RAMBUS INC

FORM 10-K (Annual Report)

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Industry Semiconductors

Sector Technology

Fiscal Year 12/31



SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

(Mark One)

[x] ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended September 30, 1997

OR

[] TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from ______ to _____

Commission File Number: 000-22339

RAMBUS INC.

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization)

94-3112828 (I.R.S. Employer Identification No.)

2465 Latham Street, Mountain View, CA 94040 (Address of principal executive offices) (zip code)

Registrant's telephone number, including area code: (650) 903-3800

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

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

Common Stock, \$.001 Par Value

(Title of Class)

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

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of Registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. []

Aggregate market value of the registrant's Common Stock held by non-affiliates of the Registrant as of November 30, 1997 was approximately \$755 million based upon the closing price reported for such date on the Nasdaq National Market. For purposes of this disclosure, shares of Common Stock held by persons who hold more than 5% of the outstanding shares of Common Stock and shares held by officers and directors of the Registrant have been excluded because such persons may be deemed to be affiliates. This determination of affiliate status is not

necessarily a conclusive determination for other purposes.

The number of outstanding shares of the Registrant's Common Stock, \$.001 par value, was 22,569,542 as of November 30, 1997.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Proxy Statement for the Registrant's next Annual Meeting of Stockholders are incorporated by reference into Part III of this Form 10-K.

PART I

This Annual Report on Form 10-K and the documents incorporated herein by reference contain forward-looking statements that have been made pursuant to the provisions of the Private Securities Litigation Reform Act of 1995. Such forward-looking statements are based on current expectations, estimates and projections about the Company's industry, management's beliefs, and certain assumptions made by the Company's management. Words such as "anticipates," "expects," "intends," "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 may differ materially from those expressed or forecasted in any such forward-looking statements. Such risks and uncertainties include those set forth herein under "Factors Affecting Future Results" on pages 5 through 11, as well as those noted in the documents incorporated herein by reference. Unless required by law, the Company undertakes no obligation to update publicly any forward-looking statements, whether as a result of new information, future events or otherwise. However, readers should carefully review the risk factors set forth in other reports or documents the Company files from time to time with the Securities and Exchange Commission, particularly the Quarterly Reports on Form 10-Q and any Current Reports on Form 8-K.

Item 1. Business

Rambus Inc. ("Rambus" or the "Company") designs, develops, licenses and markets high-speed chip-to-chip interface technology to enhance the performance and cost-effectiveness of computers, consumer electronics and other electronic systems. The Company licenses semiconductor companies to manufacture and sell memory and logic ICs incorporating Rambus interface technology and markets its solution to systems companies to encourage them to design Rambus interface technology into their products. The Company's technology cost-effectively increases the data transfer rate, or "memory bandwidth," allowing semiconductor memory devices to keep pace with faster generations of processors and controllers and thus supports the accelerating data transfer requirements of multimedia and other high-bandwidth applications.

Rambus was incorporated in California in March 1990 and reincorporated in Delaware in March 1997.

Background

The performance of a computer or other electronic system is typically constrained by the speed of its slowest element. In the past, that element was the logic IC that controlled the system's specific functions and performed calculations-the microprocessor. In recent years, however, new generations of microprocessors and controllers have become substantially faster and more powerful, and increasingly the bottleneck in system performance is becoming the component that stores the instructions and data needed by the microprocessors and controllers-the DRAM.

Since 1980, the typical operating frequency of Intel and other mainstream microprocessors has increased approximately 40 times from 5 MHz (million cycles per second) to over 200 MHz. During this same period, the typical operating frequency of a standard DRAM (known as a "page mode" DRAM) has increased by approximately five times. Even the evolutionary improvements to DRAM technology, including the FPM (fast-page mode) DRAM, the EDO (extended-data-out) DRAM, the SDRAM (synchronous DRAM) and the SGRAM (a version of the SDRAM for graphics applications), have only been able to provide an improvement of up to approximately ten times. This growing disparity between the frequency of microprocessors and DRAMs is termed the "Performance Gap."

While microprocessors have undergone both manufacturing and architectural improvements, significant innovations for DRAMs have generally only occurred on the manufacturing side. DRAM manufacturers have been successful in increasing DRAM "density," or storage capacity, from roughly 1 Kbit (thousand bits) to 64 Mbits (million bits) per chip, thereby reducing the number of DRAMs required for a given amount of memory. However, corresponding architectural improvements necessary to increase DRAM data transfer rates to keep pace with increasing microprocessor speeds have not occurred.

Rambus Technology

Rambus has created a revolutionary chip-to-chip interface architecture, which allows data to be transferred through a simplified bus at significantly higher frequencies than permitted by conventional technologies. Rambus has focused

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the application of its interface technology on the Performance Gap and licenses its interface technology to memory and logic semiconductor manufacturers, which incorporate this interface technology into their IC designs to supply systems companies with Rambus ICs. The key elements of the Rambus interface are Rambus-based DRAMs ("RDRAMs"), Rambus ASIC cells ("RACs") and the interconnecting circuitry known as the "Rambus Channel." While Rambus technology can be used to address a wide variety of chip-to-chip data transfer requirements, the largest immediate application is to connect logic circuits to memory in home video games, PCs, workstations and other electronic systems.

Rambus interface technology currently allows data transfers of up to 600 megabytes per second between a logic IC and DRAMs by transferring data at a frequency of 600 MHz over a byte-wide bus. System performance can be further enhanced by applying Rambus interface technology to multiple channels on a logic

IC. For example, a Rambus-based logic IC can utilize four channels to achieve data transfer of up to 2.4 gigabytes per second. In addition, Rambus is working with Intel and others on the definition of an extension to the Rambus interface technology for 64 Mbit generation RDRAMs, scheduled for introduction in late 1998 and called "Direct Rambus" technology, which will be further optimized for PC main memory applications. This technology is scheduled to increase the operating frequency of RDRAMs to 800 MHz and double the bus width to allow data transfers of up to 1.6 gigabytes per second. There can be no assurance that the dates or performance criteria referred to in the preceeding forward-looking statements will be obtained. See "Factors Affecting Future Results - Future Dependence upon PC Main Memory Market Segment and Intel" and "- Rapid Technological Change; Reliance on Fundamental Technology; Importance of Timely New Product Development."

Target Markets and Applications

The high-speed interface technology Rambus has developed is applicable to data transfer between most semiconductor chips. The Company has chosen to concentrate the application of its technology on the interface between logic ICs and memory devices because of the acute performance needs and the relevant market sizes. While Rambus interface technology is useful in providing increased memory bandwidth in any electronic system, the Company believes that the systems which will best utilize the high bandwidth provided by current Rambus technology are the relatively high-volume, low-cost systems in which the cost of the memory subsystems represents a significant portion of the selling price. To date, the principal applications for the Company's technology have been in the consumer multimedia, PC multimedia and workstation multimedia markets. These areas accounted for the sale of approximately \$13,000, \$11 million and \$447 million of Rambus ICs by Rambus licensees in calendar 1994, 1995 and 1996, respectively.

In November 1996, Rambus entered into a development and license contract with Intel. The contract provides for the parties to cooperate in the development of a specification for Direct Rambus next-generation 64 Mbit RDRAMs, which will be targeted at the PC main memory market segment. The contract also calls for Intel to use reasonable best efforts to develop a PC main memory controller designed for use with these RDRAMs. The Company believes that Direct Rambus technology will offer superior bandwidth compared to other solutions for PC main memory applications. However, these RDRAMs and the Intel memory controllers are not scheduled for mass production until 1999, and there can be no assurance that such devices will be successfully developed or that, if developed, will be successful in penetrating the market segment for PC main memory.

The Company believes that its technology, which enables high memory bandwidth at low cost, is well suited to a broad range of other applications. Other Rambus-based applications currently being developed include multifunction peripheral controllers for use in combination fax/copier/scanner/laser printer applications and networking equipment such as high-speed ethernet switches. There can be no assurance that such devices will be designed incorporating Rambus interface technology or that sales of such devices will be meaningful.

Rambus Licensees

Rambus licenses its technology on a nonexclusive and worldwide basis to semiconductor manufacturers who sell Rambus ICs to systems companies which have adopted Rambus technology. An important element of the Company's strategy is to license its technology broadly in order to establish Rambus interface technology as a standard and to provide systems companies with sources for Rambus ICs from established semiconductor companies. Rambus provides licenses to both DRAM manufacturers and logic IC manufacturers, who can license Rambus interface technology for use in producing RDRAMs and/or logic ICs containing RACs. At September 30, 1997, Rambus had a total of 21 licensees.

Rambus licensees include thirteen DRAM manufacturers which collectively accounted for over 90% of worldwide DRAM sales in calendar 1996: Fujitsu, Hitachi, Hyundai Electronics, IBM, LG Semicon, Micron Technology, Mitsubishi, NEC, Oki Electric Industry, Samsung Electronics, Siemens, Texas Instruments and Toshiba. At September 30, 1997, four of these licensees were in production of RDRAMs and nearly all were in development of next-generation Direct RDRAMs. Rambus logic licensees include Chromatic Research, Cirrus Logic, Fujitsu, IBM, Intel, LG Semicon, LSI Logic, NEC, SGS-THOMSON, Texas Instruments and Toshiba. At September 30, 1997, four of these licensees were in production of logic ICs which include RACs.

Rambus Business Model and Strategy

In order to establish Rambus interface technology as an industry standard, the Company has adopted an innovative business model in which it neither manufactures nor sells semiconductors incorporating the Company's technology. The Company licenses its technology on a nonexclusive and worldwide basis to semiconductor companies which manufacture and sell RDRAMs and logic ICs containing RACs to systems companies which have adopted Rambus technology. Systems companies are not required to obtain a Rambus license to incorporate Rambus ICs into their products. However, an important part of the Company's strategy is to maintain close ties to these systems companies to encourage the adoption of Rambus technology.

The Rambus business model and strategy are designed to promote Rambus as an industry standard, target leading systems companies in markets that the Company believes represent the greatest potential for Rambus IC sales, provide systems companies with multiple sources for RDRAMs, share research and development efforts with licensees, maintain technology leadership, pursue a system-level approach and generate revenue through a combination of contract fees and royalties.

Contract fees have provided the majority of the capital needed to date by the Company to develop its fundamental technology, and the Company believes that its business model is well suited to continue funding future development. However, there is no assurance that the Company's current partner licensees will generate revenue, or that the Company will be able to add new license contracts in the future, at levels sufficient to provide significant funding for further development activities.

Royalties, which are generally a percentage of the revenues received by licensees on their sales of Rambus ICs, are normally payable by a Rambus licensee on sales occurring during the life of the Rambus patents being licensed. For a typical systems application of Rambus technology, the Company receives royalties from the sale of both logic ICs containing RACs and RDRAMs as they are shipped by Rambus licensees. Royalty rates range up to a maximum of approximately 2.5% for RDRAMs and a maximum of approximately 5% for logic ICs, and in some cases may decline based on the passage of time or on the total volume of Rambus ICs shipped. The exact rate and structure of a royalty arrangement with a particular licensee depend on a number of factors, including the amount of the license fee to be paid by the licensee and the marketing and engineering commitment made by the licensee.

Design and Manufacturing

Rambus interface technology has been developed to allow semiconductor companies to use familiar, widely-available design tools and conventional techniques when designing their Rambus-enabled chips. A new Rambus licensee receives an implementation package from the Company which contains all the information needed to develop a Rambus IC in the licensee's process. There are separate implementation packages for RDRAMs and for RACs. An implementation package includes a specification, a generalized circuit layout database for the particular version of the RDRAM or RAC which the licensee intends to develop, test parameter software and, for RDRAMs, a DRAM core interface specification. Many licensees have contracted to have Rambus produce the specific implementation required to optimize the generalized circuit layout for the licensee's manufacturing process. In such cases, the licensee provides specific design rules and transistor models which Rambus designers use to integrate RDRAM or RAC circuits into the licensee's process. However, Rambus anticipates that as licensees become more familiar with the Rambus technology, they will be able to do more of the implementation work without Rambus' assistance.

Rambus has developed its technology to be manufacturable using familiar, industry-standard CMOS semiconductor processes. For this reason the Company believes that the wafer fabrication yields of RDRAMs and logic products containing RACs are consistent with those for similar products in the same manufacturing facility. However, because of the extra Rambus interface circuitry, an RDRAM chip is somewhat larger than a standard DRAM. Therefore, a

manufacturer will generally produce fewer RDRAMs than standard DRAMs for a given wafer size and an RDRAM chip will be somewhat more expensive than the standard version. Rambus believes that this die size premium is about 10% to 20% for the current 16 Mbit generation, but will be reduced to a target of less than 10% for 64 Mbit Direct RDRAMs. In addition, RDRAM manufacturers are responsible for their own manufacturing processes and Rambus has no role in the manufacture of RDRAMs. For example, Rambus has no influence on decisions in regard to any process changes or on whether or when to "shrink" or otherwise change a design to reduce the cost of the chips.

Current implementations of RDRAMs and Rambus logic ICs can be packaged in widely available, inexpensive packaging. System companies connect RDRAMs to Rambus logic ICs using normal printed circuit board ("PCB") materials and manufacturing techniques. System companies are provided with detailed specifications from Rambus on circuit board layout and construction. Circuit boards can be fabricated and assembled using standard PCB techniques and equipment.

Research and Development

The ability of the Company to compete in the future will be substantially dependent on its ability to advance its interface technology in order to meet changing market needs. To this end, Company engineers are involved in developing new versions of the Rambus interface technology which will allow chip-to-chip data transfer at higher speeds as well as provide other improvements. The Company has assembled a team of highly skilled engineers whose activities are focused on further development of Rambus interface technology as well as adaptation of current technology to specific licensees' processes. Because of the complexity of these activities, the design and development process at Rambus is a multi-disciplinary effort requiring expertise in computer architecture, digital and analog circuit design and layout, DRAM and logic semiconductor process characteristics, packaging, PCB routing and high-speed testing techniques.

As of September 30, 1997, Rambus had 99 employees in its design engineering departments. Approximately two thirds of these employees have advanced technical degrees. In fiscal 1995, 1996 and 1997, research and development expenses were approximately \$3.1 million, \$5.2 million and \$9.8 million, respectively. In addition, because the Company's license agreements often call for engineering support by Rambus, a substantial portion of the Company's total engineering costs has been allocated to cost of contract revenues, even though these engineering efforts have direct applicability to Rambus' technology development. The Company expects that it will continue to invest substantial funds in research and development activities. There can be no assurance that new versions of the Rambus interface technology can be developed and introduced by the Company's licensees in a timely fashion or that such new technology will be accepted by the market. Moreover, the end markets for the Company's technology, particularly the home video game and PC markets, are subject to rapid technological change and there can be no assurance that as such markets change the Company's interface technology will remain current and suitable.

Competition

The semiconductor industry is intensely competitive and has been characterized by price erosion, rapid technological change, short product life cycles, cyclical market patterns and increasing foreign and domestic competition. All major DRAM manufacturers, including the Rambus licensees, are developing higher-frequency versions of standard DRAMs such as EDO, SDRAMs and SGRAMs which compete with RDRAMs. These companies are much larger and have better access to financial, certain technical and other resources than Rambus. Additional high-speed DRAMs have recently been introduced by other semiconductor companies for specialized applications.

The Company believes that its success in establishing a new high-speed memory interface has been due to the systems approach it has taken to solving the application needs of companies in home video game, PC and other electronic systems businesses. However, the Company believes competitors have begun to take a similar approach. The Company believes that its principal competition may come from its licensees and prospective licensees, many of which are evaluating and developing products based on alternative technologies. Many DRAM suppliers have indicated that they are developing a new technology called Double Data Rate ("DDR") SDRAMs, aimed at doubling the memory bandwidth from SDRAMs without increasing the clock frequency. In addition, a consortium including both large DRAM manufacturers and systems companies is promoting a specification for an alternative high-speed interface standard called SyncLink or SLDRAM. To the extent that these alternative technologies provide comparable system performance at lower cost than RDRAMs, or do not require the payment of comparable royalties, the Company's licensees and prospective licensees may adopt and promote the alternative technologies. There can be no assurance that the Company's future competition will not have a material adverse effect on the Company's business, financial

condition and results of operations. In addition, certain semiconductor companies have recently introduced a new kind of IC which combines logic and DRAM on the same chip. Such chips, called "embedded DRAM," eliminate the need for any chip-to-chip interface and are primarily being used for graphics applications. Embedded DRAMs are well suited for applications where component space saving and power consumption are important, such as in the graphics subsystems of notebook PCs. There can be no assurance that competition from embedded DRAMs will not increase in the future.

Patents and Intellectual Property Protection

The Company has an active program to protect its proprietary technology through the filing of patents. At September 30, 1997, the Company held 34 United States patents on various aspects of its technology, with expiration dates ranging from 2010 to 2014 and had applications pending for an additional 69 United States patents. The Company's United States patents do not prevent the manufacture or sale of Rambusbased ICs abroad. At September 30, 1997, the Company held six foreign patents and had additional foreign patent applications pending in Taiwan, Korea, Japan and various other jurisdictions. In addition, the Company attempts to protect its trade secrets and other proprietary information through agreements with licensees and systems companies, proprietary information agreements with employees and consultants and other security measures. The Company also relies on trademarks and trade secret laws to protect its intellectual property.

Rambus believes that it is important to develop and maintain a uniform RDRAM memory interface standard. The Company's contracts generally prevent a licensee from using licensee-developed patented improvements related to Rambus technology to block other licensees from using the improvements or requiring them to pay additional royalties related to their use of Rambus interface technology. Specifically, the contracts generally require licensees to grant to Rambus a royalty-free cross-license on patented licensee intellectual property related to the implementation of Rambus interface technology, which Rambus sublicenses to other licensees which have entered into similar arrangements. Not all licensees have granted Rambus cross-licenses and there is no assurance that such a blocking arrangement will not occur in the future.

Sales and Marketing

Consistent with the Company's business model, sales and marketing activities are focused on developing relationships with potential licensees and on participating with existing licensees in marketing, sales and technical efforts directed to systems companies. In many cases, Rambus must dedicate substantial resources to market to and support systems companies. The Company's sales and marketing efforts include applications engineering and other technical support for systems companies, as well as trade shows, advertising and other traditional marketing activities.

Employees

As of September 30, 1997 the Company had 139 employees, including three in Japan. Of this total, 99 were in engineering, 27 were in marketing and sales, and 13 were in finance and administration. Overall, approximately three quarters of the Company's employees have technical degrees, and more than half of the Company's employees have advanced technical degrees. The Company's future success will largely be dependent on its ability to attract, retain and motivate highly qualified technical and management personnel who are in great demand in the semiconductor industry. The Company's employees are not represented by any collective bargaining agreements and the Company has never experienced a work stoppage. The Company believes that its employee relations are good.

Factors Affecting Future Results

Unpredictable and Fluctuating Operating Results. Because many of the Company's revenue components fluctuate and are difficult to predict, and its expenses are largely independent of revenues in any particular period, it is difficult for the Company to accurately forecast revenues and profits or losses. Historically, contract revenues have represented the largest portion of the Company's revenues. The Company recognizes contract revenues ratably over the period during which post-contract customer support is expected to be provided. While this means that contract revenues from current licenses are relatively predictable, accurate prediction of revenues from new licenses is difficult because the development of a business relationship with a potential licensee is a lengthy process, frequently spanning a year or more, and the fiscal period in which a new license agreement will be entered into, if at all, and the financial terms of such an agreement are difficult to predict. In addition to license fees, contract revenues include fees for engineering services, which are dependent upon the varying level of assistance desired by licensees and, therefore, the revenue from these

services is also difficult to predict. Adding to the complexity of making accurate financial forecasts is the fact that certain expenses associated with a particular contract are typically front-end loaded, except for expenses associated with upgrades and enhancements, whereas contract fees associated with that contract are recognized ratably over the period during which the post-contract customer support is expected to be provided.

Royalties accounted for 22.4% of total revenues in fiscal 1997. While the Company does not expect a significant increase in royalty revenue in the near term, the Company believes that royalties will represent an increasing portion of total revenue in the long term. Increasing royalty revenues will add to the difficulty in making accurate financial forecasts. Such royalties are recognized in the quarter in which the Company receives a report from a licensee regarding the shipment of Rambus ICs in the prior quarter, and are dependent upon fluctuating sales volumes and prices of chips containing Rambus technology, all of which are beyond the Company's ability to control or assess in advance. The Company believes that its continued success will be substantially dependent upon royalties increasing at a rate which more than offsets decreases in the recognition of deferred revenue under existing contracts as their recognition periods expire, as well as the Company's ability to add new licensees and to license new generations of its technology to its existing licensees. Because a systems company can change its source of Rambus ICs at any time, and because the new Rambus license source could have a considerable nonrefundable prepaid royalty balance as well as different royalty rates, any such change by a systems company, particularly one which accounts for substantial volumes of Rambus ICs, could have a sudden and significant adverse effect on the Company's revenues.

