30,745)

Components of accumulated other comprehensive income (loss), on an after-tax basis where applicable, are as follows:

In Thousands (Unaudited)	October 1, 2004	December 31, 2003
Unrealized gain (loss) on investments	\$ (112)	\$ 62
Cumulative gain on foreign currency translation	1	64
Accumulated other comprehensive income (loss)	\$ (111)	\$ 126

NOTE 9 — RESTRUCTURING AND EXCESS FACILITIES

As a result of uncertain market conditions and lower sales during the second half of 2002, the Company implemented workforce reductions of approximately 120 full-time employees and changed its estimates related to accrued excess facilities with regard to the expected timing and amount of sublease income due to the substantial surplus of vacant commercial space in the San Francisco Bay Area. In connection with these actions, Harmonic recorded \$1.5 million and paid \$1.1 million for severance and other costs and recorded an additional excess facilities charge of \$22.5 million, net of sublease income, to selling, general and administrative expenses during the second half of 2002.

During the nine months ended October 1, 2004, Harmonic paid \$34 thousand of severance and other costs, and no liability remains. As of October 1, 2004, accrued excess facilities cost totaled \$30.8 million of which \$5.3 million was included in current accrued liabilities and \$25.5 million in other non-current liabilities. The Company incurred cash outlays of \$3.9 million during the first nine months of 2004, principally for lease payments, property taxes, insurance and other maintenance fees related to vacated facilities. Harmonic expects to pay approximately \$1.6 million of excess facilities lease costs, net of estimated sublease income, for the remainder of 2004 and to pay the remaining \$29.2 million, net of estimated sublease income, over the remaining lease terms through September 2010. Harmonic reassesses this liability quarterly and adjusts as necessary based on changes in the timing and amounts of expected sublease rental income or changes in other assumptions due to changes in market conditions. The review performed at September 26, 2003 resulted in this liability being decreased by \$3.3 million due to a revision in the assumptions as to the unoccupied portions of a building. This revision was offset by a correction of a straight-line rent expense of \$2.3 million as a result of a lease extension on another building. This lease extension was a condition of leasing three additional buildings at corporate headquarters and resulted in all leases terminating in September of 2010. Because the effect of the correction on any quarter or year was not material to the results of operations and financial position, the non-cash adjustment was recorded in the third quarter of 2003. In the event the Company were unable to achieve expected levels of sublease rental income, Harmonic would need to revise its estimate of the liability, which could materially impact the Company's financial position, liquidity, cash flows or results of operations.

[Table of Contents](#)

The following table summarizes restructuring activities:

In Thousands (Unaudited)	Workforce Reduction	Excess Facilities	Total
Balance at December 31, 2003	\$ 34	\$ 34,667	\$34,701
Adjustments	—	18	18
Cash payments	(34)	(3,875)	(3,909)
Balance at October 1, 2004	\$ —	\$ 30,810	\$30,810

NOTE 10 — SEGMENT REPORTING

Operating segments are defined as components of an enterprise that engage in business activities for which separate financial information is available and evaluated by the chief operating decision maker. Harmonic is organized as two operating segments, Convergent Systems, or CS, for digital headend systems, and Broadband Access Networks, or BAN, for fiber optic systems. Each segment has its own management team directing its product development, marketing strategies and its customer service requirements. In the Americas, a separate sales force generally supports both divisions with appropriate product and market specialization as required, while the rest of the world is supported by divisional sales forces.

The results of the reportable segments are derived directly from Harmonic's management reporting system. The results reported below are based on Harmonic's method of internal reporting and are not necessarily presented in conformity with generally accepted accounting principles. Management measures performance of each segment based on several metrics, including revenue, and income or loss from segment operations. These results are used, in part, to evaluate the performance of, and allocate resources to each of the segments. Income (loss) from segment operations excludes intangible amortization expense, corporate expenses, eliminations, and interest and other income. Corporate expenses and eliminations include human resources, legal, finance and other corporate departments and intercompany eliminations. Net income or loss, and assets and liabilities are not internally reported by business segment.

In Thousands (Unaudited)	Three Months Ended		Nine Months Ended	
	October 1, 2004	September 26, 2003	October 1, 2004	September 26, 2003
Net sales:				
Convergent Systems	\$ 34,638	\$ 28,956	\$ 103,752	\$ 80,042
Broadband Access Networks	15,972	18,297	58,975	45,905
Total net sales	\$ 50,610	\$ 47,253	\$ 162,727	\$ 125,947
Income (loss) from segment operations:				
Convergent Systems	\$ 3,032	\$ 52	\$ 7,522	\$ (2,022)
Broadband Access Networks	905	(1,801)	7,717	(6,866)
Income (loss) from segment operations	3,937	(1,749)	15,239	(8,888)
Amortization of intangibles	(3,473)	(3,473)	(10,420)	(10,420)
Interest income, net	392	82	1,148	330
Other income (expense), net	(369)	175	(904)	550
Corporate expenses and eliminations	(4,625)	(2,389)	(13,347)	(12,075)
Loss before income taxes	\$ (4,138)	\$ (7,354)	\$ (8,284)	\$ (30,503)

NOTE 11 — RELATED PARTY

A director of Harmonic is also a director of Terayon Communications, with whom the Company has a reseller agreement for certain products. Product purchases from Terayon were approximately \$1.9 million and \$4.8 million for the three and nine month periods ended October 1, 2004, respectively. For the three and nine month periods ended September 26, 2003, product purchases from Terayon were approximately \$0.9 million and \$1.8 million, respectively. As of October 1, 2004 and December 31, 2003, Harmonic had liabilities to Terayon of \$0.7 million and \$0.3 million, respectively, for inventory purchases.

NOTE 12 — GUARANTEES AND INDEMNIFICATIONS

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 adjusts based on the terms of warranties provided to customers, historical and anticipated warranty claims experience, and estimates of the timing and cost of specified warranty claims. Activity for the Company's warranty accrual, which is included in accrued liabilities, is summarized below (in thousands):

In Thousands (Unaudited)	Three Months Ended		Nine Months Ended	
	October 1, 2004	September 26, 2003	October 1, 2004	September 26, 2003
Balance at the beginning of the period	\$ 4,902	\$ 4,796	\$ 4,886	\$ 5,866
Accrual for warranties	1,213	916	3,794	2,777
Warranty costs incurred	(1,139)	(1,286)	(3,704)	(4,217)
Balance at the end of the period	\$ 4,976	\$ 4,426	\$ 4,976	\$ 4,426

Standby Letters of Credit. As of October 1, 2004, the Company's financial guarantees consisted of standby letters of credit outstanding, which were related principally to customs bond requirements and corporate purchase cards. The maximum amount of potential future payments under these arrangements was \$1.5 million.

Guarantees. As of October 1, 2004, Harmonic had no outstanding guarantees, other than as described above under "Standby Letters of Credit."

Indemnifications. Harmonic indemnifies the members of its Board of Directors and its officers pursuant to the requirements of its certificate of incorporation and bylaws and pursuant to indemnification agreements entered into with such persons, and some of its suppliers and customers for specified intellectual property rights pursuant to certain parameters and restrictions. The scope of these indemnities varies, but in some instances, includes indemnification for damages and expenses (including reasonable attorneys' fees). No amounts have been accrued in respect of the indemnifications provisions at October 1, 2004.

Tax Sharing Agreements. Under the terms of the merger agreement with C-Cube, Harmonic is generally liable for C-Cube's pre-merger tax liabilities. Approximately \$15.8 million pre-merger tax liabilities remained outstanding at October 1, 2004 and are included in accrued liabilities. These liabilities represent estimates of C-Cube's pre-merger tax obligations to various tax authorities in 13 countries. We are working with LSI Logic, which acquired the spun-off semiconductor business in June 2001 and assumed its obligations, to settle these obligations, a process which has been underway since the merger in 2000. Harmonic paid approximately \$4.8 million in April 2004, pursuant to a tax sharing agreement between Harmonic and LSI Logic, but is unable to predict when the remaining obligations will be paid, or in what amount. The full amount of the estimated obligation has been classified as a current liability. To the extent that these obligations are finally settled for less than the amounts provided, Harmonic is required, under the terms of the tax-sharing agreement, to refund the difference to LSI Logic. Conversely, if the settlements are more than the \$15.8 million pre-merger tax liability, LSI is obligated to reimburse Harmonic.

NOTE 13 — LEGAL PROCEEDINGS

Between June 28 and August 25, 2000, several actions alleging violations of the federal securities laws by Harmonic and certain of its officers and directors (some of whom are no longer with Harmonic) were filed in or removed to the United States District Court for the Northern District of California. The actions subsequently were consolidated.

A consolidated complaint, filed on December 7, 2000, was brought on behalf of a purported class of persons who purchased Harmonic's publicly traded securities between January 19 and June 26, 2000. The complaint also alleged claims on behalf of a purported subclass of persons who purchased C-Cube securities between January 19 and May 3, 2000. In addition to Harmonic and certain of its officers and directors, the complaint also named C-Cube Microsystems Inc. and several of its officers and directors as defendants. The complaint alleged that, by making false or misleading statements regarding Harmonic's prospects and customers and its acquisition of C-Cube, certain defendants violated sections 10(b) and 20(a) of the Securities Exchange Act of 1934. The complaint also alleged that certain defendants violated section 14(a) of the Exchange Act and sections 11, 12(a)(2), and 15 of the Securities Act of 1933 by filing a false or misleading registration statement, prospectus, and joint proxy in connection with the C-Cube acquisition.

On July 3, 2001, the Court dismissed the consolidated complaint with leave to amend. An amended complaint alleging the same claims against the same defendants was filed on August 13, 2001. Defendants moved to dismiss the amended complaint on September 24, 2001. On November 13, 2002, the Court issued an opinion granting the motions to dismiss the amended complaint without leave to amend. Judgment for defendants was entered on December 2, 2002. On December 12, 2002, plaintiffs filed a motion to amend the judgment and for leave to file an amended complaint pursuant to Rules 59(e) and 15(a) of the Federal Rules of Civil Procedure. On June 6, 2003, the Court denied plaintiffs' motion to amend the judgment and for leave to file an amended complaint. Plaintiffs filed a notice of appeal on July 1, 2003. Plaintiffs filed their opening brief on December 3, 2003. Defendants filed their answering briefs on March 2, 2004. Plaintiffs' reply brief was filed on April 16, 2004. No hearing has been scheduled yet.

A derivative action purporting to be on behalf of Harmonic was filed against its then-current directors in the Superior Court for the County of Santa Clara on September 5, 2000. Harmonic also was named as a nominal defendant. The complaint is based on allegations similar to those found in the securities class action and claims that the defendants breached their fiduciary duties by, among other things, causing Harmonic to violate federal securities laws. The derivative action was removed to the United States District Court for the Northern District of California on September 20, 2000. All deadlines in this action were stayed pending resolution of the motions to dismiss the securities class action. On July 29, 2003, the Court approved the parties' stipulation to dismiss this derivative action without prejudice and to toll the applicable limitations period. The limitations period is tolled until fourteen days after (1) defendants provide plaintiff with a copy of the mandate issued by the Ninth Court in the securities action or (2) either party provides written notice of termination of the tolling period, whichever is first.

A second derivative action purporting to be on behalf of Harmonic was filed in the Superior Court for the County of Santa Clara on May 15, 2003. It alleges facts similar to those previously alleged in the securities class action and the federal derivative action. The complaint names as defendants former and current Harmonic officers and directors, along with former officers and directors of C-Cube Microsystems, Inc., who were named in the securities class action. The complaint also names Harmonic as a nominal defendant. The complaint alleges claims for abuse of control, gross mismanagement, and waste of corporate assets against the Harmonic defendants, and claims for breach of fiduciary duty, unjust enrichment, and negligent misrepresentation against all defendants. On July 22, 2003, the Court approved the parties' stipulation to stay the case pending resolution of the appeal in the securities class action. Although the parties initially agreed in principle to a dismissal without prejudice on similar terms as in the federal derivative action, after further discussion, the parties decided that the stay currently in place suffices to protect their respective interests.

