

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

**Form S-3**  
**REGISTRATION STATEMENT**  
**UNDER**  
**THE SECURITIES ACT OF 1933**

**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 Registrant's principal executive offices)*

**Anthony J. Ley**  
**President and Chief Executive Officer**  
**549 Baltic Way**  
**Sunnyvale, CA 94089**  
**(408) 542-2500**

*(Name, address, including zip code, and telephone number,  
including area code, of agent for service)*

**Copies to:**

**Robert G. Day**  
**Michael A. Occhiolini**  
**Wilson Sonsini Goodrich & Rosati**  
**Professional Corporation**  
**650 Page Mill Road**  
**Palo Alto, CA 94304**  
**(650) 493-9300**

**Approximate date of commencement of proposed sale to the public:** As soon as practicable after the effective date of this Registration Statement.

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.  \_\_\_\_\_

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.  \_\_\_\_\_

If delivery of the prospectus is expected to be made pursuant to Rule 434, please check the following box.

**CALCULATION OF REGISTRATION FEE**

<b>Title of Each Class of Securities to be Registered</b>	<b>Amount to be Registered</b>	<b>Proposed Maximum Offering Price Per Unit(1)</b>	<b>Proposed Maximum Offering Price Aggregate(2)</b>	<b>Amount of Registration Fee</b>
Common Stock, \$0.000 par value(3)				
Preferred Stock, \$0.001 par value				
Debt Securities(4)				
Warrants to purchase Common Stock				
<b>Total(5)(6)</b>	<b>\$126,590,000(5)(6)</b>	<b>100%</b>	<b>\$126,590,000(5)(6)</b>	<b>\$14,899.64</b>

- The proposed maximum offering price per unit will be determined from time to time by the Registrant in connection with the issuance by the Registrant of the securities registered hereunder.
- Estimated solely for the purpose of calculating the registration fee, which is calculated in accordance with Rule 457(o) under the Securities Act.
- Each share of Common Stock includes a right to purchase one one-thousandth of a share of Series A Participating Preferred Stock. In addition to the securities registered hereunder, the registrant is also registering an indeterminate number of shares of Common Stock as may be issued upon exchange or conversion of securities issued directly hereunder. No separate consideration will be received for any shares of Common Stock so issued upon conversion or exchange.
- Or (i) if any debt securities are issued at an original issue discount, such greater principal amount at maturity as shall result in an aggregate initial offering price equal to the amount to be registered or (ii) if any debt securities are issued with a principal amount denominated in a foreign currency or composite currency, such principal amount as shall result in an aggregate initial offering price equivalent thereto in United States dollars at the time of initial offering.
- Pursuant to Rule 429 of the Securities Act of 1933, as amended, securities having an aggregate initial offering price of \$73,410,000 are being carried forward from Registration Statement No. 333-84430. \$13,800 of the filing fee previously paid in connection with such registration statement is associated with these securities.
- The proposed maximum offering price per unit will be determined by us in connection with the issuance of the securities. The securities registered hereunder may be sold separately or as units with other securities registered hereby.

The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the Registration Statement shall become effective on such date as the Commission acting pursuant to said Section 8(a) may determine.

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The information in this prospectus is not complete and may be changed. We may not sell the securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities, and we are not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

**SUBJECT TO COMPLETION, DATED APRIL 4, 2005**

PROSPECTUS

**\$200,000,000**

# **Harmonic Inc.**

**By this prospectus, we may offer —**

**Common Stock**

**Preferred Stock**

**Debt Securities**

**Warrants for Common Stock**

**See “Risk Factors” on page 4 for information you should consider before buying the securities.**

Our common stock is listed on the Nasdaq National Market under the symbol “HLIT.” On April 1, 2005, the last reported sale price of our common stock on the Nasdaq National Market was \$9.55 per share.

We will provide specific terms of these securities in supplements to this prospectus. You should read this prospectus and any prospectus supplement carefully before you invest.

This prospectus may not be used to offer and sell securities unless accompanied by a prospectus supplement.

**Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.**

This prospectus is dated \_\_\_\_\_, 2005

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Unless stated otherwise, references in this prospectus to “Harmonic,” “we,” “us,” “its” or “our” refer to Harmonic Inc., a Delaware corporation, and its subsidiaries.

Each trademark, trade name or service mark of any other company appearing in this prospectus belongs to its holder.

No person has been authorized to give any information or to make any representations in connection with this offering other than those contained or incorporated by reference in this prospectus and any accompanying prospectus supplement in connection with the offering described herein and therein, and, if given or made, such information or representations must not be relied upon as having been authorized by the company. Neither this prospectus nor any prospectus supplement shall constitute an offer to sell or a solicitation of an offer to buy offered securities in any jurisdiction in which it is unlawful for such person to make such an offering or solicitation. Neither the delivery of this prospectus or any prospectus supplement nor any sale made hereunder shall under any circumstances imply that the information contained or incorporated by reference herein or in any prospectus supplement is correct as of any date subsequent to the date hereof or of such prospectus supplement.

## SUMMARY

This prospectus is part of a Registration Statement on Form S-3 that we filed with the Securities and Exchange Commission using a "shelf" registration process. Under this shelf process, we may sell any combination of securities described in this prospectus in one or more offerings, up to a total dollar amount of \$200,000,000. This prospectus provides you with a general description of the securities we may offer. Each time we sell securities, we will provide a prospectus supplement that will contain specific information about the terms of that offering. The prospectus supplement may, along with information that is incorporated by reference as described under the heading "Where You Can Find More Information," also add, update or change information contained in this prospectus. You should read both this prospectus and any prospectus supplement together with additional information described below under the heading "Where You Can Find More Information."

### Harmonic Inc.

We design, manufacture and sell 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 (VOD), high definition television (HDTV), high-speed Internet access and telephony. Historically, most of our sales have been derived from sales of digital headend products and fiber optic transmission systems to cable television and direct broadcast satellite operators. We also derive a growing portion of our sales from telephone companies that offer video services to their customers.

The construction of new networks or the upgrade and extension of existing networks to facilitate high-speed broadband video, voice and data services requires substantial expenditure and often the replacement of significant portions of the existing infrastructure. The economic success of incumbent and new network operators in a competitive environment will depend to a large extent on their ability to offer a choice of attractively priced packages of voice, video and data services to consumers, and to do so with high reliability and easy access to their network. Personalized video services, such as VOD, and the availability of TV sets equipped for HDTV will require increasing amounts of bandwidth to the home in order to deliver maximum choice and flexibility. In addition, certain operators have initiated trials to deliver live television to cellular telephones and other mobile devices. Compression of video and data to utilize effectively the available bandwidth, the cost-effective transport of digital traffic within networks, and the construction of robust "fat pipes" for distribution of content are all essential elements in the ability of operators to maximize revenue and minimize capital expenditures and operating costs.

Harmonic's products are organized in two principal groups, Convergent Systems and Broadband Access Networks. In addition, Harmonic provides technical support services to its customers worldwide.

#### ***Convergent Systems products***

The Convergent Systems division develops standards-based solutions that enable operators to increase the capacity of their broadband networks with advanced compression and stream processing technology. Our CS division's advanced digital video solutions enable satellite, cable, telco, broadcast, and wireless operators around the world to offer digital video services to their customers. As video, data and voice services continue to converge, effectively managing and processing these bandwidth-intensive applications becomes critical to the long-term viability of an operator's network.

#### ***Broadband Access Networks products***

The Broadband Access Networks division applies its strengths in optics and electronics, including expertise with lasers, modulators, and radio frequency technology, to develop products which provide enhanced network reliability and allow broadband service providers to deliver advanced services, including two-way interactive services. We provide the operator with end-to-end capability in the fiber portion of the network.

Harmonic was initially incorporated in California in June 1988 and reincorporated into Delaware in May 1995. Our principal executive offices are located at 549 Baltic Way, Sunnyvale, California 94089. Our telephone number is (408) 542-2500.

### **The Securities We May Offer**

We may offer up to \$200,000,000 of common stock, preferred stock, warrants to purchase common stock and debt securities. A prospectus supplement, which we will provide to you each time we offer securities, will describe the specific amounts, prices, and terms of these securities.

We may sell the securities to or through underwriters, dealers or agents, or directly to purchasers. We, as well as any agents acting on our behalf, reserve the sole right to accept and to reject in whole or in part any proposed purchase of securities. Each prospectus supplement will set forth the names of any underwriters, dealers, or agents involved in the sale of the securities described in that prospectus supplement and any applicable fee, commission or discount arrangements with them.

#### **Common Stock**

We may offer our common stock, par value \$0.001 per share, either alone or underlying other registered securities convertible or exercisable into our common stock. Common stock holders are entitled to receive dividends declared by our board of directors out of funds legally available for the payment of dividends, subject to rights, if any, of preferred stock holders. Currently, we do not pay a dividend. Each holder of common stock is entitled to one vote per share. The holders of common stock have no preemptive rights or cumulative voting rights.

#### **Preferred Stock**

We may issue preferred stock, par value \$0.001 per share, in one or more series. Our board of directors as a committee designated by the Board will determine the dividend, voting, and conversion rights and other provisions at the time of sale. Each series of preferred stock will be more fully described in the particular prospectus supplement that will accompany this prospectus, including redemption provisions, rights in the event of liquidation, dissolution or the winding up of Harmonic, voting rights and conversion rights.

#### **Warrants**

We may issue warrants for the purchase of our common stock.

#### **Debt Securities**

We may offer secured or unsecured obligations in the form of either senior or subordinated debt. The senior debt securities and the subordinated debt securities are together referred to in this prospectus as the "debt securities." The unsecured senior debt securities will generally have the same rank in right of payment as our other unsecured, unsubordinated debt. The subordinated debt securities generally will be entitled to payment only after payment of our senior debt. Senior debt generally includes all debt for money borrowed by us, except debt that is stated in the instrument governing the terms of that debt to be not senior to, or to have the same rank in right of payment as, or to be expressly junior to, the subordinated debt securities.

The senior and subordinated debt securities will be issued under separate indentures between us and a trustee. We have summarized the general features of the debt securities to be governed by the indentures. These indentures have been filed as exhibits to the registration statement (No. 333-84430) that we have previously filed with the Securities and Exchange Commission, and are incorporated by reference into this registration statement. We encourage you to read these indentures. Instructions on how you can get copies of these documents are provided below under the heading "Where You Can Find More Information."

**General Indenture Provisions that Apply to Senior and Subordinated Debt**

- Each indenture allows debt to be issued in series with terms particular to each series.
- Neither indenture limits the amount of debt that we may issue or generally provides holders any protection should there be a highly leveraged transaction involving our company.
- The indentures allow us to merge or to consolidate with another United States entity or convey, transfer or lease our properties and assets substantially as an entirety to another United States entity, as long as certain conditions are met. If these events occur, the other entity will be required to assume our obligations on the debt securities and under the indentures, and we will be released from all liabilities and obligations, except in the case of a lease.
- The indentures provide that we and the respective trustee may generally amend the respective indenture with the consent of holders of a majority of the total principal amount of the debt outstanding in any series to change certain of our obligations or your rights concerning the debt. However, to change the payment of principal, interest, or adversely affect any right to convert or certain other matters, every holder in that series must consent.
- We may discharge the indentures and defease restrictive covenants by depositing sufficient funds with the trustee to pay the obligations when due, as long as certain conditions are met. The trustee would pay all amounts due to you on the debt from the deposited funds.

**Events of Default**

Each of the following is among the events of default specified in the indentures:

- Principal not paid when due;
- Sinking fund payment not made when due;
- Failure to pay interest for 30 days;
- Covenants not performed for 90 days after notice; and
- Certain events of bankruptcy, insolvency or reorganization of Harmonic.

A prospectus supplement may describe deletions of, or changes or additions to, the events of default.

**Remedies**

Upon an event of default, other than a bankruptcy, insolvency or reorganization, the trustee or holders of 25% of the principal amount outstanding in a series may declare the outstanding principal plus accrued interest, if any, immediately due and payable. However, the holders of a majority in principal amount may, under certain circumstances, rescind this action.

**Subordination**

The subordinated indenture provides that the subordinated debt securities will be subordinated to all senior debt as defined in the subordinated indenture.

## RISK FACTORS

*Before you invest in any of our securities, you should be aware of various risks, including those described below. You should carefully consider these risk factors, together with all of the other information included or incorporated by reference in this prospectus and in the prospectus supplement, before you decide whether to purchase any of our securities. The risks set out below are not the only risks we face.*

*If any of the following risks occur, our business, financial condition and results of operations could be materially adversely affected. In such case, the trading price of our securities could decline, and you may lose all or part of your investment.*

***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 and 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 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, telephone companies and broadcasters for constructing and upgrading 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 industry standards;
- delays associated with the evaluation of new services, new standards, and system architectures by many cable and satellite television operators;
- emphasis on generating revenue from existing customers by operators instead of new construction or network upgrades;
- a reduction in the amount of capital available to finance projects of our customers and potential customers;
- proposed business combinations and divestitures by our customers and regulatory review thereof;
- economic and financial conditions in domestic and international markets; and
- bankruptcies and financial restructuring of major customers.

The financial difficulties of certain of our customers and changes in our customers' deployment plans adversely affected our business 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



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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, which was ultimately rejected by regulators. 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 in 2004 compared to 2003. However, another economic downturn or other factors 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. In addition, industry consolidation has, in the past and may in the future, constrain capital spending among our customers. In this regard, we believe that the proposed sale of Adelpia Communications and the recent privatization of Cox Communications have led to capital spending delays at these customers. We cannot currently predict the impact of the proposed sale of Adelpia Communications or the privatization of Cox Communications on our future sales. As a result, we cannot assure you that we will maintain or increase our net sales in the future.

Major U.S. cable operators have indicated that the substantial completion of major network upgrades, which involved 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 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, and due in part to the consolidation of ownership of cable television and direct broadcast satellite systems, we expect this customer concentration to continue in the foreseeable future. Sales to our ten largest customers in 2004, 2003, and 2002 accounted for approximately 55%, 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 DBS segment, The News Corporation Ltd. acquired an indirect controlling interest in Hughes Electronics, the parent company of DIRECTV in 2003. In addition, the sale or financial restructuring of companies such as Adelpia Communications and several European operators may lead to further industry consolidation. In 2004 and 2003, sales to Comcast accounted for 17% and 32%, respectively, of net sales. In 2002, sales to Charter Communications and Comcast accounted for 18% and 10% of net sales. If Comcast and AT&T Broadband had been combined for all of 2002, total revenues for the combined entity would have been 17% of net sales. The loss of Comcast or any other significant customer or any reduction in orders by Comcast or 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 declined in 2004 compared to 2003, both in absolute dollars and as a percentage of revenues. The loss of, or any reduction in orders from, a significant customer would harm our business.

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

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

- the level and timing of capital spending of our customers, 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 recognition from solution contracts which may span several quarters;
- the timing of revenue recognition on sales arrangements, which may include multiple deliverables;
- the need to replace revenue from a major project for a Japanese customer that was completed in 2004 with other domestic or international customers;
- 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 and timing 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;
- the impact of FAS 123R, a new accounting standard which requires us to expense stock options;
- 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 compatible set top boxes, and our customers' need for local franchise and licensing approvals.

In addition, we often recognize a substantial portion of our revenues in the last month of the 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. 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 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, or if we are unable to develop new products based on these technologies on a timely basis, 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 U.S. 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.

***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.

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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 is developing 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 begun to build. Although we believe that a number of our existing products can be deployed successfully in these networks, we will 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.

***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;
- 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 current and potential telco customers are particularly unpredictable. Additionally, orders may include multiple elements, the timing of delivery of which may impact the timing of revenue recognition. Quarterly and annual results may fluctuate significantly due to revenue recognition policies and the timing of the receipt of orders. For example, revenue from two significant customer orders in the third quarter of 2004 was delayed due to these factors until the fourth quarter of 2004.

In addition, a significant portion of our revenue is derived from solution sales that principally consist of and include the system design, manufacture, test, installation and integration of equipment to the specifications of Harmonic's customers, including equipment 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 U.S. in 2004, 2003 and 2002 represented 42%, 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. In addition, a portion of our research and development occurs overseas, including at our facilities in Israel, and, following our acquisition of Broadcast Technologies Ltd., also in the United Kingdom. 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

During 2004, a significant percentage of our international revenues were derived from a major upgrade by a Japanese customer of its satellite facilities. That upgrade has now been completed, and we expect sales to this customer to decline in 2005, which could adversely affect our sales to international customers.

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. Furthermore, payment cycles for international customers are typically longer than those for customers in the U.S.. 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.

***Pending business combinations and other financial and regulatory issues among our customers could adversely affect our business.***

The telecommunications industry has been particularly impacted by the recent economic recession, adverse conditions in capital markets and financial difficulties in both the service and equipment sectors, including bankruptcies. Many of our domestic and international customers accumulated significant levels of debt and 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 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

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RCN and WinFirst, also had difficulty in accessing capital markets. Both subsequently filed for bankruptcy. In Europe, rapid consolidation of the cable industry through acquisition also led to significant levels of debt at the major MSOs, and companies such as NTL and UPC went through bankruptcy proceedings. European digital broadcasters, such as ITV Digital, Kirsch and Quiero, also filed for protection from creditors.

While the capital market concerns about the domestic cable industry have eased, 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 Comcast/ AT&T Broadband transaction in 2002 and the acquisition by The News Corporation Ltd. in December 2003 of 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 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. More recently, restructuring of the industry has continued with the privatization of Cox Communications, the planned sale of Adelphia Communications out of bankruptcy, and the proposed sale of Cablevision's VOOOM! satellite assets to EchoStar. In addition, further business combinations may occur in our 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 U.S. 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 operators. 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.

### ***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.

### ***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 announced changes to U.S. GAAP, effective for fiscal periods beginning after June 15, 2005, that will require us to record a charge to earnings for employee stock option grants and employee stock purchase plan rights. This regulation will negatively impact our earnings and may affect our ability to raise capital on acceptable terms. In addition, new regulations implemented by The Nasdaq National

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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 exposed to additional 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 requires management's annual review and evaluation of our internal controls over financial reporting, and attestation of the effectiveness of our internal controls over financial reporting 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 have documented and tested our internal control systems and procedures and have made improvements in order for us to comply with the requirements of Section 404. This process required us to hire additional personnel and outside advisory services and has resulted in significant additional accounting and legal expenses. While our assessment of our internal controls over financial reporting resulted in our conclusion that as of December 31, 2004, our internal control over financial reporting was effective, we cannot predict the outcome of our testing in future periods. If we conclude in future periods that our internal controls over financial reporting are not effective or if our independent registered public accounting firm is unable to provide an unqualified opinion as of future year-ends, investors may lose confidence in our financial statements, and the price of our stock may suffer.

***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. Although we generated a small net profit in 2004 after several years of losses, future profitability is 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 December 31, 2004 we had an accumulated deficit of \$1.9 billion. These losses, among other things, have had and may 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 strategic 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. In April 2005, we filed this registration statement on Form S-3 with the SEC. Pursuant to the registration statement on Form S-3 declared effective by the SEC in April 2002 and this registration statement on Form S-3, we will continue to be able to issue common stock, preferred stock, debt securities and warrants to purchase common stock from time to time, up to an aggregate of approximately \$200 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

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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.

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

Our net sales increased approximately 36% in 2004 from 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. Furthermore, we purchase several key components, subassemblies and modules used in the manufacture or integration of our products from sole or limited sources. Our ability to meet customer requirements depends in part on our ability to obtain sufficient volumes of these materials in a timely fashion. Also, in recent years, in response to lower net sales and the prolonged economic recession, we significantly reduced our headcount and other expenses. 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.

***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 have been in the past adversely affected by significant provisions for excess and obsolete inventories.

***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 62 employees as of December 31, 2004, or approximately 11% of our workforce. The employees at this facility consist principally of research and development personnel involved in 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 directly 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 ongoing U.S. war on terrorism and the terrorist attacks and hostilities within Israel have heightened these risks. We cannot assure you that current tensions in the Middle East will not adversely affect our business and results of operations.

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.



***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 was particularly severe during the recent economic downturn as equipment suppliers competed aggressively for customers' reduced capital spending. Harmonic's competitors in the fiber optics systems business include corporations such as C-Cor, 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, new standards for video compression are being introduced and products based on these standards are being developed by Harmonic and certain competitors. If our competitors are successful in bringing these products to market earlier, or if these products are more technologically capable than ours, then our sales could be materially and adversely affected. 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 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 resulting 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. Also, decisions by customers to adopt new technologies or products are often delayed by extensive evaluation and qualification processes and can result in delays in sales of current 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.

***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. For example, we depend on LSI Logic for video encoding chips. 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, certain 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 optical component

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sources, consolidation of suppliers in the industry and the small number of viable alternatives have limited the results 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 Services Corp. as our primary contract manufacturer. We completed the transition during the summer of 2004. 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 negatively affect our ability to ship our products on a timely basis, which could damage relationships with current and prospective customers and harm our business. We attempt to limit this risk by maintaining safety 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 in the past, were adversely affected by significant excess and obsolete inventory charges.

### ***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. This strain was exacerbated by the acquisition of DiviCom and the subsequent loss of numerous employees, including senior management. 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 products increases significantly, we may need to increase our headcount, as we did during 2004, adding 33 employees. Our ability to manage our business effectively in the future, including any future growth, will require us to train, motivate and manage our employees successfully, to attract and integrate new employees into our overall operations, to retain key employees and to continue to improve our operational, financial and management systems.