The Company's business is subject to a variety of additional risks that could materially adversely affect quarterly and annual operating results, including market acceptance of the Company's technology; systems companies' acceptance of Rambus ICs produced by the Company's licensees; market acceptance of the products of systems companies which have adopted the Company's technology; the loss of any strategic relationships with systems companies or licensees; announcements or introductions of new technologies or products by the Company or the Company's competitors; delays or problems in the introduction or performance of enhancements or future generations of the Company's technology; fluctuations in the market price and demand for DRAMs and logic ICs into which the Company's technology has been incorporated; competitive pressures resulting in lower contract revenues or royalty rates; changes in the Company's and system companies' development schedules and levels of expenditure on research and development; personnel changes, particularly those involving engineering and technical personnel; costs associated with protecting the Company's intellectual property; changes in Company strategies; foreign exchange rate fluctuations or other changes in the international business climate; and general economic trends and other factors.

Volatility of Stock Price. The trading price of the Company's Common Stock could be subject to wide fluctuations in response to quarterly variations in operating results, announcements of technological innovations or new products by the Company, its licensees or its competitors, developments with respect to patents or proprietary rights and other events or factors. The trading price of the Company's Common Stock could also be subject to wide fluctuations in response to the publication of reports and changes in financial estimates by securities analysts, and it is possible that the Company's actual results in one or more future periods will fall short of those estimates by securities analysts. In addition, the equity markets have experienced volatility that has particularly affected the market prices of equity securities of many high technology companies and that often has been unrelated or disproportionate to the operating performance of such companies. These broad market fluctuations may adversely affect the market price of the Company's Common Stock.

History of Losses; No Assurance of Profitability. As of September 30, 1997, the Company's accumulated deficit was approximately \$32.5 million. While the Company generated net income for the last four consecutive quarters, it incurred significant losses in each quarter of fiscal 1996 and in each quarter of its prior fiscal years. There can be no assurance that in the future the Company will be profitable on a quarterly or annual basis.

Dependence upon Limited Number of Licensees. The Company neither manufactures nor sells devices containing its interface technology. Rather, the Company licenses its technology to semiconductor companies, which in turn manufacture and sell Rambus ICs to systems companies which incorporate Rambus technology into their products. The Company's strategy to become an industry standard is dependent upon the Company's ability to make its technology widely available to systems companies through multiple semiconductor manufacturers, and there can be no assurance that the Company will be successful in maintaining its relationships with its current licensees or in entering into new relationships with additional licensees. The Company faces numerous risks in successfully obtaining licensees on terms consistent with the Company's business model, including, among others, the lengthy and expensive process of building a relationship with a potential licensee before there is any assurance of a license agreement with such party; persuading large semiconductor companies to work with, to rely for critical technology on, and to disclose proprietary manufacturing technology to, a smaller company such as Rambus; persuading potential licensees to bear certain

development costs associated with Rambus technology and to make the necessary investment to successfully produce Rambus ICs; and successfully transferring technical know-how to licensees. In addition, there are a relatively limited number of larger semiconductor companies to which the Company could license its interface technology in a manner consistent with its business model. The Company believes that its principal competition may come from its licensees and prospective licensees, many of which are evaluating and developing products based on alternative technologies.

Dependence upon Systems Companies. Although sales of Rambus ICs to systems companies which have adopted the Company's technology for their products are not made directly by the Company, such sales directly affect the amount of royalties received by the Company. Therefore, the Company's success is substantially dependent upon the adoption of the Company's interface technology by systems companies, particularly those which develop and market high-volume business and consumer products such as home video games and PCs. The Company is subject to many risks beyond its control that influence the success or failure of a particular systems company, including among others competition faced by the systems company in its particular industry; market acceptance of the systems company's products; the engineering, sales and marketing and management capabilities of the systems company; technical challenges unrelated to Rambus technology faced by the systems company in developing its products; and the financial and other resources of the systems company. The process of persuading systems companies to adopt the Company's technology can be lengthy and, even if adopted, there can be no assurance that the Rambus technology will be used in a product that is ultimately brought to market, achieves commercial acceptance or results in significant royalties to the Company. Rambus must dedicate substantial resources to market to and support systems companies, in addition to supporting the sales and marketing and technical efforts of its licensees in promoting Rambus technology to systems companies. To date, the Company has not charged systems companies for technical support. Because the Company does not control the business practices of its licensees, it has no ability to establish the prices at which its technology is made available to systems companies or the degree to which its licensees promote Rambus technology to systems companies.

No Assurance of Adoption of Rambus Technology as an Industry Standard. An important part of the Company's strategy to become an industry standard is to penetrate new markets by targeting leaders in those markets. This strategy is designed to encourage other participants in those markets to follow such leaders in adopting Rambus technology. Should a high profile industry participant adopt Rambus technology for one or more of its products but fail to achieve success with those products, other industry participants' perception of Rambus technology could be adversely affected. Any such event could reduce future sales of Rambus ICs. Likewise, were a market leader to adopt and achieve success with a competing technology, the Company's reputation and sales could be adversely affected. In addition, some industry participants have adopted, and others may in the future adopt, a strategy of disparaging the Rambus solution adopted by their competitors. Failure of the Company's technology to be adopted as an industry standard would have a material adverse effect on the Company's business, financial condition and results of operations.

Future Dependence upon PC Main Memory Market Segment and Intel. An important part of the Company's strategy is to penetrate the market segment for PC main memory. Rambus believes that PC main memory currently accounts for approximately one-half of all DRAMs sold. In November 1996, Rambus signed a development and license contract with Intel Corporation which provides for the parties to cooperate in the development of a specification for an extension of the RDRAM optimized for PC main memory applications. The contract also calls for Intel to use reasonable best efforts to develop a PC main memory controller designed for use with such RDRAMs. The anticipated development period for the new RDRAM technology is at least two years and there are a number of technological issues which must be successfully resolved prior to implementation. There can be no assurance that Intel will successfully develop a controller for use with RDRAMs in time to meet market requirements, or at all. In addition, there can be no assurance that the market for high bandwidth PC main memory products, as anticipated by Intel, will develop by 1999 or at all. Under the contract, Intel can terminate its relationship with Rambus at any time. Even if such development efforts are completed, there is no assurance that RDRAMs will be built by the Company's licensees and purchased by PC manufacturers in sufficient quantity to become a standard for PC main memory. The Company established a relationship with Intel several years ago, but Intel did not at that time pursue development relating to Rambus technology. There can be no assurance that Intel's current emphasis or priorities will not change in the future, resulting in less attention and fewer resources being devoted to the current Rambus relationship. Although certain aspects of the current relationship between the two companies are contractual in nature, many important aspects depend on the continued cooperation of the two companies. There can be no assurance that Rambus and Intel will be able to work together successfully over an extended period of time. In addition, there can be no assurance that Intel will not develop or adopt competing technologies in the future.

Revenue Concentration. The Company is subject to revenue concentration risks at both the licensee and the systems company levels. In fiscal 1997, 1996, and 1995, revenues from the Company's top five licensees accounted for

approximately 63%, 65% and 70% of the Company's revenues, respectively. (In fiscal 1997, NEC accounted for approximately 29% of revenues and LG Semiconductor accounted for approximately 10% of revenues.) Because the revenues derived from various licensees vary from period to period depending on the addition of new contracts, the expiration of deferred revenue schedules under existing contracts and the volumes and prices at which the licensees have recently sold Rambus ICs to systems companies, the particular licensees which account for revenue concentration have varied from period to period. These variations are expected to continue in the foreseeable future although the Company anticipates that revenue will continue to be concentrated in a limited number of licensees.

The royalties received by the Company are a function of the adoption of Rambus technology at the systems company level. Systems companies purchase semiconductors containing Rambus technology from Rambus licensees, and generally do not have a direct contractual relationship with the Company. The Company's licensees generally do not provide detail as to the identity of, or volume of Rambus ICs purchased by, particular systems companies. As a result, the Company faces difficulty in analyzing the extent to which its future revenues will be dependent upon particular systems companies.

The profitability first attained by the Company in fiscal 1997 was attributable partially to an increase in royalties from NEC, which the Company believes was largely due to royalties on Rambus technology incorporated into the Nintendo 64 video game system. For reasons described in the foregoing paragraph, the Company cannot precisely quantify this amount, because its licensees generally are not required to identify the particular products that incorporate, or the particular systems companies which purchase, Rambus ICs. The Company anticipates that sales from its licensees to Nintendo will continue to account for a substantial portion of royalties in fiscal 1998. Nintendo faces intense competitive pressure in the video game market, which is characterized by extreme volatility, frequent new product introductions and rapidly shifting consumer preferences, and there can be no assurance as to the unit volumes of Rambus ICs that will be purchased by Nintendo in the future or the level of royalty-bearing revenues that the Company's licensees will receive from Nintendo.

The Company believes its potential to generate royalties in fiscal 1998 is largely dependent on system sales by Nintendo and sales of multimedia controller chips by Cirrus Logic and Chromatic Research. None of these companies is under any obligation to continue using Rambus technology in its current product or to incorporate Rambus technology into its future products. There can be no assurance that a significant number of other systems companies will adopt the Company's technology or that the Company's dependence upon particular systems companies will decrease in the future.

Reliance upon DRAM Market; Declines in DRAM Price and Unit Volume per System. To date, a majority of the Company's royalties has been derived from the sale of logic ICs incorporating RACs. If the Company is successful in its strategy to penetrate the PC main memory market, the Company expects that royalties from the sale of RDRAMs will eventually account for the largest portion of royalties. Royalties on RDRAMs are based on the volumes and prices of RDRAMs manufactured and sold by the Company's licensees. The royalties received by the Company therefore are influenced by many of the risks faced by the DRAM market in general, including constraints on the volumes shipped during periods of shortage and reduced average selling prices. The DRAM market is intensely competitive and generally is characterized by declining average selling prices over the life of a generation of chips. Such price decreases, and the corresponding decreases in per unit royalties received by the Company, can be sudden and dramatic. Compounding the effect of price decreases is the fact that, under certain of the Company's license agreements, royalty rates decrease as a function of time or volume. With the introduction of each new generation of higher density RDRAMs, the Company generally expects higher prices resulting in higher royalties per device, but with correspondingly fewer devices required per system. There can be no assurance that decreases in DRAM prices or in the Company's royalty rates will not have a material adverse effect on the Company's business, results of operations and financial condition. There can be no assurance that the Company will be successful in maintaining or increasing its share of any market.

Rapid Technological Change; Reliance on Fundamental Technology; Importance of Timely New Product Development. The semiconductor industry is characterized by rapid technological change, with new generations of semiconductors being introduced periodically and with ongoing evolutionary improvements. Since beginning operations in 1990, the Company has derived all of its revenue from its interface technology and expects that this dependence on its fundamental technology will continue for the foreseeable future. Accordingly, broad acceptance of the Company's interface technology is critical to the Company's future success. The introduction or market acceptance of competing technology which renders the Company's interface technology less desirable or obsolete would have a rapid and material adverse effect on the Company's business, results of operations and financial condition. The announcement of new products by the Company, such as the "Direct Rambus" technology which is under development, could cause

licensees or systems companies to delay or defer entering into arrangements for the use of the Company's technology, which could have a material adverse effect on the Company's business, financial condition and results of operations.

The Company's operating results will depend to a significant extent on its ability to introduce enhancements and new generations of its interface technology which keep pace with other changes in the semiconductor industry and which achieve rapid market acceptance. The Company must continually devote significant engineering resources to addressing the ever-increasing need for memory bandwidth associated with increases in the speed of microprocessors and other controllers. Technical innovations of the type that will be required for the Company to be successful are inherently complex and require long development cycles, and there can be no assurance that the Company's development efforts will ultimately be successful. In addition, these innovations must be completed before changes in the semiconductor industry have rendered them obsolete, must be available when systems companies require these innovations, and must be sufficiently compelling to cause semiconductor manufacturers to enter into licensing arrangements with Rambus for the new technology. There can be no assurance that Rambus will be able to meet these requirements. Moreover, significant technological innovations generally require a substantial investment before their commercial viability can be determined. There can be no assurance that the Company will have the financial resources necessary to fund future development, that the Company's licensees will continue to share certain research and development costs with the Company as they have in the past, or that revenues from enhancements or new generations of the Company's technology, even if successfully developed, will exceed the costs of development.

Competition. The semiconductor industry is intensely competitive and has been characterized by price erosion, rapid technological change, short product life cycles, cyclical market patterns and increasing foreign and domestic competition. Most major DRAM manufacturers are developing higher-frequency versions of standard DRAMs such as EDO, SDRAMs and SGRAMs which compete with RDRAMs. These DRAM manufacturers, including most Rambus DRAM licensees, are much larger and have better access to financial and technical resources than Rambus. Additional high-speed DRAMs have recently been introduced by other semiconductor companies for specialized applications.

The Company believes that its principal competition may come from its licensees and prospective licensees, many of which are evaluating and developing products based on alternative technologies and are beginning to take a systems approach similar to the Company's in solving the application needs of systems companies. Many DRAM suppliers have indicated that they are developing a new technology called Double Data Rate ("DDR") SDRAMs, aimed at doubling the memory bandwidth from SDRAMs without increasing the clock frequency. In addition, a consortium including both large DRAM manufacturers and systems companies is promoting a specification for an alternative high-speed interface standard called SyncLink. To the extent that these alternative technologies provide comparable system performance at lower or similar cost than RDRAMs, or do not require the payment of comparable royalties, the Company's licensees and prospective licensees may adopt and promote the alternative technologies. There can be no assurance that the Company's future competition will not have a material adverse effect on the Company's business, results of operations and financial condition. In addition, certain semiconductor companies have recently introduced a new kind of IC which combines logic and DRAM on the same chip. Such chips, called "embedded DRAM," eliminate the need for any chip-to-chip interface and are primarily being used for graphics applications. Embedded DRAMs are well suited for applications where component space saving and power consumption are important, such as in the graphics subsystems of notebook PCs. There can be no assurance that competition from embedded DRAMs will not increase in the future.

Limited Protection of Intellectual Property; Likelihood of Potential Litigation. While the Company has an active program to protect its proprietary technology through the filing of patents, there can be no assurance that the Company's pending United States or foreign patent applications or any future United States or foreign patent applications will be approved, that any issued patents will protect the Company's intellectual property or will not be challenged by third parties, or that the patents of others will not have an adverse effect on the Company's ability to do business. Furthermore, there can be no assurance that others will not independently develop similar or competing technology or design around any patents that may be issued to the Company.

The Company attempts to protect its trade secrets and other proprietary information through agreements with licensees and systems companies, proprietary information agreements with employees and consultants and other security measures. The Company also relies on trademarks and trade secret laws to protect its intellectual property. Despite these efforts, there can be no assurance that others will not gain access to the Company's trade secrets, or that the Company can meaningfully protect its intellectual property. In addition, effective trade secret protection may be unavailable or limited in certain foreign countries. Although the Company intends to protect its rights vigorously, there can be no assurance that such measures will be successful.

Rambus believes that it is important to develop and maintain a uniform RDRAM memory interface standard. The Company's contracts generally prevent a licensee from using licensee-developed patented improvements related to Rambus technology to block other licensees from using the improvements or requiring them to pay additional royalties related to their use of Rambus interface technology. Specifically, the contracts generally require licensees to grant to Rambus a royalty-free cross-license on patented licensee intellectual property related to the implementation of Rambus interface technology, which Rambus sublicenses to other licensees that have entered into similar arrangements. Not all licensees have granted Rambus cross-licenses, and there is no assurance that such a blocking arrangement will not occur in the future.

The semiconductor industry is characterized by frequent litigation regarding patent and other intellectual property rights. While the Company has not received formal notice of any infringement of the rights of any third party, questions of infringement in the semiconductor field involve highly technical and subjective analyses. Litigation may be necessary in the future to enforce the Company's patents and other intellectual property rights, to protect the Company's trade secrets, to determine the validity and scope of the proprietary rights of others, or to defend against claims of infringement or invalidity, and there can be no assurance that the Company would prevail in any future litigation. Any such litigation, whether or not determined in the Company's favor or settled by the Company, would be costly and would divert the efforts and attention of the Company's management and technical personnel from normal business operations, which would have a material adverse effect on the Company's business, financial condition and results of operations. Adverse determinations in litigation could result in the loss of the Company's proprietary rights, subject the Company to significant liabilities, require the Company to seek licenses from third parties or prevent the Company from licensing its technology, any of which could have a material adverse effect on the Company's business, financial condition and results of operations.

In any potential dispute involving the Company's patents or other intellectual property, the Company's licensees could also become the target of litigation. While the Company generally does not indemnify its licensees, some of its license agreements require the Company to provide technical support and information to a licensee which is involved in litigation involving use of Rambus technology. The Company is bound to indemnify certain licensees under the terms of certain license agreements, and the Company may agree to indemnify others in the future. The Company's support and indemnification obligations could result in substantial expenses to the Company. In addition to the time and expense required for the Company to supply such support or indemnification to its licensees, a licensee's development, marketing and sales of Rambus ICs could be severely disrupted or shut down as a result of litigation, which in turn could have a material adverse effect on the Company's business, financial condition and results of operations.

Risks Associated with International Licenses. To date, companies based in Japan and Korea have accounted for the substantial majority of the Company's revenues, and nearly all of its international revenues. In fiscal 1997, 1996, and 1995, international revenues constituted approximately 80%, 86% and 90% of the Company's total revenues, respectively. The Company expects that revenues derived from international licensees will continue to represent a significant portion of its total revenues in the future. All of the revenues from international licensees have to date been denominated in United States dollars. However, to the extent that such licensees' sales to systems companies are not denominated in United States dollars, any royalties that the Company receives as a result of such sales could be subject to fluctuations in currency exchange rates. In addition, if the effective price of Rambus ICs sold to the Company's foreign licensees were to increase as a result of fluctuations in the exchange rate of the relevant currencies, demand for Rambus ICs could fall, which in turn would reduce the Company's royalties. The Company does not use derivative instruments to hedge foreign exchange rate risk. In addition, international operations and demand for the products of the Company's licensees are subject to a variety of risks, including tariffs, import restrictions and other trade barriers, changes in regulatory requirements, longer accounts receivable payment cycles, adverse tax consequences, export license requirements, foreign government regulation, political and economic instability and changes in diplomatic and trade relationships. In particular, the laws of certain countries in which the Company currently licenses or may in the future license its technology require significant withholding taxes on payments for intellectual property, which the Company may not be able to offset fully against its United States tax obligations. The Company is subject to the further risk of the tax authorities in those countries recharacterizing certain engineering fees as license fees, which could result in increased tax withholdings and penalties. The Company's licensees are subject to many of the risks described above with respect to systems companies which are located in different countries, particularly video game and PC manufacturers located in Asia and elsewhere. There can be no assurance that one or more of the risks associated with international licenses of the Company's technology will not have a direct or indirect material adverse effect on the Company's business, financial condition and results of operations. Moreover, the laws of certain foreign countries in which the Company's technology is or may in the future be licensed may not protect the Company's intellectual

property rights to the same extent as the laws of the United States, thus increasing the possibility of infringement of the Company's intellectual property.

Dependence on Key Personnel. The Company's success depends to a significant extent on its ability to identify, attract, motivate and retain qualified technical, sales, marketing, finance and executive personnel. Because the future success of the Company is dependent upon its ability to continue enhancing and introducing new generations of such technology, the Company is particularly dependent upon its ability to identify, attract, motivate and retain qualified engineers with the requisite educational background and industry experience. Competition for qualified engineers, particularly those with significant industry experience, is intense. The Company is also dependent upon its senior management personnel, most of whom have worked together at the Company for several years. The loss of the services of any of the senior management personnel or a significant number of the Company's engineers could be disruptive to the Company's development efforts or business relationships and could have a material adverse effect on the Company's business, financial condition and results of operations. The Company generally does not enter into employment contracts with its employees and does not maintain key person life insurance.