Based on its review of the complaints filed in the securities class actions, Harmonic believes that it has meritorious defenses and intends to defend itself vigorously. There can be no assurance, however, that Harmonic will prevail. No estimate can be made of the possible range of loss associated with the resolution of this contingency and

[Table of Contents](#)

accordingly, Harmonic has not recorded a liability. An unfavorable outcome of this litigation could have a material adverse effect on Harmonic's business, operating results, financial position or cash flows.

On July 3, 2003, Stanford University and Litton Systems filed a complaint in U.S. District Court for the Central District of California alleging that optical fiber amplifiers incorporated into certain of Harmonic's products infringe U.S. Patent No. 4,859,016. This patent expired in September 2003. The complaint seeks injunctive relief, royalties and damages. Harmonic has not been served in the case. Harmonic is currently evaluating its position with respect to this patent and has engaged in discussions with the plaintiff regarding potential settlement of the matter. At this time, we are unable to determine whether we will be able to settle this litigation on reasonable terms or at all, nor can we predict the impact of an adverse outcome of this litigation if we elect to defend against it. No estimate can be made of the possible range of loss associated with the resolution of this contingency and accordingly, we have not recorded a liability associated with the outcome of a negotiated settlement or an unfavorable verdict in litigation. An unfavorable outcome of this matter could have a material adverse effect on Harmonic's business, operating results, financial position or cash flows.

Harmonic is involved in other litigation and may be subject to claims arising in the normal course of business. In the opinion of management the amount of ultimate liability with respect to these matters in the aggregate will not have a material adverse effect on the Company or its operating results, financial position or cash flows.

NOTE 14 – RECENT ACCOUNTING DEVELOPMENTS

In March 2004, the Emerging Issues Task Force ("EITF") reached a consensus on Issue No. 03-1 "The Meaning of Other than Temporary Impairment and its Application to Certain Investments." For investments that meet the scope of this Issue, the Task Force reached a consensus that the application guidance in paragraphs 6 through 20 of Issue No. 03-1 should be used to determine when an investment is considered impaired, whether that impairment is other than temporary, and the measurement of an impairment loss. The guidance also includes accounting considerations subsequent to the recognition of an other-than-temporary impairment and requires certain disclosures about unrealized losses that have not been recognized as other-than-temporary impairments. The recognition and measurement guidance of this Issue was to be applied to other-than-temporary impairment evaluations in reporting periods beginning after June 15, 2004. However, on September 30, 2004, the Financial Accounting Standards Board ("FASB") issued a final FASB Staff Position, FSP EITF Issue 03-1-1 that delays the effective date for the measurement and recognition guidance included in paragraphs 10 through 20 of EITF Issue No. 03-1. Disclosures required by EITF Issue No. 03-1, paragraphs 21 and 22, have not been deferred. The final FSP is a change from what was previously proposed in that it expands the scope of the deferral to include all securities covered by EITF Issue No. 03-1 rather than limiting the deferral to only certain debt securities that are impaired solely because of interest rate and/or sector spread increases. The Company is currently evaluating the effect of this proposed standard on its financial position and results of operations.

In March 2004, the EITF reached a consensus on Issue No. 03-6 "Participating Securities and the Two-Class Method Under FASB Statement No. 128." EITF Issue No. 03-6 clarifies questions related to the application of the two-class method outlined in Financial Accounting Standards Board ("FASB") Statement of Financial Accounting Standards No. 128, "Earnings per Share" and the interaction with FASB Topic No. D-95 "Effect of Participating Convertible Securities on the Computation of Basic Earnings per Share" which addresses the effect of participating convertible securities on the computation of basic earnings per share ("EPS"). EITF No. 03-6 provides guidance as to how to apply the two-class method once it is determined that a security is participating. The provisions of EITF Issue No. 03-6 are applicable for EPS computations for periods beginning after April 1, 2004. Harmonic adopted EITF Issue No. 03-6 effective April 3, 2004, and the adoption had no effect on the Company's financial position, results of operations, or cash flows.

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

This Quarterly Report on Form 10-Q contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934, including statements regarding our expectations of continued customer concentration; our expectation that current business trends will result in higher net sales in the fourth quarter of 2004 than in any prior quarter in 2004; our expectation that domestic sales will account for the majority of revenues in the fourth quarter of 2004; our expectation that the upgrade of satellite facilities by a

[Table of Contents](#)

Japanese customer will account for approximately \$3.1 million in sales revenue over the next two quarters; our expectation that international sales will continue to account for a significant portion of our net sales for the foreseeable future; our expectations regarding our capital expenditures during 2004; our expectations regarding the amount of amortization expense we will incur during the fourth quarter of 2004 and in 2005; and our belief that our existing liquidity sources will satisfy our cash requirement for at least the next 12 months. These statements involve risks and uncertainties as well as assumptions that, if they were to never materialize or prove incorrect, could cause actual results to differ materially from those projected, expressed or implied in the forward-looking statements. These risks and uncertainties include those set forth under "Factors That May Affect Future Results of Operations" below and elsewhere in this Quarterly Report on Form 10-Q and that are otherwise described from time to time in Harmonic's filings with the Securities and Exchange Commission.

Overview

Harmonic designs, manufactures and sells digital video systems and fiber optic systems that enable network operators to provide a range of interactive and advanced digital services that include digital video, video-on-demand, or VOD, high definition (HD) television, high-speed Internet access and telephony. We offer digital headend products to enable delivery of digital video over cable systems and satellite, telephone and wireless networks. We also offer fiber optic transmission systems to cable television operators and to telephone companies that offer video services to their customers.

We believe that our sequential quarterly sales increases throughout 2003 and the increases in net sales during the first, second, and third quarters of 2004 as compared to the same periods of 2003, respectively, reflected a firmer industry telecommunications capital spending environment worldwide, which favorably impacted Harmonic. We believe that this improvement in the capital spending environment was in part as a result of the intensifying competition between cable and satellite operators to offer more channels of digital video and new services, such as VOD and HD television, and increasing evidence that telephone companies are preparing to offer video services in order to compete with the cable companies in providing the "triple play" of video, voice and data. Although our net sales in the third quarter of 2004 were sequentially down from the second quarter of 2004, we believe that current business trends will result in higher net sales in the fourth quarter of 2004 than in any prior quarter of 2004.

Harmonic has been organized into two operating divisions, Convergent Systems, or CS, for digital video systems, and Broadband Access Networks, or BAN, for fiber optic systems. In the third quarter and first nine months of 2004, sales of CS products accounted for approximately 68% and 64%, respectively, of net sales, while BAN products accounted for approximately 32% and 36%, respectively, of net sales as compared to the same periods of 2003 where sales of CS and BAN products accounted for approximately 61% and 64%, respectively, and 39% and 36%, respectively, of net sales. During the third quarter and first nine months of 2004, net sales of CS products increased 20% and 30%, respectively, and net sales of BAN products decreased 13% and increased 28%, respectively, as compared to the same periods in 2003. On a consolidated basis, total Harmonic net sales in the third quarter and first nine months of 2004 increased 7% and 29%, respectively, as compared with the same periods of 2003.

Historically a majority of our net sales have been to relatively few customers, and due in part to the consolidation of ownership of cable television and direct broadcast satellite systems, we expect this customer concentration to continue for the foreseeable future. In the third quarter of 2004, there were no sales to customers in excess of 10% of our quarterly revenue, although 53% of our revenue was generated by the top 10 customers. In the third quarter of 2003, sales to Comcast accounted for 38% of net sales. For the first nine months of 2004 sales to Comcast accounted for 14% of net sales. For the first nine months of 2003, sales to Comcast and Echostar accounted for 33% and 10% of net sales, respectively.

International sales continue to account for a significant portion of our net sales. During the third quarter and first nine months of 2004, sales to customers outside of the United States represented 59% and 45%, respectively, of our total net sales, as compared to 29% and 28% for the corresponding periods in 2003. The increase in both the third quarter and first nine months of 2004 was due in part to the impact from a major upgrade by a Japanese customer of their satellite facilities during the first nine months of 2004, and in part to sales of headend equipment to two major international telephone companies for video deployments. The upgrade by the Japanese customer accounted for \$2.8 million and \$9.3 million in net sales in the third quarter and first nine months of 2004, respectively, and we expect that the remaining balance of the upgrade of approximately \$3.1 million will be recognized over the next two quarters, subject to no significant delays in completion of the upgrade. Although we expect that international sales will continue to account for a significant portion of our net sales for the foreseeable future, it is probable that domestic

[Table of Contents](#)

sales will account for the majority of revenues in the fourth quarter of 2004. A significant portion of our international sales are made to distributors and system integrators, which are generally responsible for importing the products and providing installation and technical support and service to customers within their territory.

Results of Operations

Harmonic's historical consolidated statements of operations data for the third quarter and first nine months of 2004 and 2003 as a percentage of net sales, are as follows:

	Three Months Ended		Nine Months Ended	
	October 1, 2004	September 26, 2003	October 1, 2004	September 26, 2003
Net sales	100%	100%	100%	100%
Cost of sales	59	69	60	70
Gross profit	41	31	40	30
Operating expenses:				
Research and development	16	19	16	21
Selling, general and administrative	29	24	25	30
Amortization of intangibles	4	4	4	5
Total operating expenses	49	47	45	55
Loss from operations	(8)	(16)	(5)	(25)
Interest income, net	—	—	—	—
Other income (expense), net	—	—	—	—
Loss before income taxes	(8)	(16)	(5)	(24)
Provision for (benefit from) income taxes	—	—	—	—
Net loss	(8)%	(16)%	(5)%	(24)%

Net Sales — Consolidated and Segment

Harmonic's consolidated and segment net sales in the third quarter and first nine months of 2004 compared with the corresponding periods in 2003 are presented in the tables below. Also presented is the related dollar and percentage increase (decrease) in consolidated and segment net sales in the third quarter and first nine months of 2004 compared with the corresponding periods in 2003 (in thousands, except percentages).

Segmental Sales Data:	Three Months Ended		Nine Months Ended	
	October 1, 2004	September 26, 2003	October 1, 2004	September 26, 2003
Convergent Systems	\$34,638	\$28,956	\$103,752	\$ 80,042
Broadband Access Networks	15,972	18,297	58,975	45,905
Net sales	\$50,610	\$47,253	\$162,727	\$125,947
Convergent Systems Increase	\$ 5,682		\$ 23,710	
Broadband Access Networks Increase (Decrease)	(2,325)		13,070	
Total Increase	\$ 3,357		\$ 36,780	
Convergent Systems Percent change	19.6%		29.6%	
Broadband Access Networks Percent change	(12.7)%		28.5%	
Total Percent change	7.1%		29.2%	

Net sales increased in the CS division during the third quarter and first nine months of 2004 compared to the same periods of 2003 principally due to stronger spending by international customers and to a lesser degree due to continued spending by domestic customers for the rollout of new services. The CS division sold significantly more encoders in the third quarter and first nine months of 2004 compared to the same periods of 2003, offset by a reduction in sales of its Narrowcast Service Gateway ("NSG") product for VOD due to the substantial completion of

[Table of Contents](#)

initial deployments by certain domestic cable customers. The increased sales of encoders in both the third quarter and first nine months of 2004 was due in part to the major upgrade by a Japanese customer of their satellite facilities during the first nine months of 2004, and in part to sales of headend equipment to two major international telephone companies for video deployments. The upgrade by the Japanese customer accounted for \$2.8 million and \$9.3 million in net sales in the third quarter and first nine months of 2004, respectively, and we expect that the remaining balance of the upgrade of approximately \$3.1 million will be recognized over the next two quarters subject to no significant delays in completion of the upgrade.