### ***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 assure you that compliance with WEEE and RoHS will not have a material adverse effect on our financial condition or results of operations.

### ***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. As of December 31, 2004, approximately \$15.8 million of pre-merger tax liabilities remained outstanding 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 develop an approach 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 11 countries. Harmonic paid a further \$5.8 million of these tax obligations in February 2005, but is unable to predict when the remaining tax 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

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LSI Logic. Conversely, if the settlements are more than the \$10.0 million pre-merger tax liability after the February 2005 payments, LSI Logic is obligated to reimburse Harmonic.

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. For example, on February 25, 2005, we acquired all of the issued and outstanding shares of Broadcast Technologies Ltd., a private U.K. company. In connection with this and other acquisition transactions, we could have difficulty assimilating or retaining the acquired companies' key personnel and operations, integrating the acquired technology or products into ours or complying with internal control requirements of the Sarbanes-Oxley Act as a result of an acquisition. We also may face challenges in achieving the strategic objectives, cost savings or other benefits from these proposed acquisitions and 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 or 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 (acquired by LSI Logic in June 2001) 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 has access to certain of the spun-off semiconductor business technologies and products which the DiviCom business previously depended for its product and service offerings. The current term of this agreement is through October 2005, with automatic annual renewal 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. 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 flows could be harmed.

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

We currently hold 39 issued U.S. 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.

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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 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.

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 continues to evaluate 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.

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).

### ***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 U.S. 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

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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. The U.S. Court of Appeals for the Ninth Circuit heard oral arguments on February 17, 2005, but has not ruled on the appeal 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 U.S. 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 Circuit 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.

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

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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.

***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 estimate how quickly the U.S. and other economies will recover and our business will improve.

***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.

***Our stock price may be volatile.***

The market price of our common stock has fluctuated significantly in the past, 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 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.

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

Harmonic has provisions in its certificate of incorporation and bylaws, each of 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 Board and stockholder meetings; and
- providing the board of directors with the express power to postpone previously scheduled annual meetings and to cancel previously scheduled special meetings.

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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 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 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.

### **SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS**

This prospectus and the documents incorporated herein by reference contain forward-looking statements within the meaning of Section 27A of the Securities Act and Section 21E of the Exchange Act. Words such as "anticipates," "expects," "intends," "may," "will," "should," "potential," "continue," "further," "plans," "believes," "seeks," "estimates," variations of such words and similar expressions are intended to identify such forward looking statements. These statements are not guarantees of future performance and are subject to certain risks, uncertainties and assumptions that are difficult to predict. Therefore, actual results could differ materially from those expressed or forecasted in any such forward-looking statements as a result of certain factors, including those set forth in "Risk Factors," as well as those noted in similar sections of the documents incorporated herein by reference. In connection with forward-looking statements which appear in these disclosures, investors should carefully review the factors set forth in this prospectus under "Risk Factors."

The cautionary statements contained in any prospectus supplement under the caption "Risk Factors" and other similar statements contained elsewhere in this prospectus, including the documents that are incorporated by reference, identify important factors with respect to such forward-looking statements, including certain risks and uncertainties that could cause our actual results, performance or achievements expressed or implied by such forward-looking statements.

Although we believe that the expectations reflected in such forward-looking statements are based upon reasonable assumptions, no assurance can be given that such expectations will be attained or that any deviations will not be material. We disclaim any obligation or undertaking to disseminate any updates or revision to any forward-looking statement contained herein to reflect any change in our expectations with regard thereto or any change in events, conditions or circumstances on which any such statement is based.

### **USE OF PROCEEDS**

Unless otherwise indicated in the prospectus supplement, the net proceeds from the sale of securities offered by this prospectus will be used for general corporate purposes, including capital expenditures and to meet working capital needs. We expect from time to time to evaluate the acquisition of businesses, products and technologies for which a portion of the net proceeds may be used. Pending such uses, we will invest the net proceeds in interest-bearing securities.

### RATIO OF EARNINGS AVAILABLE TO COVER FIXED CHARGES

The ratio of earnings to combined fixed charges and preferred stock dividends is identical to the ratio of earnings to fixed charges because we have not issued any preferred stock. The ratio of earnings to fixed charges and the ratio of earnings to combined fixed charges and preferred stock dividends for each of the periods indicated is as follows:

	Fiscal Year Ended December 31,				
	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>
Ratio of earnings available to cover fixed charges(1)	—	—	—	—	1.8

(1) Due to our losses in 2000, 2001, 2002 and 2003, the ratio coverage was less than 1:1. Additional earnings of \$1.7 billion, \$167.2 million, \$76.4 million and \$29.1 million would have been required in each of those periods, respectively, to achieve a coverage of 1:1.

In calculating the ratio of earnings available to cover fixed charges, "earnings" consist of net income (loss) before provisions for income taxes plus fixed charges. Fixed charges consist of:

- interest expense; and
- one-third of our rental expense, which we believe to be representative of interest attributable to rentals.



## DESCRIPTION OF COMMON STOCK

Harmonic is authorized to issue up to 150,000,000 shares of common stock, \$0.001 par value per share. As of April 1, 2005, 73,093,625 shares of Harmonic's common stock were outstanding. The holders of common stock are entitled to one vote for each share held of record on all matters submitted to a vote of the stockholders.

Subject to preferences that may be applicable to any outstanding preferred stock, the holders of common stock are entitled to receive ratably such dividends, if any, as may be declared from time to time by the Board of Directors out of funds legally available for the purpose. In the event of a liquidation, dissolution or winding up of Harmonic, the holders of common stock are entitled to share ratably in all assets remaining after payment of liabilities, subject to prior distribution rights of preferred stock, if any, then outstanding. The common stock has no preemptive or conversion rights or other subscription rights. There are no redemption or sinking fund provisions applicable to the common stock. All outstanding shares of common stock are fully paid and nonassessable, and the shares of common stock to be issued upon the closing of this offering will be fully paid and nonassessable.

### Anti-Takeover Provisions

Certain provisions of Delaware law and Harmonic's restated certificate of incorporation and bylaws could make more difficult the acquisition of Harmonic by means of a tender offer, a proxy contest or otherwise and removal of incumbent officers and directors. These provisions, summarized below, are expected to discourage certain types of coercive takeover practices and inadequate takeover bids and to encourage persons seeking to acquire control of Harmonic to first negotiate with Harmonic. Harmonic believes that the benefits of increased protection of Harmonic's potential ability to negotiate with the proponent of an unfriendly or unsolicited proposal to acquire or restructure Harmonic outweigh the disadvantages of discouraging such proposals because, among other things, negotiation of such proposals could result in an improvement of their terms.

#### *Delaware Law*

We are subject to the provisions of Section 203 of the Delaware General Corporation Law, an anti-takeover law. In general, the statute prohibits a publicly-held Delaware corporation from engaging in a "business combination" with an "interested stockholder" for a period of three years after the date of the transaction in which the person became an interested stockholder, unless the business combination is approved in a prescribed manner. For purposes of Section 203, a "business combination" includes a merger, asset sale, or other transaction resulting in a financial benefit to the interested stockholder, and an "interested stockholder" is a person who, together with affiliates and associates, owns (or within three years prior, did own) 15% or more of the corporation's voting stock. A corporation may "opt out" of this statute, which we have not done. Existence of this provision would be expected to have an anti-takeover effect with respect to transactions not approved in advance by the Board of Directors, including discouraging attempts that might result in a premium over the market price for the shares of common stock held by stockholders.

#### *Certificate of Incorporation and Bylaws Provisions*

Harmonic's restated certificate of incorporation and bylaws do not provide for cumulative voting in the election of directors. The authorization of undesignated preferred stock makes it possible for the Board of Directors to issue preferred stock with voting or other rights or preferences that could impede the success of any attempt to change control of Harmonic. These and other provisions may have the effect of deterring hostile takeovers or delaying changes in control or management of Harmonic.

## DESCRIPTION OF PREFERRED STOCK

The board of directors has the authority, without further action by the stockholders, to issue up to 5,000,000 shares of preferred stock in one or more series and to fix the rights, preferences, privileges and restrictions thereof, including dividend rights, conversion rights, voting rights, terms of redemption, liquidation

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preferences, sinking fund terms and the number of shares constituting any series or the designation of such series, without any further vote or action by stockholders. Other than the Series A preferred stock associated with Harmonic's rights plan described below under the "Stockholder Rights Plan," no shares of preferred stock of Harmonic are outstanding.

Our board of directors has the authority, without stockholder consent, subject to certain limitations imposed by law or our bylaws, to issue one or more series of preferred stock at any time. The rights, preferences and restrictions of the preferred stock of each series will be fixed by the certificate of designation relating to each particular series. A prospectus supplement relating to each such series will specify the terms of the preferred stock as determined by our board of directors, including the following:

- the number of shares in any series,
- the designation for any series by number, letter or title that shall distinguish the series from any other series of preferred stock,
- the dividend rate and whether dividends on that series of preferred stock will be cumulative, noncumulative or partially cumulative,
- the voting rights of that series of preferred stock, if any,
- the conversion provisions applicable to that series of preferred stock, if any,
- the redemption or sinking fund provisions applicable to that series of preferred stock, if any,
- the liquidation preference per share of that series of preferred stock, if any, and
- the terms of any other preferences or rights, if any, applicable to that series of preferred stock.

We will describe the specific terms of a particular series of preferred stock in the prospectus supplement relating to that series. The description of preferred stock set forth above and in any description of the terms of a particular series of preferred stock in the related prospectus supplement will not be complete. You should refer to the applicable certificate of designation for such series of preferred stock for complete information with respect to such preferred stock. The prospectus supplement will also contain a description of certain U.S. federal income tax consequences relating to the preferred stock.

Although it has no present intention to do so, our board of directors, without stockholder approval, may issue preferred stock with voting and conversion rights which could adversely affect the voting power of the holders of common stock. If we issue preferred stock, it may have the effect of delaying, deferring or preventing a change of control.

### **Stockholder rights plan**

In July 2002, pursuant to a Preferred Stock Rights Agreement between us and Mellon Investor Services, LLC, acting as rights agent, our board of directors declared a dividend of one right to purchase one one-thousandth of a share of Series A preferred stock for each outstanding share of our common stock. The dividend was paid on August 7, 2002 to stockholders of record as of the close of business on that date. Each right entitles the registered holder to purchase from us one one-thousandth of a share of Series A preferred stock at an exercise price of \$25.00, subject to adjustment upon specified events set forth in the rights agreement.

*Rights evidenced by common stock certificates.* The rights will not be exercisable until the distribution date. Certificates for the rights have not been sent to stockholders and the rights will attach to and trade together with our common stock. Accordingly, common stock certificates outstanding on August 7, 2002 will evidence the related rights, and common stock certificates issued after the record date will contain a notation incorporating the rights agreement by reference. Until the distribution date (or earlier redemption or expiration of the rights), the surrender or transfer of any certificates for common stock outstanding as of the record date, even without notation or a copy of the summary of rights being attached to such certificate, will also constitute the transfer of the rights associated with the common stock represented by such certificate.

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*Distribution date.* The rights will separate from our common stock, rights certificates will be issued and the rights will become exercisable on the distribution date which will occur upon the earlier of (a) the tenth business day (or such later date as may be determined by our board of directors) after a person or group of affiliated or associated persons has acquired, or obtained the right to acquire, beneficial ownership of 15% or more of the common stock then outstanding, or (b) the tenth business day (or such later date as may be determined by our board of directors) after a person or group announces a tender or exchange offer, the consummation of which would result in the beneficial ownership by a person or group of 15% or more of our then outstanding common stock.

*Issuance of rights certificates; expiration of rights.* As soon as practicable following the distribution date, a rights certificate will be mailed to holders of record of the common stock as of the close of business on the distribution date and such separate rights certificate alone will evidence the rights from and after the distribution date. The rights will expire on the earliest of (i) August 7, 2012, the final expiration date, or (ii) redemption or exchange of the rights as described below.

*Initial exercise of the rights.* Following the distribution date, and until one of the further events described below, holders of the rights will be entitled to receive, upon exercise and the payment of the purchase price, one one-thousandth share of the Series A preferred stock. In the event that we do not have sufficient Series A preferred stock available for all rights to be exercised, or our board decides that such action is necessary and not contrary to the interests of rights holders, we may instead substitute cash, assets or other securities for the Series A preferred stock for which the rights would have been exercisable under this provision or as described below.

*Right to buy our common stock.* Unless the rights are earlier redeemed, in the event that an acquiring person or group obtains 15% or more of our then outstanding common stock, then each holder of a right which has not theretofore been exercised (other than rights beneficially owned by the acquiring person, which will thereafter be void) will thereafter have the right to receive, upon exercise, common stock having a value equal to two times the purchase price. Rights are not exercisable following the occurrence of an event as described above until such time as the rights are no longer redeemable by us as set forth below.

*Right to buy acquiring company shares.* Similarly, unless the rights are earlier redeemed, in the event that, after an acquiring person or group obtains 15% or more of our then outstanding common stock, (i) we are acquired in a merger or other business combination transaction, or (ii) 50% or more of our consolidated assets or earning power is sold (other than in transactions in the ordinary course of business), proper provision must be made so that each holder of a right which has not theretofore been exercised (other than rights beneficially owned by the acquiring person, which will thereafter be void) will thereafter have the right to receive, upon exercise, shares of common stock of the acquiring company having a value equal to two times the purchase price.

*Exchange provision.* At any time after an acquiring person or group obtains 15% or more of our then outstanding common stock and prior to the acquisition by such acquiring person of 50% or more of our outstanding common stock, our board of directors may exchange the rights (other than rights owned by the acquiring person), in whole or in part, at an exchange ratio of one common stock per right.

*Redemption.* At any time on or prior to the close of business on the earlier of (i) the fifth day following the attainment of 15% or more of our then outstanding common stock by an acquiring person (or such later date as may be determined by action of our board of directors and publicly announced by us), or (ii) August 7, 2012, we may redeem the rights in whole, but not in part, at a price of \$0.001 per right.

*Adjustments to prevent dilution.* The purchase price payable, the number of rights, and the number of Series A preferred stock or common stock or other securities or property issuable upon exercise of the rights are subject to adjustment from time to time in connection with the dilutive issuances by us as set forth in the rights agreement. With certain exceptions, no adjustment in the purchase price will be required until cumulative adjustments require an adjustment of at least 1% in such purchase price.

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*Cash paid instead of issuing fractional shares.* No fractional common stock will be issued upon exercise of a right and, in lieu thereof, an adjustment in cash will be made based on the market price of the common stock on the last trading date prior to the date of exercise.

*No stockholders' rights prior to exercise.* Until a right is exercised, the holder, as such, will have no rights as a stockholder (other than any rights resulting from such holder's ownership of common stock), including, without limitation, the right to vote or to receive dividends.

*Amendment of rights agreement.* The terms of the rights and the Rights Agreement may be amended in any respect without the consent of the rights holders on or prior to the distribution date. Thereafter, the terms of the rights and the rights agreement may be amended without the consent of the rights holders in order to cure any ambiguities or to make changes which do not adversely affect the interests of rights holders (other than the acquiring person).

*Rights and preferences of the Series A preferred stock.* Each one one-thousandth of a share of Series A preferred stock has rights and preferences substantially equivalent to those of one share of common stock.

*No voting rights.* The rights will not have any voting rights.

*Certain anti-takeover effects.* The rights approved by our board of directors are designed to protect and maximize the value of our outstanding equity interests in the event of an unsolicited attempt by an acquirer to take over our company in a manner or on terms not approved by our board of directors. Takeover attempts frequently include coercive tactics to deprive our board of directors and its stockholders of any real opportunity to determine our destiny. The rights have been declared by our board in order to deter such tactics, including a gradual accumulation of shares in the open market of 15% or greater position to be followed by a merger or a partial or two-tier tender offer that does not treat all stockholders equally. These tactics unfairly pressure stockholders, squeeze them out of their investment without giving them any real choice and deprive them of the full value of their shares.

The rights are not intended to prevent a takeover and will not do so. Subject to the restrictions described above, the rights may be redeemed by us at \$0.001 per right at any time prior to the distribution date. Accordingly, the rights should not interfere with any merger or business combination approved by our board of directors.

However, the rights may have the effect of rendering more difficult or discouraging our acquisition if such acquisition is deemed undesirable by our board of directors. The rights may cause substantial dilution to a person or group that attempts to acquire us on terms or in a manner not approved by our board of directors, except pursuant to an offer conditioned upon the negation, purchase or redemption of the rights.

Issuance of the rights does not in any way weaken our financial strength or interfere with our business plans. The issuance of the rights themselves has no dilutive effect, will not affect reported earnings per share, should not be taxable to us or to our stockholders, and will not change the way in which our shares are presently traded.

## **DESCRIPTION OF DEBT SECURITIES**

The debt securities may be either secured or unsecured and will either be our senior debt securities or our subordinated debt securities. The debt securities will be issued under one or more separate indentures between us and a trustee. Senior debt securities will be issued under a senior indenture and subordinated debt securities will be issued under a subordinated indenture. Together, the senior indenture and subordinated indenture are called indentures. This prospectus, together with the applicable prospectus supplement, will describe all the material terms of a particular series of debt securities.

The following is a summary of selected provisions and definitions of the indentures. The summary of selected provisions of the indentures and the debt securities appearing below is not complete and is subject to, and qualified entirely by reference to, all of the provisions of the applicable indenture and certificates evidencing the applicable debt securities. For additional information, you should look at the applicable

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indenture and the certificate evidencing the applicable debt security that is filed as an exhibit to the registration statement which includes this prospectus. In this description of the debt securities, the words "Harmonic", "we", "us," "its" or "our" refer only to Harmonic Inc. and not to any of our subsidiaries.

The following description sets forth selected general terms and provisions of the applicable indenture and debt securities to which any prospectus supplement may relate. Other specific terms of the applicable indenture and debt securities will be described in the applicable prospectus supplement. If any particular terms of the indenture or debt securities described in a prospectus supplement differ from any of the terms described below, then the terms described below will be deemed to have been superceded by that prospectus supplement.

### **General**

Debt securities may be issued in separate series without limitation as to aggregate principal amount. We may specify a maximum aggregate principal amount for the debt securities of any series.

We are not limited as to the amount of debt securities we may issue under the indentures. Unless otherwise provided in a prospectus supplement, a series of debt securities may be reopened to issue additional debt securities of such series.

The prospectus supplement relating to a particular series of debt securities will set forth:

- whether the debt securities are senior or subordinated,
- the offering price,
- the title,
- any limit on the aggregate principal amount,
- the person who shall be entitled to receive interest, if other than the record holder on the record date,
- the date or dates the principal will be payable,
- the interest rate or rates, which may be fixed or variable, if any, the date interest will accrue, the interest payment dates and the regular record dates or the method for calculating the dates and rates,
- the place where payments may be made,
- any mandatory or optional redemption provisions or sinking fund provisions and any applicable redemption or purchase prices associated with these provisions,
- if issued other than in denominations of U.S. \$1,000 or any multiple of U.S. \$1,000, the denominations in which the debt securities shall be issuable,
- if applicable, the method for determining how the principal, premium, if any, or interest will be calculated by reference to an index or formula,
- if other than U.S. currency, the currency or currency units in which principal, premium, if any, or interest will be payable and whether we or a holder may elect payment to be made in a different currency,
- the portion of the principal amount that will be payable upon acceleration of maturity, if other than the entire principal amount,
- if the principal amount payable at stated maturity will not be determinable as of any date prior to stated maturity, the amount or method for determining the amount which will be deemed to be the principal amount,
- if applicable, whether the debt securities shall be subject to the defeasance provisions described below under "Satisfaction and discharge; defeasance" or such other defeasance provisions specified in the applicable prospectus supplement for the debt securities,

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- any conversion or exchange provisions,
- whether the debt securities will be issuable in the form of a global security,
- any subordination provisions applicable to the subordinated debt securities if different from those described below under "Subordinated Debt Securities,"
- any paying agents, authenticating agents, security registrars or other agents for the debt securities,
- any provisions relating to any security provided for the debt securities, including any provisions regarding the circumstances under which collateral may be released or substituted,
- any deletions of, or changes or additions to, the events of default, acceleration provisions or covenants,
- any provisions relating to guaranties for the securities and any circumstances under which there may be additional obligors, and
- any other specific terms of such debt securities.

Unless otherwise specified in the prospectus supplement, the debt securities will be registered debt securities.

Debt securities may be sold at a substantial discount below their stated principal amount, bearing no interest or interest at a rate which at time of issuance is below market rates. The United States federal income tax considerations applicable to debt securities sold at a discount will be described in the applicable prospectus supplement.

### **Exchange and Transfer**

Debt securities may be transferred or exchanged at the office of the security registrar or at the office of any transfer agent designated by us.

We will not impose a service charge for any transfer or exchange, but we may require holders to pay any tax or other governmental charges associated with any transfer or exchange.

In the event of any partial redemption of debt securities of any series, we will not be required to:

- issue, register the transfer of, or exchange, any debt security of that series during a period beginning at the opening of business 15 days before the day of mailing of a notice of redemption and ending at the close of business on the day of the mailing, or
- register the transfer of or exchange any debt security of that series selected for redemption, in whole or in part, except the unredeemed portion being redeemed in part.

We have initially appointed the trustee as the security registrar. Any transfer agent, and any other security registrar, will be named in the prospectus supplement. We may designate additional transfer agents or change transfer agents or change the office of the transfer agent. However, we will be required to maintain a transfer agent in each place of payment for the debt securities of each series.