Management of Expanded Operations. The Company is not experienced in managing rapid growth. The Company may not be equipped to successfully manage any future periods of rapid growth or expansion, which could be expected to place a significant strain on the Company's limited managerial, financial, engineering and other resources. The Company's licensees and systems companies rely heavily on the Company's technological expertise in designing, testing and manufacturing products incorporating the Company's interface technologies. Relationships with new licensees or systems companies generally require significant engineering support. As a result, any increases in adoption of the Company's technology will increase the strain on the Company's resources, particularly the Company's engineers. Any delays or difficulties in the Company's research and development process caused by these factors or others could make it difficult for the Company to develop future generations of its interface technology and to remain competitive. In addition, the rapid rate of hiring new employees could be disruptive and adversely affect the efficiency of the Company's research and development process. The rate of the Company's future expansion, if any, in combination with the complexity of the technology involved in the Company's licensee-based business model, may demand an unusually high level of managerial effectiveness in anticipating, planning, coordinating and meeting the operational needs of the Company as well as the needs of the licensees and systems companies. Additionally, the Company may be required to reorganize its managerial structure in order to more effectively respond to the needs of customers. Given the small pool of potential licensees and target systems companies, the adverse effect on the Company resulting from a lack of effective management in any of these areas will be magnified. Inability to manage the expansion of the Company's business would have a material adverse effect on its business, financial condition and res

Item 2. Properties

The Company leases approximately 38,000 square feet in one building in Mountain View, California for its U.S. engineering, marketing and administrative operations. The principal lease expires in 2005, with an option to extend the lease for an additional five years. The Company also leases space in Tokyo for an office which provides sales and technical support to systems companies in Japan. The Company believes that it will not have difficulty in securing additional facilities if required.

Item 3. Legal Proceedings

The Company is subject to various legal proceedings and claims, either asserted or unasserted, which arise in the ordinary course of business. While the outcome of these claims cannot be predicted with certainty, management does not believe that the outcome of any of these legal matters will have a material adverse effect on the Company's business, operating results or financial condition.

Item 4. Submission of Matters to a Vote of Security Holders

No matters were submitted to a vote of security holders during the fourth quarter of fiscal year 1997.

PART II

Item 5. Market for Registrant's Common Equity and Related Stockholder Matters

(a) The Company's initial public offering of its Common Stock occurred on May 13, 1997 at a price of \$12.00 per share. The Company's Common Stock is listed on the Nasdaq National Market under the symbol "RMBS." For the period from commencement of trading through June 30, 1997 the high and low prices reported by Nasdaq were \$53.00 and \$22.50, respectively. For the quarter ending September 30, 1997 the high and low prices were \$86.75 and \$44.25, respectively.

As of November 30, 1997, there were 427 holders of record of the Company's Common Stock. Because many of the Company's shares of Common Stock are held by brokers and other institutions on behalf of stockholders, the Company is unable to estimate the total number of stockholders represented by these record holders. The Company has never paid or declared any cash dividends on its Common Stock or other securities and does not anticipate paying cash dividends in the foreseeable future.

(b) The Company completed its initial public offering pursuant to a Registration Statement on Form S-1 (File No. 333-22885) declared effective by the Securities and Exchange Commission on May 13, 1997 and issued 3,162,500 shares (including the underwriter's over-allotment option) of its Common Stock, par value \$0.001 per share, to the public at a price of \$12.00 per share. The managing underwriters for the initial public offering were Morgan Stanley & Co. Incorporated, Hambrecht & Quist LLC and Robertson, Stephens & Company LLC. The offering has been terminated and all shares have been sold. The Company received approximately \$34,117,000 of cash from the initial public offering, net of underwriting discounts, commissions, and other offering costs and expenses.

Since August 22, 1997 (the date of the Company's Initial Report on Form SR), the Company used approximately \$4.3 million of the net proceeds from the Company's initial public offering to fund operating expenses, \$0.7 million to purchase and install machinery and equipment, and \$0.1 million to repay indebtedness. The Company has placed approximately \$21.8 million in temporary investments pending future use.

No payments constituted direct or indirect payments to directors, officers, general partners of the issuer or their associates, or to persons owning ten percent or more of any class of equity securities of the issuer or to affiliates of the issuer.

Item 6. Selected Consolidated Financial Data

	Year Ended September 30,				
	1997	1996	1995	1994	1993
		(in thousa	nds except per sl	nare data)	
Operations:					
Total revenues	\$ 26,015	\$ 11,270	\$ 7,364	\$ 5,000	\$ 3,371
Operating income (loss)	1,954	(4,568)	(6,053)	(6,197)	(5,962)
Net income (loss)	1,981	(4,415)	(7,020)	(6,629)	(6,336)
Net income (loss) per share	\$ 0.09	\$ (0.73)	\$ (1.24)	\$ (1.29)	\$ (1.44)
Financial Position (at year end):					
Total assets	\$ 87,878	\$ 12,868	\$ 18,307	\$ 8,395	\$ 7,807
Total debt (capital lease obligations)	512	1,297	1,616	1,655	1,698

Item 7. Management's Discussion And Analysis Of Financial Condition And Results Of Operations

Overview

Since its founding in March 1990, Rambus has been engaged in the development of high-speed chip-to-chip interface technology which can be used to enhance the performance and cost-effectiveness of consumer electronics, computer systems and other electronic systems. The Company neither manufactures nor sells semiconductors incorporating the Company's technology. Rather, the Company licenses its technology on a nonexclusive and worldwide basis to semiconductor companies which manufacture and sell RDRAMs and logic ICs containing RACs to systems companies which have adopted Rambus technology. Systems companies are not required to obtain a Rambus license to incorporate Rambus ICs into their products.

Revenues. The Company's revenues consist of contract fees and royalties. Contract fees are comprised of license fees, engineering service fees and nonrefundable, prepaid royalties, and represented substantially all of the Company's revenues through fiscal 1996 and approximately 78% of the Company's revenues in fiscal 1997. The Company's contracts generally require a licensee to pay a contract fee to Rambus typically ranging from a few hundred thousand dollars for a narrow license covering a single logic product to millions of dollars for a license with broad coverage of Rambus technology. Part of these fees may be due upon the achievement of certain milestones, such as provision of certain deliverables by Rambus or production of chips by the licensee. All contract fees are nonrefundable.

In a few cases, the Company has received nonrefundable, prepaid royalties which offset the earliest royalty payments otherwise due from the licensee. As of September 30, 1997, \$3.1 million of such nonrefundable, prepaid royalties had offset initial royalties, and the Company had a balance of \$3.7 million remaining to be offset against future royalties.

Substantially all of the license fees, engineering service fees and nonrefundable, prepaid royalties are bundled together as contract fees because the Company generally does not provide or price these components separately. The contracts also generally include rights to upgrades and enhancements. Accordingly, Rambus recognizes contract revenues ratably over the period during which post-contract customer support is expected to be provided. The excess of contract fees received over contract revenue recognized is shown on the Company's balance sheet as "deferred revenue." As of September 30, 1997, the Company's deferred revenue was \$54.5 million, substantially all of which is scheduled to be recognized in varying amounts over the next five years.

Royalties, which are generally a percentage of the revenues received by a licensee on its sales of the Company's ICs, are normally payable by the licensee on sales occurring during the life of the Company's patents being licensed. For a typical application of the Company's technology, the Company receives royalties from the sale of both RDRAMs and logic ICs containing RACs. Royalty rates range up to a maximum of approximately 2.5% for RDRAMs and a maximum of approximately 5% for logic ICs, and in some cases may decline based on the passage of time or on the total volume of the Company's ICs shipped by a licensee. The exact rate and structure of a royalty arrangement with a particular licensee depend on a number of factors, including the amount of the contract fee paid by the licensee and the marketing and engineering commitment made by the licensee.

Rambus recognizes royalties from a licensee in the quarter in which it receives the report detailing shipments of Rambus ICs by such licensee in the prior quarter. While the Company does not expect a significant increase in royalty revenue in the near term, as prepaid royalties are offset and as Rambus ICs are incorporated into additional applications the Company believes that royalties will become an increasing portion of revenues over the long term. To date, a majority of the Company's royalties has been derived from the sale of logic ICs incorporating RACs. If the Company is successful in its strategy to penetrate the PC main memory market segment, the Company expects that royalties from the sale of RDRAMs will eventually account for the largest portion of royalties.

As of September 30, 1997, the Company had 21 licensees. Because all of the Company's revenues are derived from its relatively small number of licensees, the Company's revenues tend to be highly concentrated. In fiscal 1997, 1996 and 1995 revenues from the top five licensees accounted for approximately 63%, 65% and 70% of the Company's revenues, respectively. In fiscal 1997, NEC accounted for approximately 29% of revenues and LG Semicon accounted for approximately 10% of revenues. The Company expects that it will continue to experience significant revenue concentration for the foreseeable future. However, the particular licensees which account for revenue concentration may vary from period to period depending on the addition of new contracts, the expiration of deferred revenue schedules

under existing contracts, and the volumes and prices at which the licensees sell Rambus ICs to systems companies in any given period.

The royalties received by the Company are also a function of the adoption of Rambus technology by systems companies and the acceptance of the systems companies' products by end users. The Company generally does not have a direct contractual relationship with systems companies, and the royalty reports submitted by the Company's licensees generally do not disclose the identity of, or unit volume of Rambus ICs purchased by, particular systems companies. As a result, it is difficult for the Company to predict the extent to which its future revenues will be dependent upon particular systems companies.

To date, companies based in Japan and Korea have accounted for the substantial majority of the Company's revenues, and nearly all of its international revenues. In fiscal 1997, 1996 and 1995, international revenues comprised approximately 81%, 86% and 90% of the Company's net revenues, respectively. The Company expects that revenues derived from international licensees will continue to represent a significant portion of its total revenues in the future. All of the revenues from international licensees to date have been denominated in United States dollars.

Expenses. Since the Company's inception in March 1990, its engineering costs (which consist of cost of contract revenues and research and development expenses) and marketing, general and administrative expenses have continually increased as the Company has added personnel and ramped up its activities in these areas. Engineering costs and marketing, general and administrative expenses generally have decreased as a percentage of revenues throughout this period due to the relatively rapid revenue base expansion which the Company experienced as it began entering into license agreements. The Company intends to continue making significant expenditures associated with engineering, marketing and administration, and expects that these costs and expenses will continue to be a significant percentage of revenues in future periods. Whether such expenses increase or decrease as a percentage of revenues will be substantially dependent upon the rate at which the Company's revenues change.

Engineering costs are allocated between cost of contract revenues and research and development expenses. Cost of contract revenues is determined based on the portion of engineering costs which have been incurred during the period for the adaptation of Rambus interface technology for specific licensee processes. The balance of engineering costs, incurred for general development of Rambus technology, is charged to research and development. In a given period, the allocation of engineering costs between these two components is a function of the timing of development and implementation cycles. As a generation of technology matures from the development stage through implementation, the majority of engineering costs shifts from research and development expenses to cost of contract revenues. Engineering costs are recognized as incurred and do not correspond to the recognition of revenues under the related contracts.

Marketing, general and administrative expenses include salaries, travel expenses and costs associated with trade shows, advertising, finance and other marketing and administrative efforts. Costs of technical support for systems companies, including applications engineering, are also charged to marketing, general and administrative expense. Consistent with the Company's business model, sales and marketing activities are focused on developing relationships with potential licensees and on participating with existing licensees in marketing, sales and technical efforts directed to systems companies. In many cases, Rambus must dedicate substantial resources to market to and support systems companies. Due to the long business development cycles faced by the Company and the semi-fixed nature of administrative expenses, marketing, general and administrative expenses in a given period generally are unrelated to the level of revenues in that period or in recent or near-term future periods.

Taxes. The Company reports certain items of income and expense for financial statement purposes in different years than they are reported in the tax return. Specifically, the Company reports contract fees and royalties when received for tax purposes, as required by tax law. For financial reporting purposes, the Company records revenues from contract fees over the period post-contract support is expected to be provided. Accordingly, the Company's net operating loss for tax purposes is less than the cumulative operating deficit recorded for financial statement purposes.

Results of Operations

The following table sets forth, for the fiscal years indicated, the percentage of total revenues represented by certain items reflected in the Company's consolidated statements of operations:

	1997	1996	1995
Revenues:			
Contract revenues	77.6%	99.4 %	100.0%
Royalties	22.4	0.6	
Total revenues	100.0%	100.0 %	100.0 %
	=====	=====	=====
Costs and expenses:			
Cost of contract revenues	21.1	42.8	71.1
Research and development	37.7	46.3	42.3
Marketing, general and administrative	33.7	51.4	68.8
Total costs and expenses	92.5	140.5	182.2
Operating income (loss)	7.5	(40.5)	(82.2)
Other income	5.2	3.9	4.4
Income (loss) before income taxes	12.7	(36.6)	(77.8)
Provision for income taxes	5.1	2.6	17.5
Net income (loss)	7.6%	(39.2)%	(95.3)%
	======	=====	=====

Revenues. Revenues were \$26.0 million, \$11.3 million and \$7.4 million in fiscal 1997, 1996 and 1995, respectively. While the Company received its first royalties in fiscal 1996, most of the 53.0% increase in revenues compared to fiscal 1995 was due to a combination of new contracts and a full year of revenues from contracts booked during fiscal 1995. In fiscal 1997, contract revenues increased 80.2% to \$20.2 million compared to fiscal 1996 as a result of the Company's entering into contracts with new licensees and additional contracts with current licensees for new developments, especially for an extension of the Company's technology to provide a higher bandwidth interface for future PC main memory applications.

The Company recorded its first significant royalties in fiscal 1997, a total of \$5.8 million or 22.4% of total revenues. During this period, royalties were primarily from NEC and, the Company believes, were largely based on sales of Rambus ICs for use in the Nintendo 64 home video game system. The Company anticipates that its potential to generate royalties in the next several quarters is largely dependent on system sales by Nintendo and, to a lesser extent, sales by Cirrus Logic and Chromatic Research of logic ICs incorporating RACs for PC graphics and multimedia applications. Nintendo faces intense competitive pressure in the home video game market, which is characterized by extreme volatility, frequent new product introductions and rapidly shifting consumer preferences, and there can be no assurance as to the unit volumes of Rambus ICs that will be purchased by Nintendo in the future or the level of royalty-bearing revenues that the Company's licensees will receive from Nintendo. None of the systems companies currently incorporating Rambus interface technology into their products is contractually obligated to continue using Rambus ICs.

Engineering Costs. Engineering costs, consisting of cost of contract revenues and research and development expenses, were \$15.3 million, \$10.0 million and \$8.4 million, which represented 58.8%, 89.1% and 113.4% of revenues, in fiscal 1997, 1996 and 1995, respectively. The increase in engineering costs was due primarily to an increase in engineering personnel, and the decrease as a percentage of revenues was primarily the result of the Company's growth in revenues.

Cost of Contract Revenues. Cost of contract revenues was \$5.5 million, \$4.8 million and \$5.2 million, which represented 21.1%, 42.8% and 71.1% of revenues, in fiscal 1997, 1996 and 1995, respectively. Cost of contract revenues decreased 7.9% in fiscal 1996 compared to fiscal 1995 due to several of the Company's licensees reaching the production phase during fiscal 1996, thus reducing the implementation, customization, support and enhancement services required of the Company. Cost of contract revenues increased 13.9% in fiscal 1997 compared to fiscal 1996 due to the need for the Company to support several additional licensees. The decrease in cost of contract revenues as a percentage of revenues from fiscal 1995 to fiscal 1997 was primarily the result of the Company's growth in revenues. The Company believes that the level of cost of contract revenues will continue to fluctuate in the future, both in absolute dollars and as a percentage of revenues, as new generations of Rambus ICs go through the normal development and implementation phases.

Research and Development. Research and development expenses were \$9.8 million, \$5.2 million and \$3.1 million, which represented 37.7%, 46.3% and 42.3% of revenues, in fiscal 1997, fiscal 1996 and fiscal 1995, respectively. Research and development expenses increased 67.4% in fiscal 1996 compared to fiscal 1995 and 88.1% in fiscal 1997 compared to fiscal 1996 due to development efforts related to a new generation of 64 Mbit RDRAMs and associated RACs, including an extension of the Company's technology to provide a higher bandwidth interface for future PC main memory applications. The higher costs were primarily due to increased engineering personnel. The Company expects research and development expenses to increase over time as it enhances and improves its technology and applies it to new generations of ICs. The rate of increase of, and the percentage of revenues represented by, research and development expenses in the future will vary from period to period based on the research and development projects underway and the change in engineering headcount in any given period, as well as the rate of change in the Company's total revenues.

Marketing, General and Administrative. Marketing, general and administrative expenses were \$8.8 million, \$5.8 million and \$5.1 million, which represented 33.7%, 51.4% and 68.8% of revenues, in fiscal 1997, 1996 and 1995, respectively. The increase in absolute dollars was primarily due to a buildup of the marketing and sales teams in both the U.S. and Japan as well as increased costs associated with applications engineering and other technical support provided to systems companies. The decrease in marketing, general and administrative expenses as a percentage of revenues reflects the increased revenue base. The Company expects marketing, general and administrative expenses to increase in the future as the Company puts additional effort into marketing its technology and assisting systems companies to adapt this technology to new generations of products and as a result of additional cost associated with becoming a public company. The rate of increase of, and the percentage of revenues represented by, marketing, general and administrative expenses in the future will vary from period to period based on the trade shows, advertising and other sales and marketing activities undertaken and the change in sales, marketing and administrative headcount in any given period, as well as the rate of change in the Company's total revenues.

Other Income. Other income consists primarily of interest income from the Company's short-term cash investments, offset by interest expense on leases and other equipment financing. Other income was \$1.3 million, \$439,000 and \$322,000, which represented 5.2%, 3.9% and 4.4% of revenues, in fiscal 1997, 1996 and 1995, respectively. The increase in absolute dollars was due to interest on higher average cash investment balances, offset by interest associated with leased equipment. The Company expects net other income to increase in the future due to additional interest income on higher cash balances.

Provision for Income Taxes. The Company recorded a provision for income taxes of \$1.3 million in fiscal 1997, \$286,000 in fiscal 1996 and \$1.3 million in fiscal 1995. Whereas the fiscal 1995 and 1996 provisions primarily represent foreign withholding tax on license revenue, the 1997 provision was based on an estimated federal and state combined rate of 40% on income before income taxes.

At September 30, 1997 the Company had deferred tax assets of approximately \$20 million, primarily relating to the difference between tax and book treatment of deferred revenue. The Company has established a partial valuation allowance against its deferred tax assets due to the uncertainty surrounding the realization of such assets. If it is determined that it is more likely than not that the deferred tax assets are realizable, the valuation allowance will be reduced.

Other

The Company has granted to Intel Corporation a warrant for the purchase of 1,000,000 shares of Common Stock at an exercise price of \$10.00 per share. The warrant will become exercisable only upon the achievement of certain milestones, which will result in a charge to the statement of operations at the time of achievement of the milestones based on the fair value of the warrant.

Liquidity and Capital Resources

Prior to the initial public offering of its common stock, completed in May 1997, the Company funded its operations primarily from contract payments and, to a lesser extent, the private sale of equity. Including net proceeds of approximately \$34 million from its initial public offering, the Company had cash and cash equivalents and marketable securities of \$71.8 million as of September 30, 1997 and total working capital of \$49.7 million, including a short-term component of deferred revenue of \$24.5 million. Deferred revenue represents the excess of cash received from licensees

over revenue recognized on license contracts, and the short-term component represents the amount of this deferred revenue to be recognized over the next twelve months. Without the short-term component of deferred revenue, working capital would have been \$74.2 million at September 30, 1997.

The Company's operating activities provided net cash of \$31.9 million in fiscal 1997, used net cash of \$3.5 million in fiscal 1996 and provided net cash of \$1.3 million in fiscal 1995. Cash generated by operations in fiscal 1995 was primarily the result of an increase in deferred revenue offset by the net loss, adjusted for non-cash items and an increase in accounts receivable. Cash used by operations in fiscal 1996 was due to the net loss, adjusted for non-cash items, and a decrease in deferred revenue offset by a decrease in accounts receivable. Cash generated by operations in fiscal 1997 was primarily the result of an increase in deferred revenue, net income adjusted for non-cash items, and an increase in taxes payable, accrued payroll and other liabilities, offset by increases in deferred tax assets and prepaids and other current assets. Prepaids and other current assets increased primarily due to increased interest receivable. The increase in deferred revenue for fiscal 1997 was due to new billings on license contracts in excess of revenues recognized thereon.

Net cash used in investing activities was \$47.2 million and \$10.4 million in fiscal 1997 and fiscal 1995, respectively; net cash provided by investing activities was \$3.9 million in fiscal 1996. Investing activities have consisted primarily of net purchases of marketable securities and purchases of property and equipment.