Net sales decreased in the BAN division in the third quarter of 2004 as compared to the same period in 2003 and increased in the first nine months of 2004 compared to the same period of 2003. The decrease in the third quarter of 2004 was principally due to lower shipments to most domestic cable customers in the third quarter of 2004, especially Adelphia, which recently invited offers for the sale of the company. The decrease in domestic sales was partially offset by an improvement in spending by international cable operators. The increase in the first nine months of 2004 as compared to the same period of 2003 was as a result of stronger overall spending by U.S. cable operators resulting in increased sales of transmitters and nodes related to continuing network improvements such as node segmentation, and to a lesser degree by an improvement in spending by international cable operators.

Net Sales — Geographic

Harmonic's domestic and international net sales in the third quarter and first nine months of 2004 compared with the corresponding periods in 2003 are presented in the tables below. Also presented is the related dollar and percentage increase (decrease) in domestic and international net sales in the third quarter and first nine months of 2004 compared with the corresponding periods in 2003 (in thousands, except percentages).

Geographic Sales Data:	Three Months Ended		Nine Months Ended	
	October 1, 2004	September 26, 2003	October 1, 2004	September 26, 2003
U.S.	\$ 20,944	\$ 33,430	\$ 89,201	\$ 91,154
International	<u>29,666</u>	<u>13,823</u>	<u>73,526</u>	<u>34,793</u>
Net sales	\$ 50,610	\$ 47,253	\$162,727	\$125,947
U.S. Decrease	\$(12,486)		\$ (1,953)	
International Increase	<u>15,843</u>		<u>38,733</u>	
Total Increase	\$ 3,357		\$ 36,780	
U.S. Percent change	(37.4)%		(2.1)%	
International Percent change	114.6%		111.3%	
Total Percent change	7.1%		29.2%	

The decreased U.S. sales in the third quarter and first nine months of 2004 was principally due to lower shipments to most domestic cable customers in the third quarter of 2004, partially offset by stronger overall spending during the first nine months of 2004 by domestic customers for the roll-out of new services, such as VOD and HD television programming, as well from the benefit of increased sales of transmitters and nodes for major network upgrades related to continuing network improvements, such as node segmentation.

The increased international sales in both the third quarter and first nine months of 2004 was due in part to the impact from a major upgrade by a Japanese customer of their satellite facilities, and in part to sales of headend equipment to two major international telephone companies for video deployments. The upgrade by the Japanese customer accounted for \$2.8 million and \$9.3 million in net sales in the third quarter and first nine months of 2004, respectively, and we expect that the remaining balance of the upgrade of approximately \$3.1 million will be recognized over the next two quarters, subject to no significant delays in completion of the upgrade. As a result of these factors, we expect that international sales will continue to account for a significant portion of our net sales for the foreseeable future. The increased international sales in both the third quarter and first nine months of 2004 as compared to the same periods of 2003, was also due to increased international capital spending primarily in Europe, Canada, Latin America, Asia and the Caribbean.

[Table of Contents](#)*Gross Profit*

Harmonic's gross profit and gross profit as a percentage of consolidated net sales in the third quarter and first nine months of 2004 as compared with the corresponding prior year periods of 2003 are presented in the tables below. Also presented is the related dollar and percentage increase in gross profit in the third quarter and first nine months of 2004 as compared with the corresponding periods of 2003 (in thousands, except percentages).

	Three Months Ended		Nine Months Ended	
	October 1, 2004	September 26, 2003	October 1, 2004	September 26, 2003
Gross profit	\$20,538	\$ 14,660	\$64,722	\$ 38,159
As a % of net sales	40.6%	31.0%	39.8%	30.3%
Increase	\$ 5,878		\$26,563	
Percent change	40.1%		69.6%	

The increase in gross profit in the third quarter and first nine months of 2004 as compared to the corresponding periods of 2003 was primarily due to higher sales, lower third party manufacturing costs, improvements in factory efficiencies, and a higher proportion of CS division sales in the third quarter of 2004, which historically carry a more favorable product margin. In addition, gross profit for the third quarter and first nine months of 2004 included a benefit of \$1.2 million and \$3.1 million, respectively, related to products sold for which the cost basis had been written down in prior years, as compared to a benefit of \$1.1 million and \$3.2 million, respectively, in the corresponding periods of 2003.

In the third quarter and first nine months of 2004 and 2003, approximately \$1.5 million and \$4.6 million, respectively, of amortization of intangibles was included in cost of sales. Harmonic expects to record approximately \$6.2 million in amortization of intangibles in cost of sales in 2004. See Note 5 of Notes to Condensed Consolidated Financial Statements.

Research and Development

Harmonic's research and development expense and the expense as a percentage of consolidated net sales in the third quarter and first nine months of 2004, as compared with the corresponding periods of 2003, are presented in the tables below. Also presented is the related dollar and percentage decrease in research and development expense in the third quarter and first nine months of 2004 as compared with the corresponding periods of 2003 (in thousands, except percentages).

	Three Months Ended		Nine Months Ended	
	October 1, 2004	September 26, 2003	October 1, 2004	September 26, 2003
Research and development expense	\$8,348	\$ 9,211	\$25,509	\$ 26,145
As a % of net sales	16.5%	19.5%	15.7%	20.8%
Decrease	\$ (863)		\$ (636)	
Percent change	(9.4)%		(2.4)%	

The decrease in research and development expense in the third quarter of 2004 as compared to the same period in 2003 was primarily as a result of reduced prototype material costs of \$0.2 million, reduced depreciation expenses of \$0.2 million, and a net reduction in other expenses of \$0.5 million, as compared to the same period in 2003.

The decrease in research and development expense in the first nine months of 2004 as compared to the same period in 2003 was as a result of reduced prototype material costs of \$0.4 million, and lower depreciation expenses of \$0.7 million, partially offset by higher expenses for outside services of \$0.6 million as compared to the same period in 2003. The increased 2004 expenses for outside services was primarily for the development and qualification of fiber-to-the-premises, or FTTP, products.

[Table of Contents](#)*Selling, General and Administrative*

Harmonic's selling, general and administrative expense and the expense as a percentage of consolidated net sales in the third quarter and first nine months of 2004, as compared with the corresponding periods of 2003, are presented in the tables below. Also presented is the related dollar and percentage increase in selling, general and administrative expense in the third quarter and first nine months of 2004 as compared with the corresponding periods of 2003 (in thousands, except percentages).

	Three Months Ended		Nine Months Ended	
	October 1, 2004	September 26, 2003	October 1, 2004	September 26, 2003
Selling, general and administrative expense	\$14,418	\$11,127	\$41,942	\$ 37,598
As a % of net sales	28.5%	23.6%	25.8%	29.9%
Increase	\$ 3,291		\$ 4,344	
Percent change	29.6%		11.6%	

The increase in selling, general and administrative expense in the third quarter of 2004 compared to the same period in 2003 was primarily as a result of increases in selling costs of \$1.5 million, increased overall compensation and incentive costs of \$0.7 million, and increased corporate governance costs of \$0.2 million. The higher selling costs involved increased sales commissions, travel expenses, marketing, and incentive and compensation programs associated with increased sales and headcount, and overall expense increases.

The increase in selling, general and administrative expense in the first nine months of 2004 as compared to the same period in 2003 was primarily due to increases in selling costs of approximately \$3.3 million, increased overall compensation and incentive related expenses of \$0.9 million, and increases in corporate governance costs of \$1.0 million, offset by a charge of \$2.7 million in the first nine months of 2003 related to the settlement of litigation, a credit of \$0.5 million in the first nine months of 2003 from the reversal of provisions recorded in 2002 arising from concerns about the financial condition of certain cable operators, and our receipt in the first nine months of 2003 of \$0.6 million from a previously written-off receivable. The higher selling costs during the first nine months of 2004 involved increased sales commissions, travel expenses, incentive and compensation programs associated with increased sales and headcount, and overall expense increases.

Amortization of Intangibles

Harmonic's amortization of intangible assets and the expense as a percentage of consolidated net sales in the third quarter and first nine months of 2004 as compared with the corresponding periods of 2003, are presented in the table below (in thousands, except percentages).

	Three Months Ended		Nine Months Ended	
	October 1, 2004	September 26, 2003	October 1, 2004	September 26, 2003
Amortization of intangibles	\$ 1,933	\$ 1,933	\$ 5,799	\$ 5,799
As a % of net sales	3.8%	4.1%	3.6%	4.6%

There was no change in amortization of intangibles between the third quarter and first nine months of 2004 and the corresponding periods of 2003. Harmonic expects to record a total of approximately \$7.7 million in amortization of intangibles in operating expenses in 2004.

Interest Income, Net

Harmonic's interest income, net, as a percentage of consolidated net sales in the third quarter and first nine months of 2004 as compared with the corresponding periods of 2003, are presented in the tables below. Also presented is the related dollar and percentage increase in interest income, net, in the third quarter and first nine months of 2004 as compared with the corresponding periods of 2003 (in thousands, except percentages).

[Table of Contents](#)

	Three Months Ended		Nine Months Ended	
	October 1, 2004	September 26, 2003	October 1, 2004	September 26, 2003
Interest income, net	\$ 392	\$ 82	\$ 1,148	\$ 330
As a % of net sales	0.8%	0.2%	0.7%	0.3%
Increase	\$ 310		\$ 818	
Percent change	378.1%		247.9%	

The increase in interest income, net, in the third quarter and first nine months of 2004 compared to the corresponding periods of 2003, was due primarily to a larger cash and short-term investment portfolio during the respective periods of 2004 as compared to 2003. The larger cash and short-term investment portfolio was due to the receipt of approximately \$71.4 million in the fourth quarter of 2003 by Harmonic from the completion of a public offering of our common stock in November of 2003.

Other Income (Expense), Net

Harmonic's other income (expense), net, as a percentage of consolidated net sales in the third quarter and first nine months of 2004 as compared with the corresponding periods of 2003, are presented in the tables below. Also presented is the related dollar and percentage decrease in other income (expense), net, in the third quarter and first nine months of 2004 as compared with the corresponding periods of 2003 (in thousands, except percentages).

	Three Months Ended		Nine Months Ended	
	October 1, 2004	September 26, 2003	October 1, 2004	September 26, 2003
Other income (expense)	\$ (369)	\$ 175	\$ (904)	\$ 550
As a % of net sales	(0.7)%	0.4%	(0.6)%	0.4%
Decrease	\$ (544)		\$(1,454)	
Percent change	(310.9)%		(264.4)%	

The decrease in other income (expense), net, in the third quarter of 2004 compared to the same period of 2003 was primarily due to the effect from losses in 2004 from foreign exchange of \$0.2 million, compared to a gain from foreign exchange of \$0.2 million in 2003. The decrease in other income (expense), net, in the first nine months of 2004 as compared to the same period in 2003, was primarily due to the effect from losses on foreign exchange of \$0.5 million, and increases in miscellaneous expenses of approximately \$0.2 million in 2004, compared to a gain from foreign exchange of \$0.7 million in 2003.

Income Taxes

Harmonic's provision for income taxes, and provision for income taxes as a percentage of consolidated net sales in the third quarter and first nine months of 2004, as compared with the corresponding periods of 2003, are presented in the tables below (in thousands, except percentages).

	Three Months Ended		Nine Months Ended	
	October 1, 2004	September 26, 2003	October 1, 2004	September 26, 2003
Provision for income taxes	\$ 100	\$ 100	\$ 300	\$ 300
As a % of net sales	0.2%	0.2%	0.2%	0.2%

There was no change in the provision for income taxes in the third quarter and first nine months of 2004 compared to the corresponding prior year periods of 2003 due to foreign income taxes remaining the same. Any domestic deferred tax assets realized during these periods have been fully offset by a valuation allowance.