### **Global Securities**

The debt securities of any series may be represented, in whole or in part, by one or more global securities. Each global security will:

- be registered in the name of a depositary, or its nominee, that we will identify in a prospectus supplement,
- be deposited with the depositary or nominee or custodian, and
- bear any required legends.

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No global security may be exchanged in whole or in part for debt securities registered in the name of any person other than the depositary or any nominee unless:

- the depositary has notified us that it is unwilling or unable to continue as depositary or has ceased to be qualified to act as depositary,
- an event of default is continuing with respect to the debt securities of the applicable series, or
- any other circumstance described in a prospectus supplement has occurred permitting or requiring the issuance of any such security.

As long as the depositary, or its nominee, is the registered owner of a global security, the depositary or nominee will be considered the sole owner and holder of the debt securities represented by the global security for all purposes under the indentures. Except in the above limited circumstances, owners of beneficial interests in a global security will not be:

- entitled to have the debt securities registered in their names,
- entitled to physical delivery of certificated debt securities, or
- considered to be holders of those debt securities under the indenture.

Payments on a global security will be made to the depositary or its nominee as the holder of the global security. Some jurisdictions have laws that require that certain purchasers of securities take physical delivery of such securities in definitive form. These laws may impair the ability to transfer beneficial interests in a global security.

Institutions that have accounts with the depositary or its nominee are referred to as “participants.” Ownership of beneficial interests in a global security will be limited to participants and to persons that may hold beneficial interests through participants. The depositary will credit, on its book-entry registration and transfer system, the respective principal amounts of debt securities represented by the global security to the accounts of its participants.

Ownership of beneficial interests in a global security will be shown on and effected through records maintained by the depositary, with respect to participants’ interests, or any participant with respect to interests of persons held by participants on their behalf.

Payments, transfers and exchanges relating to beneficial interests in a global security will be subject to policies and procedures of the depositary. The depositary policies and procedures may change from time to time. Neither we nor any trustee will have any responsibility or liability for the depositary’s or any participant’s records with respect to beneficial interests in a global security.

### **Payment and Paying Agents**

Unless otherwise indicated in a prospectus supplement, the provisions described in this paragraph will apply to the debt securities. Payment of interest on a debt security on any interest payment date will be made to the person in whose name the debt security is registered at the close of business on the regular record date. Payment on debt securities of a particular series will be payable at the office of a paying agent or paying agents designated by us. However, at our option, we may pay interest by mailing a check to the record holder. The corporate trust office will be designated as our sole paying agent.

We may also name any other paying agents in a prospectus supplement. We may designate additional paying agents, change paying agents or change the office of any paying agent. However, we will be required to maintain a paying agent in each place of payment for the debt securities of a particular series.

All moneys paid by us to a paying agent for payment on any debt security which remain unclaimed for a period ending the earlier of:

- 10 business days prior to the date the money would be turned over to the applicable state, or
- at the end of two years after such payment was due,

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will be repaid to us. After such time, the holder may look only to us for such payment.

### **No Protection in the Event of a Change of Control**

Unless otherwise indicated in a prospectus supplement with respect to a particular series of debt series, the debt securities will not contain any provisions which may afford holders of the debt securities protection in the event we have a change in control or in the event of a highly leveraged transaction (whether or not such transaction results in a change in control).

### **Covenants**

Unless otherwise indicated in a prospectus supplement, the debt securities will not contain any restrictive covenants, including covenants restricting either us or any of our subsidiaries from incurring, issuing, assuming or guarantying any indebtedness secured by a lien on any of our or our subsidiaries' property or capital stock, or restricting either us or any of our subsidiaries from entering into sale and leaseback transactions.

### **Consolidation, Merger and Sale of Assets**

Unless we indicate otherwise in a prospectus supplement, we may not consolidate with or merge into any other person, in a transaction in which we are not the surviving corporation, or convey, transfer or lease our properties and assets substantially as an entirety to, any person, unless:

- the successor entity, if any, is a U.S. corporation, limited liability company, partnership or trust,
- the successor entity assumes our obligations on the debt securities and under the indentures,
- immediately after giving effect to the transaction, no default or event of default shall have occurred and be continuing, and
- certain other conditions are met.

### **Events of Default**

Unless we indicate otherwise in a prospectus supplement, the following will be events of default for any series of debt securities under the indentures:

- (1) we fail to pay principal of or any premium on any debt security of that series when due,
- (2) we fail to pay any interest on any debt security of that series for 30 days after it becomes due,
- (3) we fail to deposit any sinking fund payment when due,
- (4) we fail to perform any other covenant in the indenture and such failure continues for 90 days after we are given the notice required in the indentures, and
- (5) certain events including bankruptcy, insolvency or reorganization of Harmonic.

Additional or different events of default applicable to a series of debt securities may be described in a prospectus supplement. An event of default of one series of debt securities is not necessarily an event of default for any other series of debt securities.

The trustee may withhold notice to the holders of any default, except defaults in the payment of principal, premium, if any, interest, any sinking fund installment on, or with respect to any conversion right of, the debt securities of such series. However, the trustee must consider it to be in the interest of the holders of the debt securities of such series to withhold this notice.

Unless we indicate otherwise in a prospectus supplement, if an event of default, other than an event of default described in clause (5) above, shall occur and be continuing, either the trustee or the holders of at least 25% in aggregate principal amount of the outstanding securities of that series may declare the principal amount of the debt securities of that series (or if any debt securities of that series are original issue discount



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securities, such other amount as may be specified in the applicable prospectus supplement), together with accrued and unpaid interest, if any, thereon to be due and payable immediately.

If an event of default described in clause (5) above shall occur, the principal amount of all the debt securities of that series (or if any debt securities of that series are original issue discount securities, such other amount as may be specified in the applicable prospectus supplement), together with accrued and unpaid interest, if any, thereon will automatically become immediately due and payable. Any payment by us on the subordinated debt securities following any such acceleration will be subject to the subordination provisions described below under "Subordinated Debt Securities."

After acceleration the holders of a majority in aggregate principal amount of the outstanding securities of that series may, under certain circumstances, rescind and annul such acceleration if all events of default, other than the non-payment of accelerated principal or other specified amounts have been cured or waived.

Other than the duty to act with the required care during an event of default, the trustee will not be obligated to exercise any of its rights or powers at the request of the holders unless the holders shall have offered to the trustee reasonable indemnity. Generally, the holders of a majority in aggregate principal amount of the outstanding debt securities of any series will have the right to direct the time, method and place of conducting of any proceeding for any remedy available to the trustee or exercising any trust or power conferred on the trustee.

A holder will not have any right to institute any proceeding under the indentures, or for the appointment of a receiver or a trustee, or for any other remedy under the indentures, unless:

- (1) the holder has previously given to the trustee written notice of a continuing event of default with respect to the debt securities of that series,
- (2) the holders of at least a majority in aggregate principal amount of the outstanding debt securities of that series have made a written request and have offered reasonable indemnity to the trustee to institute the proceeding, and
- (3) the trustee has failed to institute the proceeding and has not received direction inconsistent with the original request from the holders of a majority in aggregate principal amount of the outstanding debt securities of that series within 60 days after the original request.

Holders may, however, sue to enforce the payment of principal, premium or interest on any debt security on or after the due date or to enforce the right, if any, to convert any debt security (if the debt security is convertible) without following the procedures listed in (1) through (3) above.

We will furnish the trustee an annual statement by our officers as to whether or not we are in default in the performance of the conditions and covenants under the indenture and, if so, specifying all known defaults.

### **Modification and Waiver**

Unless we indicate otherwise in a prospectus supplement, Harmonic and the applicable trustee may make modifications and amendments to an indenture with the consent of the holders of a majority in aggregate principal amount of the outstanding securities of each series affected by the modification or amendment.

We may also make modifications and amendments to the indentures for the benefit of holders without their consent, for certain purposes including, but not limited to:

- providing for our successor to assume the covenants under the indenture,
- adding covenants or events of default,
- making certain changes to facilitate the issuance of the securities,
- securing the securities,
- providing for a successor trustee or additional trustees,

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- curing any ambiguities or inconsistencies,
- providing for guaranties of, or additional obligors on, the securities;
- permitting the facilitation of the defeasance and discharge of the securities, and
- other changes specified in the indenture.

However, neither we nor the trustee may make any modification or amendment without the consent of the holder of each outstanding security of that series affected by the modification or amendment if such modification or amendment would:

- change the stated maturity of any debt security,
- reduce the principal, premium, if any, or interest on any debt security,
- reduce the principal of an original issue discount security or any other debt security payable on acceleration of maturity,
- change the place of payment or the currency in which any debt security is payable,
- impair the right to enforce any payment after the stated maturity or redemption date,
- if subordinated debt securities, modify the subordination provisions in a materially adverse manner to the holders,
- adversely affect the right to convert any debt security if the debt security is a convertible debt security, or
- change the provisions in the indenture that relate to modifying or amending the indenture.

### **Satisfaction and Discharge; Defeasance**

We may be discharged from our obligations on the debt securities of any series that have matured or will mature or be redeemed within one year if we deposit enough money with the trustee to pay all the principal, interest and any premium due to the stated maturity date or redemption date of the debt securities.

Each indenture contains a provision that permits us to elect either or both of the following:

- We may elect to be discharged from all of our obligations, subject to limited exceptions, with respect to any series of debt securities then outstanding. If we make this election, the holders of the debt securities of the series will not be entitled to the benefits of the indenture, except for the rights of holders to receive payments on debt securities or the registration of transfer and exchange of debt securities and replacement of lost, stolen or mutilated debt securities.
- We may elect to be released from our obligations under some or all of any financial or restrictive covenants applicable to the series of debt securities to which the election relates and from the consequences of an event of default resulting from a breach of these covenants.

To make either of the above elections, we must deposit in trust with the trustee enough money to pay in full the principal, interest and premium on the debt securities. This amount may be made in cash and/or U.S. government obligations or, in the case of debt securities denominated in a currency other than United States dollars, foreign government obligations. As a condition to either of the above elections, we must deliver to the trustee an opinion of counsel that the holders of the debt securities will not recognize income, gain or loss for federal income tax purposes as a result of the action.

“foreign government obligations” means, with respect to debt securities of any series that are denominated in a currency other than U.S. dollars:

- direct obligations of the government that issued or caused to be issued the currency in which such securities are denominated and for the payment of which obligations its full faith and credit is pledged, or, with respect to debt securities of any series which are denominated in euros, direct obligations of

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certain members of the European Union for the payment of which obligations the full faith and credit of such member is pledged, which in each case are not callable or redeemable at the option of the issuer thereof; or

- obligations of a person controlled or supervised by or acting as an agency or instrumentality of that government the timely payment of which is unconditionally guaranteed as a full faith and credit obligation by that government, which are not callable or redeemable at the option of the issuer thereof.

### **Notices**

Notices to holders will be given by mail to the addresses of the holders in the security register.

### **Governing Law**

The indentures and the debt securities will be governed by, and construed under, the laws of the State of New York.

### **No Personal Liability of Directors, Officers, Employees and Stockholders**

No incorporator, stockholder, employee, agent, officer, director or subsidiary of ours will have any liability for any obligations of ours, or because of the creation of any indebtedness under the debt securities, the indentures or supplemental indentures. The indentures provide that all such liability is expressly waived and released as a condition of, and as a consideration for, the execution of such indentures and the issuance of the debt securities.

### **Regarding the Trustee**

The indentures limit the right of the trustee, should it become a creditor of Harmonic, to obtain payment of claims or secure its claims.

The trustee is permitted to engage in certain other transactions. However, if the trustee acquires any conflicting interest, and there is a default under the debt securities of any series for which it is trustee, the trustee must eliminate the conflict or resign.

### **Subordinated Debt Securities**

The indebtedness evidenced by the subordinated debt securities of any series is subordinated to the extent provided in the subordinated indenture and the applicable prospectus supplement to the prior payment in full, in cash or other payment satisfactory to the holders of senior debt, of all senior debt, including any senior debt securities.

Upon any distribution of our assets upon any dissolution, winding up, liquidation or reorganization, payments on the subordinated debt securities will be subordinated in right of payment to the prior payment in full in cash or other payment satisfactory to holders of senior debt of all senior debt.

In the event of any acceleration of the subordinated debt securities because of an event of default, holders of any senior debt would be entitled to payment in full in cash or other payment satisfactory to holders of senior debt of all senior debt before the holders of subordinated debt securities are entitled to receive any payment or distribution.

We are required to promptly notify holders of senior debt or their representatives under the subordinated indenture if payment of the subordinated debt securities is accelerated because of an event of default.

Under the subordinated indenture, we may also not make payment on the subordinated debt securities if:

- a default in the payment of senior debt occurs and is continuing beyond any grace period (a "payment default"), or

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- any other default occurs and is continuing with respect to designated senior debt that permits holders of designated senior debt to accelerate its maturity, and the trustee receives a payment blockage notice from us or some other person permitted to give the notice under the subordinated indenture (a “non-payment default”).

We may and shall resume payments on the subordinated debt securities:

- in case of a payment default, when the default is cured or waived or ceases to exist, and
- in case of a nonpayment default, the earlier of when the default is cured or waived or ceases to exist or 179 days after the receipt of the payment blockage notice if the maturity of the designated senior debt has not been accelerated.

No new payment blockage period may start unless 365 days have elapsed from the effectiveness of the prior payment blockage notice.

No nonpayment default that existed or was continuing on the date of delivery of any payment blockage notice to the trustee shall be the basis for a subsequent payment blockage notice.

As a result of these subordination provisions, in the event of our bankruptcy, dissolution or reorganization, holders of senior debt may receive more, ratably, and holders of the subordinated debt securities may receive less, ratably, than our other creditors. The subordination provisions will not prevent the occurrence of any event of default under the subordinated indenture.

The subordination provisions will not apply to payments from money or government obligations held in trust by the trustee for the payment of principal, interest and premium, if any, on subordinated debt securities pursuant to the provisions described under “— Satisfaction and discharge; defeasance,” if the subordination provisions were not violated at the time the money or government obligations were deposited into trust.

If the trustee or any holder receives any payment that should not have been made to them in contravention of subordination provisions before all senior debt is paid in full in cash or other payment satisfactory to holders of senior debt, then such payment will be held in trust for the holders of senior debt.

Senior debt securities will constitute senior debt under the subordinated indenture.

Additional or different subordination provisions may be described in a prospectus supplement relating to a particular series of debt securities.

### **Definitions**

“designated senior debt” means our obligations under any of our senior debt that expressly provides that it is “designated senior debt.”

“indebtedness” means:

(1) all of our indebtedness, obligations and other liabilities for:

- borrowed money, including our obligations in respect of overdrafts, foreign exchange contracts, currency exchange agreements, interest rate protection agreements, and any loans or advances from banks, whether or not evidenced by notes or similar instruments, or
- evidenced by bonds, debentures, notes or similar instruments, whether or not the recourse of the lender is to the whole of our assets or to only a portion of our assets, other than any account payable or other accrued current liability or obligation incurred in the ordinary course of business in connection with the obtaining of materials or services,

(2) all of our reimbursement obligations and other liabilities with respect to letters of credit, bank guarantees or bankers’ acceptances,

(3) all of our obligations and liabilities in respect of leases required, in conformity with generally accepted accounting principles, to be accounted for as capitalized lease obligations on our balance sheet,

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(4) all of our obligations and other liabilities under any other any lease or related document (including a purchase agreement) in connection with the lease of real property which provides that we are contractually obligated to purchase or cause a third party to purchase the leased property and thereby guarantee a minimum residual value of the leased property to the lessor and our obligations under such lease or related document to purchase or to cause a third party to purchase such leased property,

(5) all of our obligations with respect to an interest rate or other swap, cap or collar agreement or other similar instrument or agreement or foreign currency hedge, exchange, purchase or similar instrument or agreement,

(6) all of our direct or indirect guaranties or similar agreements in respect of, and obligations or liabilities to purchase or otherwise acquire or otherwise assure a creditor against loss in respect of, indebtedness, obligations or liabilities of another person of the kind described in clauses (1) through (5),

(7) any of our indebtedness or other obligations described in clauses (1) through (6) secured by any mortgage, pledge, lien or other encumbrance existing on property which is owned or held by us regardless of whether the indebtedness or other obligation secured thereby shall have been assumed by us, and

(8) any and all deferrals, renewals, extensions, refundings, amendments, modifications or supplements to, any indebtedness, obligation or liability of the kind described in clauses (1) through (7).

“senior debt” means the principal of, premium, if any, interest, including all interest accruing subsequent to the commencement of any bankruptcy or similar proceeding, rent and all fees, costs, expenses and other amounts accrued or due in connection with our indebtedness, including all deferrals, renewals, extensions or refundings of, or modifications or supplements to, that indebtedness. Senior debt shall not include:

- any debt that expressly provides it shall not be senior in right of payment to the subordinated debt securities or expressly provides that such indebtedness is on the same basis or “junior” to the subordinated debt securities, or
- debt to any of our subsidiaries, a majority of the voting stock of which is owned, directly or indirectly, by us.

### **DESCRIPTION OF WARRANTS**

We may issue warrants for the purchase of our common stock. Each series of warrants will be issued under a separate warrant agreement to be entered into between us and a bank or trust company, as warrant agent. The warrant agent will act solely as our agent in connection with the warrants. The warrant agent will not have any obligation or relationship of agency or trust for or with any holders or beneficial owners of warrants. This summary of certain provisions of the warrants is not complete. For the complete terms of a particular series of warrants, you should refer to the prospectus supplement for that series of warrants and the warrant agreement for that particular series.

The prospectus supplement relating to a particular series of warrants to purchase our common stock will describe the terms of the warrants, including the following:

- the title of the warrants,
- the offering price for the warrants, if any,
- the aggregate number of the warrants,
- the designation and terms of the common stock or preferred stock that may be purchased upon exercise of the warrants,
- the number of shares of common stock or preferred stock that may be purchased upon exercise of a warrant and the exercise price for the warrants,
- the dates on which the right to exercise the warrants shall commence and expire,

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- if applicable, the minimum or maximum amount of the warrants that may be exercised at any one time,
- the currency or currency units in which the offering price, if any, and the exercise price are payable,
- if applicable, a discussion of material United States Federal income tax considerations,
- the antidilution provisions of the warrants, if any,
- the redemption or call provisions, if any, applicable to the warrants,
- any provisions with respect to holder's right to require us to repurchase the warrants upon a change in control, and
- any additional terms of the warrants, including terms, procedures, and limitations relating to the exchange, exercise and settlement of the warrants.

Holders of equity warrants will not be entitled:

- to vote, consent or receive dividends,
- receive notice as stockholders with respect to any meeting of stockholders for the election of our directors or any other matter, or
- exercise any rights as stockholders of Harmonic.

As set forth in the applicable prospectus supplement, the exercise price and the number of shares of common stock purchasable upon exercise of the warrant will be subject to adjustment in certain events, including the issuance of a stock dividend to any holders of common stock, a stock split, reverse stock split, combination, subdivision or reclassification of common stock, and such other events, if any, specified in the applicable prospectus supplement.

### **PLAN OF DISTRIBUTION**

We may sell the securities:

- through one or more underwriters or dealers,
- directly to purchasers,
- through agents, or
- through a combination of any of these methods of sale.

We may distribute the securities from time to time in one or more transactions:

- at a fixed price or prices, which may be changed from time to time,
- at market prices prevailing at the times of sale,
- at prices related to such prevailing market prices, or
- at negotiated prices.

We will describe the method of distribution of each series of securities in the applicable prospectus supplement.

We may also make sales through the Internet or through other electronic means. Since we may from time to time elect to offer securities directly to the public, with or without the involvement of agents, underwriters or dealers, utilizing the Internet (sometimes referred to as the "world wide web") or other forms of electronic bidding or ordering systems for the pricing and allocation of such securities, you will want to pay particular attention to the description of that system we will provide in a prospectus supplement.

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Such electronic system may allow bidders to directly participate, through electronic access to an auction site, by submitting conditional offers to buy that are subject to acceptance by us, and which may directly affect the price or other terms and conditions at which such securities are sold. These bidding or ordering systems may present to each bidder, on a so-called "real-time" basis, relevant information to assist in making a bid, such as the clearing spread at which the offering would be sold, based on the bids submitted, and whether a bidder's individual bids would be accepted, prorated or rejected. For example, in the case of debt security, the clearing spread could be indicated as a number of "basis points" above an index treasury note. Of course, many pricing methods can and may also be used.

Upon completion of such an electronic auction process, securities will be allocated based on prices bid, terms of bid or other factors. The final offering price at which securities would be sold and the allocation of securities among bidders would be based in whole or in part on the results of the Internet or other electronic bidding process or auction.

Many variations of Internet or other electronic auction or pricing and allocation systems are likely to be developed in the future as new technology evolves, and we may utilize such systems in connection with the sale of securities. The specific rules of such an auction would be described to potential bidders in a prospectus supplement. You should review carefully the auction and other rules we will describe in an prospectus supplement in order to understand and participate intelligently in the applicable offering.

Underwriters, dealers or agents may receive compensation in the form of discounts, concessions or commissions from us or our purchasers as their agents in connection with the sale of securities. These underwriters, dealers or agents may be considered to be underwriters under the Securities Act. As a result, discounts, commissions, or profits on resale received by the underwriters, dealers or agents may be treated as underwriting discounts and commissions. Each prospectus supplement will identify any such underwriter, dealer or agent, and describe any compensation received by them from us. Any initial public offering price and any discounts or concessions allowed or reallocated or paid to dealers may be changed from time to time.