Net cash provided by financing activities were \$35.2 million and \$8.5 million in fiscal 1997 and fiscal 1995, respectively; net cash used in financing activities was \$546,000 in fiscal 1996. Financing activities in fiscal 1995 consisted primarily of sales of convertible preferred stock and preferred stock purchase rights offset by principal payments on capital leases. Net cash used in financing activities in fiscal 1996 consisted of principal payments on capital leases offset by proceeds from the sale of common stock. Net cash provided by financing activities in fiscal 1997 was primarily due to completion of the Company's initial public offering of its common stock.

The Company presently anticipates that existing cash balances will be adequate to meet its cash needs for at least the next 12 months.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

None.

Item 8. Financial Statements and Supplementary Data

See Item 14 of this Form 10-K for required financial statements and supplementary data.

Item 9. Changes in and Disagreements With Accountants on Accounting and Financial Disclosure

None.

PART III

Certain information required by Part III is omitted from this Report on Form 10-K since the Registrant will file its definitive Proxy Statement for its next Annual Meeting of Stockholders, pursuant to Regulation 14A of the Securities Exchange Act of 1934, as amended (the "Proxy Statement"), not later than 120 days after the end of the fiscal year covered by this Report, and certain information to be included in the Proxy Statement is incorporated herein by reference.

Item 10. Directors and Executive Officers of the Registrant

The information required by this item concerning the Company's directors and executive officers is incorporated by reference to the information set forth in the sections entitled "Executive Officer Compensation - Executive Officers of the Company" in the Company's Proxy Statement for the 1998 Annual Meeting of Stockholders to be filed with the Commission within 120 days after the end of the Company's fiscal year ended September 30, 1997.

Item 11. Executive Compensation

The information required by this item regarding executive compensation is incorporated by reference to the information set forth in the sections entitled "Proposal One - Election of Directors - Director Compensation" and "Executive Officer Compensation" in the Company's Proxy Statement for the 1998 Annual Meeting of Stockholders to be filed with the Commission within 120 days after the end of the Company's fiscal year ended September 30, 1997.

Item 12. Security Ownership of Certain Beneficial Owners and Management

The information required by this item regarding security ownership of certain beneficial owners and management is incorporated by reference to the information set forth in the section entitled "Share Ownership by Principal Stockholders and Management" in the Company's Proxy Statement for the 1998 Annual Meeting of Stockholders to be filed with the Commission within 120 days after the end of the Company's fiscal year ended September 30, 1997.

Item 13. Certain Relationships and Related Transactions

The information required by this item regarding certain relationships and related transactions is incorporated by reference to the information set forth in the section entitled "Certain Transactions with Management" in the Company's Proxy Statement for the 1998 Annual Meeting of Stockholders to be filed with the Commission within 120 days after the end of the Company's fiscal year ended September 30, 1997.

PART IV

Item 14. Exhibits, Financial Statement Schedules, and Reports on Form 8-K

	•	ug
(a) (1)	Financial Statements	
	The following consolidated financial statements of the Registrant and Report of Coopers & Lybrand L.L.P., Independent Accountants, are included herewith:	
	Report of Coopers & Lybrand L.L.P., Independent Accountants	22
	Consolidated Balance Sheets as of September 30, 1997 and 1996	23
	Consolidated Statements of Operations for the years ended September 30, 1997, 1996, and 1995	24
	Consolidated Statements of Stockholders' Equity (Deficit) for the years ended September 30, 1997, 1996, and 1995	25
	Consolidated Statements of Cash Flows for the years ended September 30, 1997, 1996, and 1995	26
	Notes to Consolidated Financial Statements	27
	Consolidated Supplementary Financial Data	40
(a) (2)	Financial Statement Schedules	
	Schedule II - Valuation and Qualifying Accounts	42

This financial statement schedule of the Company for each of the years ended September 30, 1997, 1996 and 1995 is filed as part of this Form 10-K and should be read in conjunction with the Consolidated Financial Statements, and related notes thereto, of the Company. All other financial statement schedules have been omitted because the required information is not present or not present in amounts sufficient to require submission of the schedule or because the information required is included in the consolidated financial statements or notes thereto.

Item 14. Exhibits, Financial Statement Schedules, and Reports on Form 8-K (Continued)

(a) (3)	Exhibits
Exhibit Number	Description of Document
3.1	Amended and Restated Certificate of Incorporation of Registrant filed May 29, 1997.
3.2(1)	Amended and Restated Bylaws of Registrant dated February 28, 1997.
4.1(1)	Form of Registrant's Common Stock Certificate.
4.2(1)	Amended and Restated Information and Registration Rights Agreement, dated as of January 7, 1997, between Registrant and the parties indicated therein.
4.3(1)	Form of Preferred Shares Rights Agreement dated April 1, 1997.
4.4(1)	Common Stock Purchase Warrant dated January 7, 1997.
10.1(1)	Form of Indemnification Agreement entered into by Registrant with each of its directors and executive officers.
10.2(1)(2) Semiconductor Technology License Agreement, dated as of July 4, 1991, between Registrant and NEC Corporation.

10.2.1(1)(2) Amendment No. 1 to Semiconductor Technology License Agreement, dated as of April 28, 1995, between Registrant and NEC Corporation.

10.2.2(1)(2) Supplement No. 1 to Semiconductor Technology License Agreement, dated as of February 25, 1993, between Registrant and NEC Corporation.

10.2.3(1)(2) Supplement No. 2 to Semiconductor Technology License Agreement, dated as of July 28, 1994, between Registrant and NEC Corporation.

10.2.4(1)(2) Supplement No. 4 to Semiconductor Technology License Agreement, dated as of August 31, 1995, between Registrant and NEC Corporation.

10.2.5(1)(2) Supplement No. 5 to Semiconductor Technology License Agreement, dated as of November 14, 1994, between Registrant and NEC Corporation.

10.2.6(1)(2) Supplement No. 6 to Semiconductor Technology License Agreement, dated as of December 27, 1994, between Registrant and NEC Corporation.

10.2.7(1)(2) Supplement No. 8 to Semiconductor Technology License Agreement, dated as of September 27, 1996, between Registrant and NEC Corporation.

10.2.8(1)(2) Supplement No. 9 to Semiconductor Technology License Agreement, dated as of September 10, 1996, between Registrant and NEC Corporation.

10.2.9(1)(2) Supplement No. 10 to Semiconductor Technology License Agreement, dated as of February 27, 1997, between Registrant and NEC Corporation.

10.2.10(1)(2) Supplement No. 11 to Semiconductor Technology License Agreement, dated as of March 4, 1997, between Registrant and NEC Corporation.

10.2.11(2)(3) TRAC Addendum to Supplement No. 11 to Semiconductor Technology License Agreement, dated as of April 23, 1997, between Registrant and NEC Corporation.

10.2.12(2)(3) Supplement No. 12 to Semiconductor Technology License

10.3(1)(2) Semiconductor Technology Agreement, dated as of December 9, 1994, between Registrant and Goldstar Electron Co., Ltd.

10.3.1(1)(2) First Amendment to Semiconductor Technology Agreement, dated as of June 30, 1995, between Registrant and Goldstar Electron Co., Ltd.

Item 14. Exhibits, Financial Statement Schedules, and Reports on Form 8-K (Continued)

(a) (3) Exhibits (Continued)

10.3.2(1)(2) Amendment No. 2 to Semiconductor Technology Agreement, dated as of March 20, 1996, between Registrant and Goldstar Electron Co., Ltd.

10.3.3(1)(2) Amendment No. 3 to Semiconductor Technology Agreement, dated as of June 12, 1996, between Registrant and Goldstar Electron Co., Ltd.

10.3.4(2)(3) Amendment No. 4 to Semiconductor Technology Agreement, dated as of May 21, 1997, between Registrant and Goldstar Electron Co., Ltd.

10.3.5(2)(3) Amendment No. 5 to Semiconductor Technology Agreement, dated as of August 29, 1997, between Registrant and Goldstar Electron Co., Ltd.

10.3.6(2)(3) Amendment No. 6 to Semiconductor Technology Agreement, dated

	as of August 28, 1997, between Registrant and Goldstar Electron Co., Ltd.
10.4(1)(2)	Semiconductor Technology License Agreement, dated as of November 15, 1996, between Registrant and Intel Corporation.
10.5(1)	1990 Stock Plan, as amended, and related forms of agreements.
10.6(1)	1997 Stock Plan and related forms of agreements.
10.7(1)	1997 Employee Stock Purchase Plan and related forms of agreements.
10.8(1)	Standard Office Lease, dated as of March 10, 1991, between Registrant and South Bay/Latham.
10.9(1)	Form of Promissory Note between the Registrant and certain executive officers.
11.1	Statement re: Computation of Net Income (Loss) Per Share.
21.1(1)	Subsidiaries of the Registrant.
23.1	Consent of Coopers & Lybrand L.L.P., Independent Accountants.
27.1	Financial Data Schedule.

⁽¹⁾ Incorporated by reference to Registration Statement No. 333-22885.

(b) Reports on Form 8-K

No Current Report on Form 8-K was filed in the fourth quarter ended September 30, 1997.

⁽²⁾ Confidential treatment has been requested with respect to certain portions of this exhibit. Omitted portions have been filed separately with the Securities and Exchange Commission.

⁽³⁾ To be filed by amendment.

REPORT OF INDEPENDENT ACCOUNTANTS

To the Board of Directors and Stockholders Rambus Inc. and Subsidiary

We have audited the accompanying consolidated balance sheets of Rambus Inc. and Subsidiary as of September 30, 1997 and 1996, and the related consolidated statements of operations, stockholders' equity (deficit) and cash flows for each of the three years in the period ended September 30, 1997. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of Rambus Inc. and Subsidiary as of September 30, 1997 and 1996, and the results of their operations and their cash flows for each of the three years in the period ended September 30, 1997 in conformity with generally accepted accounting principles.

COOPERS & LYBRAND L.L.P.

San Jose, California October 10, 1997

September 30,

	Septembe	1 30,
	1997	1996
ASSETS Current assets:		
Cash and cash equivalents	\$ 20,641	\$ 742
Marketable securities	51,184	7,812
Accounts receivable, less allowance for doubtful accounts of	,	.,
\$10 in 1997 and \$8 in 1996	925	718
Deferred tax assets	5,974	
Prepaids and other current assets	2,033	873
Total current assets	80,757	10,145
Property and equipment, net	4,338	2,340
Investment Other assets	986 1,797	383
Other assets	1,797	383
Total assets	\$ 87,878	\$ 12,868
	======	=======
LIABILITIES		
Current liabilities:		
Accounts payable	\$ 378	\$ 228
Income taxes payable	3,292	84
Accrued salaries and benefits	1,454	338
Other accrued liabilities	1,042	587
Current portion of: Capital lease obligations	382	753
capital lease obligations Deferred revenue	24,473	13,082
Deletied levenue	24,473	
Total current liabilities	31,021	15,072
Capital lease obligations, less current portion	130	544
Deferred revenue, less current portion	30,066	9,396
Total liabilities	61,217	25,012
Commitments (Note 8)		
STOCKHOLDERS' EQUITY (DEFICIT)		
Convertible preferred stock, \$.001 par value:		
Authorized: 5,000,000 shares;		
Issued and outstanding: no shares at September 30, 1997 and		
11,296,822 shares at September 30, 1996		11
Common stock, \$.001 par value:		
Authorized: 60,000,000 shares;		
Issued and outstanding: 22,310,499 shares at September 30, 1997 and 5,758,749 shares at September 30, 1996	22	6
Additional paid-in capital	59,865	22,330
Stockholders' notes receivable	(680)	22,330
Accumulated deficit	(32,511)	(34,492)
Cumulative translation adjustment	(35)	(34,4)2)
Total stockholders' equity (deficit)	26,661	(12,144)
Total liabilities and stockholders' equity (deficit)	\$ 87,878	\$ 12,868
	======	======

See Notes to Consolidated Financial Statements.

CONSOLIDATED STATEMENTS OF OPERATIONS (in thousands, except per share amounts)

Year Ended September 30, 1997 1996 Revenues: \$ 20,186 \$ 11,205 \$ 7,364 Contract revenues Royalties 5,829 65 26,015 11,270 Total revenues 7,364 Costs and expenses: Cost of contract revenues 5,491 4,821 5,236 Research and development 9,815 5,218 3,117 Marketing, general and administrative 8,755 5,799 5,064 Total costs and expenses 24,061 15,838 13,417 1,954 1,536 (4,568) (6,053) Operating income (loss) Interest and other income, net 737 (194) (298) (297) Interest expense (4,129) 3,296 (5,731) Income (loss) before income taxes Provision for income taxes 1,315 286 1,289 Net income (loss) \$ 1,981 \$ (4,415) \$ (7,020) ======= Net income (loss) per share \$ 0.09 \$ (0.73) \$ (1.24) ====== ====== ====== 21,711 6,088 Number of shares used in per share calculations 5,665 ======= -----=======

See Notes to Consolidated Financial Statements.

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY (DEFICIT)

for the years ended September 30, 1997, 1996 and 1995 $_{\rm (in\ thousands)}$

	Conver Preferre		ck				Common Stock					l Stockholders		
	Shares		ount	Shares	Amo	unt	Paid-In Capital	Receivable D		Accumulated Deficit				
Balances, September 30, 1994	9,414	\$	9	5,150	\$	5	\$ 13,010	\$		\$(23,057)				
exercise of options				499		1	189							
\$35	1,883		2				7,963							
cash				(88)			(3)							
purchase rights Foreign currency translation							936							
adjustments														
Net loss										(7,020)				
Balances, September 30, 1995	11,297	\$	11	5,561		6	22,095			(30,077)				
exercise of options				212			239							
cash Foreign currency translation				(14)			(4)							
adjustments														
Net loss										(4,415)				
Balances, September 30, 1996	11,297	\$	11	5,759		6	22,330			(34,492)				
issuance costs of \$3,832				3,163		3	34,114							
exercise of options				2,092		2	2,564	(1,047)					
common stock	(11,297)		(11)	11,297		11								
notes receivable Tax benefit of stock option									367					
exercises Foreign currency translation							857							
adjustments														
Net income										1,981				
Balances, September 30, 1997		\$ ===		22,311	\$	22		\$	(680)	\$(32,511) ======				

	Cumulative Translation Adjustment	Total
Balances, September 30, 1994	\$ 27	\$(10,006)
Issuance of common stock upon exercise of options		190
stock, net of issuance costs of \$35		7,965
cash		(3)
purchase rights Foreign currency translation		936
adjustments	2	2 (7,020)
Balances, September 30, 1995	29	(7,936)
exercise of options		239
cash Foreign currency translation		(4)
adjustments Net loss	(28)	(28) (4,415)
Balances, September 30, 1996	1	(12,144)
issuance costs of \$3,832		34,117
Issuance of common stock upon exercise of options		1,519

Conversion of preferred stock to		
common stock		
Repayments of stockholders'		
notes receivable		367
Tax benefit of stock option		
exercises		857
Foreign currency translation		
adjustments	(36)	(36)
Net income		1,981
Balances, September 30, 1997	\$ (35)	\$ 26,661

See Notes to Consolidated Financial Statements.

CONSOLIDATED STATEMENTS OF CASH FLOWS (in thousands)

Year Ended September 30,

39

1997 Cash flows from operating activities: \$ (4,415) Net income (loss) \$ 1,981 \$ (7,020) Adjustments to reconcile net income (loss) to net cash provided by (used in) operating activities: Depreciation and amortization 2,070 1,194 1,552 45 82 36 Other Change in operating assets and liabilities: (207) Accounts receivable 488 (1,096)Deferred tax assets (5,974) (33) 130 (226) Prepaids and other current assets (1,160)Other assets (1,414)191 118 Accounts payable 150 (20) Income taxes payable 4.065 5 Accrued salaries and benefits 1,116 107 50 Other accrued liabilities 394 (173)(278)30,861 Deferred revenue (1,036) Net cash provided by (used in) operating activities 31,927 (3,536)1,290 Cash flows from investing activities: (1,952) Purchase of property and equipment (3,854) (1,227)Proceeds from sale of property and equipment 467 516 Purchases of marketable securities (279,222) (20,050) (27,611) 25,410 Maturities of marketable securities 235,850 17,939 Net cash provided by (used in) investing activities (47.222)3,875 Cash flows from financing activities: Net proceeds from issuance of common stock 35,636 239 190 Repayments of stockholders' notes receivable 367 --Issuance of Series D preferred stock --7,965 --__ Sale of convertible preferred stock purchase rights 936 Repurchase of common stock (4) (3) -- ' Proceeds from bank loans 794 Principal payments on bank loans (794)(781) Principal payments on capital lease obligations (773)(566) Net cash provided by (used in) financing activities 35,230 (546) 8,522 Foreign currency translation adjustment (36) (28) 2 Net increase (decrease) in cash and cash equivalents 19.899 (235) (569) Cash and cash equivalents at beginning of period 742 977 1,546 \$ 20,641 \$ 742 \$ 977 Cash and cash equivalents at end of period ======= -----======= Supplemental disclosure of cash flow information: 194 298 297 Interest paid Taxes paid 4,224 286 1,266 License of technology for common stock 1,200 ----Issuance of stockholders' notes receivable 1,047 Tax benefit of stock option exercises 857

See Notes to Consolidated Financial Statements.

Acquisition of equipment under capital leases

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. Formation and Business of the Company:

Rambus Inc. and Subsidiary (the Company) designs, develops, licenses and markets high-speed chip-to-chip interface technology to enhance the performance and cost-effectiveness of computers, consumer electronics, and other electronic systems. The Company licenses semiconductor companies to manufacture and sell memory and logic ICs incorporating Rambus interface technology and markets its solution to systems companies to encourage them to design Rambus interface technology into their products.

The Company was incorporated in California in March 1990 and reincorporated in Delaware in March 1997.

2. Summary of Significant Accounting Policies:

Financial Statement Presentation:

The accompanying consolidated financial statements include the accounts of the Company and its wholly owned subsidiary, Rambus K.K., located in Tokyo, Japan. All intercompany accounts and transactions have been eliminated in the accompanying consolidated financial statements. Identifiable assets and revenues of the subsidiary are not significant.

Use of Estimates:

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Revenue Recognition:

The Company has entered into nonexclusive technology agreements with semiconductor licensees. These agreements provide a license to use the Company's proprietary technology and to receive engineering implementation services, customer support, and enhancements.

The Company delivers to a new licensee an implementation package which contains all information needed to develop a Rambus chip in the licensee's process. An implementation package includes a specification, a generalized circuit layout database software for the particular version of the chip which the licensee intends to develop, test parameter software and, for memory chips, a core interface specification. Test parameters are the programs that test the Rambus technology embedded in the customer's product. Many licensees have contracted to have Rambus provide the specific engineering implementation services required to optimize the generalized circuit layout for the licensee's manufacturing process. The contracts also provide for the right to receive ongoing customer support which includes technical advice on chip specifications, enhancements, debugging and testing.

The Company recognizes revenue consistent with Statement of Position 91-1, Software Revenue Recognition ("SOP"). This SOP applies to all entities that earn revenue on products containing software, where software is not incidental to the product as a whole.

Contract fees for the services provided under these agreements are comprised of license fees, engineering service fees and nonrefundable, prepaid royalties. Contract fees are bundled together as the total price of the agreement does not vary as a result of inclusion or exclusion of services. Accordingly, the revenues from such contract fees are recognized ratably over the period during which the post-contract customer support is expected to be provided independent of the payment schedules under the contract, including milestones. This period represents the estimated life of the technology which was initially eight years and is currently five years. At the time the Company begins to recognize revenue under the contract, the remaining obligations, as defined by the SOP, are no longer significant. These remaining obligations are primarily to keep the product updated and include activities such as responding to inquiries and periodic customer meetings. Historically the product life has been less than the contract life. However, the Company defers 5% of the

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS -(Continued)

2. Summary of Significant Accounting Policies (Continued):

contract value to meet any insignificant obligations arising under those contracts subsequent to product life. At September 30, 1997 and 1996, the amounts included in deferred revenue to meet these obligations were \$2.4 million and \$1.4 million, respectively.

Part of these contract fees may be due upon the achievement of certain milestones, such as provision of certain deliverables by the Company or production of chips by the licensee. The remaining fees are due on pre-determined dates and include significant up-front fees.

The Company recognizes royalties upon notification of sale by its licensees. The terms of the royalty agreements generally require licensees to give notification to the Company and to pay royalties within 60 days of the end of the quarter during which the sales take place.