Segments

Harmonic's management uses income or loss from segment operations as its measure of segment profitability.

[Table of Contents](#)

Income or loss from segment operations excludes intangible amortization expense, corporate expenses, including excess facilities charges, and interest income, net, and other income (expense), net. See Note 10 of Notes to Condensed Consolidated Financial Statements.

Fluctuations in net sales by operating segment are discussed more extensively in the section above entitled *Net Sales — Consolidated and Segment*

Harmonic's income (loss) from segment operations and the income (loss) as a percentage of consolidated net sales in the third quarter and first nine months of 2004, as compared with the corresponding periods of 2003, are presented in the tables below. Also presented is the related dollar and percentage increase in segment operations results in the third quarter and first nine months of 2004 as compared with the corresponding periods of 2003 (in thousands, except percentages).

Convergent Systems (CS)	Three Months Ended		Nine Months Ended	
	October 1, 2004	September 26, 2003	October 1, 2004	September 26, 2003
Income (loss) from segment operations	\$ 3,032	\$ 52	\$ 7,522	\$ (2,022)
As a % of net sales	6.0%	0.1%	4.6%	(1.6)%
Increase	\$ 2,980		\$ 9,544	
Percent change	5730.8%		472.0%	

The increase in CS income (loss) from segment operations in the third quarter and first nine months of 2004 compared to the same periods of 2003, was primarily due to the net impact in the third quarter of 2004 from higher sales, lower third party manufacturing costs, and a more favorable margin on the mix of products sold, slightly offset by an increase in operating expenses as compared to the same periods of 2003. The 2004 increases in operating expenses were as a result of higher selling expenses and slightly higher research and development expenses as compared to the same periods of 2003.

Broadband Access Networks (BAN)	Three Months Ended		Nine Months Ended	
	October 1, 2004	September 26, 2003	October 1, 2004	September 26, 2003
Income (loss) from segment operations	\$ 905	\$ (1,801)	\$ 7,717	\$ (6,866)
As a % of net sales	1.8%	(3.8)%	4.7%	(5.5)%
Increase	\$ 2,706		\$ 14,583	
Percent change	150.3%		212.4%	

The increase in BAN income (loss) from segment operations in the third quarter and first nine months of 2004 compared to the same period in 2003, was primarily due to a more favorable margin on the mix of products sold during the third quarter of 2004, and increased sales during the first nine months of 2004. BAN results for the third quarter and first nine months of 2004 also included benefits of \$1.2 million and \$3.1 million, respectively, related to products sold for which the cost basis had been written down in prior years. BAN results for the third quarter and first nine months of 2003 include benefits of \$1.1 million and \$3.2 million, respectively, related to products sold for which the cost basis had been written down in prior years.

Liquidity and Capital Resources

As of October 1, 2004, cash and cash equivalents and short-term investments totaled \$89.4 million, compared to \$112.6 million as of December 31, 2003. Cash used in operations was \$22.4 million in the first nine months of 2004, compared to \$13.5 million in the first nine months of 2003. The increased use of cash in operations in the first nine months of 2004 was primarily due to the collective effect of cash used for inventories of \$12.4 million, cash used for prepaid expenses and other assets of \$4.0 million and accounts receivables of \$4.6 million, and cash used by a decrease in accrued and other liabilities of \$4.9 million, as compared to the first nine months of 2003. The higher inventory was primarily due to higher inventory purchases in order to meet anticipated demand. The increase in prepaid expenses and other assets was primarily due to higher project costs and estimated earnings in excess of billings associated with ongoing customer contracts during the first nine months of 2004 as compared to the corresponding period of 2003.

[Table of Contents](#)

The increase in accounts receivable was primarily due to the increased revenues during the first nine months of 2004 as compared to the corresponding period of 2003. The decrease in accrued and other liabilities is primarily related to the payments made by Harmonic of approximately \$4.8 million in the second quarter of 2004 pursuant to a tax sharing agreement between Harmonic and LSI Logic.

On November 3, 2003, Harmonic completed a follow-on public offering of 9.0 million shares of its common stock at a price of \$7.40 per share. The net proceeds were approximately \$62.0 million, which is net of underwriters' fees of \$3.7 million, and related legal, accounting, printing and other expenses totaling approximately \$0.9 million. In connection with this offering, the underwriters exercised their option to purchase 1.35 million additional shares of common stock at \$7.40 per share on November 12, 2003 to cover over-allotments which resulted in additional net proceeds of approximately \$9.4 million. The net proceeds from the offering are being used for general corporate purposes, including payment of existing liabilities, research and development, the development or acquisition of new products or technologies, equipment acquisitions, general working capital and operating expenses.

Under the terms of the merger agreement with C-Cube, Harmonic is generally liable for C-Cube's pre-merger tax liabilities. Approximately \$15.8 million pre-merger tax liabilities remained outstanding at October 1, 2004 and are included in accrued liabilities. These liabilities represent estimates of C-Cube's pre-merger tax obligations to various tax authorities in 13 countries. We are working with LSI Logic, which acquired the spun-off semiconductor business in June 2001 and assumed its obligations, to settle these obligations, a process which has been underway since the merger in 2000. Harmonic paid approximately \$4.8 million in April 2004, pursuant to a tax sharing agreement between Harmonic and LSI Logic, but is unable to predict when the remaining obligations will be paid, or in what amount. The full amount of the estimated obligation has been classified as a current liability. To the extent that these obligations are finally settled for less than the amounts provided, Harmonic is required, under the terms of the tax-sharing agreement, to refund the difference to LSI Logic. Conversely, if the settlements are more than the \$15.8 million pre-merger tax liability, LSI is obligated to reimburse Harmonic.

Additions to property, plant and equipment were \$3.8 million and \$2.2 million in the first nine months of 2004 and 2003, respectively. Harmonic currently expects capital expenditures to be approximately \$5 million during 2004.

Harmonic has a bank line of credit facility with Silicon Valley Bank, which provides for borrowings up to \$13.5 million, including \$3.5 million for equipment under a secured term loan. This facility, which was amended and restated in December 2003 and expires in December 2004, contains financial and other covenants, including the requirement for Harmonic to maintain cash, cash equivalents and short-term investments, net of credit extensions, of not less than \$65.0 million. If Harmonic is unable to maintain this cash, cash equivalents and short-term investments balance or satisfy the additional affirmative covenant requirements, Harmonic would be in noncompliance with the facility. In the event of noncompliance by Harmonic with the covenants under the facility, Silicon Valley Bank would be entitled to exercise its remedies under the facility which include declaring all obligations immediately due and payable and disposing of the collateral if obligations were not repaid. At October 1, 2004, Harmonic was in compliance with the covenants under this line of credit facility. Future borrowings pursuant to the line bear interest at the bank's prime rate or prime rate plus 1.0% depending upon the Company's total cash position and previous six months' revenue. Borrowings are payable monthly and are collateralized by all of Harmonic's assets. As of October 1, 2004, \$1.8 million was outstanding under the equipment term loan portion of this facility, of which \$1.2 million was borrowed during 2004 through September 18, the expiration of the equipment advance period. The term loan is payable monthly, including principal and interest at 4.5% per annum on outstanding borrowings as of October 1, 2004 and matures at various dates through October 2007. The draw period under the term loan expired on September 18, 2004, effectively capping the term loan's borrowings at \$1.8 million. Other than standby letters of credit and guarantees (Note 12 of Notes to Condensed Consolidated Financial Statements), there were no other outstanding borrowings or commitments under the line of credit facility as of October 1, 2004.

We currently believe that our existing liquidity sources, including the proceeds from the November 2003 stock offering, and our bank line of credit facility, will satisfy our cash requirements for at least the next twelve months, including the final settlement and payment of C-Cube's pre-merger tax liabilities. However, we may need to raise additional funds if our expectations or estimates change or prove inaccurate, or to take advantage of unanticipated opportunities or to strengthen our financial position. The completed stock offering in November 2003 related to a registration statement on Form S-3 that was declared effective by the SEC in April 2002. The registration statement will continue to allow Harmonic to issue various types of securities, including common stock, preferred stock, debt

[Table of Contents](#)

securities, and warrants to purchase common stock from time to time, up to an aggregate of approximately \$73 million, subject to market conditions and our capital needs.

In addition, from time to time, we review 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 a transaction, and could require us to issue our stock and dilute existing stockholders. If adequate funds are not available, or are not available on acceptable terms, we may not be able to take advantage of market opportunities, to develop new products or to otherwise respond to competitive pressures.

FACTORS THAT MAY AFFECT FUTURE RESULTS OF OPERATIONS

We Depend On Cable And Satellite Industry Capital Spending For A Substantial Portion Of Our Revenue And Any Decrease Or Delay In Capital Spending In These Industries Would Negatively Impact Our Resources, Operating Results, Financial Condition and Cash Flows.

A significant portion of Harmonic's sales have been derived from sales to cable television and satellite operators and we expect these sales to continue to constitute a significant portion of net sales for the foreseeable future. Demand for our products will depend on the magnitude and timing of capital spending by cable television operators, satellite operators, broadcasters and telephone companies for constructing and upgrading of their systems.

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

- access to financing;
- annual budget cycles;
- the impact of industry consolidation;
- the status of federal, local and foreign government regulation of telecommunications and television broadcasting;
- overall demand for communication services and the acceptance of new video, voice and data services;
- evolving industry standards and network architectures;
- competitive pressures, including pricing pressures;
- discretionary customer spending patterns; and
- general economic conditions.

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

- uncertainty related to development of digital video and cable modem industry standards;
- delays associated with the evaluation of new services and system architectures by many cable television operators;
- emphasis on generating revenue from existing customers by cable television operators instead of new construction or network upgrades;
- proposed business combinations by our customers and regulatory review thereof;
- economic and financial conditions in domestic and international markets; and

[Table of Contents](#)

- bankruptcies and financial restructurings of major customers.

The recent economic recession, the financial difficulties of certain of our customers and changes in our customers' deployment plans adversely affected our business in the latter part of 2001, throughout 2002 and in the first half of 2003. Two of our major domestic customers, Adelphia Communications and Winfirst, declared bankruptcy during the first half of 2002, while NTL, a major international customer, emerged from bankruptcy in 2003. Furthermore, we believe that our net sales to satellite customers were adversely affected by the uncertainty related to the prolonged regulatory review of the proposed acquisition of DIRECTV by EchoStar in 2002. These events, coupled with uncertain and volatile capital markets, also pressured the market values of domestic cable operators and restricted their access to capital. This reduced access to funding for new and existing customers caused delays in the timing and scale of deployments of our equipment and also resulted in the postponement or cancellation of certain projects by our customers. Several customers also canceled new projects or delayed new orders to allow them to reduce inventory levels that were in excess of their deployment requirements. We believe that these factors contributed to decreased net sales in both our CS division and our BAN division during the second half of 2002 and the first half of 2003 compared to the first half of 2002.

We believe that the financial condition of many of our customers has stabilized or improved, and our net sales increased sequentially in the second, third and fourth quarters of 2003 and again in the second quarter of 2004. However, another economic downturn or weakness in capital markets could cause additional financial difficulties among our customers, and customers whose financial condition has stabilized may not purchase new equipment at levels we have seen in the past. Continued financial difficulties among our customers would adversely affect our operating results and financial condition. Also, The News Corporation Ltd. has acquired an indirect controlling interest in Hughes Electronics, the parent company of DIRECTV. We cannot currently predict the impact of The News Corporation Ltd.'s control of DIRECTV on our future sales. In addition, the proposed sale of Adelphia Communications and the privatization of Cox Communications may lead to potential capital spending delays. We cannot currently predict the impact of the proposed sale of Adelphia Communications, or the privatization of Cox Communications on our future sales. As a result of these and other factors, we cannot assure you that we will maintain or increase our net sales in the future.