Underwriters, dealers and agents may be entitled to indemnification by us against certain civil liabilities, including liabilities under the Securities Act, or to contribution with respect to payments made by the underwriters, dealers or agents, under agreements between us and the underwriters, dealers and agents.

In connection with underwritten offerings of securities, underwriters may over-allot or effect transactions that stabilize, maintain or otherwise affect the market price of the offered securities at levels above those that might otherwise prevail in the open market, including by entering stabilizing bids, effecting syndicate covering transactions or imposing penalty bids, each of which is described below.

- A stabilizing bid means the placing of any bid, or the effecting of any purchase, for the purpose of pegging, fixing or maintaining the price of a security.
- A syndicate covering transaction means the placing of any bid on behalf of the underwriting syndicate or the effecting of any purchase to reduce a short position created in connection with the offering.
- A penalty bid means an arrangement that permits the managing underwriter to reclaim a selling concession from a syndicate member in connection with the offering when offered securities originally sold by the syndicate member are purchased in syndicate covering transactions.

These transactions may be effected on the New York Stock Exchange, the Nasdaq National Market, in the over-the-counter market or otherwise. Underwriters are not required to engage in any of these activities, or to continue the activities if commenced.

We may enter into derivative transactions with third parties, or sell securities not covered by this prospectus to third parties in privately negotiated transactions. If the applicable prospectus supplement indicates, in connection with those derivatives, the third parties may sell securities covered by this prospectus and the applicable prospectus supplement, including in short sale transactions. If so, the third party may use securities pledged by us or borrowed from us or others to settle those sales or to close out any open borrowings of stock, and may use securities received from us in settlement of those derivatives to close out any related

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open borrowings of stock. The third parties in such sale transactions will be underwriters and, if not identified in this prospectus, will be identified in the applicable prospectus supplement, or a post-effective amendment.

We may grant underwriters who participate in the distribution of securities an option to purchase additional securities to cover over-allotments, if any, in connection with the distribution.

Some securities which we may issue under this prospectus may be new issues of securities with no established trading market. Underwriters involved in the public offering and sale of these series of securities may make a market in the securities. However, they are not obligated to make a market and may discontinue market making activity at any time. No assurance can be given as to the liquidity of the trading market for any securities.

Underwriters or agents and their associates may be customers of, engage in transactions with or perform services for us in the ordinary course of business.

**LEGAL MATTERS**

Wilson Sonsini Goodrich & Rosati, Professional Corporation, Palo Alto, California, will pass upon the validity of the issuance of the securities offered by this prospectus.

**EXPERTS**

The consolidated financial statements incorporated in this prospectus by reference to the Annual Report on Form 10-K of Harmonic Inc. for the year ended December 31, 2004 have been so incorporated in reliance on the report of PricewaterhouseCoopers LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

**WHERE YOU CAN FIND MORE INFORMATION**

We file reports, proxy statements, and other information with the Securities and Exchange Commission, or SEC. Copies of our reports, proxy statements, and other information may be inspected at the public reference facilities maintained by the SEC:

Judiciary Plaza  
450 Fifth Street, N.W.  
Room 1024  
Washington, D.C. 20549

Citicorp Center  
500 West Madison Street  
Suite 1400  
Chicago, Illinois 60661-2511

Copies of these materials may be obtained by mail at prescribed rates from the public reference section of the SEC at the addresses indicated above or by calling the SEC at 1-800-SEC-0330. Our reports, proxy statements and other information filed with the SEC are also available to the public over the Internet at the Commission's world wide web site at <http://www.sec.gov>. Reports, proxy statements, and other information concerning Harmonic may also be inspected at The National Association of Securities Dealers, 1735 K Street, N.W., Washington, D.C. 20006.

We have elected to "incorporate by reference" certain information into this prospectus. By incorporating by reference, we can disclose important information to you by referring you to another document we have filed separately with the SEC. The information incorporated by reference is deemed to be part of this prospectus, except for information incorporated by reference that is superseded by information contained in this prospectus, any applicable prospectus supplement or any document we subsequently file with the SEC that is incorporated or deemed to be incorporated by reference in this prospectus. Likewise, any statement in this prospectus or any document which is incorporated or deemed to be incorporated by reference herein will be deemed to have been modified or superseded to the extent that any statement contained in any applicable prospectus supplement or any document that we subsequently file with the SEC that is incorporated or deemed to be incorporated by reference herein modifies or supersedes that statement. We incorporate by



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reference the following documents that we have previously filed with the SEC (other than information in such documents that is deemed not to be filed):

- Annual Report on Form 10-K for the fiscal year ended December 31, 2004;
- The description of our common stock contained in our registration statement on Form 8-A, filed with the Commission on April 6, 1995 under section 12(g) of the Exchange Act, including any amendment or report filed for the purpose of updating such description; and
- The description of our Series A participating preferred stock contained in our registration statement on Form 8-A, filed with the Commission on July 25, 2002 under Section 12(g) of the Exchange Act, including any amendment or report filed for the purpose of updating such description.

We also are incorporating by reference all future documents that we file with the SEC pursuant to Section 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934 prior to the termination of the offering of the securities made hereby (other than information in such documents that is deemed not to be filed). In addition, all filings that we file with the SEC pursuant to Section 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934 after the date of this amendment to the registration statement and prior to the effectiveness of the registration statement shall be deemed to be incorporated by reference herein (other than information in such documents that is deemed not to be filed).

You should rely only on the information contained in this prospectus or on information to which we have referred you. We have not authorized anyone else to provide you with any information.

We will provide to each person who so requests, including any beneficial owner to whom a prospectus is delivered, a copy of these filings. You may request a copy of these filings, at no cost, by writing or telephoning us at the following address:

Harmonic Inc.  
549 Baltic Way  
Sunnyvale, CA 94089  
Telephone: (408) 542-2500  
Attention: Investor Relations

We are not making an offer of these securities in any state where the offer is not permitted. You should not assume the information in this prospectus or any prospectus supplement is accurate as of any date other than the date on the front of those documents.

We have filed a registration statement under the Securities Act of 1933 with respect to the securities we propose to issue under this prospectus. This prospectus does not contain all the information set forth in the registration statement because certain parts of the registration statement are omitted as provided by the rules and regulations of the SEC. You may obtain a copy of the registration statement at the sources and locations identified above.

**PART II**  
**INFORMATION NOT REQUIRED IN THE PROSPECTUS**

**Item 14. Other expenses of issuance and distribution**

The aggregate estimated (other than the registration fee) expenses to be paid by the registrant in connection with this offering are as follows:

Securities and Exchange Commission registration fee	\$ 14,899.64
Trustee's fees and expenses	15,000
Accounting fees and expenses	200,000
Legal fees and expenses of the registrant	250,000
Printing and engraving	50,000
Blue sky fees and expenses	15,000
Transfer agent fees and expenses	15,000
Miscellaneous	16,200
Total	<u>\$ 576,099.64</u>

**Item 15. Indemnification of directors and officers of Harmonic Inc.**

Our Bylaws limit the liability of our directors and officers for expenses to the maximum extent permitted by Delaware law. Delaware law provides that directors of a corporation will not be personally liable for monetary damages for breach of their fiduciary duties as directors, except for liability (i) for any breach of their duty of loyalty to the corporation or its stockholders; (ii) for acts or omissions not in good faith or that involve intentional misconduct or a knowing violation of law; (iii) for unlawful payments of dividends or unlawful stock repurchases or redemptions as provided in Section 174 of the Delaware General Corporation Law; or (iv) for any transaction from which the director derived an improper personal benefit.

Our Certificate of Incorporation provides that we must indemnify our directors and may indemnify our other officers, employees and agents to the fullest extent permitted by law.

We have entered into agreements to indemnify our directors and officers, in addition to indemnification provided for in our Bylaws. These agreements, among other things, indemnify our directors and officers for certain expenses (including attorneys' fees), judgments, fines and settlement amounts incurred by any such person in any action or proceeding, including any action by or in the right of Harmonic, arising out of such person's services as a Harmonic director or officer, any subsidiary of Harmonic or any other company or enterprise to which the person provides services at our request.

Harmonic's Bylaws also permit us to secure insurance on behalf of any officer, director, employee or other agent for any liability arising out of his or her actions in such capacity, regardless of whether the Bylaws would permit indemnification. We also maintain an insurance policy insuring our directors and officers against liability for certain acts and omissions while acting in their official capacities.

**Item 16. Exhibits**

The following exhibits are filed herewith or incorporated by reference herein:

Exhibit Number	Exhibit Title
1.1	Form of Underwriting Agreement
1.2	Form of Preferred Stock Purchase Agreement*
1.3	Form of Senior Debt Securities Purchase Agreement*
1.4	Form of Subordinated Debt Securities Purchase Agreement*

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<u>Exhibit Number</u>	<u>Exhibit Title</u>
1.5	Form of Warrant Purchase Agreement*
3.1	Restated Certificate of Incorporation, as amended**
3.2	Bylaws**
4.1	Form of Senior Indenture (incorporated by reference to Exhibit 4.1 to the Company's Registration Statement on Form S-3 (Registration No. 333-84430))
4.2	Form of Subordinated Indenture (incorporated by reference to Exhibit 4.2 to the Company's Registration Statement on Form S-3 (Registration No. 333-84430))
4.3	Form of Senior Debt Security (included in Exhibit 4.1)
4.4	Form of Subordinated Debt Security (included in Exhibit 4.2)
4.5	Form of Certificate of Designation***
4.6	Form of Preferred Stock Certificate***
4.7	Form of Warrant Agreement***
4.8	Form of Warrant Certificate***
5.1	Opinion of Wilson Sonsini Goodrich & Rosati, Professional Corporation
12.1	Computation of Ratio of Earnings Available to Cover Fixed Charges
23.1	Consent of PricewaterhouseCoopers, LLP, independent registered public accounting firm
23.2	Consent of Wilson Sonsini Goodrich & Rosati, Professional Corporation (included in Exhibit 5.1)
24.1	Power of Attorney of Certain Directors and Officers of Registrant (set forth on the signature pages to this Registration Statement)
25.1	Form T-1 Statement of Eligibility of Trustee for Senior Debt Securities under the Trust Indenture Act of 1939
25.2	Form T-1 Statement of Eligibility of Trustee for Subordinated Debt Securities under the Trust Indenture Act of 1939

\* To be filed by amendment or by a report on Form 8-K pursuant to Section 601 of Regulation S-K.

\*\* Previously filed as an exhibit to the Company's Form 10-K for the year ended December 31, 2001.

\*\*\* To be filed as an exhibit to a report pursuant to Section 13(a) or 15(d) of the Securities Act of 1934.

**Item 17. Undertakings**

The undersigned registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(a) To include any prospectus required by Section 10(a)(3) of the Securities Act,

(b) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement,

(c) To include any material information with respect to the plan of distribution not previously disclosed in the Registration Statement or any material change to such information in the

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Registration Statement; provided, however, that clauses (a) and (b) do not apply if the information required to be included in a post-effective amendment by such clauses is contained in periodic reports filed with or furnished to the Securities and Exchange Commission by the registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934 (the "Exchange Act") that are incorporated by reference in the registration statement.

(2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(4) That, for purposes of determining any liability under the Securities Act, each filing of the registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Exchange Act that is incorporated by reference in this registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof. Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the provisions described under Item 15 above, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

The undersigned registrant hereby undertakes that:

(1) For purposes of determining any liability under the Securities Act of 1933, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.

(2) For the purpose of determining any liability under the Securities Act of 1933, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

**SIGNATURES**

Pursuant to the requirements of the Securities Act, as amended, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Sunnyvale, State of California, on April 4, 2005.

HARMONIC INC.

By: \_\_\_\_\_ /s/ Robin N. Dickson  
Robin N. Dickson,  
Chief Financial Officer

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Anthony J. Ley and Robin N. Dickson and each of them individually, as his or her true and lawful attorneys-in-fact and agents with full power of substitution and resubstitution, for him or her and in his or her name, place and stead, in any and all capacities to sign the Registration Statement filed herewith and any or all amendments to said Registration Statement (including post-effective amendments and registration statements filed pursuant to Rule 462(b) under the Securities Act of 1933, as amended, and otherwise), and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission granting unto said attorneys-in-fact and agents the full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the foregoing, as full to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or any of them, or his or her substitute, may lawfully do or cause to be done by virtue thereof.

Pursuant to the requirements of the Securities Act, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated:

<u>Signature</u>	<u>Title</u>	<u>Date</u>
_____ /s/ Anthony J. Ley Anthony J. Ley	Chief Executive Officer and President (Principal Executive Officer) and Chairman of the Board of Directors	April 4, 2005
_____ /s/ Robin N. Dickson Robin N. Dickson	Chief Financial Officer (Principal Financial and Accounting Officer)	April 4, 2005
_____ /s/ David R. Van Valkenburg David R. Van Valkenburg	Director	April 4, 2005
_____ /s/ E. Floyd Kvamme E. Floyd Kvamme	Director	April 4, 2005
_____ /s/ William F. Reddersen William F. Reddersen	Director	April 4, 2005
_____ /s/ Lewis Solomon Lewis Solomon	Director	April 4, 2005
_____ /s/ Michael L. Vaillaud Michael L. Vaillaud	Director	April 4, 2005

EXHIBIT INDEX

Exhibit Number	Exhibit Title
1.1	Form of Underwriting Agreement
1.2	Form of Preferred Stock Purchase Agreement*
1.3	Form of Senior Debt Securities Purchase Agreement*
1.4	Form of Subordinated Debt Securities Purchase Agreement*
1.5	Form of Warrant Purchase Agreement*
3.1	Restated Certificate of Incorporation, as amended**
3.2	Bylaws**
4.1	Form of Senior Indenture (incorporated by reference to Exhibit 4.1 to the Company's Registration Statement on Form S-3 (Registration No. 333-84430))
4.2	Form of Subordinated Indenture (incorporated by reference to Exhibit 4.2 to the Company's Registration Statement on Form S-3 (Registration No. 333-84430))
4.3	Form of Senior Debt Security (included in Exhibit 4.1)
4.4	Form of Subordinated Debt Security (included in Exhibit 4.2)
4.5	Form of Certificate of Designation***
4.6	Form of Preferred Stock Certificate***
4.7	Form of Warrant Agreement***
4.8	Form of Warrant Certificate***
5.1	Opinion of Wilson Sonsini Goodrich & Rosati, Professional Corporation
12.1	Computation of Ratio of Earnings Available to Cover Fixed Charges
23.1	Consent of PricewaterhouseCoopers, LLP, independent registered public accounting firm
23.2	Consent of Wilson Sonsini Goodrich & Rosati, Professional Corporation (included in Exhibit 5.1)
24.1	Power of Attorney of Certain Directors and Officers of Registrant (set forth on the signature pages to this Registration Statement)
25.1	Form T-1 Statement of Eligibility of Trustee for Senior Debt Securities under the Trust Indenture Act of 1939
25.2	Form T-1 Statement of Eligibility of Trustee for Subordinated Debt Securities under the Trust Indenture Act of 1939

\* To be filed by amendment or by a report on Form 8-K pursuant to Section 601 of Regulation S-K.

\*\* Previously filed as an exhibit to the Company's Form 10-K for the year ended December 31, 2001.

\*\*\* To be filed as an exhibit to a report pursuant to Section 13(a) or 15(d) of the Securities Act of 1934.

**HARMONIC INC.**

**[●] Shares**

**Common Stock**

**(\$0.001 par value per Share)**

**COMMON STOCK UNDERWRITING AGREEMENT**

**[TRADE DATE]**

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## UNDERWRITING AGREEMENT

[Trade Date]

[List Managing Underwriters]

[Address]

Ladies and Gentlemen:

Harmonic Inc., a Delaware corporation (the "Company"), proposes to issue and sell to the underwriters named in Schedule A annexed hereto (the "Underwriters"), for whom you are acting as representatives, an aggregate of [●] shares (the "Firm Shares") of common stock, \$0.001 par value per share (the "Common Stock"), of the Company. In addition, solely for the purpose of covering over-allotments, the Company proposes to grant to the Underwriters the option to purchase from the Company up to an additional [●] shares of Common Stock (the "Additional Shares"). The Firm Shares and the Additional Shares are hereinafter collectively sometimes referred to as the "Shares." The Shares are described in the Prospectus which is referred to below.

The Company has prepared and filed, in accordance with the provisions of the Securities Act of 1933, as amended, and the rules and regulations thereunder (collectively, the "Act"), with the Securities and Exchange Commission (the "Commission") a registration statement on Form S-3 (File No. 333- ) under the Act (the "registration statement"). Amendments to such registration statement, if necessary or appropriate, have been similarly prepared and filed with the Commission. Such registration statement, as so amended, has been declared by the Commission to be effective under the Act. The Company has filed with the Commission a Prepricing Prospectus (as defined and referred to below) pursuant to Rule 424(b) under the Act, describing the Shares and the offering thereof, in such form as has been provided to or discussed with, and approved by, the Underwriters. The Company will next file with the Commission pursuant to Rule 424(b) under the Act a final prospectus supplement to the basic prospectus, describing the Shares and the offering thereof, in such form as has been provided to or discussed with, and approved, by the Underwriters.

The term "Registration Statement" as used in this Agreement means the registration statement, as amended at the time it became effective and as supplemented or amended prior to the execution of this Agreement, including (i) all financial schedules and exhibits thereto and (ii) all documents incorporated by reference or deemed to be incorporated by reference therein. If an abbreviated registration statement is prepared and filed with the Commission in accordance with Rule 462(b) under the Act (an "Abbreviated Registration Statement"), the term "Registration Statement" includes the Abbreviated Registration Statement. The term "Basic Prospectus" as used in this Agreement means the basic prospectus dated as of [●] and to be filed with the Commission pursuant to Rule 424(b) for use in connection with the offer and/or sale of Shares pursuant to this Agreement. The term "Prepricing Prospectus" as used in this Agreement means any form of preliminary prospectus used in connection with the marketing of the Shares, including the preliminary prospectus supplement dated as of [●] and filed with the Commission on [●] pursuant to



Rule 424 under the Act and any basic prospectus (whether or not in preliminary form) used with any such preliminary prospectus supplement in connection with the marketing of the Shares, in each case as any of the foregoing may be amended or supplemented by the Company. The term "Prospectus Supplement" as used in this Agreement means any final prospectus supplement specifically relating to the Shares, in the form filed with, or transmitted for filing to, the Commission pursuant to Rule 424 under the Act. The term "Prospectus" as used in this Agreement means the Basic Prospectus together with the Prospectus Supplement except that if such Basic Prospectus is amended or supplemented on or prior to the date on which the Prospectus Supplement was first filed pursuant to Rule 424, the term "Prospectus" shall refer to the Basic Prospectus as so amended or supplemented and as supplemented by the Prospectus Supplement. Any reference herein to the registration statement, the Registration Statement, the Basic Prospectus, any Prepricing Prospectus, any Prospectus Supplement or the Prospectus shall be deemed to refer to and include (i) the documents incorporated by reference therein pursuant to Form S-3 (the "Incorporated Documents") and (ii) the copy of the Registration Statement, the Basic Prospectus, the Prepricing Prospectus, the Prospectus Supplement, the Prospectus or the Incorporated Documents filed with the Commission pursuant to its Electronic Data Gathering, Analysis and Retrieval system ("EDGAR"). Any reference herein to the terms "amend," "amendment" or "supplement" with respect to the Registration Statement, any Prepricing Prospectus, the Prospectus Supplement or the Prospectus shall be deemed to refer to and include the filing of any document under the Securities Exchange Act of 1934, as amended, and the rules and regulations thereunder (collectively, the "Exchange Act") after the effective date of the Registration Statement, or the date of the Prospectus, as the case may be, deemed to be incorporated therein by reference.

The Company and the Underwriters agree as follows:

1. Sale and Purchase. Upon the basis of the representations and warranties and subject to the terms and conditions herein set forth, the Company agrees to issue and sell to the respective Underwriters and each of the Underwriters, severally and not jointly, agrees to purchase from the Company the number of Firm Shares set forth opposite the name of such Underwriter in Schedule A attached hereto, subject to adjustment in accordance with Section 8 hereof, in each case at a purchase price of \$[●] per Share. The Company is advised by you that the Underwriters intend (i) to make a public offering of their respective portions of the Firm Shares as soon after the effective date of the Registration Statement as in your judgment is advisable and (ii) initially to offer the Firm Shares upon the terms set forth in the Prospectus. You may from time to time increase or decrease the public offering price after the initial public offering to such extent as you may determine.

In addition, the Company hereby grants to the several Underwriters the option to purchase, and upon the basis of the representations and warranties and subject to the terms and conditions herein set forth, the Underwriters shall have the right to purchase, severally and not jointly, from the Company, ratably in accordance with the number of Firm Shares to be purchased by each of them, all or a portion of the Additional Shares as may be necessary to cover over-allotments made in connection with the offering of the Firm Shares, at the same purchase price per share to be paid by the Underwriters to the Company for the Firm Shares. This option may be exercised by [●] ("[●]") on behalf of the several Underwriters at any time and from time to time on or before the thirtieth day following the date of the Prospectus, by written notice to the Company. Such notice shall set forth the aggregate number of Additional Shares as to which the option is being exercised and the date and

time when the Additional Shares are to be delivered (such date and time being herein referred to as the “additional time of purchase”); provided, however, that the additional time of purchase shall not be earlier than the time of purchase (as defined below) nor earlier than the second business day after the date on which the option shall have been exercised nor later than the tenth business day after the date on which the option shall have been exercised. The number of Additional Shares to be sold to each Underwriter shall be the number which bears the same proportion to the aggregate number of Additional Shares being purchased as the number of Firm Shares set forth opposite the name of such Underwriter on Schedule A hereto bears to the total number of Firm Shares (subject, in each case, to such adjustment as you may determine to eliminate fractional shares), subject to adjustment in accordance with Section 8 hereof.