Research and Development:

Costs incurred in research and development are expensed as incurred. Software development costs are capitalized beginning when a product's technological feasibility has been established and ending when a product is available for general release to customers. The Company has not capitalized any software development costs since such costs have not been significant.

Income Taxes:

The Company accounts for income taxes under the liability method whereby deferred tax asset or liability account balances are calculated at the balance sheet date using current laws and rates in effect. Research and development credits are accounted for using the flow-through method.

Computation of Historical Net Income (Loss) Per Share and Pro Forma Net Income (Loss) Per Share:

Historical net income (loss) per share is computed using the weighted average number of common and dilutive common equivalent shares outstanding during the period. Dilutive common equivalent shares consist of the incremental common shares issuable upon conversion of convertible preferred stock (using the "if converted" method) and stock options and warrants (using the treasury stock method) as if converted for all periods.

Pursuant to the Securities and Exchange Commission Staff Accounting Bulletin (SAB) No. 83, all common shares and all common share equivalents issued by the Company at prices below the initial public offering price during the 12 month period prior to the initial public offering have been included in the calculation of the number of shares used to determine net income (loss) per share as if the shares had been outstanding for all periods presented prior to the initial filing date.

Pro forma net loss per share for the years ended September 30, 1996 and 1995 gives retroactive effect to the conversion of all outstanding shares of convertible preferred stock into common stock, which took place upon the closing of the Company's initial public offering, using the "if converted" method.

Pro forma net loss per share is as follows (in thousands, except per share data):

Yo	ear Ended S	eptember 30,
-	1996	1995
Net loss	\$ (4,415)	\$ (7,020)
Pro forma net loss per share	\$ (0.25) ======	\$ (0.41) ======
Pro forma number of shares used in per share calculations	17,385 ======	16,962 ======

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS-(Continued)

2. Summary of Significant Accounting Policies (Continued):

Stock-Based Compensation:

The Company accounts for stock-based awards to employees using the intrinsic value method in accordance with Accounting Principles Board Opinion No. 25, "Accounting for Stock Issued to Employees." Accordingly, no compensation cost has been recognized for its stock plans. The Company provides additional pro forma disclosures as required under Statement of Financial Accounting Standards No. 123 (SFAS 123), "Accounting for Stock-Based Compensation." See Note 9.

Cash and Cash Equivalents:

Cash equivalents are highly liquid investments with original or remaining maturities of three months or less at the date of purchase. Cash equivalents present risk of changes in value because of interest rate changes. The Company maintains its cash balances with high quality financial institutions and has not experienced any material losses relating to any investment instruments.

Marketable Securities:

Available-for-sale securities are carried at fair value, based on quoted market prices, with the unrealized gains or losses, net of tax, reported in stockholders' equity (deficit). The amortized cost of debt securities is adjusted for amortization of premiums and accretion of discounts to maturity, both of which are included in interest income. Realized gains and losses are recorded on the specific identification method.

Fair Value of Financial Instruments:

The amounts reported for cash equivalents, receivables and other financial instruments are considered to approximate fair values based upon comparable market information available at the respective balance sheet dates.

Property and Equipment:

Property and equipment are stated at cost and depreciated on a straight-line basis over estimated useful lives of three to five years. Leasehold improvements and property under capital leases are amortized on a straight-line basis over the shorter of their estimated useful lives or the terms of the leases. Upon disposal, assets and related accumulated depreciation are removed from the accounts and the related gain or loss is included in results from operations.

Foreign Currency Translation:

The functional currency for the Company's foreign operation in Japan is the Japanese yen. The translation from the Japanese yen to U.S. dollars is performed for balance sheet accounts using current exchange rates in effect at the balance sheet date and for revenue and expense accounts using the weighted average exchange rate during the period. Adjustments resulting from such translation are reflected as a separate component of stockholders' equity (deficit). Gains or losses resulting from foreign currency transactions are included in the results of operations.

New Pronouncements:

In February 1997, the Financial Accounting Standards Board issued Statement No. 128, "Earnings Per Share" (SFAS 128), which specifies the computation, presentation, and disclosure requirements for net income per share. SFAS 128 will become effective for the Company's 1998 fiscal year. The impact of the adoption of SFAS 128 on the financial statements of the Company has not yet been determined.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS-(Continued)

2. Summary of Significant Accounting Policies (Continued):

In June 1997, the Financial Accounting Standards Board issued Statement No. 130, "Reporting Comprehensive Income." This statement establishes requirements for disclosure of comprehensive income and will become effective for the Company's 1999 fiscal year, with reclassification of earlier financial statements for comparative purposes. Comprehensive income generally represents all changes in stockholders' equity except those resulting from investments or contributions by stockholders. The Company is evaluating alternative formats for presenting this information, but does not expect this pronouncement to materially impact the Company's results of operations.

In June 1997, the Financial Accounting Standards Board issued Statement No. 131, "Disclosures about Segments of an Enterprise and Related Information" (SFAS 131). This statement establishes standards for disclosure about operating segments in annual financial statements and selected information in interim financial reports. It also establishes standards for related disclosures about products and services, geographic areas and major customers. This statement supercedes Statement of Financial Accounting Standards No. 14, "Financial Reporting for Segments of a Business Enterprise." SFAS 131 will become effective for the Company's 1999 fiscal year and requires that comparative information from earlier years be restated to conform to the requirements of this standard. The Company is evaluating the requirements of SFAS 131 and the effects, if any, on the Company's current reporting and disclosures.

In October 1997, the American Institute of Certified Public Accountants (AICPA) issued Statement of Position No. 97-2 (SOP 97-2), "Software Revenue Recognition," which supercedes SOP 91-1. SOP 97-2 will become effective for transactions entered into beginning in the Company's 1999 fiscal year. Retroactive application of the provisions of SOP 97-2 is prohibited. The Company does not expect SOP 97-2 to materially impact the Company's results of operations.

3. Business Risks and Credit Concentration:

The Company operates in the intensely competitive semiconductor industry, which has been characterized by price erosion, rapid technological change, short product life cycles, cyclical market patterns and heightened foreign and domestic competition. Significant technological changes in the industry could adversely affect operating results.

The Company markets and sells its technology to a narrow base of customers and generally does not require collateral. At September 30, 1997, three customers accounted for 53%, 28% and 11% of accounts receivable. At September 30, 1996, three customers accounted for 59%, 21% and 17% of accounts receivable.

As of September 30, 1997 and 1996, the Company's cash and cash equivalents are deposited with principally one financial institution in the form of commercial paper, money market accounts, and demand deposits.

Financial instruments that potentially subject the Company to concentrations of credit risk comprise principally cash and cash equivalents, available-for-sale securities and trade accounts receivable. The Company invests its excess cash primarily in commercial paper and U.S. government agency and treasury notes that mature within one year.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS-(Continued)

4. Marketable Securities:

All marketable securities are classified as available-for-sale and are summarized as follows (in thousands):

	September 30,	
	1997	1996
Corporate notes and bonds United States government debt securities Certificates of deposit Commercial paper	\$31,412 14,801 3,000 1,971	\$ 2,442 5,370
	\$51,184 ======	\$ 7,812 ======

All marketable securities classified as current have scheduled maturities of less than one year. At September 30, 1997 and 1996, the cost of marketable securities represents the fair value of the securities, and there are no unrealized holding gains or losses.

5. Property and Equipment:

Property and equipment, net is comprised of the following (in thousands):

	September 30,		
	1997	1996	
Computer equipment	\$ 5,617 4,211 1,062 371	\$ 3,684 2,771 818 272	
Less accumulated depreciation and amortization	11,261 (6,923)	7,545 (5,205)	
	\$ 4,338 ======	\$ 2,340 =====	

Depreciation and amortization expense was approximately \$1,857,000, \$1,148,000, and \$1,288,000 in the years ended September 30, 1997, 1996 and 1995.

Property and equipment under capital leases included above is comprised of (in thousands):

	September 30,	
	1997	1996
Computer equipment	\$ 873 344 1,217	\$ 2,302 403 2,705
Less accumulated amortization	(895) \$ 322	(1,989) \$ 716
	======	======

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS-(Continued)

6. Investment:

In December 1996, the Company licensed technology to Monolithic System Technology, Inc. (MoSys) in exchange for a cash payment of \$50,000 and 184,617 shares of MoSys common stock valued at \$1,200,000, based on the latest round of equity financing. These shares represented a 1% equity interest in MoSys at the time of issuance. The license fee of \$1,250,000 was initially recorded as deferred revenue and is being recognized as revenue in accordance with the Company's revenue recognition policy.

7. Capital Lease Obligations:

The Company has leased equipment under capital lease obligations maturing through fiscal year 1999. The lease agreements require the Company to maintain liability and property insurance.

At September 30, 1997, future minimum annual payments due under the capital lease obligations are as follows (in thousands):

Fiscal Year:	
1998	\$ 434
1999	137
Minimum lease payments	571
Less amount representing interest	(59)
Total minimum payments	512
Less amount due in one year	(382)
Long term amount due after one year	\$ 130
	=====

8. Lease Commitments and Commitments to the Company's Founders:

The Company leases its office facilities under operating lease agreements that expire through February 2005. Upon expiration of the leases, the Company has an option to renew for one five-year term at the then fair market rate. The Company is responsible for taxes, insurance and utilities related to the leased facilities. As of September 30, 1997, aggregate future minimum payments under the leases are (in thousands):

Fiscal Year:	
1998	\$ 804
1999	830
2000	849
2001	758
2002	736
Thereafter	1,853
Total minimum lease payments	\$5,830
	=====

Rent expense was approximately \$987,000, \$736,000, and \$581,000 for the

years ended September 30, 1997, 1996 and 1995, respectively.

Rambus Partners

In September 1992, the Company entered into agreements to pay certain cash amounts to its founders for certain patent rights and technology. The total amounts paid to the founders under these agreements were approximately \$244,000 in each of the fiscal years 1997, 1996 and 1995. Included in the accompanying balance sheets under the caption other accrued liabilities are amounts payable to the founders of approximately \$244,000 at September 30, 1996 and none at September 30, 1997. The associated deferred amounts to the founders totaling \$233,000 and \$456,000 at

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS-(Continued)

8. Lease Commitments and Commitments to the Company's Founders (Continued):

September 30, 1997 and 1996, respectively, include \$223,000 classified in other current assets for each period with the remaining balance classified in other assets.

9. Stockholders' Equity (Deficit):

Preferred and Common Stock:

In February 1997, the Company established a Stockholder Rights Plan pursuant to which each holder of the Company's common stock shall receive a right to purchase one-thousandth of a share of Series E Preferred Stock for \$125 per right, subject to a number of conditions. Such rights are subject to adjustment in the event of a takeover or commencement of a tender offer not approved by the Board of Directors. In May 1997, all of the then outstanding preferred shares were automatically converted into common stock concurrent with the closing of the initial public offering.

In connection with the Company's March 1997 reincorporation in Delaware, the number of authorized shares of common stock was increased to 60,000,000 at \$0.001 par value.

In May 1997, the Company sold 3,162,500 shares of common stock in an initial public offering that generated net proceeds of approximately \$34,117,000.

As of September 30, 1997 and 1996, the total shares held by employees that were subject to repurchase was 708,243 and 261,283, respectively.

Stock Option Plans:

In March 1990, the Company adopted the 1990 Stock Plan under which 2,657,143 shares of common stock were reserved for issuance. Incentive stock options may be granted with exercise prices of no less than fair market value, and nonqualified stock options may be granted with exercise prices of no less than 85% of the fair market value of the common stock on the grant date, as determined by the Board of Directors. Grants to employees of the Company who are also directors of the Company may not exceed 800,000 shares of common stock. The options generally vest over a four-year period but may be exercised immediately subject to repurchase by the Company for those options that are not vested. Vesting periods are determined by the Board of Directors at the date of grant.

During 1992 and 1994, the 1990 Stock Plan was amended to authorize the granting of options which shall vest within one year from the date that certain options previously granted to the optionee (as defined in the Plan) have vested in full. Pursuant to requirements imposed by the California Department of Corporations, these options may be granted only to those employees whose annual compensation exceeds \$60,000 per year. The total number of shares reserved for these options is 950,000.

Upon completion of a public offering of the Company's common stock in May 1997, the 1990 Stock Plan was terminated and the 1997 Stock Plan was adopted. The 1997 Stock Plan authorizes the issuance of incentive stock options and nonstatutory stock options to employees and nonstatutory stock options to directors, employees or paid consultants of the Company. The Company has reserved 1,000,000 shares of common stock for issuance under the plan. The plan expires ten years after adoption, and the Board of Directors or a committee designated by the Board of Directors has the authority to determine to whom options will be granted, the number of shares, the vesting period and the exercise price (which generally cannot be less than 100% of the fair market value at the date of grant for incentive stock options). The options are exercisable at times and in increments as specified by the Board of Directors, and expire not more than ten years from date of grant.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS-(Continued)

9. Stockholders' Equity (Deficit) (Continued):

Stock Option Plans (Continued):

A summary of activity under all stock option plans is as follows:

		-	utstanding
	Options Available for Grant	Number of	Weighted Average Exercise Price Per Share
Outstanding at September 30, 1994 Shares reserved	634,601 875,000		\$ 0.24
Options granted	(1,204,900)	1,204,900	\$ 1.41
Options canceled	37,513	(37,513)	\$ 0.27
Options exercised		(498,789)	\$ 0.38
Outstanding at September 30, 1995	342,214	3,026,355	\$ 0.68
Shares reserved	1,000,000		
Options granted	(347,500)	347,500	\$ 3.84
Options canceled	70,738	(70,738)	\$ 1.08
Options exercised	- -	(197,667)	\$ 1.12
Outstanding at September 30, 1996 Shares reserved	1,065,452 1,000,000	3,105,450	\$ 1.00
Options granted	(1,411,350)	1,411,350	\$14.37
Options exercised		(2,092,428)	\$ 1.22
Options canceled	20,000	(20,000)	\$ 8.00
Outstanding at September 30, 1997	674,102 ======		\$ 8.55

The following table summarizes information about outstanding and exercisable options as of September 30, 1997:

	Options Outstanding		Options Ex	ercisable		
Range of Exercise Prices	Number Outstanding	Weighted Average Remaining Contractual Life	Weighted Average Exercise Price	Number Exercisable	Weighted Average Exercise Price	
d 0 12 d 1 00	006 370		d 0.70	006 270		
\$ 0.13 - \$ 1.00	906,378	6.84	\$ 0.72	906,378	\$ 0.72	
\$ 3.00 - \$ 5.00	662,419	8.69	4.29	662,419	4.29	
\$ 7.00 - \$12.00	645,575	9.52	9.45	395,575	7.83	
\$57.00 - \$66.13	190,000	9.99	57.72			
	2,404,372	8.32	\$ 8.55	1,964,372	\$ 3.36	
	========			========		

As of September 30, 1997, a total of 3,078,474 shares of common stock were reserved for issuance under all stock option plans. As of September 30, 1997, options for the purchase of 429,018 shares were exercisable without being subject to repurchase by the Company.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS-(Continued)

9. Stockholders' Equity (Deficit) (Continued):

Employee Stock Purchase Plan:

In May 1997, the Company adopted the 1997 Employee Stock Purchase Plan (the "Purchase Plan") and reserved 400,000 shares of common stock for issuance under the Purchase Plan. The Purchase Plan authorizes the granting of stock purchase rights to eligible employees during two-year offering periods with exercise dates approximately every six months. The first offering period commenced in May 1997 and will end on the last trading day in the period ending April 30, 1999. Shares are purchased through employee payroll deductions at purchase prices equal to 85% of the lesser of the fair market value of the Company's common stock at either the first day of each offering period or the date of purchase. As of September 30, 1997, no shares had been issued under the Purchase Plan.

Stockholders' Notes Receivable:

During the year ended September 30, 1997, the Company issued loans to certain key personnel in connection with the exercise of options to purchase shares of the Company's common stock. The loans bear interest at an annual rate of 12%, are evidenced by promissory notes, and are secured by a pledge of the underlying shares of common stock. Principal and accrued interest on the loans are due in September 1998. The aggregate principal balance outstanding at September 30, 1997 is approximately \$680,000.

Warrant:

In November 1996, the Company entered into an agreement with Intel Corporation for the development of high-speed semiconductor memory interface technology. In January 1997, as part of this agreement, the Company issued a warrant to purchase 1,000,000 shares of common stock of the Company at a purchase price of \$10.00 per share. This warrant will become exercisable only upon the achievement of certain specified performance milestones, resulting in a charge to the statement of operations at the time of achievement of these milestones based on the fair value of the warrant.

Stock-Based Compensation:

The Company applies Accounting Principles Board Opinion No. 25, "Accounting for Stock Issued to Employees," and related interpretations in accounting for its stock plans. Accordingly, no compensation expense has been recognized for its stock-based compensation plans. If the Company had recognized compensation expense based upon the fair value of stock option awards at the grant date consistent with the methodology prescribed under Statement of Financial Accounting Standards No. 123 (SFAS 123), "Accounting for Stock-Based Compensation," the Company's net income (loss) and net income (loss) per share would have changed to the pro forma amounts indicated below:

	Year Ended September 30			er 30,
	1997			1996
Net income (loss) as reported	\$	1,981	\$	(4,415)
Net income (loss) pro forma	\$	1,586	\$	(4,509)
Net income (loss) per share as reported	\$	0.09	\$	(0.73)
Net income (loss) per share pro forma	\$	0.07	\$	(0.74)

For purposes of pro forma disclosures, the estimated fair value of the options is amortized to expense over the options' vesting period.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS-(Continued)

9. Stockholders' Equity (Deficit) (Continued):

Stock-Based Compensation (Continued):

The fair value of each option grant is estimated as of the grant date using the Black-Scholes option-pricing model assuming a dividend yield of 0% and the following additional weighted-average assumptions:

	Stock Option Plans		
	1997	1996	
Expected stock price volatility	71%	71%	
Risk-free interest rate	6.2%	5.9%	
Expected life of options	4.5 years	4.5 years	

The weighted-average fair value of stock options granted during the years ended September 30, 1997 and 1996, calculated using the Black-Scholes option valuation model, is \$8.79 and \$2.12, respectively.

The Black-Scholes option valuation model was developed for use in estimating the fair value of traded options which have no vesting restrictions and are fully transferable. In addition, option valuation models require the input of highly subjective assumptions, including the expected stock price volatility. Because the Company's options have characteristics significantly different from those of traded options, and because changes in the subjective input assumptions can materially affect the fair value estimate, in the opinion of management, the existing models do not necessarily provide a reliable single measure of the fair value of its options.

The effects of applying SFAS 123 on the pro forma disclosures for the years ending September 30, 1997 and 1996 are not likely to be representative of the effects on pro forma disclosures in future years. SFAS No. 123 is applicable only to options granted by the Company subsequent to October 1, 1995. The pro forma effect of options outstanding as of September 30, 1997 will not be fully reflected until 2002.

10. Employee Benefit Plans:

The Company has a 401(k) Profit Sharing Plan (the "Plan") qualified under Section 401(k) of the Internal Revenue Code of 1986. Each eligible employee may elect to contribute up to 20% of the employee's annual compensation to the Plan. The Company, at the discretion of its Board of Directors, may match employee contributions to the Plan but has not done so for the years ended September 30, 1997, 1996 and 1995.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS-(Continued)

11. Income Taxes:

The provision for income taxes comprises (in thousands):

	Year	er 30,	
	1997	1996	1995
Foreign withholding tax:			
Current	\$ 1,498	\$ 270	\$ 1,235
Federal:			
Current	4,335		40
Deferred	(5,999)	==	
State:			
Current	2,458	16	14
Deferred	(977)		
	\$ 1,315	\$ 286	\$ 1,289

The Company's effective tax rate on pretax income differs from the U.S. federal statutory regular tax rate as follows:

	Year Ended September 30,		
	1997	1996	1995
Expense (benefit) at U.S. federal statutory rate Tax losses not currently benefited Expense at state statutory rate Nondeductible amortization R&D credit Change in valuation allowance	34.0% 5.7 2.7 (15.1)	(34.0)% 34.0 	(34.0)% 34.0
Foreign withholding tax	 	6.5 0.4	21.6 0.9
	40.0%	6.9% ====	22.5%

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS-(Continued)

11. Income Taxes (Continued):

The components of the net deferred tax assets are as follows (in thousands):

	September 30,		
	1997	1996	
Deferred tax assets:			
Deferred revenue	\$ 21,725	\$ 9,206	
Deferred compensation		98	
Depreciation and amortization expense	391	174	
Other liabilities and reserves	1,444	220	
Foreign tax credits		2,440	
Research and development credits		868	
Net operating loss		3,361	
Total deferred tax asset Deferred tax liability:	23,560	16,367	
Deferred royalty cost	(95)	(296)	
Valuation allowance	, ,	(16,071)	
Deferred tax assets, net	\$ 6,976 ======	\$ =======	

The Company has established a partial valuation allowance against its deferred tax assets due to the uncertainty surrounding the realization of such assets. Management periodically evaluates the recoverability of the deferred tax assets and recognizes the tax benefit only as reassessment demonstrates they are realizable. At such time, if it is determined that it is more likely than not that the deferred tax assets are realizable, the valuation allowance will be reduced.