Major US cable operators have indicated that the imminent completion of major transmission network upgrades, which involve significant labor and construction costs, will lead to lower capital expenditures in the future. If our product portfolio and product development plans do not position us well to capture an increased portion of the expected reduced capital spending of US cable operators, our revenue may decline and our operating results would be adversely affected.

Our Customer Base Is Concentrated And The Loss Of One Or More Of Our Key Customers Would Harm Our Business.

Historically, a majority of our sales have been to relatively few customers, due in part to the consolidation of ownership of cable television and direct broadcast satellite systems, and we expect this customer concentration to continue in the foreseeable future. Sales to our ten largest customers in the third quarter and first nine months of 2004, and the years 2003 and 2002, accounted for approximately 53%, 51%, 65% and 61% of net sales, respectively. Although we are attempting to broaden our customer base by penetrating new markets such as the telecommunications and broadcast markets and expand internationally, we expect to see continuing industry consolidation and customer concentration due in part to the significant capital costs of constructing broadband networks. For example, Comcast acquired AT&T Broadband in November 2002, thereby creating the largest U.S. cable operator, reaching approximately 22 million subscribers. In the satellite segment, The News Corporation Ltd. acquired an indirect controlling interest in Hughes Electronics, the parent company of DIRECTV in December 2003. In addition, the proposed sale of Adelphia Communications out of bankruptcy, the privatization of Cox Communications, and financial restructurings of several European operators may lead to further industry consolidation with potential capital spending delays during the change of ownership. In the third quarter of 2004, there were no sales to customers in excess of 10% of our quarterly revenue. In the third quarter of 2003, sales to Comcast accounted for 38% of net sales. For the first nine months of 2004, sales to Comcast accounted for 14% of net sales, and for the first nine months of 2003, sales to Comcast and EchoStar accounted for 33% and 10% of net sales, respectively. In 2003, sales to Comcast accounted for 32% of net sales. In 2002, sales to Charter Communications and Comcast accounted for 18% and 10% of net

[Table of Contents](#)

sales, respectively. If Comcast and AT&T Broadband had been combined for all of 2002, total revenues would have been 17% of net sales. The loss of any significant customer or any reduction in orders by any significant customer, or our failure to qualify our products with a significant customer could adversely affect our business, operating results and liquidity. In this regard, sales to Comcast have declined in 2004 compared with 2003, both in absolute dollars and as a percentage of revenue. The loss of, or any reduction in orders from, a significant customer would harm our business.

Our Operating Results Are Likely To Fluctuate Significantly And May Fail To Meet Or Exceed The Expectations Of Securities Analysts Or Investors, Which Could Cause 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, both in the U.S. and in foreign markets;
- changes in market demand;
- the timing and amount of orders, especially from significant customers;
- the timing of revenue from systems contracts which may span several quarters;
- the timing of revenue from the sale of products;
- competitive market conditions, including pricing actions by our competitors;
- seasonality, with fewer construction and upgrade projects typically occurring in winter months and otherwise being affected by inclement weather;
- our unpredictable sales cycles;
- the amount of sales to telcos, which are particularly difficult to predict;
- new product introductions by our competitors or by us;
- changes in domestic and international regulatory environments;
- market acceptance of new or existing products;
- the cost and availability of components, subassemblies and modules;
- the mix of our customer base and sales channels;
- the mix of our products sold;
- changes in our operating expenses and extraordinary expenses;
- our development of custom products and software;
- the level of international sales; and
- economic and financial conditions specific to the cable and satellite industries, and general economic conditions.

For example, the timing of deployment of our equipment can be subject to a number of other risks, including the availability of skilled engineering and technical personnel, the availability of other equipment such as digital set top boxes, and the need for local franchise and licensing approvals.

[Table of Contents](#)

In addition, we often recognize a substantial portion of our revenues in the last month of a quarter. We establish our expenditure levels for product development and other operating expenses based on projected sales levels, and expenses are relatively fixed in the short term. Accordingly, variations in timing of sales can cause significant fluctuations in operating results. For example, in the third quarter of 2004, we experienced delays from two significant customer orders, and our inability to recognize these revenues contributed to a shortfall in our financial results for that quarter. As a result of all these 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. In this regard, due to lower than expected sales in several quarters during 2000 and 2001, and during the third quarter of 2002, the first quarter of 2003 and the third quarter of 2004, we failed to meet our internal expectations, as well as the expectations of securities analysts and investors, and the price of our common stock declined, in some cases significantly.

Our Future Growth Depends on Market Acceptance of Several Emerging Broadband Services, on the Adoption of New Broadband Technologies and on Several Other Broadband Industry Trends.

Future demand for our products will depend significantly on the growing market acceptance of several emerging broadband services, including digital video; VOD; HD television; very high-speed data services and voice-over-IP (VoIP) telephony. The effective delivery of these services will depend, in part, on a variety of new network architectures, such as FTTP networks; new video compression standards such as MPEG-4/H.264 and Microsoft's Windows Media 9 broadcast profile (VC-1); the greater use of protocols such as IP; and the introduction of new consumer devices, such as advanced set-top boxes and personal video recorders (PVRs). If adoption of these emerging services and/or technologies is not as widespread or as rapid as we expect, our net sales growth will be materially and adversely affected.

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

- convergence, or the desire of certain network operators to deliver a package of video, voice and data services to consumers, also known as the "triple play";
- the use of digital video by businesses, governments and educators;
- the privatization of state-owned telcos around the world;
- efforts by regulators and governments in the United States and abroad to encourage the adoption of broadband and digital technologies; and
- the extent and nature of regulatory attitudes towards such issues as competition between operators, access by third parties to networks of other operators, and new services such as VoIP.

If, for instance, operators do not pursue the triple play as aggressively as we expect, our net sales growth would be materially and adversely affected. Similar, if our expectations regarding these and other trends are not met, our net sales may be materially and adversely affected.

If Sales Forecasted For A Particular Period Are Not Realized In That Period Due To The Unpredictable Sales Cycles Of Our Products, Our Operating Results For That Period Will Be Harmed.

The sales cycles of many of our products, particularly our newer products and products sold internationally, are typically unpredictable and usually involve:

- a significant technical evaluation;
- a commitment of capital and other resources by cable, satellite, and other network operators;
- time required to engineer the deployment of new technologies or new broadband services;

[Table of Contents](#)

- testing and acceptance of new technologies that affect key operations; and
- test marketing of new services with subscribers.

For these and other reasons, our sales cycles generally last three to six months, but can last up to 12 months. If orders forecasted for a specific customer for a particular quarter do not occur in that quarter, our operating results for that quarter could be substantially lower than anticipated. In this regard, our sales cycles with our telco customers are particularly unpredictable. Additionally, orders may include multiple elements, the timing of delivery of which may impact the timing of recognition of revenue.

In addition, a significant portion of our revenue is derived from solution contracts which principally consist of and include the system design, manufacture, test, integration and installation of equipment to the specifications of Harmonic's customers, or acquired from third parties to be integrated with Harmonic's products. Revenue forecasts for solution contracts are based on the estimated timing of the system design, installation and integration of projects. Because the solution contracts generally span several quarters and revenue recognition is based on progress under the contract, the timing of revenue is difficult to predict and could result in lower than expected revenue in any particular quarter.

We Depend On Our International Sales And Are Subject To The Risks Associated With International Operations, Which May Negatively Affect Our Operating Results.

Sales to customers outside of the United States in the third quarter and first nine months of 2004 and the years 2003 and 2002, represented 59%, 45%, 29% and 29%, of net sales, respectively, and we expect that international sales will continue to represent a meaningful portion of our net sales for the foreseeable future. Furthermore, a substantial portion of our contract manufacturing occurs overseas. Our international operations, the international operations of our contract manufacturers, and our efforts to increase sales in international markets, are subject to a number of risks, including:

- changes in foreign government regulations and telecommunications standards;
- import and export license requirements, tariffs, taxes and other trade barriers;
- fluctuations in currency exchange rates;
- difficulty in collecting accounts receivable;
- the burden of complying with a wide variety of foreign laws, treaties and technical standards;
- difficulty in staffing and managing foreign operations;
- political and economic instability; and
- changes in economic policies by foreign governments.

Certain of our international customers have accumulated significant levels of debt and have announced during the past three years reorganizations and financial restructurings, including bankruptcy filings. Even if these restructurings are completed, we cannot assure you that these customers will be in a position to purchase new equipment at levels we have seen in the past.

While our international sales 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 sales or profitability in that country.

Following implementation of the Euro in January 2002, a higher portion of our European business is denominated in Euros, which may subject 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 operating results. For example, we experienced foreign exchange losses of \$0.1 million and \$0.5 million in the third quarter and first nine months of 2004, respectively, as a result of a stronger U.S. dollar against the British Pound and the Euro, which adversely impacted our third quarter and first nine months of

[Table of Contents](#)

2004. Furthermore, payment cycles for international customers are typically longer than those for customers in the United States. Unpredictable sales cycles could cause us to fail to meet or exceed the expectations of security analysts and investors for any given period. In addition, foreign markets may not develop in the future. Any or all of these factors could adversely impact our business and results of operations.

If Demand For Our Products Increases More Quickly Than We Expect, We May Be Unable To Meet Our Customers' Requirements.

Our net sales increased sequentially in the second, third and fourth quarters of 2003 and again in the second quarter of 2004 and for the first nine months of 2004 compared to the same period in 2003. If demand for our products continues to increase, the difficulty of accurately forecasting our customers' requirements and meeting these requirements will increase. Forecasting to meet customers' needs 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. From time to time, we assess our relationship with our contract manufacturers. Changes in these relationships, including our agreement with Plexus, or reallocating manufacturing to new or existing contract manufacturers, could adversely affect our ability to meet our customers' requirements in a timely manner, if at all, and could create operating inefficiencies. Furthermore, we purchase several key components, subassemblies and modules used in the manufacture or integration of our products from sole or limited sources, and any disruption in our relationship with these providers or in the ability of such providers to satisfy our requirements could adversely affect our ability to deliver our products to customers. Also, in recent years, in response to lower net sales and the prolonged economic recession, we significantly reduced our headcount. As a result, 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 net sales would be adversely affected and we may lose business.

Competition For Qualified Personnel, Particularly Management Personnel, Can Be Intense. 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 senior management. We are dependent on our ability to retain and motivate high caliber personnel, in addition to attracting new personnel. Competition for qualified management, technical and other personnel can be intense, and we may not be successful in attracting and retaining such personnel. Competitors and others have in the past and may in the future 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 qualified personnel in the future or delays in hiring required personnel, particularly senior management and engineers and other technical personnel, could negatively affect our business.

We Face Risks Associated With Having Important Facilities And Resources Located In Israel.

Harmonic maintains a facility in Caesarea in the State of Israel with a total of 60 employees as of October 1, 2004, or approximately 10% of our workforce. The employees at this facility consist principally of research and development personnel involved in the development of certain products for the CS division. In addition, we have pilot production capabilities at this facility consisting of procurement of subassemblies and modules from Israeli subcontractors and final assembly and test operations. Accordingly, we are influenced by the political, economic and military conditions affecting Israel, and any major hostilities involving Israel or the interruption or curtailment of trade between Israel and its trading partners could significantly harm our business. The September 2001 terrorist attacks, the situation in Iraq, the ongoing U.S. war on terrorism and the escalation of terrorist attacks and hostilities within Israel have heightened these risks. We cannot assure you that the protraction or escalation of current tensions in the Middle East will not adversely affect our business and results of operations.

[Table of Contents](#)

In addition, most of our employees in Israel are currently obligated to perform annual reserve duty in the Israel Defense Forces and several have been called for active military duty recently. We cannot predict the effect of these obligations on Harmonic in the future.