2. Payment and Delivery. Payment of the purchase price for the Firm Shares shall be made to the Company by Federal Funds wire transfer against delivery of the certificates for the Firm Shares to you through the facilities of The Depository Trust Company (“DTC”) for the respective accounts of the Underwriters. Such payment and delivery shall be made at 10:00 A.M., New York City time, on [●] (unless another time shall be agreed to by you and the Company or unless postponed in accordance with the provisions of Section 8 hereof). The time at which such payment and delivery are to be made is hereinafter sometimes called “the time of purchase.” Electronic transfer of the Firm Shares shall be made to you at the time of purchase in such names and in such denominations as you shall specify.

Payment of the purchase price for the Additional Shares shall be made at the additional time of purchase in the same manner and at the same office as the payment for the Firm Shares. Electronic transfer of the Additional Shares shall be made to you at the additional time of purchase in such names and in such denominations as you shall specify.

Deliveries of the documents described in Section 6 hereof with respect to the purchase of the Shares shall be made at the offices of Wilson Sonsini Goodrich & Rosati PC, 650 Page Mill Road, Palo Alto, California 94304, at \_\_\_\_ A.M., Pacific time, on the date of the closing of the purchase of the Firm Shares or the Additional Shares, as the case may be.

3. Representations and Warranties of the Company. The Company represents and warrants to and agrees with each of the Underwriters that:

(a) the Registration Statement has been declared effective under the Act; no stop order of the Commission preventing or suspending the use of the Basic Prospectus, any Prepricing Prospectus, the Prospectus Supplement or the Prospectus or the effectiveness of the Registration Statement has been issued and no proceedings for such purpose have been instituted or, to the Company’s knowledge, are contemplated by the Commission; the Company is eligible to use Form S-3. The Registration Statement complied when it became effective, complies and, at the time of purchase, any additional time of purchase and at any time at which the Prospectus is delivered in connection with any sale of Shares, will comply, and the Basic Prospectus, any Prepricing Prospectus, the Prospectus Supplement and the Prospectus conformed as of its date, conform and, at the time of purchase, any additional time of purchase and at any time at which the Prospectus is delivered in connection with any sale of Shares, will conform in all material respects with the requirements of the Act; any statutes, regulations, contracts or other documents that are required to

be described in the Registration Statement or the Prospectus or to be filed as exhibits to the Registration Statement have been and will be so described or filed; and the Registration Statement did not at the time of effectiveness, does not and, at the time of purchase, any additional time of purchase and at any time at which the Prospectus is delivered in connection with any sale of Shares, will not contain an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading, and the Basic Prospectus, any Prepricing Prospectus, the Prospectus Supplement and the Prospectus did not as of its date, does not and, at the time of purchase, any additional time of purchase and at any time at which the Prospectus is delivered in connection with any sale of Shares, will not contain an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances under which they were made, not misleading; provided, however, that the Company makes no warranty or representation with respect to any statement contained in the Registration Statement or the Prospectus in reliance upon and in conformity with information concerning an Underwriter and furnished in writing by or on behalf of such Underwriter through you to the Company expressly for use in the Registration Statement or the Prospectus; the documents incorporated by reference in the Basic Prospectus, any Prepricing Prospectus, the Prospectus Supplement, the Registration Statement and the Prospectus, at the time they became effective or were filed with the Commission, complied in all material respects with the requirements of the Exchange Act and did not contain an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances under which they were made, not misleading; and the Company has not distributed and will not distribute any offering material in connection with the offering or sale of the Shares other than the Registration Statement, any Prepricing Prospectus, the then most recent Prospectus Supplement and the Prospectus;

(b) as of the date of this Agreement, the Company has an authorized capitalization as set forth in the sections of the Registration Statement and the Prospectus entitled "Capitalization" (subject, in each case, to the issuance of shares of Common Stock upon exercise of stock options granted pursuant to the Company's benefit plans and the grant of stock options or other stock awards described in the Registration Statement and the Prospectus as reserved for future issuance under existing stock option or other benefit plans); the only shares of capital stock of the Company outstanding are the Common Stock of the Company, and all of the issued and outstanding shares of the Common Stock of the Company have been duly authorized and validly issued and are fully paid and non-assessable, have been issued in compliance with all federal and state securities laws and were not issued in violation of any preemptive right, right of first refusal or similar right;

(c) the Company has been duly incorporated and is validly existing as a corporation in good standing under the laws of the State of Delaware, with corporate power and authority to own, lease and operate its properties and conduct its business as described in the Registration Statement and the Prospectus to execute and deliver this Agreement and to issue, sell and deliver the Shares as contemplated herein;

(d) the Company is duly qualified to do business as a foreign corporation and is in good standing in each jurisdiction where the ownership or leasing of its properties or the conduct of its business requires such qualification, except where the failure to be so qualified and in good standing would not reasonably be expected to have a material adverse effect on the business,

properties, financial condition or results of operation of the Company and the Subsidiaries (as hereinafter defined) taken as a whole (a “Material Adverse Effect”);

(e) the Company has no subsidiaries (as defined under the Act) other than as listed in Schedule B annexed hereto (collectively, the “Subsidiaries”); the Company has no “significant subsidiary,” as that term is defined in Rule 1-02(w) of Regulation S-X under the Act; other than the capital stock of the Subsidiaries, the Company does not own, directly or indirectly, any shares of stock or any other equity or long-term debt securities of any corporation or have any equity interest in any firm, partnership, joint venture, association or other entity; each Subsidiary has been duly incorporated and is validly existing as a corporation in good standing under the laws of the jurisdiction of its incorporation, with full corporate power and authority to own, lease and operate its properties and to conduct its business as described in the Registration Statement and the Prospectus; each Subsidiary is duly qualified to do business as a foreign corporation and is in good standing in each jurisdiction where the ownership or leasing of its properties or the conduct of its business requires such qualification, except where the failure to be so qualified and in good standing would not, individually or in the aggregate, have a Material Adverse Effect; all of the outstanding shares of capital stock of each of the Subsidiaries have been duly authorized and validly issued, are fully paid and nonassessable and are owned by the Company and/or one of the Subsidiaries;

(f) the Shares have been duly and validly authorized and, when issued and delivered against payment therefor as provided herein, will be duly and validly issued, fully paid and non-assessable and free of statutory and contractual preemptive rights or rights of first refusal;

(g) the capital stock of the Company, including the Shares, conforms in all material respects to the description thereof contained in the Registration Statement and the Prospectus, and the certificates for the Shares are in due and proper form in all material respects;

(h) this Agreement has been duly authorized, executed and delivered by the Company;

(i) neither the Company nor any of the Subsidiaries is in breach or violation of or in default under (A) its respective charter or bylaws (or comparable organizational documents), or (B) any indenture, mortgage, deed of trust, bank loan or credit agreement or other evidence of indebtedness, or any license, lease, contract or other agreement or instrument to which the Company or any of the Subsidiaries is a party or by which any of them or any of their properties may be bound or affected except to the extent that any such breach, violation or default would not have a Material Adverse Effect; and the execution, delivery and performance of this Agreement, the issuance and sale of the Shares and the consummation of the transactions contemplated hereby will not result in any breach or violation of or constitute a default under (X) the charter or bylaws (or comparable organizational documents) of the Company or any of the Subsidiaries, or (Y) any indenture, mortgage, deed of trust, bank loan or credit agreement or other evidence of indebtedness, or any license, lease, contract or other agreement or instrument to which the Company or any of the Subsidiaries is a party or by which any of them or any of their respective properties may be bound or affected, or (Z) any federal, state, local or foreign law, regulation or rule or any decree, judgment or order applicable to the Company or any of the Subsidiaries except in the case of clauses (Y) or (Z), to the extent that any such breach, violation or default would not have a Material Adverse Effect;

(j) no approval, authorization, consent or order of or filing with any federal, state, local or foreign governmental or regulatory commission, board, body, authority or agency, or of or with the National Association of Securities Dealers Automated Quotation National Market System (“NASDAQ”) is required in connection with the issuance and sale of the Shares or the consummation by the Company of the transactions contemplated hereby other than registration of the Shares under the Act and the filing of a listing of additional shares with NASDAQ, which have been effected, and any necessary qualification under the securities or blue sky laws of the various jurisdictions in which the Shares are being offered by the Underwriters or under the rules and regulations of the National Association of Securities Dealers, Inc. (“NASD”);

(k) (i) no person has the right, contractual or otherwise, to cause the Company to issue or sell to it any shares of Common Stock or shares of any other capital stock or other equity interests of the Company (other than pursuant to options, rights to purchase or other awards under the Company’s benefit plans), (ii) no person has any preemptive rights, rights of first refusal or other rights to purchase any shares of Common Stock or shares of any other capital stock of or other equity interests in the Company (other than pursuant to options, rights to purchase or other awards under the Company’s benefit plans) and (iii) no person has the right to act as an underwriter or as a financial advisor to the Company in connection with the offer and sale of the Shares, in the case of each of the foregoing clauses (i), (ii) and (iii), whether as a result of the filing or effectiveness of the Registration Statement or the sale of the Shares as contemplated thereby or otherwise; except as otherwise disclosed to you or your counsel, no person has the right, contractual or otherwise, to cause the Company to register under the Act any shares of Common Stock or shares of any other capital stock of or other equity interests in the Company, or, except as have been waived pursuant to an effective waiver, to include any such shares or interests in the Registration Statement or the offering contemplated thereby, whether as a result of the filing or effectiveness of the Registration Statement or the sale of the Shares as contemplated thereby or otherwise;

(l) each of the Company and the Subsidiaries has all necessary licenses, authorizations, consents and approvals and has made all necessary filings required under any federal, state, local or foreign law, regulation or rule, and has obtained all necessary licenses, authorizations, consents and approvals from other persons, in order to conduct its respective business, except in each case as would not reasonably be expected to have a Material Adverse Effect; neither the Company nor any of the Subsidiaries is in violation of, or in default under, or has received notice of any proceedings relating to revocation or modification of, any such license, authorization, consent or approval or any federal, state, local or foreign law, regulation or rule or any decree, order or judgment applicable to the Company or any of the Subsidiaries, except where such violation, default, revocation or modification would not reasonably be expected to have a Material Adverse Effect;

(m) except as described in the Registration Statement and the Prospectus, there are no actions, suits, claims, investigations or proceedings pending or, to the Company’s knowledge, threatened to which the Company or any of the Subsidiaries or any of their respective directors or officers is or would be a party or of which any of their respective properties is or would be subject at law or in equity, before or by any federal, state, local or foreign governmental or regulatory commission, board, body, authority or agency, except any such action, suit, claim, investigation or proceeding which would not reasonably be expected to result in a judgment, decree or order having a Material Adverse Effect or preventing consummation of the transactions contemplated hereby;

(n) PricewaterhouseCoopers LLP, whose report on the consolidated financial statements of the Company and the Subsidiaries is included in the Registration Statement and the Prospectus, is an independent registered public accounting firm as required by the Act and by Rule 3600T of the Public Company Accounting Oversight Board;

(o) the financial statements included in the Registration Statement and the Prospectus, together with the related notes and schedules, present fairly in all material respects the consolidated financial position of the Company and the Subsidiaries as of the dates indicated and the consolidated results of operations and cash flows of the Company and the Subsidiaries for the periods specified and have been prepared in compliance with the requirements of the Act and in conformity with generally accepted accounting principles applied on a consistent basis during the periods involved; the other financial and statistical data set forth in the Registration Statement and the Prospectus are accurately presented and prepared in all material respects on a basis consistent with the financial statements and books and records of the Company; there are no financial statements (historical or pro forma) that are required to be included in the Registration Statement and the Prospectus (including, without limitation, as required by Rules 3-12 or 3-05 or Article 11 of Regulation S-X under the Act) that are not included as required; the Company and the Subsidiaries do not have any material liabilities or obligations, direct or contingent (including any off-balance sheet obligations or any “variable interest entities” within the meaning of Financial Accounting Standards Board Interpretation No. 46), not disclosed in the Registration Statement and the Prospectus; and all disclosures contained in the Registration Statement or the Prospectus regarding “non-GAAP financial measures” (as such term is defined by the rules and regulations of the Commission) comply with Regulation G of the Securities Exchange Act of 1934, as amended, and the rules and regulations thereunder (collectively, the “Exchange Act”) and Item 10 of Regulation S-K under the Act, to the extent applicable;

(p) subsequent to the respective dates as of which information is given in the Registration Statement and the Prospectus, there has not been (i) any material adverse change in the business, properties, management, financial condition or results of operations of the Company and the Subsidiaries taken as a whole, (ii) any transaction which is material to the Company and the Subsidiaries taken as a whole, (iii) any obligation direct or contingent (including any off balance sheet obligations), incurred by the Company or the Subsidiaries, which is material to the Company and the Subsidiaries taken as a whole, (iv) any material change in the capital stock (other than as a result of the exercise of options or the grant of stock options or other stock awards under the Company’s benefit plans, in each case disclosed as either outstanding or reserved for future issuance in the Registration Statement and the Prospectus) or material increase in outstanding indebtedness of the Company or the Subsidiaries or (v) any dividend or distribution of any kind declared, paid or made on the capital stock of the Company;

(q) the Company has obtained for the benefit of the Underwriters the agreement (a “Lock-Up Agreement”), in the form set forth as Exhibit A hereto, of each of its directors and executive officers;

(r) neither the Company nor any of the Subsidiaries is, nor, after giving effect to the offering and sale of the Shares, will any of them be an “investment company” or an entity

“controlled” by an “investment company,” as such terms are defined in the Investment Company Act of 1940, as amended (the “Investment Company Act”);

(s) except as set forth in the Registration Statement and the Prospectus, the Company and each of the Subsidiaries have good and marketable title to all material property (real and personal) described in the Registration Statement and the Prospectus as being owned by each of them, free and clear of all liens, claims, security interests or other encumbrances; all the material property described in the Registration Statement and the Prospectus as being held under lease by the Company or a Subsidiary is held thereby under valid, subsisting and enforceable leases;

(t) the Company and its Subsidiaries own or possess, or can acquire on reasonable terms, adequate patents, patent rights, licenses, covenants not to sue, inventions, copyrights, know-how (including trade secrets and other unpatented and/or unpatentable proprietary or confidential information, systems or procedures), trademarks, service marks, trade names or other intellectual property (collectively, “Intellectual Property”) necessary to carry on the business now operated by them, and neither the Company nor any of its Subsidiaries has received any notice or is otherwise aware of any infringement of or conflict with asserted rights of others with respect to any Intellectual Property or of any facts of circumstances which would reasonably be expected to render any Intellectual Property invalid or inadequate to protect the interest of the Company or any of its Subsidiaries therein, and which infringement or conflict or invalidity or inadequacy, singly or in the aggregate, would reasonably be expected to result in a Material Adverse Effect;

(u) neither the Company nor any of the Subsidiaries is engaged in any unfair labor practice; except for matters which would not reasonably be expected to have a Material Adverse Effect, (i) there is (A) no unfair labor practice complaint pending or, to the Company’s knowledge, threatened against the Company or any of the Subsidiaries before the National Labor Relations Board, and no grievance or arbitration proceeding arising out of or under collective bargaining agreements is pending or threatened, (B) no strike, labor dispute, slowdown or stoppage pending or, to the Company’s knowledge, threatened against the Company or any of the Subsidiaries and (C) no union representation dispute currently existing concerning the employees of the Company or any of the Subsidiaries, and (ii) to the Company’s knowledge, no union organizing activities are currently taking place concerning the employees of the Company or any of the Subsidiaries and there has been no violation of any federal, state, local or foreign law relating to discrimination in the hiring, promotion or pay of employees, any applicable wage or hour laws or any provision of the Employee Retirement Income Security Act of 1974 (“ERISA”) or the rules and regulations promulgated thereunder concerning the employees of the Company or any of the Subsidiaries;

(v) the Company and the Subsidiaries and their properties, assets and operations are in compliance with, and hold all permits, authorizations and approvals required under, Environmental Laws (as defined below), except to the extent that failure to so comply or to hold such permits, authorizations or approvals would not reasonably be expected to have a Material Adverse Effect; there are no past, present or, to the Company’s knowledge, reasonably anticipated future events, conditions, circumstances, activities, practices, actions, omissions or plans that would reasonably be expected to give rise to any material costs or liabilities to the Company or the Subsidiaries under, or to interfere with or prevent compliance by the Company or the Subsidiaries

with, Environmental Laws, except as would not reasonably be expected to have a Material Adverse Effect; except as would not reasonably be expected to, individually or in the aggregate, have a Material Adverse Effect, neither the Company nor any of the Subsidiaries (i) is the subject of any investigation, (ii) has received any notice or claim, (iii) is a party to or affected by any pending or threatened action, suit or proceeding, (iv) is bound by any judgment, decree or order or (v) has entered into any agreement, in each case relating to any alleged violation of any Environmental Law or any actual or alleged release or threatened release or cleanup at any location of any Hazardous Materials (as defined below) (as used herein, “Environmental Law” means any federal, state, local or foreign law, statute, ordinance, rule, regulation, order, decree, judgment, injunction, permit, license, authorization or other binding requirement, or common law, relating to health, safety or the protection, cleanup or restoration of the environment or natural resources, including those relating to the distribution, processing, generation, treatment, storage, disposal, transportation, other handling or release or threatened release of Hazardous Materials, and “Hazardous Materials” means any material (including, without limitation, pollutants, contaminants, hazardous or toxic substances or wastes) that is regulated by or may give rise to liability under any Environmental Law);

(w) except as disclosed in the Registration Statement and the Prospectus, all material tax returns required to be filed by the Company and each of the Subsidiaries have been filed, and all material taxes and other assessments of a similar nature (whether imposed directly or through withholding) including any interest, additions to tax or penalties applicable thereto due or claimed to be due from such entities have been paid, other than those being contested in good faith and those described in the Registration Statement and the Prospectus, in each case for which adequate reserves have been provided;

(x) the Company and each of the Subsidiaries maintains insurance covering its properties, operations, personnel and businesses as the Company deems adequate;

(aa) the Company has not sent or received any communication regarding termination of, or intent not to renew, any of the material contracts or agreements referred to or described in, or filed as an exhibit to, the Registration Statement, and no such termination or non-renewal has been threatened by the Company or, to the Company’s knowledge, any other party to any such contract or agreement;

(bb) the Company and each of the Subsidiaries maintains a system of internal accounting controls sufficient to provide reasonable assurance that (i) transactions are executed in accordance with management’s general or specific authorization; (ii) transactions are recorded as necessary to permit preparation of financial statements in conformity with generally accepted accounting principles and to maintain accountability for assets; (iii) access to assets is permitted only in accordance with management’s general or specific authorization; and (iv) the recorded accountability for assets is compared with existing assets at reasonable intervals and appropriate action is taken with respect to any differences;

(cc) the Company has established and maintains and evaluates “disclosure controls and procedures” (as such term is defined in Rule 13a-14 and 15d-14 under the Exchange Act) and



“internal control over financial reporting” (as such term is defined in Rule 13a-15 and 15d-15 under the Exchange Act); such disclosure controls and procedures are designed to ensure that material information relating to the Company, including its consolidated subsidiaries, is made known to the Company’s Chief Executive Officer and its Chief Financial Officer by others within those entities, and such disclosure controls and procedures are effective to perform the functions for which they were established; the Company’s auditors and the Audit Committee of the Board of Directors of the Company have been advised of: (i) any significant deficiencies in the design or operation of internal controls which could adversely affect the Company’s ability to record, process, summarize, and report financial data; and (ii) any fraud, whether or not material, that involves management or other employees who have a role in the Company’s internal controls; any material weaknesses in internal controls have been identified for the Company’s auditors; and since the date of the most recent evaluation of such disclosure controls and procedures, there have been no significant changes in internal controls or in other factors that could significantly affect internal controls, including any corrective actions with regard to significant deficiencies and material weaknesses;

(dd) neither the Company nor any Subsidiary has, directly or indirectly, made any extension of credit in the form of a personal loan to any director or executive officer of the Company, or to any family member or affiliate of any director or executive officer of the Company or any of the Subsidiaries; and on or after July 30, 2002, the Company has not, directly or indirectly, including through any Subsidiary: (i) extended credit, arranged to extend credit, or renewed any extension of credit, in the form of a personal loan, to or for any director or executive officer of the Company, or to or for any family member or affiliate of any director or executive officer of the Company; or (ii) made any material modification, including any renewal thereof, to any term of any personal loan to any director or executive officer of the Company, or any family member or affiliate of any director or executive officer, which loan was outstanding on July 30, 2002;

(ee) except pursuant to this Agreement, neither the Company nor any of the Subsidiaries has incurred any liability for any finder’s or broker’s fee or agent’s commission in connection with the execution and delivery of this Agreement or the consummation of the transactions contemplated hereby or by the Prospectus;

(ff) neither the Company nor any of the Subsidiaries nor any of their respective directors, officers, affiliates or controlling persons has taken, directly or indirectly, any action designed, or which has constituted or might reasonably be expected to cause or result in, under the Exchange Act or otherwise, the stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of the Shares; and

(gg) to the Company’s knowledge, there are no affiliations or associations between any member of the NASD and any of the Company’s officers, directors or 5% or greater stockholders, except as set forth in the Registration Statement and the Prospectus.