12. Related Party Transactions:

Chromatic Research Inc. In February 1994, the Company licensed its interface technology to Chromatic Research, Inc. ("Chromatic"), a multimedia processor design company. Under the terms of the license, Rambus received 626,053 shares of Chromatic Series B Preferred Stock (representing 5% of the then outstanding shares of Chromatic) and continuing royalties. Chromatic was formed in May 1993 (then called Xenon Microsystems Corporation) by, among others, Dr. Farmwald, who continues to serve as a director of, and consultant to, Chromatic through the date hereof. Investors in Chromatic include affiliates of Mohr, Davidow Ventures, Merrill, Pickard, Anderson & Eyre and Kleiner, Perkins, Caufield & Byers. In connection with these investments in Chromatic, Dr. Davidow and Mr. Dunlevie joined and continue to sit on the Board of Directors of Chromatic. The initial valuation of the Chromatic stock, approximately \$626,000, has been fully written down by the Company. Revenue recognized as license fees under this agreement was \$119,000 in each of the years ended September 30, 1997, 1996 and 1995. As of September 30, 1997 and 1996, the remaining balance of license fees of approximately \$200,000 and \$319,000, respectively, is included in deferred revenue.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS-(Continued)

13. Business Segments, Exports and Major Customers:

The Company operates in a single industry segment.

Two customers accounted for 29% and 10% of revenues in the year ended September 30, 1997. Six customers accounted for 14%, 15%, 11%, 11%, 13% and 12% of revenues in the year ended September 30, 1996. Six customers accounted for 16%, 12%, 15%, 12%, 14% and 13% of revenues in the year ended September 30, 1995.

The Company sells its technology to customers in the Far East, North America, and Europe. The net income and loss for all periods presented are derived primarily from the Company's North American operations, which generates revenues from the following geographic regions (in thousands):

	Yea	r Ended September	30,
	1997	1996	1995
Far East	\$20,638	\$ 9,692	\$ 6,619
North America	5,076	1,578	745
Europe	301		
	\$26,015	\$11,270	\$ 7,364
	======	======	======

CONSOLIDATED SUPPLEMENTARY FINANCIAL DATA

(in thousands, except per share amounts)

(Unaudited)

Fiscal years by quarter

	1997			1996				
	4th	3rd	2nd	1st	4th	3rd	2nd	1st
Revenues:								
Contract revenues	\$ 6,344 1,472	\$ 5,375 1,399	\$ 4,401 1,533	1,425	\$ 3,299 64	\$ 2,833	\$ 2,562 	\$ 2,510
Total revenues	7,816				3,363	2,834	2,562	2,510
Costs and expenses:								
Cost of contract revenues Research and development	1,601 2,935	1,494 2,512			1,245 1,570	1,275	1,186 1,271	1,115 1,142
Marketing, general and	2,933	2,312	2,103	2,203	1,370	1,233	1,2/1	1,142
administrative	2,347	2,263	2,057	2,088	1,688	1,497	1,205	1,409
Total costs and expenses		6,269	5,521		4,503	4,007		3,666
Operating income (loss)	933 843	505 374	413 80	103 45	(1,140) 151	(1,173) 85	(1,100) 92	(1,156) 112
Income (loss) before income taxes Provision for income taxes	1,776 710	879 352	493 197	148 56	(989) 103	(1,088)	(1,008)	(1,044)
Net income (loss)	\$ 1,066 =====	\$ 527 ======	\$ 296 =====	\$ 92 =====	\$(1,092) =====	\$(1,088) ======	\$(1,109) ======	\$(1,126) ======
Net income (loss) per share	\$ 0.04	\$ 0.02	\$ 0.01	\$ 0.01	\$ (0.18) ======	\$ (0.18) ======	\$ (0.18) ======	\$ (0.19) =====
Shares used in per share calculations	24,274	22,403	20,196	19,971	6,145	6,113	6,097	5,997

INDEPENDENT ACCOUNTANTS' REPORT ON SCHEDULE

Our report on the financial statements of Rambus Inc. and Subsidiary is included on page 22 of this Form 10-K. In connection with our audits of such financial statements, we have also audited the related financial statement schedule listed in the index on page 19 of this Form 10-K.

In our opinion, the financial statement schedule referred to above, when considered in relation to the basic financial statements taken as a whole, presents fairly, in all material respects, the information required to be included therein.

COOPERS & LYBRAND L.L.P.

San Jose, California October 10, 1997

SCHEDULE II - VALUATION AND QUALIFYING ACCOUNTS

(in thousands)

Valuation allowance for doubtful accounts

For the year ended:	Balance at beginning of period	Additions charged to costs and expenses	Charged to other accounts	Deductions	Balance at end of period
September 30, 1995		\$ 8			\$ 8
September 30, 1996	\$ 8				\$ 8
September 30, 1997	\$ 8	\$ 2			\$10
Valuation allowance for deferred tax asset	Balance at	Additions charged to	Charged to		Balance at end
For the year ended:	beginning of period	costs and expenses	other accounts	Deductions	of period
September 30, 1995	\$10,802	\$3,624			\$14,426
September 30, 1996	\$14,426	\$1,645			\$16,071
September 30, 1997	\$16,071	\$ 418			\$16,489

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

RAMBUS INC.

Date: December 5, 1997

By:/s/ Gary Harmon

Gary Harmon,

Vice President, Finance and Chief Financial Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Signatures	Title	Date
/s/ Geoff Tate	President, Chief Executive Officer	December 5, 1997
Geoff Tate	and Director (Principal Executive Officer)	
/s/ Gary Harmon	Vice President, Finance and Chief Financial Officer (Principal	December 5, 1997
Gary Harmon	Financial and Accounting Officer)	
/s/ William Davidow	Chairman of the Board of Directors	December 5, 1997
William Davidow		
/s/ Bruce Dunlevie	Director	December 5, 1997
Bruce Dunlevie		
/s/ P. Michael Farmwald	Director	December 5, 1997
P. Michael Farmwald		
/s/ Charles Geschke	Director	December 5, 1997
Charles Geschke		
/s/ Mark Horowitz	Director	December 5, 1997
Mark Horowitz		

PAGE 1 State of Delaware Office of the Secretary of State

I, EDWARD J. FREEL, SECRETARY OF STATE OF THE STATE OF

DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE RESTATED CERTIFICATE OF "RAMBUS INC.", FILED IN THIS OFFICE ON THE TWENTY-NINTH DAY OF MAY, A.D. 1997, AT 11:30 O'CLOCK A.M.

A CERTIFIED COPY OF THIS CERTIFICATE HAS BEEN FORWARDED TO

THE NEW CASTLE COUNTY RECORDER OF DEEDS FOR RECORDING.

[GRAPHIC OMITTED] /s/ Edward J. Freel

Edward J. Freel, Secretary of State

2713545 8100 AUTHENTICATION: 8486508

971174669 DATE: 05-29-97

AMENDED AND RESTATED CERTIFICATE OF INCORPORATION

OF

RAMBUS INC.

Rambus Inc., a corporation organized and existing under the laws of the State of Delaware, hereby certifies as follows:

- A. The name of the Corporation is Rambus Inc. The Corporation was originally incorporated under the same name and the original Certificate of Incorporation of the Corporation was filed with the Delaware Secretary of State on February 3, 1997. The Amended and Restated Certificate of Incorporation of the Corporation was filed with the Delaware Secretary of State on April 7, 1997. The Certificate of Designation of Rights, Preferences and Privileges of Series E Participating Preferred Stock of the Corporation was filed with the Delaware Secretary of State on April 17, 1997.
- B. Pursuant to Sections 242 and 245 of the General Corporation Law of the State of Delaware, this Amended and Restated Certificate of Incorporation restates and amends the provisions of the Amended and Restated Certificate of Incorporation and the Certificate of Designation of Rights, Preferences and Privileges of Series E Participating Preferred Stock of this Corporation.
- C. The text of the Certificate of Incorporation is hereby amended and restated in its entirety to read as follows:
- I. The name of the corporation (the "Corporation") is:

Rambus Inc.

- II. The address of the Corporation's registered office in the State of Delaware is 1209 Orange Street, Wilmington, Delaware 19801, County of New Castle. The name of its registered agent at such address is The Corporation Trust Company.
- III. The nature of the business or purposes to be conducted or promoted by the Corporation is to engage in any lawful act or activity for which corporations may be organized under the General Corporation Law of Delaware.
- IV. This Corporation is authorized to issue two classes of stock to be designated, respectively, Common Stock and Preferred Stock. The total number of shares of Common Stock this Corporation is authorized to issue is 60,000,000, \$0.001 par value, and the total number of shares of Preferred Stock this Corporation is authorized to issue is 5,000,000, \$0.001 par value. Of the Preferred Stock, 40,000 shares shall be designated Series E Participating Preferred Stock ("Series E Preferred"), and 4,960,000 shares shall be undesignated.

The Preferred Stock may be issued from time to time in one or more series pursuant to a resolution or resolutions providing for such issue duly adopted by the Board of Directors (authority to do so being hereby expressly vested in the Board). The Board of Directors is further authorized to determine or alter the fights, preferences, privileges and restrictions granted to or imposed upon any wholly unissued series of Preferred Stock and to fix the number of shares of any series of Preferred Stock and the designation of any such series of Preferred Stock. The Board of Directors, within the limits and restrictions stated in any resolution or resolutions of the Board of Directors originally fixing the number of shares constituting any series, may increase or decrease (but not below the number of shares in any such series then outstanding) the number of shares of any series subsequent to the issue of shares of that series.

The Corporation shall from time to time in accordance with the laws of the State of Delaware increase the authorized amount of its Common Stock if at any time the number of shares of Common Stock remaining unissued and available for issuance shall not be sufficient to permit conversion of the Preferred Stock.

The relative rights, preferences, privileges and restrictions granted to or imposed on the Series E Preferred or the holders thereof are as follows:

1. Proportional Adjustment. In the event the Corporation shall at any time after the issuance of any share or shares of Series E Participating Preferred Stock (i) declare any dividend on Common Stock of the Corporation ("Common Stock") payable in shares of Common Stock, (ii) subdivide the outstanding Common Stock or (iii) combine the outstanding Common Stock into a smaller number of shares, then in each such case the Corporation shall simultaneously effect a proportional adjustment to the number of outstanding shares of Series E Participating Preferred Stock.

2. Dividends and Distributions.

(a) Subject to the prior and superior right of the holders of any shares of any series of Preferred Stock ranking prior and superior to the shares of Series E Participating Preferred Stock with respect to dividends, the holders of shares of Series E Participating Preferred Stock shall be entitled to receive when, as and if declared by the Board of Directors out of funds legally available for the purpose, quarterly dividends payable in cash on the last day of January, April, July and October in each year (each such date being referred to herein as a "Quarterly Dividend Payment Date"), commencing on the first Quarterly Dividend Payment Date after the first issuance of a share or fraction of a share of Series E Participating Preferred Stock, in an amount per share (rounded to the nearest cent) equal to 1,000 times the aggregate per share amount of all cash dividends, and 1,000 times the aggregate per share amount (payable in kind) of all non-cash dividends or other distributions other than a dividend payable in shares of Common Stock or a subdivision of the outstanding shares of Common Stock (by reclassification or otherwise), declared on the Common Stock since the immediately preceding Quarterly Dividend Payment Date, or, with respect to the first Quarterly Dividend Payment Date, since the first issuance of any share or fraction of a share of Series E Participating Preferred Stock.

- (b) The Corporation shall declare a dividend or distribution on the Series E Participating Preferred Stock as provided in paragraph (a) above immediately after it declares a dividend or distribution on the Common Stock (other than a dividend payable in shares of Common Stock).
- (c) Dividends shall begin to accrue on outstanding shares of Series E Participating Preferred Stock from the Quarterly Dividend Payment Date next preceding the date of issue of such shares of Series E Participating Preferred Stock, unless the date of issue of such shares is prior to the record date for the first Quarterly Dividend Payment Date, in which case dividends on such shares shall begin to accrue from the date of issue of such shares, or unless the date of issue is a Quarterly Dividend Payment Date or is a date after the record date for the determination of holders of shares of Series E Participating Preferred Stock entitled to receive a quarterly dividend and before such Quarterly Dividend Payment Date, in either of which events such dividends shall begin to accrue from such Quarterly Dividend Payment Date. Accrued but unpaid dividends shall not bear interest. Dividends paid on the shares of Series E Participating Preferred Stock in an amount less than the total amount of such dividends at the time accrued and payable on such shares shall be allocated pro rata on a share-by-share basis among all such shares at the time outstanding. The Board of Directors may fix a record date for the determination of holders of shares of Series E Participating Preferred Stock entitled to receive payment of a dividend or distribution declared thereon, which record date shall be no more than 30 days prior to the date fixed for the payment thereof.
- 3. Voting Rights. The holders of shares of Series E Participating Preferred Stock shall have the following voting rights:
- (a) Each share of Series E Participating Preferred Stock shall entitle the holder thereof to 1,000 votes on all matters submitted to a vote of the stockholders of the Corporation.
- (b) Except as otherwise provided herein or by law, the holders of shares of Series E Participating Preferred Stock and the holders of shares of Common Stock shall vote together as one class on all matters submitted to a vote of stockholders of the Corporation.
- (c) Except as required by law, holders of Series E Participating Preferred Stock shall have no special voting rights and their consent shall not be required (except to the extent they are entitled to vote with holders of Common Stock as set forth herein) for taking any corporate action.
- 4. Certain Restrictions.
- (a) The Corporation shall not declare any dividend on, make any distribution on, or redeem or purchase or otherwise acquire for consideration any shares of Common Stock after the first issuance of a share or fraction of a share of Series E Participating Preferred Stock unless concurrently therewith it shall declare a dividend on the Series E Participating Preferred Stock as required by Section 3 hereof.

- (b) Whenever quarterly dividends or other dividends or distributions payable on the Series E Participating Preferred Stock as provided in Section 3 are in arrears, thereafter and until all accrued and unpaid dividends and distributions, whether or not declared, on shares of Series E Participating Preferred Stock outstanding shall have been paid in full, the Corporation shall not
- (i) declare or pay dividends on, make any other distributions on, or redeem or purchase or otherwise acquire for consideration any shares of stock ranking junior (either as to dividends or upon liquidation, dissolution or winding up) to the Series E Participating Preferred Stock;
- (ii) declare or pay dividends on, make any other distributions on any shares of stock ranking on a parity (either as to dividends or upon liquidation, dissolution or winding up) with Series E Participating Preferred Stock, except dividends paid ratably on the Series E Participating Preferred Stock and all such parity stock on which dividends are payable or in arrears in proportion to the total amounts to which the holders of all such shares are then entitled;
- (iii) redeem or purchase or otherwise acquire for consideration shares of any stock ranking on a parity (either as to dividends or upon liquidation, dissolution or winding up) with the Series E Participating Preferred Stock, provided that the Corporation may at any time redeem, purchase or otherwise acquire shares of any such parity stock in exchange for shares of any stock of the Corporation ranking junior (either as to dividends or upon dissolution, liquidation or winding up) to the Series E Participating Preferred Stock;
- (iv) purchase or otherwise acquire for consideration any shares of Series E Participating Preferred Stock, or any shares of stock ranking on a parity with the Series E Participating Preferred Stock, except in accordance with a purchase offer made in writing or by publication (as determined by the Board of Directors) to all holders of such shares upon such terms as the Board of Directors, after consideration of the respective annual dividend rates and other relative rights and preferences of the respective series and classes, shall determine in good faith will result in fair and equitable treatment among the respective series or classes.
- (c) The Corporation shall not permit any subsidiary of the Corporation to purchase or otherwise acquire for consideration any shares of stock of the Corporation unless the Corporation could, under paragraph (a) of this Section 5, purchase or otherwise acquire such shares at such time and in such manner.
- 5. Reacquired Shares. Any shares of Series E Participating Preferred Stock purchased or otherwise acquired by the Corporation in any manner whatsoever shall be retired and canceled promptly after the acquisition thereof. All such shares shall upon their cancellation become authorized but unissued shares of Preferred Stock and may be reissued as part of a new series of Preferred Stock to be created by resolution or resolutions of the Board of Directors, subject to the conditions and restrictions on issuance set forth herein and, in the Restated Certificate of Incorporation, as then amended.

- 6. Liquidation. Dissolution or Winding Up. Upon any liquidation, dissolution or winding up of the Corporation, the holders of shares of Series E Participating Preferred Stock shall be entitled to receive an aggregate amount per share equal to 1000 times the aggregate amount to be distributed per share to holders of shares of Common Stock plus an amount equal to any accrued and unpaid dividends on such shares of Series E Participating Preferred Stock.
- 7. Consolidation, Merger, etc. In case the Corporation shall enter into any consolidation, merger, combination or other transaction in which the shares of Common Stock are exchanged for or changed into other stock or securities, cash and/or any other property, then in any such case the shares of Series E Participating Preferred Stock shall at the same time be similarly exchanged or changed in an amount per share equal to 1,000 times the aggregate amount of stock, securities, cash and/or any other property (payable in kind), as the case may be, into which or for which each share of Common Stock is changed or exchanged.
- 8. No Redemption. The shares of Series E Participating Preferred Stock shall not be redeemable.
- 9. Ranking. The Series E Participating Preferred Stock shall rank junior to all other series of the Corporation's Preferred Stock as to the payment of dividends and the distribution of assets, unless the terms of any such series shall provide otherwise.
- 10. Amendment. The Restated Certificate of Incorporation of the Corporation shall not be further amended in any manner which would materially alter or change the powers, preference or special fights of the Series E Participating Preferred Stock so as to affect them adversely without the affirmative vote of the holders of a majority of the outstanding shares of Series E Participating Preferred Stock, voting separately as a class.
- 11. Fractional Shares. Series E Participating Preferred Stock may be issued in fractions of a share which shall entitle the holder, in proportion to such holder's fractional shares, to exercise voting rights, receive dividends, participate in distributions and to have the benefit of all other rights of holders of Series E Participating Preferred Stock.
- V. The Corporation is to have perpetual existence.
- VI. Elections of directors need not be by written ballot unless a stockholder demands election by written ballot at the meeting and before voting begins or unless the Bylaws of the Corporation shall so provide.
- VII. The number of directors which constitute the whole Board of Directors of the Corporation shall be designated in the Bylaws of the Corporation. The Directors shall be divided into two classes with the term of office of the first class (Class I) to expire at the annual meeting of stockholders in 1998; the term of office of the second class (Class II) to expire at the annual meeting of stockholders held in 1999; and thereafter for each such term to expire at each second succeeding annual meeting of stockholders after such election.

VIII. In furtherance and not in limitation of the powers conferred by statute, the Board of Directors is expressly authorized to make, alter, amend or repeal the Bylaws of the Corporation.

- IX. A. To the fullest extent permitted by the Delaware General Corporation Law as the same exists or as may hereafter be amended, a director of the Corporation shall not be personally liable to the Corporation or its stockholders for monetary damages for breach fiduciary duty as a director.
- B. The Corporation shall indemnify to the fullest extent permitted by law any person made or threatened to be made a party to an action or proceeding, whether criminal, civil, administrative or investigative, by reason of the fact that he, his testator or interstate is or was a director, officer or employee of the Corporation or any predecessor of the Corporation or serves or served at any other enterprise as a director, officer or employee at the request of the Corporation or any predecessor to the Corporation.
- C. Neither any amendment nor repeal of this Article IX, nor the adoption of any provision of this Corporation's Certificate of Incorporation inconsistent with this Article IX, shall eliminate or reduce the effect of this Article IX, in respect of any matter occurring, or any action or proceeding accruing or arising or that, but for this Article IX, would accrue or arise, prior to such amendment, repeal or adoption of an inconsistent provision.
- X. Following the effectiveness of the registration of any class of securities of the Corporation pursuant to the requirements of the Securities Exchange Act of 1934, as amended, no action shall be taken by the stockholders of the Corporation except at an annual or special meeting of the stockholders called in accordance with the Bylaws and no action shall be taken by the stockholders by written consent. The affirmative vote of sixty-six and two-thirds percent (66 2/3%) of the then issued and outstanding voting securities of the Corporation, voting together as a single class, shall be required for the amendment, repeal or modification of the provisions of Article VII or Article X of this Restated Certificate of Incorporation or Sections 2.3 (Special Meeting), 2.11 (Stockholder Action by Written Consent without a Meeting) or 2.15 (Advance Notice of Stockholder Nominees and Stockholder Business) of the Corporation's Bylaws.
- XI. Meetings of stockholders may be held within or without the State of Delaware, as the Bylaws of the Corporation may provide. The books of the Corporation may by kept (subject to any provision contained in the statutes) outside of the State of Delaware at such place or places may be designated from time to time by the Board of Directors or in the Bylaws of the Corporation.