Financial And Other Issues Among Our Customers Could Adversely Affect Our Business.

The telecommunications industry has been particularly impacted by the recent economic recession and adverse conditions in capital markets and financial difficulties in both the service and equipment sectors, including bankruptcies. Although large telecommunications service providers such as WorldCom (now MCI) and troubled data and voice-oriented start-ups have not been traditional customers of Harmonic, the cable, satellite and broadcast sectors have also experienced significant financial problems. Many of our domestic and international customers have accumulated significant levels of debt and have announced reorganizations and financial restructurings during the past three years, including bankruptcy filings. In particular, Adelphia Communications, a major domestic cable operator, declared bankruptcy in June 2002. The stock prices of other domestic cable companies came under pressure following the Adelphia Communications bankruptcy due to concerns about debt levels and capital expenditure requirements for new and expanded services, thereby making the raising of capital more difficult and expensive. New operators, such as RCN and WinFirst, also had difficulty in accessing capital markets. WinFirst subsequently filed for bankruptcy and during the second quarter of 2004 RCN filed for bankruptcy. In Europe, rapid consolidation of the cable industry through acquisition also led to significant levels of debt at the major multiple system operators, and companies such as NTL and UPC commenced bankruptcy proceedings. European digital broadcasters, such as ITV Digital, Kirsch and Quiero, have also filed for protection from creditors.

While the capital market concerns about the domestic cable industry have eased since the summer of 2002, market conditions remain difficult and capital spending plans are generally constrained. It is likely that further industry restructuring will take place via mergers or spin-offs, such as the completed Comcast/AT&T Broadband transaction, the potential spin-off of Time-Warner Cable from Time-Warner and the proposed sale of Adelphia Communications requested by its creditors. Also, The News Corporation Ltd., in December 2003 acquired an indirect controlling interest in Hughes Electronics, the parent company of DIRECTV. This transaction followed regulatory opposition to the proposed acquisition of DIRECTV by EchoStar. We cannot currently predict the impact of the proposed sale of Adelphia Communications, or The News Corporation Ltd.'s control of DIRECTV on our future sales. We believe that uncertainty during 2002 regarding the proposed DIRECTV and EchoStar merger adversely affected capital spending by both of these parties as well as other customers. As such, further restructuring or business combinations could adversely impact our business and results of operations. In addition, further business combinations may occur in the satellite industry, and these further combinations could adversely affect our business. Regulatory issues, financial concerns and business combinations among our customers are likely to significantly affect the industry, its capital spending plans, and our levels of business for the foreseeable future.

Changes in Telecommunications Regulations Could Harm Our Prospects And Future Sales.

Changes in telecommunications regulations in the United States and other countries could affect the sales of 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 incumbents. Increased regulation of our customers' pricing or service offerings could limit their investments and consequently the sales of our products. Changes in regulations could have a material adverse effect on our business, operating results, and financial condition.

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.

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. Our reliance on sole or limited suppliers, particularly foreign suppliers, and our increased reliance on subcontractors since the merger with C-Cube involves several risks, including a potential inability to obtain an adequate supply of required components, subassemblies or modules and reduced control over pricing, quality and timely delivery of components, subassemblies or modules. In particular, optical components have in the past been in short supply and are available only from a small number of suppliers, including sole source suppliers. While we expend resources to qualify additional component sources, the

[Table of Contents](#)

consolidation of suppliers in the industry and the small number of viable alternatives have limited the success of these efforts. We do not generally maintain long-term agreements with any of our suppliers. 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. Furthermore, from time to time we assess our relationship with our contract manufacturers. In late 2003, we entered into a three-year agreement with Plexus as our primary contract manufacturer. We have substantially completed the transition during the second quarter of 2004. Plexus has the right to terminate the contract manufacturing agreement, in whole or in part for any reason upon one hundred twenty (120) days written notice to Harmonic. Difficulties in managing relationships with current contract manufacturers, could impede our ability to meet our customers' requirements and adversely affect our operating results. An inability to obtain adequate deliveries or any other circumstance that would require us to seek alternative sources of supply could affect our ability to ship our products on a timely basis, which could damage relationships with current and prospective customers and harm our business. We attempt to limit this risk by maintaining surplus stocks of certain components, subassemblies and modules. As a result of this investment in inventories, we have in the past and in the future may be subject to risk of excess and obsolete inventories, which could harm our business, operating results, financial position and liquidity. In this regard, our gross margins and operating results from the fourth quarter of 2000 through the third quarter of 2001 were adversely affected by excess and obsolete inventory charges of approximately \$49 million.

We Must Be Able To Manage Expenses And Inventory Risks Associated With Meeting The Demand Of Our Customers.

If actual orders are materially lower than the indications we receive from our customers, our ability to manage inventory and expenses may be affected. If we enter into purchase commitments to acquire materials, or expend resources to manufacture products, and such products are not purchased by our customers, our business and operating results could suffer. In this regard, our gross margins and operating results for the fourth quarter of 2000 through the third quarter of 2001 were adversely affected by provisions for excess and obsolete inventories of approximately \$49 million. We have also increased inventories by \$12.4 million in the first nine months of 2004, in response to anticipated customer demand. If this demand does not fully materialize, or if it is for products other than those in inventory, we may be required to make provisions for excess inventories.

The Markets In Which We Operate Are Intensely Competitive And Many Of Our Competitors Are Larger And More Established.

The markets for cable television fiber optics systems and digital video broadcasting systems are extremely competitive and have been characterized by rapid technological change and declining average selling prices. Pressure on average selling prices has been particularly severe during the recent economic downturn as equipment suppliers competed aggressively for customers' reduced capital spending. Harmonic's competitors in the cable television fiber optics systems business include corporations such as C-Cor.net, Motorola, and Scientific-Atlanta. In the digital and video broadcasting systems business, we compete broadly with vertically integrated system suppliers including Motorola, Scientific-Atlanta, Tandberg Television and Thomson Multimedia, and in certain product lines with Cisco and a number of smaller companies.

Many of our competitors are substantially larger and have greater financial, technical, marketing and other resources than Harmonic. Many of these large organizations are in a better position to withstand any significant reduction in capital spending by customers in these markets. They often have broader product lines and market focus and may not be as susceptible to downturns in a particular market. In addition, many of our competitors have been in operation longer than we have and therefore have more long standing and established relationships with domestic and foreign customers. We may not be able to compete successfully in the future, which may harm our business.

If any of our competitors' products or technologies were to become the industry standard, our business could be seriously harmed. For example, U.S. cable operators have to date mostly purchased proprietary digital systems from Motorola and Scientific-Atlanta. While certain operators have made limited purchases of the "open" systems provided by Harmonic, we cannot assure you that our digital products will find broad market acceptance with U.S. cable operators. In addition, companies that have historically not had a large presence in the broadband communications equipment market have begun recently to expand their market share through mergers and

[Table of Contents](#)

acquisitions. The continued consolidation of our competitors could have a significant negative impact on us. Further, our competitors, particularly competitors of our digital and video broadcasting systems business, 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, which would result in lower gross margins.

Broadband Communications Markets Are Characterized By Rapid Technological Change.

Broadband communications markets are relatively immature, 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 cable television operators, telephone companies or other suppliers of broadband wireless and satellite services will decide to adopt alternative architectures or technologies that are incompatible with our current or future 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 will suffer. Also, decisions by customers to adopt new technologies or products are often delayed by extensive evaluation and qualifications processes and can result in delays in sales of current products.

We Need To Develop And Introduce New And Enhanced Products In A Timely Manner To Remain Competitive.

Broadband communications markets are characterized by continuing technological advancement, changes in customer requirements and evolving industry standards. To compete successfully, we must design, develop, manufacture and sell new or enhanced products that provide increasingly higher levels of performance and reliability. However, we may not be able to successfully develop or introduce these products if our products:

- are not cost effective;
- are not brought to market in a timely manner;
- are not in accordance with evolving industry standards and architectures;
- fail to achieve market acceptance; or
- are ahead of the market.

Also, to successfully develop and market certain of our planned products for digital applications, we may be required to enter into technology development or licensing agreements with third parties. We cannot assure you that we will be able to enter into any necessary technology development or licensing agreement on terms acceptable to us, or at all. The failure to enter into technology development or licensing agreements when necessary could limit our ability to develop and market new products and, accordingly, could materially and adversely affect our business and operating results.

Our CS division is currently developing and marketing products based on new video compression standards. Encoding products based on the current MPEG-2 compression standards have represented a significant portion of the Company's sales since the acquisition of DiviCom in 2000. New standards, such as MPEG-4/H.264 and Microsoft's Windows Media 9 broadcast profile (VC-1), are being adopted which are expected to provide significantly greater compression efficiency, thereby making more bandwidth available to operators. Harmonic believes that it needs to develop products based on these new standards in order to remain competitive and is devoting considerable resources to this effort. There can be no assurance that these efforts will be successful in the near future, or at all.

Our BAN division is currently marketing products for FTTP networks which telcos have announced that they intend to build. Although we believe that a number of our existing products can be deployed successfully in these networks, we may need to devote considerable resources to obtaining orders, qualifying our products and hiring knowledgeable personnel, and we may make significant financial commitments. There can be no assurance that these efforts will be successful in the near future, or at all.

[Table of Contents](#)

We May Be Materially Affected By The WEEE And RoHS Directives

The European Union has finalized the Waste Electrical and Electronic Equipment (WEEE) directive, which regulates the collection, recovery, and recycling of waste from electrical and electronic products, and the Restrictions 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, chromium, and halogenated flame-retardants. Under WEEE, we will be responsible for financing operations for the collection, treatment, disposal, and recycling of past and future covered products. Because the specific legal requirements have not been finalized, we are presently unable to reasonably estimate the amount of any costs that may be necessary in order to comply with WEEE. We cannot provide any assurance that compliance with WEEE and RoHS will not have a material adverse effect on our financial condition or results of operations.

We May Need Additional Capital In The Future And May Not Be Able To Secure Adequate Funds On Terms Acceptable To Us.

We have generated substantial operating losses since we began operations in June 1988. The extent of our future losses and the timing of potential profitability are highly uncertain, and we may never achieve sustained profitable operations. We have been engaged in the design, manufacture and sale of a variety of broadband products since inception, which has required, and will continue to require, significant research and development expenditures. As of October 1, 2004 we had an accumulated deficit of \$1.9 billion. These losses, among other things, have had and may continue to have an adverse effect on our stockholders' equity and working capital.

We believe that the proceeds of the stock offering we completed in November 2003, together with our existing liquidity sources, will satisfy our cash requirements for at least the next twelve months, including the final settlement and payment of C-Cube's pre-merger tax liabilities. However, we may need to raise additional funds if our expectations are incorrect, to fund our operations, to take advantage of unanticipated opportunities or to strengthen our financial position. The stock offering we completed in November 2003 related to a registration statement on Form S-3 declared effective by the SEC in April 2002. This registration statement will continue to allow Harmonic to issue various types of securities, including common stock, preferred stock, debt securities and warrants to purchase common stock from time to time, up to an aggregate of approximately \$73 million, subject to market conditions and our capital needs. 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 conditions in capital markets and the cable, telecom and satellite industries. There can be no assurance that such financing will be available on terms acceptable to us, if at all.

In addition, from time to time we review 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 a transaction, and could require us to issue our stock and dilute existing stockholders. If adequate funds are not available, or are not available on acceptable terms, we may not be able to take advantage of market opportunities, to develop new products or to otherwise respond to competitive pressures.

We may raise additional financing through public or private equity offerings, debt financings or additional corporate collaboration and licensing arrangements. To the extent we raise additional capital by issuing equity securities, 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. If adequate funds are not available, we will not be able to continue developing our products.