In addition, any certificate signed by any officer of the Company or any of the Subsidiaries and delivered to the Underwriters or counsel for the Underwriters in connection with the offering of the Shares shall be deemed to be a representation and warranty by the Company or Subsidiary, as the case may be, as to matters covered thereby, to each Underwriter.

4. Certain Covenants of the Company. The Company hereby agrees:

(a) to furnish such information as may be required and otherwise to cooperate in qualifying the Shares for offering and sale under the securities or blue sky laws of such states or other jurisdictions as you may designate and to maintain such qualifications in effect so long as you may request for the distribution of the Shares; provided, however, that the Company shall not be required to qualify as a foreign corporation or to consent to the service of process under the laws of any such jurisdiction (except service of process with respect to the offering and sale of the Shares); and to promptly advise you of the receipt by the Company of any notification with respect to the suspension of the qualification of the Shares for offer or sale in any jurisdiction or the initiation or threatening of any proceeding for such purpose;

(b) to make available to the Underwriters in New York City, as soon as practicable after this Agreement becomes effective, and thereafter from time to time to furnish to the Underwriters, as many copies of the Prospectus (or of the Prospectus as amended or supplemented if the Company shall have made any amendments or supplements thereto after the effective date of the Registration Statement) as the Underwriters may reasonably request for the purposes contemplated by the Act; in case any Underwriter is required to deliver under the Act a prospectus after the nine-month period referred to in Section 10(a)(3) of the Act in connection with the sale of the Shares, the Company will prepare, at its expense, promptly upon reasonable request such amendment or amendments to the Registration Statement and the Prospectus as may be necessary to permit compliance with the requirements of Section 10(a)(3) of the Act;

(c) if, at the time this Agreement is executed and delivered, it is necessary for the Registration Statement or any post-effective amendment thereto to be declared effective before the Shares may be sold, the Company will endeavor to cause the Registration Statement or such post-effective amendment to become effective as soon as possible, and the Company will advise you promptly and, if requested by you, will confirm such advice in writing, (i) when the Registration Statement and any such post-effective amendment thereto has become effective, and (ii) if Rule 430A under the Act is used, when the Prospectus is filed with the Commission pursuant to Rule 424(b) under the Act (which the Company agrees to file in a timely manner under such Rule);

(d) to advise you promptly, confirming such advice in writing, of any request by the Commission for amendments or supplements to the Registration Statement or the Prospectus or for additional information with respect thereto, or of notice of institution of proceedings for, or the entry of a stop order, suspending the effectiveness of the Registration Statement and, if the Commission should enter a stop order suspending the effectiveness of the Registration Statement, to use its commercially reasonable efforts to obtain the lifting or removal of such order as soon as possible; to advise you promptly of any proposal to amend or supplement the Registration Statement or the Prospectus, including by filing any documents that would be incorporated therein by reference, and to provide you and Underwriters' counsel copies of any such documents for review and comment a reasonable amount of time prior to any proposed filing and to file no such amendment or supplement to which you shall object in writing unless required by applicable law; provided, however, the Company's obligations under this Section 4(d) shall terminate when delivery of a prospectus is no longer required under applicable law in connection with the offering or sale of the Shares;

(e) to file promptly all reports and any definitive proxy or information statement required to be filed by the Company with the Commission in order to comply with the Exchange Act subsequent to the date of the Prospectus and for so long as the delivery of a prospectus is required under the Act in connection with the offering or sale of the Shares; and, as long as the delivery of a prospectus is required under the Act in connection with the offering or sale of the Shares, to provide you with a copy of such reports and statements and other documents to be publicly filed by the Company pursuant to Section 13, 14 or 15(d) of the Exchange Act to the extent such reports, statements and other documents are not available through the EDGAR filing system during such period a reasonable amount of time prior to any proposed filing, and to promptly notify you of such filing;

(f) if necessary or appropriate, to file a registration statement pursuant to Rule 462(b) under the Act and pay the applicable fees in accordance with the Act;

(g) to advise the Underwriters promptly of the happening of any event within the time during which a prospectus relating to the Shares is required to be delivered under the Act which could require the making of any change in the Prospectus then being used so that the Prospectus would not include an untrue statement of material fact or omit to state a material fact necessary to make the statements therein, in the light of the circumstances under which they are made, not misleading, and, during such time, subject to Section 4(d) hereof, to prepare and furnish, at the Company's expense, to the Underwriters promptly such amendments or supplements to such Prospectus as may be necessary to reflect any such change;

(h) to the extent not available through the EDGAR filing system, to make generally available to its security holders, and to deliver to you, an earnings statement of the Company (which will satisfy the provisions of Section 11(a) of the Act) covering a period of twelve months beginning after the effective date of the Registration Statement (as defined in Rule 158(c) under the Act) as soon as is reasonably practicable after the termination of such twelve-month period but in any case not later than [●];

(i) to furnish to its stockholders after the end of each fiscal year an annual report (including a consolidated balance sheet and statements of income, shareholders' equity and cash flow of the Company and the Subsidiaries for such fiscal year, accompanied by, to the extent required, a copy of the certificate or report thereon of nationally recognized independent certified public accountants duly registered with the Public Company Oversight Accounting Board);

(j) to furnish to you one copy of the Registration Statement, as initially filed with the Commission, and of all amendments thereto (including all exhibits thereto) and upon reasonable request sufficient copies of the foregoing (other than exhibits) for distribution of a copy to each of the other Underwriters;

(k) to pay all costs, expenses, fees and taxes in connection with (i) the preparation and filing of the Registration Statement, the Basic Prospectus, each Prepricing Prospectus, each Prospectus Supplement, the Prospectus and any amendments or supplements thereto, and the printing and furnishing of copies of each thereof to the Underwriters and to dealers (including costs of mailing and shipment), (ii) the registration, issue, sale and delivery of the Shares including any

stock or transfer taxes and stamp or similar duties payable upon the sale, issuance or delivery of the Shares to the Underwriters, (iii) the producing, word processing and for printing of this Agreement, any Agreement Among Underwriters, any dealer agreements, any Powers of Attorney and any closing documents (including compilations thereof) and the reproduction and/or printing and furnishing of copies of each thereof to the Underwriters and (except closing documents) to dealers (including costs of mailing and shipment), (iv) the qualification of the Shares for offering and sale under state or foreign laws and the determination of their eligibility for investment under state or foreign law as aforesaid (including the filing fees and reasonable legal fees and other disbursements of counsel for the Underwriters) and the printing and furnishing of copies of any blue sky surveys or legal investment surveys to the Underwriters and to dealers, (v) any listing of the Shares on any securities exchange or qualification of the Shares for quotation on the NASDAQ and any registration thereof under the Exchange Act, (vi) any filing for review of the public offering of the Shares by the NASD, including the filing fees and reasonable legal fees and other disbursements of counsel to the Underwriters in connection with such NASD filing, (vii) the fees and disbursements of any transfer agent or registrar for the Shares, (viii) the costs and expenses of the Company relating to presentations or meetings undertaken in connection with the marketing of the offering and sale of the Shares to prospective investors and the Underwriters' sales forces, including, without limitation, expenses associated with the production of road show slides and graphics, travel, lodging and other expenses incurred by the officers of the Company, and one-half the cost of any aircraft chartered in connection with the road show and (ix) the performance of the Company's other obligations hereunder;

(l) not to sell, offer to sell, contract or agree to sell, hypothecate, pledge, grant any option to purchase or otherwise dispose of or agree to dispose of, directly or indirectly, any Common Stock or securities convertible into or exchangeable or exercisable for Common Stock or warrants or other rights to purchase Common Stock or any other securities of the Company that are substantially similar to Common Stock, or file or cause to be declared effective a registration statement under the Act relating to the offer and sale of any shares of Common Stock or securities convertible into or exercisable or exchangeable for Common Stock or warrants or other rights to purchase Common Stock or any other securities of the Company that are substantially similar to Common Stock for a period of [90] days after the date hereof (the "Lock-Up Period"), without the prior written consent of [●], except for (i) the registration of the Shares and the sales to the Underwriters pursuant to this Agreement, (ii) issuances of Common Stock upon the exercise of options, stock purchase rights or other awards disclosed as outstanding in the Registration Statement and the Prospectus pursuant to the Company's benefit plans described in or filed as an exhibit to the Registration Statement and the Prospectus, (iii) the issuance of employee stock options, stock purchase rights and other awards not exercisable during the Lock-Up Period (in each case described as reserved for future issuance in the Registration Statement and the Prospectus) pursuant to the Company's benefit plans described in or filed as an exhibit to the Registration Statement and the Prospectus, (iv) issuances in connection with an acquisition of or strategic relationship with another corporation or entity, or the acquisition of assets, provided that the number of shares of Common Stock or securities convertible into or exchangeable or exercisable for Common Stock does not exceed [●], (v) pursuant to the Preferred Stock Rights Agreement dated July 24, 2002 between the Company and Mellon Investor Services LLC and (vi) the filing of a registration statement (and effectiveness thereof) in connection with contractual obligations existing on the date hereof and disclosed to you, or future contractual obligations undertaken pursuant to clause (iv) above;

(m) to use its reasonable best efforts to cause the Common Stock to be listed for quotation on the NASDAQ and to maintain such listing; and

(n) to maintain a transfer agent and, if necessary under the jurisdiction of incorporation of the Company, a registrar for the Common Stock.

5. Reimbursement of Underwriters' Expenses. If the Shares are not delivered for any reason other than the termination of this Agreement pursuant to the fifth paragraph of Section 8 hereof or the default by one or more of the Underwriters in its or their respective obligations hereunder, the Company shall, in addition to paying the amounts described in Section 4(k) hereof, reimburse the Underwriters for all of their out-of-pocket expenses, including the reasonable fees and disbursements of their counsel.

6. Conditions of Underwriters' Obligations. The several obligations of the Underwriters hereunder are subject to the accuracy of the representations and warranties on the part of the Company on the date hereof, at the time of purchase and, if applicable, at the additional time of purchase, the performance by the Company of its obligations hereunder and to the following additional conditions precedent:

(a) The Company shall furnish to you at the time of purchase and, if applicable, at the additional time of purchase, an opinion of Wilson Sonsini Goodrich & Rosati, P.C., counsel for the Company, addressed to the Underwriters, and dated the time of purchase or the additional time of purchase, as the case may be, with executed copies for each of the other Underwriters, and in form and substance reasonably satisfactory to [●], counsel for the Underwriters, in the form set forth in Exhibit B hereto.

(b) The Company shall furnish to you at the time of purchase and, if applicable, at the additional time of purchase, an opinion of Goldfarb, Levy, Eran & Co., special Israel counsel for the Company with respect to Harmonic Lightwaves (Israel) Ltd., addressed to the Underwriters, and dated the time of purchase or the additional time of purchase, as the case may be, with executed copies for each of the other Underwriters, and in form and substance reasonably satisfactory to [●], counsel for the Underwriters, in the form set forth in Exhibit C hereto.

(c) You shall have received from PricewaterhouseCoopers LLP letters dated, respectively, the date of this Agreement, the time of purchase and, if applicable, the additional time of purchase, and addressed to the Underwriters and the Company (with executed copies for each of the Underwriters) in the forms agreed to by [●] and PricewaterhouseCoopers LLP.

(d) You shall have received at the time of purchase and, if applicable, at the additional time of purchase, the favorable opinion of [●], counsel for the Underwriters, dated the time of purchase or the additional time of purchase, as the case may be, in form and substance reasonably satisfactory to [●].

(e) No Prospectus or amendment or supplement to the Registration Statement or the Prospectus, including documents deemed to be incorporated by reference therein, shall have been filed to which you object in writing.

(f) The Prospectus Supplement shall have been filed with the Commission pursuant to Rule 424(b) under the Act at or before 5:30 P.M., New York City time, on or prior to the second full business day after the date of this Agreement and any registration statement pursuant to Rule 462(b) under the Act required in connection with the offering and sale of the Shares shall have been filed and become effective no later than 10:00 P.M., New York City time, on the date of this Agreement.

(g) Prior to the time of purchase, and, if applicable, the additional time of purchase, (i) no stop order with respect to the effectiveness of the Registration Statement shall have been issued under the Act or proceedings initiated under Section 8(d) or 8(e) of the Act; (ii) the Registration Statement and all amendments thereto shall not contain an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading; and (iii) the Prospectus and all amendments or supplements thereto shall not contain an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they are made, not misleading.

(h) The Company will, at the time of purchase and, if applicable, at the additional time of purchase, deliver to you a certificate of its Chief Executive Officer and its Chief Financial Officer, executed by each in his capacity as such officer, in the form attached as Exhibit D hereto.

(i) You shall have received signed Lock-up Agreements referred to in Section 3(q) hereof.

(j) The Company shall have furnished to you such other documents and certificates as to the accuracy and completeness of any statement in the Registration Statement and the Prospectus as of the time of purchase and, if applicable, the additional time of purchase, as you may reasonably request.

(k) The Shares shall have been approved for quotation on the NASDAQ, subject only to notice of issuance at or prior to the time of purchase or the additional time of purchase, as the case may be.

7. Effective Date of Agreement; Termination. This Agreement shall become effective (i) if Rule 430A under the Act is not used, when you shall have received notification of the effectiveness of the Registration Statement, or (ii) if Rule 430A under the Act is used, when the parties hereto have executed and delivered this Agreement.

The obligations of the several Underwriters hereunder shall be subject to termination in the absolute discretion of [●] or any group of Underwriters (which may include [●]) which has agreed to purchase in the aggregate at least 50% of the Firm Shares, if (x) since the time of execution of this Agreement or the earlier respective dates as of which information is given in the Registration Statement and the Prospectus, there has occurred or become known any material adverse change [or any development involving a prospective material adverse change] in the business, properties, management, financial condition or results of operations of the Company and the Subsidiaries taken as a whole, which would, in [●] judgment or in the judgment of such group of Underwriters, make it

impracticable or inadvisable to proceed with the public offering or the delivery of the Shares on the terms and in the manner contemplated in the Registration Statement and the Prospectus, or (y) since execution of this Agreement, there shall have occurred: (i) a suspension or material limitation in trading in securities generally on the New York Stock Exchange, the American Stock Exchange or the NASDAQ; (ii) a suspension or material limitation in trading in the Company's securities on NASDAQ; (iii) a general moratorium on commercial banking activities declared by either federal or New York State authorities or a material disruption in commercial banking or securities settlement or clearance services in the United States; (iv) an outbreak or escalation of hostilities or acts of terrorism involving the United States or a declaration by the United States of a national emergency or war; or (v) any other calamity or crisis or any change in financial, political or economic conditions in the United States or elsewhere, if the effect of any such event specified in clause (iv) or (v) in [●] judgment or in the judgment of such group of Underwriters makes it impracticable or inadvisable to proceed with the public offering or the delivery of the Shares on the terms and in the manner contemplated in the Registration Statement and the Prospectus, or (z) since the time of execution of this Agreement, there shall have occurred any downgrading, or any notice or announcement shall have been given or made of (i) any intended or potential downgrading or (ii) any watch, review or possible change that does not indicate an affirmation or improvement in the rating accorded any securities of or guaranteed by the Company or any Subsidiary by any "nationally recognized statistical rating organization," as that term is defined in Rule 436(g)(2) under the Act.

If [●] or any group of Underwriters elects to terminate this Agreement as provided in this Section 7, the Company and each other Underwriter shall be notified promptly in writing.

If the sale to the Underwriters of the Shares, as contemplated by this Agreement, is not carried out by the Underwriters for any reason permitted under this Agreement, or if such sale is not carried out because the Company shall be unable to comply with any of the terms of this Agreement, the Company shall not be under any obligation or liability under this Agreement (except to the extent provided in Sections 4(n), 5 and 9 hereof), and the Underwriters shall be under no obligation or liability to the Company under this Agreement (except to the extent provided in Section 9 hereof) or to one another hereunder.

8. Increase in Underwriters' Commitments. Subject to Sections 6 and 7 hereof, if any Underwriter shall default in its obligation to take up and pay for the Firm Shares to be purchased by it hereunder (otherwise than for a failure of a condition set forth in Section 6 hereof or the termination of this Agreement pursuant to the provisions of Section 7 hereof) and if the number of Firm Shares which all Underwriters so defaulting shall have agreed but failed to take up and pay for does not exceed 10% of the total number of Firm Shares, the non-defaulting Underwriters shall take up and pay for (in addition to the aggregate number of Firm Shares they are obligated to purchase pursuant to Section 1 hereof) the number of Firm Shares agreed to be purchased by all such defaulting Underwriters, as hereinafter provided. Such Shares shall be taken up and paid for by such non-defaulting Underwriters in such amount or amounts as you may designate with the consent of each Underwriter so designated or, in the event no such designation is made, such Shares shall be taken up and paid for by all non-defaulting Underwriters pro rata in proportion to the aggregate number of Firm Shares set forth opposite the names of such non-defaulting Underwriters in Schedule A.

Without relieving any defaulting Underwriter from its obligations hereunder, the Company agrees with the non-defaulting Underwriters that it will not sell any Firm Shares hereunder unless all of the Firm Shares are purchased by the Underwriters (or by substituted Underwriters selected by you with the approval of the Company or selected by the Company with your approval).

If a new Underwriter or Underwriters are substituted by the Underwriters or by the Company for a defaulting Underwriter or Underwriters in accordance with the foregoing provision, the Company or you shall have the right to postpone the time of purchase for a period not exceeding five business days in order that any necessary changes in the Registration Statement and the Prospectus and other documents may be effected.

The term "Underwriter" as used in this Agreement shall refer to and include any Underwriter substituted under this Section 8 with like effect as if such substituted Underwriter had originally been named in Schedule A hereto.

If the aggregate number of Firm Shares which the defaulting Underwriter or Underwriters agreed to purchase exceeds 10% of the total number of Firm Shares which all Underwriters agreed to purchase hereunder, and if neither the non-defaulting Underwriters nor the Company shall make arrangements within the five business day period stated above for the purchase of all the Firm Shares which the defaulting Underwriter or Underwriters agreed to purchase hereunder, this Agreement shall terminate without further act or deed and without any liability on the part of the Company to any non-defaulting Underwriter and without any liability on the part of any non-defaulting Underwriter to the Company. Nothing in this paragraph, and no action taken hereunder, shall relieve any defaulting Underwriter from liability in respect of any default of such Underwriter under this Agreement.

#### 9. Indemnity and Contribution.

(a) The Company agrees to indemnify, defend and hold harmless each Underwriter, its partners, directors and officers, and any person who controls any Underwriter within the meaning of Section 15 of the Act or Section 20 of the Exchange Act, and the successors and assigns of all of the foregoing persons, from and against any loss, damage, expense, liability or claim (including the reasonable cost of investigation) which, jointly or severally, any such Underwriter or any such person may incur under the Act, the Exchange Act, the common law or otherwise, insofar as such loss, damage, expense, liability or claim arises out of or is based upon any untrue statement or alleged untrue statement of a material fact contained in the Registration Statement (or in the Registration Statement as amended by any post-effective amendment thereof by the Company) or in a Prospectus (the term Prospectus for the purpose of this Section 9 being deemed to include the Basic Prospectus, any Prepricing Prospectus, any Prospectus Supplement or the Prospectus, as any of the foregoing may be amended or supplemented by the Company), or arises out of or is based upon any omission or alleged omission to state a material fact required to be stated in either such Registration Statement or such Prospectus or necessary to make the statements made therein not misleading, except insofar as any such loss, damage, expense, liability or claim arises out of or is based upon any untrue statement or alleged untrue statement of a material fact contained in, and in conformity with information concerning such Underwriter furnished in writing by or on behalf of such Underwriter through you to the Company expressly for use in, such Registration Statement or



such Prospectus or arises out of or is based upon any omission or alleged omission to state a material fact in connection with such information required to be stated in such Registration Statement or such Prospectus or necessary to make such information not misleading; provided, however, that the indemnity agreement contained in this subsection (a) with respect to any Prepricing Prospectus or amended Prepricing Prospectus shall not inure to the benefit of any Underwriter (or to the benefit of any person controlling such Underwriter) from whom the person asserting any such loss, damage, expense, liability or claim purchased the Shares which is the subject thereof if the Prospectus corrected any such alleged untrue statement or omission and if such Underwriter failed to send or give a copy of the Prospectus to such person at or prior to the written confirmation of the sale of such Shares to such person, unless the failure is the result of noncompliance by the Company with paragraph (b) of Section 4 hereof (as it relates to the delivery of sufficient copies of the Prospectus to the Underwriters).