IN WITNESS WHEREOF, the Corporation has caused this certificate to be signed by Gary Harmon,

its Secretary, this 28th day of May, 1997.

/s/ Gary Harmon
------Gary Harmon, Secretary

TRAC ADDENDUM TO SUPPLEMENT NO. 11 TO SEMICONDUCTOR TECHNOLOGY LICENSE AGREEMENT

This Addendum to Supplement No. 11 to the parties Semiconductor Technology License Agreement (the "Addendum") is entered into as of the date last entered below by and between Rambus Inc., a California corporation with a principal place of business at 2465 Latham Street, Mountain View, California 94040 U.S.A. ("Rambus") and NEC Corporation, a Japanese corporation with a principal place of business at 7-1, Shiba 5-chome, Minato-ku, Tokyo 108-01, Japan ("NEC").

WHEREAS, in 1991 Rambus and NEC entered into a Semiconductor Technology License Agreement (as previously supplemented and amended, including, without limitation, by Supplement No. 11, "Supplement No. 11", collectively referred to herein from time to time as the "License Agreement"); and

WHEREAS, the parties desire to further amend the License Agreement to include the characterization by Rambus of an NEC ASIC test chip (incorporating the Modified RAC produced by Rambus for NEC pursuant to Supplement No. 11) as more fully set forth below.

NOW, THEREFORE, the parties agree that the License Agreement is further amended by this Addendum to include the following:

1. Definitions.

Capitalized terms used in this Addendum shall have the meaning specified therefor in Supplement No.11 and/or the License Agreement, as appropriate, and, in addition, the following term shall have the meaning set forth below.

- 1.1 "TRAC" means an ASIC test chip designed and manufactured by or for NEC, incorporating (i) schematics and netlists provided by Rambus pursuant to Exhibit A hereto and (ii) the Modified RAC produced by Rambus pursuant to Supplement No. 11.
- 2. Scope of the Work.

Rambus shall, in accordance with the terms and conditions contained herein perform characterization of a TRAC as specified in Exhibit A hereto (the "Characterization") and shall use its reasonable best efforts to deliver to NEC the deliverables specified in Exhibit A within forty-five (45) days after delivery of the TRAC from NEC per Section 3 below.

3. NEC's Assistance.

NEC shall perform the obligations specified in Exhibit B to enable Rambus to perform the Characterization. Based on the delivery schedule for the layout database and schematics committed to by Rambus herein, NEC will use its reasonable best efforts to complete the fabrication of a TRAC within ninety (90) days after receipt of the Modified RAC GDSII database from Rambus.

- 4. Payments.
- 4.1 In consideration of Rambus' engineering services hereunder, NEC will pay to Rambus a development fee equal to one hundred fifty thousand dollars (U.S.\$150,000) as follows:
- (i) seventy-five thousand dollars (U.S.\$75,000) within thirty (30) days after delivery by Rambus to NEC of the deliverables set forth in Section 2(1) of Exhibit A; and
- (ii) seventy-five thousand dollars (U.S.\$75,000) within thirty
- (30) days after delivery by Rambus to NEC and NEC's acceptance of the deliverables set forth in Section 2(2) of Exhibit A.

These payments will be nonrefundable and shall not be recoupable against any royalty or other payment obligations of NEC under Supplement No. 11 or the LIcense Agreement. The parties understand that this development fee represents partial reimbursement of the total cost incurred by Rambus for engineering services to be performed hereunder, and, accordingly, shall not be subject to Japanese withholding tax. However, if a Japanese tax authority does impose Japanese withholding tax on this payment or any portion thereof, NEC will be solely responsible for payment of, and shall pay, the tax, i.e., the engineering services fee specified in this Addendum shall be the amounts actually received by Rambus from NEC.

- 4.2 Sections 5.3 and 5.4 of Supplement No. 11 shall apply to payments made hereunder.
- 5. Miscellaneous.
- 5.1 Sections 6, 7, 8, 9, 10.2, 10.3, 10.4, 10.5, 10.6, 11 and 13 of Supplement No. 11 are incorporated herein by this reference.
- 5.2 This Addendum shall be effective as of the date last written below and shall automatically expire when NEC receives all the deliverables hereunder and Rambus receives all payments required hereunder, unless earlier terminated pursuant to Section 10.2 or 10.5 of Supplement No. 11.

The parties hereto execute this Addendum in duplicate as of the dates set forth below.

NEC CORPORATION RAMBUS INC.

Ву:	By:
Print Name:	Print Name:
Title:	Title:
Date:	Date:

EXHIBIT A CHARACTERIZATION

1. CHARACTERIZATION WORK

- (1) Rambus shall characterize the New RAC pursuant to Supplement No. 11 on the Rambus ASIC Test Chip using a customized load board on its HP83000 tester.
- (2) The Characterization shall be performed using devices for one lot which have been fabricated using typical process parameters.

2. DELIVERABLES

- (1) Netlists and test patterns for the Rambus ASIC Test Chip which provides a device to characterize the PLL and the AC and DC parameters of the NEW RAC.
- (2) A Characterization report of the New RAC on the Rambus ASIC Test Chip and its data.

EXHIBIT B NEC'S SUPPORT ON CHARACTERIZATION

1. NEC will design an ASIC which includes the Modified RAC and incorporates the netlists of the TRAC. At its option, Rambus may choose to provide to NEC a completed EZTRAC circuit layout, designed for the NEC Process Technology, which will incorporate the Rambus-designed Modified RAC.

- 2. NEC will generate masks and manufacture engineering samples of the TRAC with the Modified RAC.
- 3. NEC will provide package engineering samples of the TRAC with the Modified RAC to Rambus.

SUPPLEMENT NO. 12 TO SEMICONDUCTOR TECHNOLOGY LICENSE AGREEMENT

This Supplement No. 12 (the "Supplement") to the parties' Semiconductor Technology License Agreement is entered into as of the date last entered below by and between Rambus Inc., a Delaware corporation with principal offices at 2465 Latham Street, Mountain View, California 94040, U.S.A. ("Rambus") and NEC Corporation, a Japanese corporation with a principal place of business at 7-1, Shiba 5-chome, Minato-ku, Tokyo 108-01, Japan ("NEC").

WHEREAS, in 1991 Rambus and NEC entered into a Semiconductor Technology License Agreement (as previously supplemented and amended, the "License Agreement"); and

WHEREAS the parties desire to further amend the License Agreement to provide for a license from NEC to Rambus to certain rights under NEC patents, for the benefit of Rambus and its licensees and to enable NEC to enjoy a reciprocal benefit under patents of certain Rambus licensees;

NOW, THEREFORE, the parties agree that the License Agreement is further amended to include the following:

1 Definitions.

Capitalized terms used in this Supplement shall have the meaning specified therefor in the License Agreement, and, in addition, the following term shall have the meaning set forth below:

- 1.1. "Applicable NEC Patents" means all patents, patent applications, and other patent rights (including utility models but excluding those on semiconductor process technology) in all countries of the world to the extent necessary to implement Rambus Technology, any other Rambus technology which has been licensed to NEC by Rambus or NEC Improvements and which, during the term of the License Agreement, are owned by NEC or NEC Subsidiaries (or licensed to NEC or NEC Subsidiaries with respect to which NEC has the right to grant sublicenses of the scope granted herein without the payment of consideration to third parties).
- 2 NEC Licenses to Rambus.
 - 2.1. NEC hereby grants Rambus a worldwide, royalty-free, fully paid, nonexclusive, nontransferable (except as set forth herein) license under Applicable NEC Patents to design, make, have made, use, import, offer to sell, and sell or otherwise transfer any products which incorporate all or part of Rambus Technology or any other Rambus technology which has been licensed to NEC by Rambus, provided that Rambus' rights with respect to the Applicable NEC Patents shall be limited to implementation of the Rambus Technology or other Rambus technology which has been licensed to NEC by

Rambus and no license with respect thereto is granted for use in any other portion of any integrated circuit including, without limitation, the core of a memory integrated circuit (i.e., that portion of a memory integrated circuit other than the interface). Rambus shall have the right to sublicense its rights under the Applicable NEC Patents to any or all of the other licensees of any Rambus Technology or any other Rambus technology to the same extent that NEC is licensed by such licensee through Rambus under Section 2.1 of the License Agreement or under other relevant license agreements between Rambus and NEC for such other Rambus technology.

- 2.2 NEC makes no warranty or representation with respect to, or in connection with the grant of licenses under such Applicable NEC Patents. No license is granted, either expressly or impliedly, by NEC other than the license expressly granted in Section 2.1 above.
- 2.3 The parties agree that, except as otherwise provided in the License Agreement, neither party shall be required to provide the other party with any technical information hereunder.
 - 3 Term and Termination.
 - 3.1. This Supplement shall be effective as of the date last written below.
 - 3.2. This Supplement shall survive any termination of the License Agreement and remain in force after any such termination thereof.
 - 4 Notice Regarding this Supplement.

Any notice hereunder and any delivery hereunder shall be sent to the

following address:

If sent to NEC: General Manager

1st LSI Memory Division

NEC Corporation

1120, Shimokuzawa, Sagamihara

Kanagawa 229, Japan

General Manager System ASIC Division NEC Corporation

1753, Shimonumabe, Nakahara-ku Kawasaki, Kanagawa 211, Japan

If sent to Rambus: President

Rambus Inc.

2465 Latham Street

Mountain View, California 94040

U.S.A.

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NEC represents and warrants that no prior consent or approval with any governmental authority in Japan is required in connection with the valid execution and performance of this Supplement. NEC shall be responsible for any required filings of this Supplement with Japanese government agencies.

6 License Agreement.

- 6.1. Other than expressly set forth herein, the terms and conditions of the License Agreement, including, but not limited to, Sections 7, 9 and 10 thereof, shall be applied to any transactions, performances, rights and obligations, interpretation, and any other matter of, under or with respect to this Supplement.
- 6.2. In all respects, the License Agreement, as previously supplemented and amended, shall remain unmodified and in full force and effect. In the event of any inconsistency or conflict, the provisions of this Supplement shall control and govern over the provisions of the License Agreement.

The parties hereto execute this Supplement in duplicate as of the date last entered below:

NEC CORPORATION	RAMBUS INC.
ву:	ву:
Print Name:	Print Name:
Title:	Title:
Date:	Date:
ву:	
Print Name:	
Title:	
Date:	

AMENDMENT NO. 4 TO SEMICONDUCTOR TECHNOLOGY AGREEMENT

This Amendment No. 4 (the "Amendment") to the parties' Semiconductor Technology Agreement is entered into as of May 21, 1997 ("Effective Date") by and between Rambus Inc., a Delaware corporation with principal offices at 2465 Latham Street, Mountain View, California 94040, U.S.A. ("Rambus") and LG Semicon Co., Ltd. (formerly known as GoldStar Electron Co., Ltd.), a Korean corporation with principal offices at 1, Hyangjeong-dong, Hungduk-gu, Cheongju-si, Chungcheongbuk-do, 361-480 Korea ("LGS").

RECITALS

- A. In 1994 the parties entered into a Semiconductor Technology Agreement (as previously restated and amended, the "License Agreement");
- B. The parties entered into Amendment No. 2 dated March 20, 1996 to the License Agreement to provide for the development by Rambus of a Rambus ASIC cell for LGS's 0.35 micron semiconductor manufacturing process;
- C. The parties desire to further amend the License Agreement to include the development by Rambus of a Rambus ASIC cell for LGS's 70 angstrom 0.35 micron semiconductor manufacturing process (the "Modified RAC") as defined hereinbelow, on the terms and conditions set forth herein; and

WHEREAS, the parties desire to provide for characterization by Rambus of the Modified RAC.

NOW, THEREFORE, the parties agree that the License Agreement is further amended to include the following:

1. Definitions and Related Matters.

Capitalized terms used in this Amendment shall have the meaning specified therefor in the License Agreement or Amendment No. 2, as applicable, and, in addition, the following terms shall have the meaning set forth below:

- 1.1 "LGS Process Technology" means the 70 angstrom 0.35 micron process technology adopted by LGS.
- 1.2 "Modified RAC" means the ASIC cell based on the design of the New RAC (as defined in Amendment No. 2) as modified for the LGS Process Technology by Rambus in accordance with this Amendment.

- 1.3 "Modified RAC Deliverables" means the items specified in Exhibit A hereto.
- 1.4 "EzTRAC" means a prototype Rambus test ASIC device designed and manufactured by or for LGS and incorporating the Modified RAC.
- 1.5 "Rambus Interface Technology," as defined in Section 1.1 of the License Agreement, shall also include the Modified RAC Deliverables developed hereunder.
- 2. Development of the Modified RAC.
- 2.1 Rambus shall use its reasonable best efforts to deliver to LGS the Modified RAC Deliverables specified in Exhibit A by June 30, 1997, subject to the signing of this Amendment by May 21, 1997 and the provisions of Section 2.3 below.
- 2.2 LGS shall assign an English-speaking engineer or an engineer with experience in communicating in English as liaison to Rambus on this project and shall cooperate with Rambus to complete the development contemplated by this Amendment to the extent LGS considers reasonably necessary including, without limitation, performance of the obligations specified in Section 3 and Exhibit C.
- 2.3 LGS will use its best efforts to deliver to Rambus final versions of the items set forth in Exhibit C by May 21, 1997. LGS acknowledges that providing the process deliverables set forth in Exhibit C is a critical part of developing the Modified RAC by Rambus and that any delay in delivery to Rambus of the items set forth in Exhibit C after May 21, 1997 will impact Rambus' ability to meet the target date for delivery of the Modified RAC Deliverables provided in Section 2.1 above.
- 2.4 Based on the delivery schedule for the Modified RAC Deliverables in Section 2.1 above, LGS will use its best efforts to complete the fabrication of the EzTRAC by July 31, 1997.
- 3. LGS's Assistance and Acceptance.
- 3.1 LGS will design an ASIC that includes the Modified RAC and incorporates the netlists of the EzTRAC.
- 3.2 LGS will generate masks and manufacture engineering samples of the EzTRAC with the Modified RAC.
- 3.3 LGS will use its best efforts to complete the fabrication and assembly of the EzTRAC by July 31, 1997. LGS will provide at least ten (10) package engineering samples of the EzTRAC with the Modified RAC to Rambus for each process condition to be characterized (typical, SS and FF).

3.4 Within thirty-five (35) days after receipt of the characterization report from Rambus in accordance with Section 4.2 below, LGS shall examine such report in order to determine if it satisfies all the requirements of Sections 4.1 and 4.2 below. Prior to the expiration of this thirty-five (35) day period, LGS shall provide Rambus with a written acceptance of the characterization report or a written statement reporting LGS's dissatisfaction with such report. In the event LGS delivers a statement of dissatisfaction to Rambus, Rambus shall promptly correct the unsatisfactory aspect(s) of such report and redeliver a corrected characterization report to LGS. Within thirty-five (35) days after such redelivery, LGS shall provide Rambus with written acceptance or with a statement of dissatisfaction. The above procedure shall be repeated until LGS provides Rambus with a written acceptance of the characterization report.

4. Characterization.

- 4.1 Rambus shall, in accordance with the terms and conditions contained hereinafter, characterize the functionality of the Modified RAC and the behavior of the Rambus channel of the Modified RAC on the EzTRAC using a customized load board on its HP83000/F660 tester. Characterization shall be performed at room temperature and at hot and cold using three (3) devices from one lot which have been fabricated using typical process parameters. In addition, if SS and FF devices are available from LGS, this characterization shall also be performed at room temperature using three (3) devices from each such lot. Characterization shall be in accordance with the Rambus "Test Methodology for ASICs with RAC" for RAC X as specified in the Rambus "EzTRAC Specification".
- 4.2 Rambus shall use its reasonable best efforts to deliver to LGS by September 30, 1997 a characterization report of the functionality of the Modified RAC and the behavior of the Rambus channel of the Modified RAC on the EzTRAC and its data. Such characterization report will include the specific results in each test in each skew wafer to tell the performances and design margins of the Modified RAC with respect to the RAC Specification, revision 1.1. In addition, such report will include an evaluation of design and/or process problems, if any, found in the Modified RAC along with proposed remedies for such problems. Rambus' ability to meet the September 30, 1997 date is subject to the execution of this Agreement by May 21, 1997 and the provisions of Section 3 above.
- 5. Engineering Services Fees.
- 5.1 In consideration for Rambus' engineering services in the development of the Modified RAC hereunder, LGS will pay to Rambus an engineering services fee of two hundred fifty thousand dollars (U.S. \$250,000), as follows:
- (a) one hundred thousand dollars (U.S. \$100,000) within thirty
- (30) days of the Effective Date or within fifteen (15) business days of Korean government approval, whichever comes earlier;

- (b) one hundred fifty thousand dollars (U.S. \$150,000) within thirty (30) days of the tapeout of the database.
- 5.2 In consideration for Rambus' engineering services in performing the characterization of the Modified RAC, LGS shall pay to Rambus an engineering services fee of one hundred twenty-five thousand U.S. dollars (U.S. \$125,000), payable as follows:
- (a) seventy-five thousand dollars (U.S. \$75,000) within thirty (30) days of LGS's delivery of silicon to Rambus; and
- (b) fifty thousand dollars (U.S. \$50,000) within thirty (30) days of acceptance by LGS of the characterization report as provided in Section 4.4 above, as applied to the Modified RAC.
- 5.3 All payments by LGS to Rambus under the provisions of Sections 5.1 and 5.2 above will be nonrefundable and shall not be recoupable against any royalty or other payment obligations of LGS under the License Agreement. The parties understand that the engineering services fees to be paid to Rambus represent partial reimbursement of the total cost incurred by Rambus for engineering services to be performed hereunder.
- 5.4 If any of Rambus' obligations hereunder, including without limitation any consultation or evaluation services Rambus may provide to LGS, are performed in Korea by mutual agreement of Rambus and LGS, then LGS shall reimburse all travel and related living expenses incurred by Rambus with respect thereto within thirty (30) days after receipt of Rambus' invoice therefor.
- 5.5 All payments by LGS to Rambus under this Section 5 shall be made by telegraphic wire transfer to Rambus' bank account designated by Rambus in writing in advance.
- 6. Ownership.
- 6.1 Subject to the licenses granted to LGS pursuant to the License Agreement and this Amendment, Rambus shall own and retain all right, title, and interest in the generic RAC designed by Rambus hereunder, and all intellectual property rights with respect thereto, including without limitation the unsized transistor netlist implementations. Without limiting the foregoing, nothing in this Amendment shall prevent or restrict Rambus from developing similar implementation packages and RACs for or with third parties, including use by Rambus of information developed or learned by Rambus in connection with the development of the specific RAC hereunder, except for Confidential Information of LGS provided to Rambus.
- 6.2 LGS shall own all right, title and interest in such portions of the Modified RAC as are modified or developed by Rambus for LGS hereunder and shall retain all right, title and interest in LGS's technology which may be used or contained in the Modified RAC including,

but not limited to, LGS Process Technology.

6.3 THE TECHNICAL INFORMATION, SERVICES, AND ANY CONFIDENTIAL INFORMATION PROVIDED BY RAMBUS TO LGS ARE PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND, EXPRESS, IMPLIED, STATUTORY, OR OTHERWISE, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

- 7. Term and Termination.
- 7.1 This Amendment shall terminate upon any termination of the License Agreement. Termination of this Amendment, however, for default hereof, shall be severable from termination of the License Agreement and each prior amendment thereto. That is, this Amendment shall be terminable for default, in accordance with the procedures specified in Section 8.2(a) of the License Agreement, by either party with respect to a default of either party's obligations hereunder, or with respect to obligations pursuant to the License Agreement as applied to the Modified RAC or the development thereof. Any such termination of this Amendment, however, shall not result in termination of the License Agreement or any prior amendment thereto.
- 7.2 Upon termination of this Amendment by Rambus pursuant to Section 7.1 above, LGS's rights and licenses with respect to the Modified RAC shall terminate. Otherwise, such rights and licenses of LGS shall survive, conditioned on LGS's continuing compliance with its obligations under the License Agreement and this Amendment. The parties' rights and obligations pursuant to Section 6 shall survive any termination or expiration of this Amendment.
- 8. Government Approvals.