We Need To Effectively Manage Our Operations And The Cyclical Nature Of Our Business.

The cyclical nature of our business has placed, and is expected to continue to place, a significant strain on our personnel, management and other resources. In addition, we reduced our work force by approximately 44% between December 31, 2000 and December 31, 2003 due to reduced industry spending and demand for our products. If demand for our products increases significantly, we may need to increase our headcount. Our ability to manage our business effectively in the future, including any future growth, will require us to train, motivate and manage our

[Table of Contents](#)

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.

We Are Exposed To Increased Costs And Risks Associated With Complying With Increasing And New Regulation Of Corporate Governance And Disclosure Standards.

We are spending an increased amount of management time and external resources to comply with changing laws, regulations and standards relating to corporate governance and public disclosure, including the Sarbanes-Oxley Act of 2002, new SEC regulations and Nasdaq Stock Market rules. Particularly, Section 404 of the Sarbanes-Oxley Act of 2002 requires management's annual review and evaluation of our internal control systems, and attestation of the effectiveness of these systems by management and the Company's independent registered public accounting firm in connection with the filing of our annual report on Form 10-K for the fiscal year ended December 31, 2004, and with each subsequently filed annual report on Form 10-K. We are currently documenting and testing our internal control systems and procedures and considering improvements that may be necessary 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 additional accounting and legal expenses. In addition, the evaluation and attestation processes required by Section 404 are new, and companies do not yet have significant experience in testing or complying with these requirements. Accordingly, we may encounter problems or delays in completing the review, evaluation and the implementation of improvements. In the event that our chief executive officer, chief financial officer and the Company's independent registered public accounting firm determine that our internal controls over financial reporting are not effective as defined under Section 404, or if we are unable to complete the review of internal controls over financial reporting or any related remediation thereof in a timely manner, investor perceptions of Harmonic may be adversely affected and would cause a decline in the market price of our stock.

Recent And Proposed Regulations Related To Equity Compensation Could Adversely Affect Earnings, Affect Our Ability To Raise Capital And Affect Our Ability To Attract And Retain Key Personnel.

Since our inception, we have used stock options as a fundamental component of our employee compensation packages. We believe that our stock option plans are an essential tool to link the long-term interests of stockholders and employees, especially executive management, and serve to motivate management to make decisions that will, in the long run, give the best returns to stockholders. The Financial Accounting Standards Board (FASB) has proposed changes to United States generally accepted accounting principles, or US GAAP, that, if implemented, would require us to record a charge to earnings for employee stock option grants, as well as other equity-based awards. This proposed accounting pronouncement would negatively impact our earnings and could affect our ability to raise capital on acceptable terms. In addition, new regulations implemented by the Nasdaq Stock Market requiring stockholder approval for all stock option plans could make it more difficult for us to grant options to employees in the future. To the extent that new regulations make it more difficult or expensive to grant options to employees, we may incur increased compensation costs, change our equity compensation strategy or find it difficult to attract, retain and motivate employees, each of which could materially and adversely affect our business.

We Are Liable For C-Cube's Pre-Merger Tax Liabilities, Including Tax Liabilities Resulting From The Spin-Off Of Its Semiconductor Business.

Under the terms of the merger agreement with C-Cube, Harmonic is generally liable for C-Cube's pre-merger tax liabilities. Approximately \$15.8 million of pre-merger tax liabilities remained outstanding at October 1, 2004 and are included in accrued liabilities. We are working with LSI Logic, which acquired C-Cube's spun-off semiconductor business in June 2001 and assumed its obligations, to settle these obligations, a process which has been underway since the merger in 2000. These liabilities represent estimates of C-Cube's pre-merger tax obligations to various tax authorities in 13 countries. Harmonic has already paid approximately \$4.8 million pursuant to the tax sharing agreement between Harmonic and LSI Logic, but is unable to predict when the remaining obligations will be paid, or in what amount. The full amount of the estimated obligation has been classified as a current liability. To the extent that these obligations are finally settled for less than the amounts provided, Harmonic is required, under the terms of the merger agreement, to refund the difference to LSI Logic. Conversely, if the settlements are more than the \$15.8 million pre-merger tax liability, LSI Logic is obligated to reimburse Harmonic.

[Table of Contents](#)

The merger agreement stipulates that Harmonic will be indemnified by the spun-off semiconductor business if the cash reserves are not sufficient to satisfy all of C-Cube's tax liabilities for periods prior to the merger. If for any reason the spun-off semiconductor business does not have sufficient cash to pay such taxes, or if there are additional taxes due with respect to the non-semiconductor business and Harmonic cannot be indemnified by LSI Logic, Harmonic generally will remain liable, and such liability could have a material adverse effect on our financial condition, results of operations or cash flows.

We May Be Subject To Risks Associated With Other Acquisitions.

We have made, continue to consider making and may make investments in complementary companies, products or technologies. If we enter into acquisition transactions, we could have difficulty assimilating or retaining the acquired companies' key personnel and operations or integrating the acquired technology or products into ours. We also may face challenges in achieving the strategic objectives, cost savings or other benefits from a proposed acquisition and may face difficulties in expanding our management information systems to accommodate the acquired business. These difficulties could disrupt our ongoing business, distract our management and employees and significantly increase our expenses. Moreover, our operating results may suffer because of acquisition-related expenses, amortization of intangible assets and impairment of acquired goodwill or intangible assets. Furthermore, we may have to incur debt or issue equity securities to pay for any future acquisitions, or to provide for additional working capital requirements, the issuance of which could be dilutive to our existing shareholders. If we are unable to successfully address any of these risks, our business, financial condition and operating results could be harmed.

Cessation Of The Development And Production Of Video Encoding Chips By C-Cube's Spun-off Semiconductor Business May Adversely Impact Us.

The DiviCom business and C-Cube semiconductor business collaborated on the production and development of two video encoding microelectronic chips prior to the merger. In connection with the merger, Harmonic and the spun-off semiconductor business entered into a contractual relationship under which Harmonic will have access to certain of the spun-off semiconductor business technologies and products upon which the DiviCom business previously depended for its product and service offerings. The term of this Agreement is through October 2005, with automatic annual renewals unless terminated by either party in accordance with the Agreement provisions. The spun-off semiconductor business is the sole supplier of these chips to Harmonic. Several of these products continue to be important to our business, and we have incorporated these chips into additional products that we have developed.

However, under the contractual relationships between Harmonic and the spun-off semiconductor business, which was acquired by LSI Logic in June 2001, the semiconductor business does not have a firm commitment to continue the development of video encoding microelectronic chips. As a result, the spun-off semiconductor business may choose not to continue future development of the chips for any reason. The semiconductor business may also encounter in the future technological difficulties in the production and development of the chips. If the spun-off semiconductor business is not able to or does not sustain its development and production efforts in this area our business, financial condition, results of operations or cash flow could be harmed.

Our Failure To Adequately Protect Our Proprietary Rights May Adversely Affect Us.

We currently hold 40 issued United States patents and 19 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 cannot assure you 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 cannot assure you that others will not develop technologies that are similar or superior to our technology, duplicate our technology 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 investors therefore should not rely on our patent portfolio to give us a competitive advantage over others in our industry. We believe

[Table of Contents](#)

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, vendors and customers as needed, and generally limit access to and distribution of our proprietary information. Nevertheless, we cannot assure you 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 resources and could negatively affect our business, operating results, financial position or cash flows.

In order to successfully develop and market certain of our planned products for digital applications, we may be required to enter into technology development or licensing agreements with third parties. Although many companies are often willing to enter into technology development or licensing agreements, we cannot assure you that such agreements will be negotiated on terms acceptable to us, or at all. The failure to enter into technology development or licensing agreements, when necessary, could limit our ability to develop and market new products and could cause our business to suffer.

We or Our Customers May Face Intellectual Property Infringement Claims From Third Parties.

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. In particular, leading companies in the telecommunications industry have extensive patent portfolios. From time to time, third parties, including these leading companies, have asserted and may assert exclusive patent, copyright, trademark and other intellectual property rights against us or our customers. Indeed, a number of third parties, including leading companies, have asserted patent rights to technologies that are important to us. Our suppliers and customers may receive similar claims. We have agreed to indemnify some of our suppliers and customers for alleged patent infringement. The scope of this indemnity varies, but, in some instances, includes indemnification for damages and expenses, including reasonable attorney's fees.

On July 3, 2003, Stanford University and Litton Systems filed a complaint in U.S. District Court for the Central District of California alleging that optical fiber amplifiers incorporated into certain of Harmonic's products infringe U.S. Patent No. 4,859,016. This patent expired in September 2003. The complaint seeks injunctive relief, royalties and damages. Harmonic has not been served in the case. Harmonic is currently evaluating its position with respect to this patent and has engaged in discussions with the plaintiff regarding potential settlement of the matter. At this time, Harmonic is unable to determine whether Harmonic will be able to settle this matter on reasonable terms or at all, nor can Harmonic predict the impact of an adverse outcome of this litigation if Harmonic elects to defend against it. Consequently, Harmonic has made no provision in its financial statements for the outcome of a negotiated settlement or an unfavorable verdict in litigation. An unfavorable outcome of this matter could have a material adverse effect on Harmonic's business, operating results, financial position or cash flows.

We Are The Subject Of Securities Class Action Claims And Other Litigation Which, If Adversely Determined, Could Harm Our Business And Operating Results.

Between June 28 and August 25, 2000, several actions alleging violations of the federal securities laws by Harmonic and certain of its officers and directors (some of whom are no longer with Harmonic) were filed in or removed to the United States District Court for the Northern District of California. The actions subsequently were consolidated. A consolidated complaint, filed on December 7, 2000, was brought on behalf of a purported class of persons who purchased Harmonic's publicly traded securities between January 19 and June 26, 2000. The complaint also alleged claims on behalf of a purported subclass of persons who purchased C-Cube securities between January 19 and May 3, 2000. In addition to Harmonic and certain of its officers and directors, the complaint also named C-Cube Microsystems Inc. and several of its officers and directors as defendants. The complaint alleged that, by making false or misleading statements regarding Harmonic's prospects and customers and its acquisition of C-Cube, certain defendants violated sections 10(b) and 20(a) of the Securities Exchange Act of 1934. The complaint also alleged that certain defendants violated section 14(a) of the Exchange Act and sections 11, 12(a)(2), and 15 of the Securities Act of 1933 by filing a false or misleading registration statement, prospectus, and joint proxy in connection with the C-Cube acquisition.

[Table of Contents](#)

On July 3, 2001, the Court dismissed the consolidated complaint with leave to amend. An amended complaint alleging the same claims against the same defendants was filed on August 13, 2001. Defendants moved to dismiss the amended complaint on September 24, 2001. On November 13, 2002, the Court issued an opinion granting the motions to dismiss the amended complaint without leave to amend. Judgment for defendants was entered on December 2, 2002. On December 12, 2002, plaintiffs filed a motion to amend the judgment and for leave to file an amended complaint pursuant to Rules 59(e) and 15(a) of the Federal Rules of Civil Procedure. On June 6, 2003, the Court denied plaintiffs' motion to amend the judgment and for leave to file an amended complaint. Plaintiffs filed a notice of appeal on July 1, 2003. Plaintiffs filed their opening brief on December 3, 2003. Defendants filed their answering briefs on March 2, 2004. Plaintiffs' reply brief was filed on April 16, 2004. No hearing has been scheduled yet.