If any action, suit or proceeding (each, a "Proceeding") is brought against an Underwriter or any such person in respect of which indemnity may be sought against the Company pursuant to the foregoing paragraph, such Underwriter or such person shall promptly notify the Company in writing of the institution of such Proceeding and the Company shall assume the defense of such Proceeding, including the employment of counsel reasonably satisfactory to such indemnified party and payment of all fees and expenses; provided, however, that the omission to so notify the Company shall not relieve the Company from any liability which the Company may have to any Underwriter or any such person or otherwise unless the Company was unaware of the proceeding to which such notice would have related and was materially prejudiced by the failure to give such notice. Such Underwriter or such person shall have the right to employ its or their own counsel in any such case, but the fees and expenses of such counsel shall be at the expense of such Underwriter or of such person unless the employment of such counsel shall have been authorized in writing by the Company in connection with the defense of such Proceeding or the Company shall not have, within a reasonable period of time in light of the circumstances, employed counsel to have charge of the defense of such Proceeding or such indemnified party or parties shall have reasonably concluded that there may be defenses available to it or them which are different from, additional to or in conflict with those available to the Company (in which case the Company shall not have the right to direct the defense of such Proceeding on behalf of the indemnified party or parties), in any of which events such fees and expenses shall be borne by the Company and paid as incurred (it being understood, however, that the Company shall not be liable for the expenses of more than one separate counsel (in addition to any local counsel) in any one Proceeding or series of related Proceedings in the same jurisdiction representing the indemnified parties who are parties to such Proceeding). The Company shall not be liable for any settlement of any Proceeding effected without its written consent but, if settled with the written consent of the Company, the Company agrees to indemnify and hold harmless any Underwriter and any such person from and against any loss or liability by reason of such settlement. No indemnifying party shall, without the prior written consent of the indemnified party, effect any settlement of any pending or threatened Proceeding in respect of which any indemnified party is or could have been a party and indemnity could have been sought hereunder by such indemnified party, unless such settlement includes an unconditional release of such indemnified party from all liability on claims that are the subject matter of such Proceeding and does not include an admission of fault, culpability or a failure to act, by or on behalf of such indemnified party.

(b) Each Underwriter severally agrees to indemnify, defend and hold harmless the Company, its directors and officers, and any person who controls the Company within the meaning of Section 15 of the Act or Section 20 of the Exchange Act, and the successors and assigns of all of the foregoing persons, from and against any loss, damage, expense, liability or claim (including the reasonable cost of investigation) which, jointly or severally, the Company or any such person may incur under the Act, the Exchange Act, the common law or otherwise, insofar as such loss, damage, expense, liability or claim arises out of or is based upon any untrue statement or alleged untrue statement of a material fact contained in, and in conformity with information concerning such Underwriter furnished in writing by or on behalf of such Underwriter through you to the Company expressly for use in, the Registration Statement (or in the Registration Statement as amended by any post-effective amendment thereof by the Company) or in a Prospectus, or arises out of or is based upon any omission or alleged omission to state a material fact in connection with such information required to be stated in such Registration Statement or such Prospectus or necessary to make such information not misleading.

If any Proceeding is brought against the Company or any such person in respect of which indemnity may be sought against any Underwriter pursuant to the foregoing paragraph, the Company or such person shall promptly notify such Underwriter in writing of the institution of such Proceeding and such Underwriter shall assume the defense of such Proceeding, including the employment of counsel reasonably satisfactory to such indemnified party and payment of all fees and expenses; provided, however, that the omission to so notify such Underwriter shall not relieve such Underwriter from any liability which such Underwriter may have to the Company or any such person or otherwise unless such Underwriter was unaware of the proceeding to which such notice would have related and was materially prejudiced by the failure to give such notice. The Company or such person shall have the right to employ its own counsel in any such case, but the fees and expenses of such counsel shall be at the expense of the Company or such person unless the employment of such counsel shall have been authorized in writing by such Underwriter in connection with the defense of such Proceeding or such Underwriter shall not have, within a reasonable period of time in light of the circumstances, employed counsel to defend such Proceeding or such indemnified party or parties shall have reasonably concluded that there may be defenses available to it or them which are different from or additional to or in conflict with those available to such Underwriter (in which case such Underwriter shall not have the right to direct the defense of such Proceeding on behalf of the indemnified party or parties, but such Underwriter may employ counsel and participate in the defense thereof but the fees and expenses of such counsel shall be at the expense of such Underwriter), in any of which events such fees and expenses shall be borne by such Underwriter and paid as incurred (it being understood, however, that such Underwriter shall not be liable for the expenses of more than one separate counsel (in addition to any local counsel) in any one Proceeding or series of related Proceedings in the same jurisdiction representing the indemnified parties who are parties to such Proceeding). No Underwriter shall be liable for any settlement of any such Proceeding effected without the written consent of such Underwriter but, if settled with the written consent of such Underwriter, such Underwriter agrees to indemnify and hold harmless the Company and any such person from and against any loss or liability by reason of such settlement. No indemnifying party shall, without the prior written consent of the indemnified party, effect any settlement of any pending or threatened Proceeding in respect of which any indemnified party is or could have been a party and indemnity could have been sought hereunder by such indemnified party.

unless such settlement includes an unconditional release of such indemnified party from all liability on claims that are the subject matter of such Proceeding.

(c) If the indemnification provided for in this Section 9 is unavailable to an indemnified party under subsections (a) and (b) of this Section 9 or insufficient to hold an indemnified party harmless in respect of any losses, damages, expenses, liabilities or claims referred to therein, then each applicable indemnifying party shall contribute to the amount paid or payable by such indemnified party as a result of such losses, damages, expenses, liabilities or claims (i) in such proportion as is appropriate to reflect the relative benefits received by the Company on the one hand and the Underwriters on the other hand from the offering of the Shares or (ii) if the allocation provided by clause (i) above is not permitted by applicable law, in such proportion as is appropriate to reflect not only the relative benefits referred to in clause (i) above but also the relative fault of the Company on the one hand and of the Underwriters on the other in connection with the statements or omissions which resulted in such losses, damages, expenses, liabilities or claims, as well as any other relevant equitable considerations. The relative benefits received by the Company on the one hand and the Underwriters on the other shall be deemed to be in the same respective proportions as the total proceeds from the offering (net of underwriting discounts and commissions but before deducting expenses) received by the Company, and the total underwriting discounts and commissions received by the Underwriters, bear to the aggregate public offering price of the Shares. The relative fault of the Company on the one hand and of the Underwriters on the other shall be determined by reference to, among other things, whether the untrue statement or alleged untrue statement of a material fact or omission or alleged omission relates to information supplied by the Company or by the Underwriters and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such statement or omission. The amount paid or payable by a party as a result of the losses, damages, expenses, liabilities and claims referred to in this subsection shall be deemed to include any legal or other fees or expenses reasonably incurred by such party in connection with investigating, preparing to defend or defending any Proceeding.

(d) The Company and the Underwriters agree that it would not be just and equitable if contribution pursuant to this Section 9 were determined by pro rata allocation (even if the Underwriters were treated as one entity for such purpose) or by any other method of allocation that does not take account of the equitable considerations referred to in subsection (c) above. Notwithstanding the provisions of this Section 9, no Underwriter shall be required to contribute any amount in excess of the amount by which the total price at which the Shares underwritten by such Underwriter and distributed to the public were offered to the public exceeds the amount of any damage which such Underwriter has otherwise been required to pay by reason of such untrue statement or alleged untrue statement or omission or alleged omission. No person guilty of fraudulent misrepresentation (within the meaning of Section 11 (f) of the Act) shall be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation. The Underwriters' obligations to contribute pursuant to this Section 9 are several in proportion to their respective underwriting commitments and not joint.

(e) The indemnity and contribution agreements contained in this Section 9 and the covenants, warranties and representations of the Company contained in this Agreement shall remain in full force and effect regardless of any investigation made by or on behalf of any Underwriter, its partners, directors or officers or any person (including each partner, officer or

director of such person) who controls any Underwriter within the meaning of Section 15 of the Act or Section 20 of the Exchange Act, or by or on behalf of the Company, its directors or officers or any person who controls the Company within the meaning of Section 15 of the Act or Section 20 of the Exchange Act, and shall survive any termination of this Agreement or the issuance and delivery of the Shares. The Company and each Underwriter agree promptly to notify each other of the commencement of any Proceeding against it and, in the case of the Company, against any of the Company's officers or directors in connection with the issuance and sale of the Shares, or in connection with the Registration Statement or the Prospectus.

10. Information Furnished by the Underwriters. The statements set forth in the [●],[●],[●] and [●] paragraphs under the caption "Underwriting" in the Prospectus, insofar as such statements relate to (i) amount of selling concession and reallowance, (ii) over-allotment and stabilization, (iii) price stabilization and short positions and (iv) [●] constitute the only information furnished by or on behalf of the Underwriters as such information is referred to in Sections 3 and 9 hereof.

11. Notices. Except as otherwise herein provided, all statements, requests, notices and agreements shall be in writing or by telegram and, if to the Underwriters, shall be sufficient in all respects if delivered or sent to [●] and, if to the Company, shall be sufficient in all respects if delivered or sent to the Company at the offices of the Company at 549 Baltic Way, Sunnyvale, CA 94089, Attention: Robin N. Dickson.

12. Governing Law; Construction. This Agreement and any claim, counterclaim or dispute of any kind or nature whatsoever arising out of or in any way relating to this Agreement ("Claim"), directly or indirectly, shall be governed by, and construed in accordance with, the laws of the State of New York. The section headings in this Agreement have been inserted as a matter of convenience of reference and are not a part of this Agreement.

13. Submission to Jurisdiction. Except as set forth below, no Claim may be commenced, prosecuted or continued in any court other than the courts of the State of New York located in the City and County of New York or in the United States District Court for the Southern District of New York, which courts shall have jurisdiction over the adjudication of such matters, and the Company consents to the jurisdiction of such courts and personal service with respect thereto. The Company hereby consents to personal jurisdiction, service and venue in any court in which any Claim arising out of or in any way relating to this Agreement is brought by any third party against [●] or any indemnified party. Each of [●] and the Company (on its behalf and, to the extent permitted by applicable law, on behalf of its stockholders and affiliates) waives all right to trial by jury in any action, proceeding or counterclaim (whether based upon contract, tort or otherwise) in any way arising out of or relating to this Agreement. The Company agrees that a final judgment in any such action, proceeding or counterclaim brought in any such court shall be conclusive and binding upon the Company and may be enforced in any other courts to the jurisdiction of which the Company is or may be subject, by suit upon such judgment.

14. Parties at Interest. The Agreement herein set forth has been and is made solely for the benefit of the Underwriters and the Company and to the extent provided in Section 9 hereof the controlling persons, partners, directors and officers referred to in such Section, and their respective

successors, assigns, heirs, personal representatives and executors and administrators. No other person, partnership, association or corporation (including a purchaser, as such purchaser, from any of the Underwriters) shall acquire or have any right under or by virtue of this Agreement.

15. Counterparts. This Agreement may be signed by the parties in one or more counterparts which together shall constitute one and the same agreement among the parties.

16. Successors and Assigns. This Agreement shall be binding upon the Underwriters and the Company and their successors and assigns and any successor or assign of any substantial portion of the Company's and any of the Underwriters' respective businesses and/or assets.

*[The Remainder of This Page Intentionally Left Blank; Signature Page Follows]*

If the foregoing correctly sets forth the understanding between the Company and the several Underwriters, please so indicate in the space provided below for that purpose, whereupon this agreement and your acceptance shall constitute a binding agreement between the Company and the Underwriters, severally.

Very truly yours,

Harmonic Inc.

By: \_\_\_\_\_  
Name:  
Title:

Accepted and agreed to as of the  
date first above written, on  
behalf of themselves  
and the other several Underwriters  
named in Schedule A

[ \_\_\_\_\_ ]  
[ \_\_\_\_\_ ]  
[ \_\_\_\_\_ ]

By: [ \_\_\_\_\_ ]

By: \_\_\_\_\_  
Name:  
Title:

By: \_\_\_\_\_  
Name:  
Title:

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SCHEDULE A

<u>Underwriter</u>	<u>Number of Firm Shares</u>
[ ]	[ ]
[ ]	[ ]
[ ]	[ ]
[ ]	[ ]
[ ]	[ ]
[ ]	[ ]
Total	[ ]

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**SCHEDULE B**

Subsidiaries

<u>Name</u>	<u>Jurisdiction of Incorporation</u>
Harmonic (Asia Pacific) Ltd.	Hong Kong, China
Harmonic Data Systems Ltd.	Israel
Harmonic Europe S.A.S.	France
Harmonic Germany GmbH.	Germany
Harmonic International Inc.	U.S.A.
Harmonic International Limited.	Bermuda
Harmonic Lightwaves (Israel) Ltd.	Israel
Harmonic (UK) Ltd.	United Kingdom

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**EXHIBIT A**

Harmonic Inc.

Common Stock  
(\$0.001 Par Value)

[Date]

[\_\_\_\_\_]

[\_\_\_\_\_]

[\_\_\_\_\_]

[\_\_\_\_\_]

[\_\_\_\_\_]

[\_\_\_\_\_]

[\_\_\_\_\_]

Ladies and Gentlemen:

This Lock-Up Letter Agreement is being delivered to you in connection with the proposed Underwriting Agreement (the "Underwriting Agreement") to be entered into by Harmonic Inc. (the "Company") and you, as Representatives of the several Underwriters named therein, with respect to the public offering (the "Offering") of common stock, par value \$0.001 per share, of the Company (the "Common Stock").

In order to induce you to enter into the Underwriting Agreement, the undersigned agrees that for a period from the date hereof until the expiration of [90] days after the date of the Underwriting Agreement the undersigned will not, without the prior written consent of [\_\_\_\_\_] (i) sell, offer to sell, contract or agree to sell, hypothecate, pledge, grant any option to purchase or otherwise dispose of or agree to dispose of, directly or indirectly, or file (or participate in the filing of) a registration statement with the Securities and Exchange Commission (the "Commission") in respect of, or establish or increase a put equivalent position or liquidate or decrease a call equivalent position within the meaning of Section 16 of the Securities Exchange Act of 1934, as amended, and the rules and regulations of the Commission promulgated thereunder with respect to, any Common Stock of the Company or any securities convertible into or exercisable or exchangeable for Common Stock, or warrants or other rights to purchase Common Stock, (ii) enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of Common Stock or any securities convertible into or exercisable or exchangeable for Common Stock, or warrants or other rights to purchase Common Stock, whether any such transaction is to be settled by delivery of Common Stock or such other securities, in cash or otherwise, or (iii) publicly announce an intention to effect any transaction specified in clause (i) or (ii). The foregoing sentence shall not apply to (a) the registration of or sale to the Underwriters of any Common Stock pursuant to the Offering and the Underwriting Agreement, (b) bona fide gifts,

provided the recipient thereof agrees in writing with the Underwriters to be bound by the terms of this Lock-Up Letter Agreement, (c) dispositions to any trust, family partnership or similar entity for the direct or indirect benefit of the undersigned and/or the immediate family of the undersigned, provided that such trust, family partnership or similar entity agrees in writing with the Underwriters to be bound by the terms of this Lock-Up Letter Agreement, (d) the receipt of options or shares pursuant to an equity-based compensation or benefit plan of the Company described in the Registration Statement and the Prospectus (as defined in the Underwriting Agreement) and in effect on the date of the final prospectus supplement relating to the Offering (and public announcements of such receipt in connection with applicable securities laws) and (e) the exercise of options by the undersigned in accordance with the terms thereof (but not the sale of the Common Stock issued as a result thereof), which options were disclosed as outstanding in the Registration Statement and the Prospectus (as defined in the Underwriting Agreement) and were outstanding on the date of the final prospectus supplement relating to the Offering or issued in accordance with the foregoing clause (d) (and public announcement of such exercises in connection with applicable securities laws).<sup>T</sup>

In addition, the undersigned hereby waives any rights the undersigned may have to require registration of Common Stock in connection with the filing of a registration statement relating to the Offering. The undersigned further agrees that, for a period from the date hereof until the expiration of [90] days after the date of the Underwriting Agreement, the undersigned will not, without the prior written consent of [●], make any demand for, or exercise any right with respect to, the registration of (i) Common Stock of the Company, (ii) any securities convertible into or exercisable or exchangeable for Common Stock, or (iii) warrants or other rights to purchase Common Stock.

\* \* \*

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T The letters to be delivered by Messrs. Ley, Dickson, Levi, Simler and Harshman would include the additional exception:

"(f) dispositions of not more than shares of Common Stock issued to the undersigned (and public announcements related to such dispositions in connection with applicable securities laws), provided that the parenthetical clause in clause (e) of such letters would clarify that the prohibitions on sales contained in such parenthetical clause would not extend to sales permitted by clause (f) of such letter. The number of shares of Common Stock to be set forth in clause (f) of such letter shall be as follows: Mr. Ley, [●] shares of Common Stock; Mr. Dickson, [●] shares of Common Stock; Mr. Levi, [●] shares of Common Stock; Mr. Simler, [●] shares of Common Stock; and Mr. Harshman, [●] shares of Common Stock.

If (i) the Underwriting Agreement is not executed and delivered by the Company before [●], (ii) the Company notifies you in writing that it does not intend to proceed with the Offering, (iii) the registration statement filed with the Securities and Exchange Commission with respect to the Offering is withdrawn or (iv) for any reason the Underwriting Agreement shall be terminated prior to the time of purchase (as deemed in the Underwriting Agreement), this Lock-Up Letter Agreement shall be terminated and the undersigned shall be released from its obligations hereunder.

Yours very truly,

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Name:

A-3

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**EXHIBIT B**

FORM OF OPINION OF WILSON SONSINI GOODRICH & ROSATI, P.C.

1. The Company has been duly incorporated and is validly existing as a corporation in good standing under the laws of the State of Delaware, with corporate power and authority to own, lease and operate its properties and conduct its business as described in the Registration Statement and the Prospectus, to execute and deliver this Agreement and to issue, sell and deliver the Shares as contemplated herein.

2. Based solely on certifications provided by public officials in applicable states, the Company is duly qualified to do business as a foreign corporation and in good standing in each state listed on Schedule A attached hereto.

3. The Agreement has been duly authorized, executed and delivered by the Company.

4. The Shares have been duly authorized and, when issued in accordance with the Agreement, will be validly issued, fully paid and nonassessable.

5. The Company has an authorized capitalization as set forth in the Registration Statement and the Prospectus under the caption "Capitalization"; the issuance of the Shares is not subject to any preemptive rights under the Delaware General Corporations Law (the "DGCL") and the Company's Certificate of Incorporation and bylaws, each as amended through the date of such opinion, or any Reviewed Agreements (Reviewed Agreements being defined as any material agreement currently in effect required to file by the Company as an exhibit to its Annual Report on Form 10-K as certified in writing by the Company to such counsel).

6. The capital stock of the Company, including the Shares, conform in all material respects to the description thereof under the headings "Description of Preferred Stock" and "Description of Common Stock".

7. (A) The Registration Statement and the Prospectus (it being understood that such counsel is not called upon and does not comment with respect to any financial statements and the notes thereto and related schedules and other information of an accounting or financial nature included therein or omitted therefrom) comply on their face as to form in all material respects with the requirements of the Act; and (B) the documents filed pursuant to the Exchange Act that are incorporated by reference in the Registration Statement and the Prospectus, at the time they became effective or were filed with the Commission, complied on their face as to form in all material respects with the requirements of the Exchange Act (it being understood that such counsel is not called upon and does not comment with respect to any financial statements and the notes thereto and related schedules and other information of an accounting or financial nature including therein or omitted therefrom).

8. The Registration Statement has become effective under the Act and, to such counsel's knowledge based on a conversation with the Office of the Secretary of the Commission, no stop order proceedings is in effect under the Act, and any required filing of the Prospectus and any supplement thereto pursuant to Rule 424 under the Act has been made in the manner and within the time period required by such Rule 424.

9. No approval, authorization, consent or order of or filing with any U.S. federal, California or New York governmental or regulatory commission, board, body, authority or agency, or of or with the NASDAQ is required in connection with the issuance and sale of the Shares or with the consummation by the Company of the transactions contemplated hereby, other than registration of the Shares under the Act and a filing of a listing of additional shares application with NASDAQ, which has been effected (except such counsel need express no opinion as to any necessary qualification under the state or foreign securities or blue sky laws of the various jurisdictions in which the Shares are being offered by the Underwriters).

10. The execution, delivery and performance of the Agreement by the Company, the issuance and sale of the Shares by the Company and the consummation by the Company of the transactions contemplated thereby do not violate or constitute a default under (A) the Certificate of Incorporation or bylaws of the Company, or (B) any Reviewed Agreement, or (C) any U.S. federal, California or New York law, regulation or rule known by us to be customarily applicable to transactions of this nature or, to our knowledge, any U.S. federal, California or New York decree, judgment or order applicable to the Company.

11. To our knowledge, there are no actions, suits, claims, investigations or proceedings pending or overtly threatened to which the Company or any of the Subsidiaries or any of their respective directors or officers is or would be a party or to which any of their respective properties is or would be subject at law or in equity, before or by any U.S. federal, California or New York governmental or regulatory commission, board, body, authority or agency which are required to be described in the Registration Statement or the Prospectus but are not so described.

12. Neither the Company nor any of the Subsidiaries is, nor after giving effect to the offering and sale of the Shares and the application of the proceeds of the sale of the Shares by the Company in the manner specified in "Use of Proceeds," will any of them be, an "investment company" or an entity "controlled" by an "investment company," as such terms are defined in the Investment Company Act.

13. Except as have been waived pursuant to an effective waiver or disclosed in the Registration Statement or Prospectus, with respect to the offering of the Shares, no person has the right, pursuant to the terms of any Reviewed Agreement, to cause the Company to register under the Act any shares of Common Stock or shares of any other capital stock or other equity interest in the Company or to include any such shares or interest in the Registration Statement or the offering contemplated thereby, whether as a result of the filing or effectiveness of the Registration Statement or the sale of the Shares as contemplated thereby or otherwise.