A derivative action purporting to be on behalf of Harmonic was filed against its then-current directors in the Superior Court for the County of Santa Clara on September 5, 2000. Harmonic also was named as a nominal defendant. The complaint is based on allegations similar to those found in the securities class action and claims that the defendants breached their fiduciary duties by, among other things, causing Harmonic to violate federal securities laws. The derivative action was removed to the United States District Court for the Northern District of California on September 20, 2000. All deadlines in this action were stayed pending resolution of the motions to dismiss the securities class action. On July 29, 2003, the Court approved the parties' stipulation to dismiss this derivative action without prejudice and to toll the applicable limitations period. The limitations period is tolled until fourteen days after (1) defendants provide plaintiff with a copy of the mandate issued by the Ninth Court in the securities action or (2) either party provides written notice of termination of the tolling period, whichever is first.

A second derivative action purporting to be on behalf of Harmonic was filed in the Superior Court for the County of Santa Clara on May 15, 2003. It alleges facts similar to those previously alleged in the securities class action and the federal derivative action. The complaint names as defendants former and current Harmonic officers and directors, along with former officers and directors of C-Cube Microsystems, Inc., who were named in the securities class action. The complaint also names Harmonic as a nominal defendant. The complaint alleges claims for abuse of control, gross mismanagement, and waste of corporate assets against the Harmonic defendants, and claims for breach of fiduciary duty, unjust enrichment, and negligent misrepresentation against all defendants. On July 22, 2003, the Court approved the parties' stipulation to stay the case pending resolution of the appeal in the securities class action. Although the parties initially agreed in principle to a dismissal without prejudice on similar terms as in the federal derivative action, after further discussion, the parties decided that the stay currently in place suffices to protect their respective interests.

Based on its review of the complaints filed in the securities class action, Harmonic believes that it has meritorious defenses and intends to defend itself vigorously. There can be no assurance, however, that Harmonic will prevail. No estimate can be made of the possible range of loss associated with the resolution of this contingency and accordingly, Harmonic has not recorded a liability. An unfavorable outcome of this litigation could have a material adverse effect on Harmonic's business, operating results, financial position or cash flows.

The Terrorist Attacks Of 2001 And The Ongoing Threat Of Terrorism Have Created Great Uncertainty And May Continue To Harm Our Business.

Current conditions in the U.S. and global economies are uncertain. The terrorist attacks in 2001 created many economic and political uncertainties that have severely impacted the global economy. We experienced a further decline in demand for our products after the attacks. The long-term effects of the attacks, the situation in Iraq and the ongoing war on terrorism on our business and on the global economy remain unknown. Moreover, the potential for future terrorist attacks has created additional uncertainty and makes it difficult to assess whether the U.S. and other economies will continue to recover and whether our business will continue to improve.

Our Stock Price May Be Volatile.

The market price of our common stock has fluctuated significantly in the past, particularly in recent years, and is likely to fluctuate in the future. In addition, the securities markets have experienced significant price and volume fluctuations and the market prices of the securities of technology companies have been especially volatile. Investors

[Table of Contents](#)

may be unable to resell their shares of our common stock at or above their purchase price. In the past, companies that have experienced volatility in the market price of their stock have been the object of securities class action litigation.

We Rely On A Continuous Power Supply To Conduct Our Operations, And Any Electrical And Natural Gas Crisis Could Disrupt Our Operations And Increase Our Expenses.

We rely on a continuous power supply for manufacturing and to conduct our business operations. Interruptions in electrical power supplies in California in the early part of 2001 could recur in the future. In addition, the cost of electricity and natural gas has risen significantly. Power outages could disrupt our manufacturing and business operations and those of many of our suppliers, and could cause us to fail to meet production schedules and commitments to customers and other third parties. Any disruption to our operations or those of our suppliers could result in damage to our current and prospective business relationships and could result in lost revenue and additional expenses, thereby harming our business and operating results.

Some Anti-Takeover Provisions Contained In Our Certificate Of Incorporation, Bylaws And Stockholder Rights Plan, As Well As Certain Provisions Of Delaware Law, Could Impair A Takeover Attempt.

Harmonic has provisions in its certificate of incorporation and bylaws, which could have the effect of rendering more difficult or discouraging an acquisition deemed undesirable by the Harmonic Board of Directors. These include provisions:

- authorizing blank check preferred stock, which could be issued with voting, liquidation, dividend and other rights superior to Harmonic common stock;
- limiting the liability of, and providing indemnification to, directors and officers;
- limiting the ability of Harmonic stockholders to call and bring business before special meetings;
- requiring advance notice of stockholder proposals for business to be conducted at meetings of Harmonic stockholders and for nominations of candidates for election to the Harmonic Board of Directors;
- controlling the procedures for conduct and scheduling of Harmonic Board of Directors and stockholder meetings; and
- providing the Harmonic 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 and changes in control or management of Harmonic.

In addition, Harmonic has adopted a stockholder rights plan. The rights are not intended to prevent a takeover of Harmonic, and we believe these rights will help Harmonic's negotiations with any potential acquirers. However, if the Harmonic Board of Directors believes that a particular acquisition is undesirable, the rights may have the effect of rendering more difficult or discouraging that acquisition. The rights would cause substantial dilution to a person or group that attempts to acquire Harmonic on terms or in a manner not approved by the Harmonic Board of Directors, except pursuant to an offer conditioned upon redemption of the rights.

As a Delaware corporation, Harmonic also is 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, our stockholder rights plan or Delaware law that has the effect of delaying or deterring a change in control could limit the opportunity for Harmonic stockholders to receive a

[Table of Contents](#)

premium for their shares of Harmonic common stock, and could also affect the price that some investors are willing to pay for Harmonic common stock.

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 and foreign currency exchange rates as measured against the U.S. dollar and the currencies used by Harmonic's subsidiaries.

Foreign Currency Exchange Risk

Harmonic has a number of international subsidiaries, each of whose sales and results of operations are generally denominated in U.S. dollars. Sales denominated in foreign currencies were approximately 5%, 6% and 4% of total net sales in the third quarter and first nine months of 2004 and the full year of 2003, respectively. In addition, the Company has various international branch offices, which provide sales support and systems integration services. While Harmonic does not anticipate that near-term changes in exchange rates will have a material impact on future operating results, financial position or cash flows, Harmonic cannot assure you that a sudden and significant change in the value of local currencies would not harm Harmonic's operating results, financial position or cash flows. For example, we experienced foreign exchange losses of \$0.1 million and \$0.5 million in the third quarter and first nine months of 2004, respectively.

Interest Rate Risk

Exposure to market risk for changes in interest rates relate primarily to Harmonic's investment portfolio of marketable debt securities of various issuers, types and maturities, and to Harmonic's borrowings 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 with an original maturity of less than two years. These investments are classified as available for sale and are carried at estimated fair value, with unrealized gains and losses reported in other comprehensive income. There is a risk that the Company would be required to record impairment charge if any unrealized losses are assessed to be other than temporary. A 10% change in interest rates would not have a material impact on financial conditions results of operations or cash flows.

ITEM 4. CONTROLS AND PROCEDURES

Evaluation of disclosure controls and procedures.

Our chief executive officer and our chief financial officer participated in the evaluation of the effectiveness of the Company's "disclosure controls and procedures" (as defined in the Securities Exchange Act of 1934, as amended (the "Exchange Act"), Rules 13a-15(e) or 15d-15(e)) as of the end of the period covered by this quarterly report, and have concluded that our disclosure controls and procedures are effective based on their evaluation of these controls and procedures required by paragraph (b) of Exchange Act Rules 13a-15 or 15d-15.

Changes in internal controls.

There were no changes in our internal control over financial reporting identified in connection with the evaluation required by paragraph (d) of Exchange Act Rules 13a-15 or 15d-15 that occurred during our last fiscal quarter 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

Shareholder Litigation

Between June 28 and August 25, 2000, several actions alleging violations of the federal securities laws by Harmonic and certain of its officers and directors (some of whom are no longer with Harmonic) were filed in or removed to the United States District Court for the Northern District of California. The actions subsequently were consolidated.

A consolidated complaint, filed on December 7, 2000, was brought on behalf of a purported class of persons who purchased Harmonic's publicly traded securities between January 19 and June 26, 2000. The complaint also alleged claims on behalf of a purported subclass of persons who purchased C-Cube securities between January 19 and May 3, 2000. In addition to Harmonic and certain of its officers and directors, the complaint also named C-Cube Microsystems Inc. and several of its officers and directors as defendants. The complaint alleged that, by making false or misleading statements regarding Harmonic's prospects and customers and its acquisition of C-Cube, certain defendants violated sections 10(b) and 20(a) of the Securities Exchange Act of 1934. The complaint also alleged that certain defendants violated section 14(a) of the Exchange Act and sections 11, 12(a)(2), and 15 of the Securities Act of 1933 by filing a false or misleading registration statement, prospectus, and joint proxy in connection with the C-Cube acquisition.

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[Table of Contents](#)

the federal derivative action, after further discussion, the parties decided that the stay currently in place suffices to protect their respective interests.

Based on its review of the complaints filed in the securities class actions, Harmonic believes that it has meritorious defenses and intends to defend itself vigorously. There can be no assurance, however, that Harmonic will prevail. No estimate can be made of the possible range of loss associated with the resolution of this contingency and accordingly, Harmonic has not recorded a liability. An unfavorable outcome of this litigation could have a material adverse effect on Harmonic's business, operating results, financial position or cash flows.

Other Litigation

On July 3, 2003, Stanford University and Litton Systems filed a complaint in U.S. District Court for the Central District of California alleging that optical fiber amplifiers incorporated into certain of Harmonic's products infringe U.S. Patent No. 4,859,016. This patent expired in September 2003. The complaint seeks injunctive relief, royalties and damages. Harmonic has not been served in the case. Harmonic is currently evaluating its position with respect to this patent and has engaged in discussions with the plaintiff regarding potential settlement of the matter. At this time, we are unable to determine whether we will be able to settle this litigation on reasonable terms or at all, nor can we predict the impact of an adverse outcome of this litigation if we elect to defend against it. No estimate can be made of the possible range of loss associated with the resolution of this contingency and, accordingly, we have not recorded a liability associated with the outcome of a negotiated settlement or an unfavorable verdict in litigation. An unfavorable outcome of this matter could have a material adverse effect on Harmonic's business, operating results, financial position or cash flows.

ITEM 6. EXHIBITS

Exhibits.

Exhibit Number	Exhibit
31.1	Section 302 Certification of Principal Executive Officer
31.2	Section 302 Certification of Principal Financial Officer
32.1	Section 906 Certification of Principal Executive Officer
32.2	Section 906 Certification of Principal Financial Officer

SIGNATURE

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.

Dated: November 5, 2004

HARMONIC INC.
(Registrant)

By: /s/ Robin N. Dickson

Robin N. Dickson
Chief Financial Officer
(Principal Financial and Accounting Officer)

INDEX TO EXHIBITS

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31.1	Section 302 Certification of Principal Executive Officer
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Certification of Principal Executive Officer
Pursuant to Section 302 of
The Sarbanes-Oxley Act of 2002

I, Anthony J. Ley, Chairman, President and Chief Executive Officer of Harmonic Inc., 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)) 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) 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
 - c) 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 5, 2004

By: /s/Anthony J. Ley

Anthony J. Ley
Chairman, President and Chief Executive Officer
(Principal Executive Officer)

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

I, Robin N. Dickson, Principal Financial Officer of Harmonic Inc., 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)) 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) 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
 - c) 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 5, 2004

By: /s/Robin N. Dickson

Robin N. Dickson
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, Anthony J. Ley, Chairman, 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 quarterly report of the Company on Form 10-Q for the fiscal quarter ended October 1, 2004, 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 Act of 1934 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.

Date: November 5, 2004

/s/ Anthony J. Ley

Anthony J. Ley
Chairman, 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, Robin N. Dickson, 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 quarterly report of the Company on Form 10-Q for the fiscal quarter ended October 1, 2004, 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 Act of 1934 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.

Date: November 5, 2004

/s/ Robin N. Dickson

Robin N. Dickson
Chief Financial Officer
(Principal Financial Officer)