In addition, such counsel shall state that such counsel has participated in conferences with officers and other representatives of the Company, representatives of the independent registered

public accounting firm of the Company and representatives of the Underwriters and their counsel at which the contents of the Registration Statement and the Prospectus and related matters were discussed and, although such counsel is not passing upon and does not assume responsibility for the accuracy, completeness or fairness of the statements contained in the Registration Statement or the Prospectus (except as and to the extent stated in subparagraphs 5 and 6 above), on the basis of the foregoing nothing has come to the attention of such counsel that causes such counsel to believe (A) that the Registration Statement or any amendment thereto at the time such Registration Statement or amendment became effective contained an untrue statement of a material fact or omitted to state a material fact required to be stated therein or necessary to make the statements therein not misleading (it being understood that such counsel is not called upon and does not comment with respect to any financial statements and the notes thereto and related schedules and other information of an accounting or financial nature included therein or omitted therefrom), or (B) that the Prospectus or any supplement thereto at the date of such Prospectus or such supplement, and at the time of purchase or the additional time of purchase, as the case may be, contained an untrue statement of a material fact or omitted to state a material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances under which they were made, not misleading (it being understood that such counsel is not called upon and does not comment with respect to any financial statements and the notes thereto and related schedules and other information of an accounting or financial nature included therein or omitted therefrom).

## EXHIBIT C

### FORM OF OPINION OF GOLDFARB, LEVY, ERAN & CO.

1. Harmonic Lightwaves (Israel) Ltd., a company organized under the laws of Israel (the "Israel Subsidiary"), has been duly incorporated and is validly existing as a corporation under the laws of Israel, with all requisite power and authority to own, lease and operate its properties and to conduct its business as currently conducted.

2. All of the issued and outstanding shares of capital stock of the Israel Subsidiary have been duly authorized and validly issued, are fully paid and non-assessable and, except as otherwise stated in the Registration Statement and the Prospectus, are owned by the Company; and to such counsel's knowledge, no options, warrants or other rights to purchase, agreements or other obligations to issue or other rights to convert any obligation into shares of capital stock or ownership interests in the Israel Subsidiary are outstanding.

3. To such counsel's knowledge, there is no litigation or governmental or other action, suit, proceedings or investigations before any court or before or by any public, regulatory or governmental agency or body pending or, to such counsel's knowledge, threatened in Israel against or involving the properties or business of the Israel Subsidiary in Israel which, if determined adversely to the Israel Subsidiary, would have a material adverse effect on the business, properties, financial condition, results of operation or prospects of the Company and the Israel Subsidiary taken as a whole.

4. To such counsel's knowledge, the execution, delivery and performance of this Agreement by the Company, the issuance and sale of the Shares by the Company and the consummation by the Company of the transactions contemplated hereby do not, and, based on facts and law in existence at the date of such opinion, will not, conflict with, result in any breach or violation of or constitute a default under (nor constitute any event which with notice, lapse of time or both would result in any breach or violation of or constitute a default under) (A) the Memorandum and Articles of Association of the Israel Subsidiary, or (B) any indenture, mortgage, deed of trust, bank loan or credit agreement, other evidence of indebtedness, license, lease, contract or other agreement or instrument to which the Israel Subsidiary is a party or by which it or any of its properties may be bound filed as an exhibit to the Registration Statement or any document incorporated by reference in the Registration Statement or the Prospectus or any document or instrument which has otherwise been identified to such counsel by the Company or the Israel Subsidiary in writing as being material, or (C) any Israeli law, regulation or rule or any decree, judgment or order applicable to the Israel Subsidiary and known to such counsel.

**EXHIBIT D**

FORM OF OFFICERS' CERTIFICATE

1. I have reviewed the Registration Statement and the Prospectus.
2. The representations and warranties of the Company as set forth in this Agreement are true and correct as of the time of purchase and, if applicable, the additional time of purchase.
3. The Company has performed all of its obligations under this Agreement as are to be performed at or before the time of purchase and at or before the additional time of purchase, as the case may be.
4. The conditions set forth in paragraphs (g) of Section 6 of this Agreement have been met.
5. Between the time of execution of this Agreement and the time of purchase or the additional time of purchase, as the case may be, no material adverse change or any development involving a prospective material adverse change in the business, properties, management, financial condition or results of operations of the Company and the Subsidiaries taken as a whole has occurred or become known.
6. The financial statements and other financial information included in the Registration Statement and the Prospectus fairly present the financial condition, results of operations and cash flows of the Company as of, and for, the periods presented in the Registration Statement.



[Letterhead of Wilson Sonsini Goodrich &amp; Rosati, P.C.]

April 4, 2005

Harmonic Inc.  
549 Baltic Way  
Sunnyvale, CA 94089

**Re: Harmonic Inc.—Registration Statement on Form S-3**

Ladies and Gentlemen:

At your request, we have examined the Registration Statement on Form S-3 (the “**Registration Statement**”), filed or to be filed by Harmonic Inc., a Delaware corporation (the “**Company**”), with the Securities and Exchange Commission (the “**Commission**”) in connection with the registration pursuant to the Securities Act of 1933, as amended (the “**Act**”), of the Securities (as defined below). The Registration Statement relates to the proposed issuance and sale, from time to time pursuant to Rule 415 under the Act as set forth in the Registration Statement, the prospectus contained therein (the “**Prospectus**”) and the supplements to the prospectus referred to therein (the “**Prospectus Supplements**”), of up to an aggregate offering price of \$200,000,000 or the equivalent thereof, of the Company’s senior and subordinated debt securities (the “**Debt Securities**”), shares of the Company’s preferred stock, \$0.001 par value per share (the “**Preferred Stock**”), shares of the Company’s common stock, \$0.001 par value per share (the “**Common Stock**”), and warrants to purchase shares of the Company’s Common Stock (the “**Warrants**”) (the Debt Securities, the Preferred Stock, the Common Stock, and the Warrants are collectively referred to herein as the “**Securities**”).

The Debt Securities are to be issued pursuant to a senior debt securities indenture (the “**Senior Indenture**”) and a subordinated debt securities indenture (the “**Subordinated Indenture**”), as applicable, both of which have been filed as exhibits to the Registration Statement (the “**Indentures**”) and are to be entered into, in each case, between the Company and U.S. Bank National Association, as trustee (the “**Trustee**”). The Debt Securities are to be issued in the forms set forth in the Indentures filed as exhibits to the Registration Statement. Each indenture may be supplemented, as applicable, in connection with the issuance of each such series of Debt Securities, by a supplemental indenture or other appropriate action of the Company creating such series (each, a “**Supplemental Indenture**”). The shares of Common Stock are to be sold pursuant to an underwriting agreement in substantially the form filed as an exhibit to the Registration Statement. The Debt Securities, the Preferred Stock and the Warrants are to be sold pursuant to a purchase, underwriting or similar agreement in substantially the form to be filed under a Current Report on Form 8-K.

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We have examined instruments, documents, certificates and records which we have deemed relevant and necessary for the basis of our opinion hereinafter expressed. In such examination, we have assumed (i) the authenticity of original documents and the genuineness of all signatures; (ii) the conformity to the originals of all documents submitted to us as copies; (iii) the truth, accuracy, and completeness of the information, representations and warranties contained in the records, documents, instruments and certificates we have reviewed; (iv) the Registration Statement, and any amendments thereto (including post-effective amendments), will have become effective under the Act; (v) a prospectus supplement will have been filed with the Commission describing the Securities offered thereby; (vi) all Securities will be issued and sold in compliance with applicable Federal and state securities laws and in the manner stated in the Registration Statement and the applicable prospectus supplement; (vii) a definitive purchase, underwriting or similar agreement with respect to any Securities offered will have been duly authorized and validly executed and delivered by the Company and the other parties thereto; (viii) any Securities issuable upon conversion, exchange, redemption, or exercise of any Securities being offered will be duly authorized, created and, if appropriate, reserved for issuance upon such conversion, exchange, redemption, or exercise; and (ix) with respect to shares of Common Stock or Preferred Stock offered, there will be sufficient shares of Common Stock or Preferred Stock authorized under the Company's organizational documents and not otherwise reserved for issuance.

Based on such examination, we are of the opinion that:

1. with respect to Debt Securities to be issued under either the Senior Indenture or Subordinated Indenture, when (a) the Trustee is qualified to act as Trustee under the Senior Indenture or Subordinated Indenture, as applicable, (b) the Trustee has duly executed and delivered the Senior Indenture or Subordinated Indenture, as applicable, (c) the Senior Indenture or Subordinated Indenture, as applicable, has been duly authorized and validly executed and delivered by the Company to the Trustee, (d) the Senior Indenture or Subordinated Indenture, as applicable, has been duly qualified under the Trust Indenture Act of 1939, as amended, (e) the Board of Directors of the Company or a duly constituted and acting committee thereof (such Board of Directors or committee being hereinafter referred to as the "**Board**") has taken all necessary corporate action to approve the issuance and terms of such Debt Securities, the terms of the offering thereof and related matters, and (f) such Debt Securities have been duly executed, authenticated, issued and delivered in accordance with the provisions of the Senior Indenture or Subordinated Indenture, as applicable, and the applicable definitive purchase, underwriting or similar agreement approved by the Board, such Debt Securities will be validly issued and will constitute valid and binding obligations of the Company, enforceable against the Company in accordance with their terms, and entitled to the benefits of the applicable Indenture;

2. with respect to any particular series of shares of Preferred Stock, when both (a) the Board has taken all necessary corporate action to approve the issuance and terms of the shares of Preferred Stock, the terms of the offering thereof, and related matters, including the adoption of a certificate of designation relating to such Preferred Stock conforming to the Delaware General

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Corporation Law (a "*Certificate*") and the filing of the Certificate with the Secretary of State of the State of Delaware, and (b) certificates representing the shares of Preferred Stock have been duly executed, countersigned, registered and delivered in accordance with the applicable definitive purchase, underwriting or similar agreement approved by the Board, upon payment of the consideration therefor (not less than the par value of the Preferred Stock) provided for therein, then the shares of Preferred Stock will be validly issued, fully paid and nonassessable;

3. with respect to shares of Common Stock, when both (a) the Board has taken all necessary corporate action to approve the issuance of and the terms of the offering of the shares of Common Stock and related matters and (b) certificates representing the shares of Common Stock have been duly executed, countersigned, registered and delivered either (i) in accordance with the applicable definitive purchase, underwriting or similar agreement approved by the Board, or upon the exercise of Warrants to purchase Common Stock, upon payment of the consideration therefor (not less than the par value of the Common Stock) provided for therein, or (ii) upon conversion or exercise of any other Security, in accordance with the terms of such Security or the instrument governing such Security providing for such conversion or exercise as approved by the Board, for the consideration approved by the Board (not less than the par value of the Common Stock), then the shares of Common Stock will be validly issued, fully paid and nonassessable; and

4. with respect to the Warrants, when both (a) the Board has taken all necessary corporate action to approve the issuance of and the terms of the Warrants and related matters and (b) the Warrants have been duly executed and delivered against payment therefor, pursuant to the applicable definitive purchase, underwriting, warrant or similar agreement duly authorized, executed and delivered by the Company and a warrant agent and the certificates for the Warrants have been duly executed and delivered by the Company and such warrant agent, then the Warrants will be validly issued and will constitute valid and binding obligations of the Company, enforceable against the Company in accordance with their terms.

Our opinion that any document is legal, valid and binding is qualified as to:

(a) limitations imposed by bankruptcy, insolvency, reorganization, arrangement, fraudulent conveyance, moratorium or other laws relating to or affecting the rights of creditors generally;

(b) rights to indemnification and contribution which may be limited by applicable law or equitable principles;

(c) general principles of equity, including without limitation concepts of materiality, reasonableness, good faith and fair dealing, and the possible unavailability of specific performance or injunctive relief and limitation of rights of acceleration, regardless of whether such enforceability is considered in a proceeding in equity or at law.

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Harmonic Inc.  
April 4, 2005  
Page 4

Attorneys at our Firm are admitted to the practice of law in the States of New York and California, and we express no opinion as to the laws of any other jurisdiction other than the Federal laws of the United States of America, the State of New York as to the enforceability of the Debt Securities, and the General Corporation Law of the State of Delaware.

We hereby consent to the filing of this opinion as an exhibit to the above-referenced Registration Statement and to the use of our name wherever it appears in the Registration Statement, the Prospectus, the Prospectus Supplement, and in any amendment or supplement thereto. In giving such consent, we do not believe that we are "experts" within the meaning of such term as used in the Act or the rules and regulations of the Commission issued thereunder with respect to any part of the Registration Statement, including this opinion as an exhibit or otherwise.

**/s/ WILSON SONSINI GOODRICH & ROSATI**

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**WILSON SONSINI GOODRICH & ROSATI**  
Professional Corporation

## Harmonic Inc.

## Computation of Ratio of Earnings Available to Cover Fixed Charges

(in thousands, except for ratio amounts)

	Fiscal Year Ended December 31,				
	2000	2001	2002	2003	2004
Pre- tax income (loss)	(1,672,579)	(167,213)	(76,418)	(29,133)	2,163
Total fixed charges	2,026	3,700	3,369	3,506	2,882
Total earnings (losses) before fixed charges	(1,670,553)	(163,513)	(73,049)	(25,627)	5,045
Interest expense	28	125	307	154	103
Interest attributable to rentals <sup>a</sup>	1,998	3,575	3,062	3,352	2,779
Total fixed charges	2,026	3,700	3,369	3,506	2,882
Ratio of earnings to fixed charges <sup>b</sup>	—	—	—	—	1.8

a) Interest attributable to rentals includes one-third of rental expense.

b) Due to Harmonic's losses in 2000, 2001, 2002, and 2003, the ratio coverage was less than 1:1. Additional earnings of \$1.7 billion, \$167.2 million, \$76.4 million, \$29.1 million would have been required in each of these periods, respectively, to achieve a coverage of 1:1.

**CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

We hereby consent to the incorporation by reference in this Registration Statement on Form S-3 of our report dated March 15<sup>th</sup> 2005 relating to the financial statements, management's assessment of the effectiveness of internal control over financial reporting and the effectiveness of internal control over financial reporting, which appears in Harmonic Inc.'s Annual Report on Form 10-K for the year ended December 31, 2004. We also consent to the reference to us under the heading "Experts" in such Registration Statement.

/s/ PricewaterhouseCoopers LLP

PricewaterhouseCoopers LLP

San Jose, CA

April 4, 2005

**SECURITIES AND EXCHANGE COMMISSION**

**Washington, D.C. 20549**

**FORM T-1**

**STATEMENT OF ELIGIBILITY UNDER  
THE TRUST INDENTURE ACT OF 1939 OF A  
CORPORATION DESIGNATED TO ACT AS TRUSTEE**

Check if an Application to Determine Eligibility of  
a Trustee Pursuant to Section 305(b)(2)

**U.S. BANK NATIONAL ASSOCIATION**

(Exact name of Trustee as specified in its charter)

**31-0841368**

I.R.S. Employer Identification No.

800 Nicollet Mall Minneapolis, Minnesota (Address of principal executive offices)	55402 (Zip Code)
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Paula Oswald  
U.S. Bank National Association  
633 W. 5TH Street, 24th Floor  
Los Angeles, CA 90071  
(213) 615-6043  
(Name, address and telephone number of agent for service)

**Harmonic Inc.**

(Issuer with respect to the Securities)

DELAWARE	77-0201147
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

549 Baltic Way, Sunnyvale, CA (Address of Principal Executive Offices)	94089 (Zip Code)
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**Senior Debt Securities**  
(Title of the Indenture Securities)

**FORM T-1**

**Item 1. GENERAL INFORMATION.** Furnish the following information as to the Trustee.

a) *Name and address of each examining or supervising authority to which it is subject.*

Comptroller of the Currency  
Washington, D.C.

b) *Whether it is authorized to exercise corporate trust powers.*

Trustee is authorized to exercise corporate trust powers.

**Item 2. AFFILIATIONS WITH OBLIGOR.** *If the obligor is an affiliate of the Trustee, describe each such affiliation.*

None

*In answering this item, the trustee has relied, in part, upon information furnished by the obligor and the underwriters, and has also examined its own books and records for the purpose of answering this item.*

**Items 3-15** *Items 3-15 are not applicable because to the best of the Trustee's knowledge, the obligor is not in default under any Indenture for which the Trustee acts as Trustee.*

**Item 16. LIST OF EXHIBITS:** *List below all exhibits filed as a part of this statement of eligibility and qualification.*

1. A copy of the Articles of Association of the Trustee.\*
2. A copy of the certificate of authority of the Trustee to commence business.\*
3. A copy of the certificate of authority of the Trustee to exercise corporate trust powers.\*
4. A copy of the existing bylaws of the Trustee.\*
5. A copy of each Indenture referred to in Item 4. Not applicable.
6. The consent of the Trustee required by Section 321(b) of the Trust Indenture Act of 1939, attached as Exhibit 6.
7. A copy of the latest report of condition of the trustee published pursuant to law or the requirements of its supervising or examining authority, attached hereto as Exhibit 7.

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\* Incorporated by reference to Registration Number 333-67188.

A copy of the Articles of Association of the trustee, as now in effect, is on file with the Securities and Exchange Commission as an Exhibit with corresponding exhibit number to the Form T-1 of Structured Obligations Corporation, filed pursuant to Section 305(b)(2) of the Trust Indenture Act of 1939, as amended (the "Act"), on November 16, 2001 (Registration No. 333-67188), and is incorporated herein by reference.



**NOTE**

The answers to this statement insofar as such answers relate to what persons have been underwriters for any securities of the obligors within three years prior to the date of filing this statement, or what persons are owners of 10% or more of the voting securities of the obligors, or affiliates, are based upon information furnished to the Trustee by the obligors.

**SIGNATURE**

Pursuant to the requirements of the Trust Indenture Act of 1939, as amended, the Trustee, U.S. BANK NATIONAL ASSOCIATION, a national banking association organized and existing under the laws of the United States of America, has duly caused this statement of eligibility and qualification to be signed on its behalf by the undersigned, thereunto duly authorized, all in the City of Los Angeles, State of California on the 4th day of April, 2005.

**U.S. BANK NATIONAL ASSOCIATION**

By: \_\_\_\_\_ /s/ Paula Oswald  
Paula Oswald  
Vice President

**Exhibit 6**

**CONSENT**

In accordance with Section 321(b) of the Trust Indenture Act of 1939, the undersigned, U.S. BANK NATIONAL ASSOCIATION hereby consents that reports of examination of the undersigned by Federal, State, Territorial or District authorities may be furnished by such authorities to the Securities and Exchange Commission upon its request therefor.

Dated: April 4, 2005

**U.S. BANK NATIONAL ASSOCIATION**

By: \_\_\_\_\_ /s/ Paula Oswald  
Paula Oswald  
Vice President

**Exhibit 7**

**U.S. Bank National Association  
Statement of Financial Condition  
As of 12/31/2004**

**(\$000's)**

	<u>12/31/2004</u>
<b>Assets</b>	
Cash and Due From Depository Institutions	\$ 6,340,324
Federal Reserve Stock	0
Securities	41,160,517
Federal Funds	2,727,496
Loans & Lease Financing Receivables	122,755,374
Fixed Assets	1,861,688
Intangible Assets	10,104,022
Other Assets	9,487,217
<b>Total Assets</b>	<b>\$194,436,638</b>
<b>Liabilities</b>	
Deposits	\$128,301,617
Fed Funds	3,378,614
Treasury Demand Notes	4,848,145
Trading Liabilities	156,654
Other Borrowed Money	25,478,470
Acceptances	94,553
Subordinated Notes and Debentures	6,386,971
Other Liabilities	5,910,141
<b>Total Liabilities</b>	<b>\$174,555,165</b>
<b>Equity</b>	
Minority Interest in Subsidiaries	\$ 1,016,160
Common and Preferred Stock	18,200
Surplus	11,792,288
Undivided Profits	7,054,825
<b>Total Equity Capital</b>	<b>\$ 19,881,473</b>
<b>Total Liabilities and Equity Capital</b>	<b>\$194,436,638</b>

SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549

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(Exact name of Trustee as specified in its charter)

31-0841368

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Harmonic Inc.

(Issuer with respect to the Securities)

DELAWARE	77-0201147
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

549 Baltic Way, Sunnyvale, CA (Address of Principal Executive Offices)	94089 (Zip Code)
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Subordinated Debt Securities  
(Title of the Indenture Securities)

**FORM T-1**

**Item 1. GENERAL INFORMATION.** Furnish the following information as to the Trustee.

a) *Name and address of each examining or supervising authority to which it is subject.*

Comptroller of the Currency  
Washington, D.C.

b) *Whether it is authorized to exercise corporate trust powers.*

Trustee is authorized to exercise corporate trust powers.

**Item 2. AFFILIATIONS WITH OBLIGOR.** *If the obligor is an affiliate of the Trustee, describe each such affiliation.*

None

*In answering this item, the trustee has relied, in part, upon information furnished by the obligor and the underwriters, and has also examined its own books and records for the purpose of answering this item.*

**Items 3-15** *Items 3-15 are not applicable because to the best of the Trustee's knowledge, the obligor is not in default under any Indenture for which the Trustee acts as Trustee.*

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**U.S. BANK NATIONAL ASSOCIATION**

By: \_\_\_\_\_ /s/ Paula Oswald  
Paula Oswald  
Vice President

**Exhibit 6**

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Dated: April 4, 2005

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Paula Oswald  
Vice President

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