LGS shall be responsible for any required filings of this Amendment with Korean government agencies.

9. License Agreement.

Except as expressly provided in this Amendment, the License Agreement, as previously amended, shall remain unmodified and in full force and effect. In the event of any inconsistency

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LG SEMICON CO., LTD.	RAMBUS INC.
ву:	ву:
Print Name:	Print Name:
Title:	Title:
Date:	Date:

EXHIBIT A MODIFIED RAC DELIVERABLES

- 1. Layout database of the RAC cell in Cadence Edge format or GDSII format. The layout is based on a floorplan template which is optimized for a pad pitch of 90u.
- a. Rambus will ensure that the layout database is DRC clean according to the DRC layout rules provided by LGS. Rambus will use the Cadence Edge PDV tools.
- b. Rambus will ensure that the database is LVS clean with the layout database corresponding to the Cadence schematics.
- c. Critical circuits will pass simulations to reasonable skew process corners with voltages 3.3 +/- 10% and junction temperatures 25(degree) C to 110(degree) C.
- 2. Schematics of database in Cadence Edge format and printed on paper.
- 3. Characterization requirements:
- a. Test vectors in HP83000 format for the EzTRAC for RAC characterization purposes.
- b. Characterization requirements document.
- c. Description of cable, load board and probe station requirements for the HP83000

and EZTRAC.

EXHIBIT B CHARACTERIZATION

- 1. WORK.
- a. Rambus shall characterize the New RAC on the EZTRAC using a customized load board on its HP83000 tester.
- b. The characterization shall be performed using three (3) devices for one lot which have been fabricated using typical process parameters.
- 2. DELIVERABLES.
- a. Netlists and test patterns for the EZTRAC which provides a device to characterize the PLL and the AC and DC parameters of the New RAC.
- b. A characterization report of the New RAC on the EZTRAC and its data.

EXHIBIT C LGS PROCESS DELIVERABLES

- 1. HSpice models of transistors, resistors, diodes, and bipolar transistors in paper and electronic formats. I.V. curve data simulated from the models and from actual device measurements. The models should be of high enough quality to enable high speed analog and digital designs. (Level 28 is commonly used).
- 2. Cross section profile of transistors and interconnect structures including materials, thicknesses and spacings.
- 3. Layout design rules and final on-wafer dimensions of all layers.
- 4. Other process data, e.g. resistivities, temperature coefficients, electromigration rules, ESD and latch up rules, etc. and their variations.

AMENDMENT NO. 5 TO SEMICONDUCTOR TECHNOLOGY AGREEMENT

This Amendment No. 5 (the "Amendment") to the parties' Semiconductor Technology Agreement is entered into by and between Rambus Inc., a Delaware corporation with principal offices at 2465 Latham Street, Mountain View, California 94040, U.S.A. ("Rambus") and LG Semicon Co., Ltd. (formerly known as GoldStar Electron Co., Ltd.), a Korean corporation with principal offices at 1, Hyangjeong-dong, Hungduk-gu, Cheongju-si, Chungcheongbuk-do, 361-480 Korea ("LGS").

RECITALS

- A. In 1994 the parties entered into a Semiconductor Technology Agreement (as previously restated and amended, the "License Agreement");
- B. In 1996 the parties amended the License Agreement to include certain additional "Rambus-2" interface technology. The parties now desire to further amend the License Agreement to include the development by Rambus, and implementation by LGS, of a Rambus ASIC cell for the Rambus-2 Interface Technology (the "RAC") as defined hereinbelow, on the terms and conditions set forth herein; and
- C. The parties also desire to provide for characterization by Rambus of the RAC.
- NOW, THEREFORE, the parties agree that the License Agreement is further amended to include the following:
- 1. Definitions and Related Matters.
- Capitalized terms used in this Amendment shall have the meaning specified therefor in the License Agreement, and, in addition, the following terms shall have the meaning set forth below:
- 1.1 "LGS Process Technology" means the 0.25 micron process technology adopted by LGS.
- 1.2 "RAC" means the Rambus-2 ASIC cell as modified for the LGS Process Technology by Rambus in accordance with this Amendment.
- 1.3 "RAC Deliverables" means the items specified in Exhibit A hereto.
- 1.4 "gTRAC" means a prototype Rambus test ASIC device designed and manufactured by or for LGS and incorporating the RAC.

- 1.5 "Rambus-2 Interface Technology," as defined in Amendment No. 3 of the License Agreement, shall also include the RAC Deliverables developed hereunder.
- 2. Development of the RAC.
- 2.1 Rambus shall use its reasonable best efforts to deliver to LGS the RAC Deliverables specified in Exhibit A by April 15, 1998, subject to the signing of this Amendment by August 18, 1997 and LGS' timely completion of its obligations pursuant to the provisions of Section 2.3 below.
- 2.2 LGS shall assign an English-speaking engineer or an engineer with experience in communicating in English as liaison to Rambus on this project and shall cooperate with Rambus to complete the development contemplated by this Amendment including, without limitation, performance of the obligations specified in Section 4 below and Exhibits C and D.
- 2.3 LGS will use its reasonable best efforts to deliver to Rambus preliminary versions of the items set forth in Exhibit C by the Effective Date (as defined below) and final versions of all Exhibit C items by October 30, 1997. LGS acknowledges that providing the process deliverables set forth in Exhibit C is a critical part of developing the RAC by Rambus and that any delay in delivery to Rambus of the items set forth in Exhibit C after October 30, 1997 will impact Rambus' ability to meet the target date for delivery of the RAC Deliverables provided in Section 2.1 above.
- 2.4 Based on the delivery schedule for the RAC Deliverables in Section 2.1 above, LGS will use its reasonable best efforts to complete the fabrication of the gTRAC by May 30, 1998.
- 2.5 At LGS's request, Rambus will provide LGS at no charge up to thirty (30) person days of consulting in the San Francisco Bay Area with respect to LGS's implementation of the RAC Deliverables pursuant to this Amendment. Reasonable additional such assistance, including any consulting performed at LGS's request in Korea, will be available for one thousand five hundred U.S. dollars (U.S. \$1,500) per person day. It is understood that occasional project and design reviews held in the USA shall be provided free of charge by Rambus.
- 3. Characterization.
- 3.1 Rambus shall, in accordance with the terms and conditions contained hereinafter, characterize the functionality of the RAC and the behavior of the Rambus channel of the RAC on the gTRAC using a customized load board on its HP83000/F660 tester. Characterization shall be performed at room temperature and at hot and cold using three (3) devices from one lot which have been fabricated using typical process parameters. In addition, if SS and FF devices are available from LGS, this characterization shall also be performed at room temperature using three (3) devices from each such lot.

- 3.2 Rambus shall use its reasonable best efforts to deliver to LGS by September 30, 1998 a characterization report of the functionality of the RAC and the behavior of the Rambus channel of the RAC on the gTRAC and its data. Such characterization report will include the specific results in each test in each skew wafer to tell the performances and design margins of the RAC with respect to the Rambus-2 (Direct) RAC Specification (the then current applicable specification revision as agreed upon by the parties). In addition, such report will include an evaluation of design and/or process problems, if any, found in the RAC along with proposed remedies for such problems. Rambus' ability to meet the September 30, 1998 date is subject to the execution of this Agreement by August 18, 1997 and LGS' timely completion of its obligations pursuant to the provisions of Section 4 below.
- 3.3 THE TECHNICAL INFORMATION, SERVICES, AND ANY CONFIDENTIAL INFORMATION PROVIDED BY RAMBUS TO LGS ARE PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND, EXPRESS, IMPLIED, STATUTORY, OR OTHERWISE, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.
- 4. LGS's Assistance and Acceptance.
- 4.1 LGS will design an ASIC that includes the RAC and incorporates the netlists of the gTRAC.
- 4.2 LGS will generate masks and manufacture engineering samples of the gTRAC with the RAC.
- 4.3 LGS will use its reasonable best efforts to complete the fabrication and assembly of the gTRAC by May 30, 1998. LGS will provide at least ten (10) package engineering samples of the gTRAC with the RAC to Rambus for each process condition to be characterized (typical, SS and FF).
- 4.4 Within thirty-five (35) days after receipt of the characterization report from Rambus in accordance with Section 3.2 above, LGS shall examine such report in order to determine if it satisfies all the requirements of Sections 3.1 and 3.2 above. Prior to the expiration of this thirty-five (35) day period, LGS shall provide Rambus with a written acceptance of the characterization report or a written statement reporting LGS's dissatisfaction with such report. If Rambus receives no such writing, the characterization report shall be deemed accepted. In the event LGS delivers a statement of dissatisfaction to Rambus, Rambus shall promptly correct the unsatisfactory aspect(s) of such report and redeliver a corrected characterization report to LGS. Within thirty-five (35) days after such redelivery, LGS shall provide Rambus with written acceptance or with a statement of dissatisfaction. The above procedure shall be repeated until LGS provides Rambus with a written acceptance of the characterization report.

- 5. Engineering Services Fees.
- 5.1 In consideration for Rambus' engineering services in the development of the RAC hereunder, LGS will pay to Rambus an engineering services fee of five hundred thousand dollars (U.S. \$500,000), as follows:
- (a) two hundred fifty thousand dollars (U.S. \$250,000) within thirty (30) days of the Effective Date or within fifteen (15) days of Korean government approval, whichever comes earlier;
- (b) two hundred fifty thousand dollars (U.S. \$250,000) within thirty (30) days of the tapeout of the database.
- 5.2 In consideration for Rambus' engineering services in performing the characterization of the RAC, LGS shall pay to Rambus an engineering services fee of one hundred fifty thousand U.S. dollars (U.S. \$150,000), payable as follows:
- (a) seventy-five thousand dollars (U.S. \$75,000) within thirty (30) days of the date LGS delivers working silicon to Rambus; and
- (b) seventy-five thousand dollars (U.S. \$75,000) within thirty (30) days of acceptance by LGS of the characterization report as provided in Section 4.4 above, as applied to the RAC.
- 5.3 All payments by LGS to Rambus under the provisions of Sections 5.1 and 5.2 above will be nonrefundable and shall not be recoupable against any royalty or other payment obligations of LGS under the License Agreement. The parties understand that the engineering services fees to be paid to Rambus represent partial reimbursement of the total cost incurred by Rambus for engineering services to be performed hereunder.
- 5.4 If any of Rambus' obligations hereunder, including without limitation any consultation or evaluation services Rambus may provide to LGS, are performed in Korea by mutual agreement of Rambus and LGS, then LGS shall reimburse all travel and related living expenses incurred by Rambus with respect thereto within thirty (30) days after receipt of Rambus' invoice therefor.
- 5.5 All payments by LGS to Rambus under this Section 5 shall be made by telegraphic wire transfer to Rambus' bank account designated by Rambus in writing in advance.
- 6. Ownership.
- 6.1 Subject to the licenses granted to LGS pursuant to the License Agreement and this Amendment, Rambus shall own and retain all right, title, and interest in the generic RAC designed by Rambus hereunder, and all intellectual property rights with respect thereto, including

without limitation the unsized transistor netlist implementations. Without limiting the foregoing, nothing in this Amendment shall prevent or restrict Rambus from developing similar implementation packages and RACs for or with third parties, including use by Rambus of information developed or learned by Rambus in connection with the development of the specific RAC hereunder, except for Confidential Information of LGS provided to Rambus.

6.2 LGS shall own all right, title and interest in such portions of the RAC as are modified or developed by Rambus for LGS hereunder and shall retain all right, title and interest in LGS's technology which may be used or contained in the RAC including, but not limited to, LGS Process Technology.

6.3 THE TECHNICAL INFORMATION, SERVICES, AND ANY CONFIDENTIAL INFORMATION PROVIDED BY RAMBUS TO LGS ARE PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND, EXPRESS, IMPLIED, STATUTORY, OR OTHERWISE, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

- 7. Term and Termination.
- 7.1 This Amendment shall become effective on the date of signature by the second party to sign below or the date of approval of this Amendment by the Korean Government as required, whichever comes later ("Effective Date"), and shall terminate upon any termination of the License Agreement. Termination of this Amendment, however, for default hereof, shall be severable from termination of the License Agreement and each prior amendment thereto. That is, this Amendment shall be terminable for default, in accordance with the procedures specified in Section 8.2(a) of the License Agreement, by either party with respect to a default of either party's obligations hereunder, or with respect to obligations pursuant to the License Agreement as applied to the RAC or the development thereof. Any such termination of this Amendment, however, shall not result in termination of the License Agreement or any prior amendment thereto.
- 7.2 Upon termination of this Amendment by Rambus pursuant to Section 7.1 above, LGS's rights and licenses with respect to the RAC shall terminate. Otherwise, such rights and licenses of LGS shall survive, conditioned on LGS's continuing compliance with its obligations under the License Agreement and this Amendment. The parties' rights and obligations pursuant to Section 6 shall survive any termination or expiration of this Amendment.
- 8. Government Approvals.

LGS shall be responsible for any required filings of this Amendment with Korean government agencies.

9. License Agreement.

Except as expressly provided in this Amendment, the License Agreement, as previously amended, shall remain unmodified and in full force
and effect. In the event of any inconsistency or conflict, the provisions of this Amendment shall control and govern over the provisions of th
License Agreement.

LG SEMICON CO., LTD.	RAMBUS INC.
ву:	Ву:
Print Name:	Print Name:
Title:	Title:
Date:	Date:

EXHIBIT A RAC DELIVERABLES

- 1. Layout database of the RAC cell in Cadence Edge format or GDSII format. The layout is based on a floorplan template.
- a. Rambus will ensure that the layout database is DRC clean according to the DRC layout rules provided by LGS. Rambus will use the Cadence Edge PDV tools.
- b. Rambus will ensure that the database is LVS clean with the layout database corresponding to the Cadence schematics.
- c. Critical circuits will pass simulations to reasonable skew process corners with voltages 2.5V + 10% and junction temperatures 25(degree) C to 110(degree) C.
- 2. Schematics of database in Cadence Edge format and printed on paper.
- 3. Characterization requirements:
- a. Test vectors in HP83000 format for the gTRAC for RAC characterization purposes.
- b. Characterization requirements document.
- c. Description of cable, load board and probe station requirements for the HP83000 and gTRAC.

EXHIBIT B CHARACTERIZATION

1. WORK.

- a. Rambus shall characterize the RAC on the gTRAC using a customized load board on its HP83000 tester.
- b. The characterization shall be performed using three (3) devices for one lot which have been fabricated using typical process parameters.
- 2. DELIVERABLES.
- a. Netlists and test patterns for the gTRAC which provides a device to characterize the PLL and the AC and DC parameters of the RAC.
- b. A characterization report of the RAC on the gTRAC and its data.

EXHIBIT C LGS PROCESS DELIVERABLES

- 1. HSpice models of transistors, resistors, diodes, and bipolar transistors in paper and electronic formats. I.V. curve data simulated from the models and from actual device measurements. The models should be of high enough quality to enable high speed analog and digital designs. (Level 28 is commonly used).
- 2. Cross section profile of transistors and interconnect structures including materials, thicknesses and spacings.
- 3. Layout design rules and final on-wafer dimensions of all layers.
- 4. Other process data, e.g. resistivities, temperature coefficients, electromigration rules, ESD and latch up rules, etc. and their variations.

EXHIBIT D LGS'S SUPPORT ON CHARACTERIZATION

- 1. LGS will design an ASIC that includes the RAC and incorporates the netlists of the gTRAC.
- 2. LGS will generate masks and manufacture engineering samples of the gTRAC with the RAC.
- 3. LGS will provide package engineering samples of the gTRAC with the RAC to Rambus.

AMENDMENT NO. 6 TO SEMICONDUCTOR TECHNOLOGY AGREEMENT

This Amendment No. 6 the "Amendment") to the Parties' Semiconductor Technology Agreement is entered into by and between Rambus Inc., a Delaware corporation with principal offices at 2465 Latham Street, Mountain View, California 94040, U.S.A. ("Rambus") and LG Semicon Co., Ltd. (formerly known as GoldStar Electron Co., Ltd.), a Korean corporation with principal offices at 1, Hyangjeong-dong, Hungduk-gu, Cheongju-si, Chungcheongbuk-do, 361-480 Korea ("LGS").

RECITALS

A. In 1994 the parties entered into a Semiconductor Technology Agreement (as previously restated and amended, the "License Agreement");

B. In 1995 the parties made an amendment ("Amendment No. 1") to the License Agreement to provide for the exercise by LGS of its Option Right under the License Agreement for the license of Rambus Peripherals. The parties now desire to further amend the License Agreement to allow LGS to design, with Rambus' support, its own "LG RMC conforming to LGS's Requirement Specification (as defined below on the terms and conditions set forth herein. LGS' VDC (as defined below) will incorporate the LG RMC. LGS also intends to verify the performance of the LG RMC and to have its engineers who participate in this project be trained by Rambus on the RMC

NOW, THEREFORE, the parties agree that the License Agreement is further amended to include the following:

1. Definitions and Related Matters

Capitalized terms used in this Amendment shall have the meaning specified therefor in the License Agreement, and, in addition, the following terms shall have the meaning set forth below:

- 1.1 "RMC" means the RCPU version of the Rambus Memory Controller.
- 1.2 "LG RMC" means a modified or redesigned RMC for LGS' own use which shall be jointly developed and jointly owned by Rambus and LGS in accordance with this Amendment.
- 1.3 "LGS' Requirement Specification" means a specification for the LG RMC to meet LGS' requirement which as of July 28, 1997 has been discussed and agreed in good faith between both parties.
- 1.4 "VDC" means the LGS video decoder chip which shall incorporate the LG RMC.
- 1.5 "Rambus Channel" means the wires that connect compatible integrated circuits that implement the Rambus interface specification.

- 1.6 "Rambus Interface Technology" as defined in Section 1.1 of the License Agreement, shall also include the Rambus Channel and RMC Deliverables provided hereunder, as well as all information, invention, technology, technical documentation, designs, materials and know-how which describe or enable the use or implementation of the Rambus Channel and/or the RMC.
- 1.7 "Effective Date" means the date of last signature on this Amendment or the date of approval for this Amendment from the Korean Government as required, whichever comes later.
- 1.8 "LGE" refers to LG Electronics, Inc., a Korean corporation.
- 2. Rambus Engineering Responsibilities
- 2.1 Rambus shall use its commercially reasonable effort to deliver to LGS the RMC Deliverables specified in Exhibit A pursuant to the timetable set forth therein, subject to the timely performance by LGS of each of its obligations set forth in Section 3 below.
- 2.2 Rambus shall use its commercially reasonable effort to provide LGS with the following services to design the LG RMC in accordance with the LGS' Requirement Specification:
- i) Rambus will consult with LGS regarding substantive performance, schedule and integration issues which may arise during this undertaking by means of network communication or face-to-face meeting at Rambus' facility or LGS' San Jose facility as needed at LGS' request.
- ii) Rambus has delivered. and LGS has received and accepted, the Architecture Design for the LG RMC as of July 28, 1997.
- iii) Rambus shall support LGS in both it's logic design and verification of the LG RMC, by LGS' August 21, 1997 schedule.
- iv) Rambus shall provide at least five (5) man-days of support to evaluate the test chip for LG RMC design after its fab-out around October at Rambus' facility or LGS' San Jose facility.
- 2.3 On LGS' optional written request by January 31, 1998, the delivery of LGS PCB Deliverables set forth in Exhibit B, and the payment set forth in
- Section 4.2, Rambus shall use its reasonable effort to i) provide a PCB layout of the Rambus Channel for LGS' HDTV board, Rambus PCB Deliverables, as set forth in Exhibit A and ii) review the package electricals of the VDC with regard to reliable operation at frequency.
- 2.4 Until the Logic Design is successfully completed, or until August 31st, 1997, whichever comes later, Rambus shall assign at least one of its engineer to support, consult and train LGS Engineers, with regard to RMC and LGS RMC design, on an almost full time (80% or above) basis at Rambus' facility or LGS's San Jose facility.
- 2.5 Rambus shall use its commercially reasonable effort, as set forth in Section 2, to

support LGS in successful completion of this project. The success of this project means completion of the LG RMC on schedule and LGE's adoption of Rambus DRAM as their HDTV memory instead of Synchronous DRAM or other memories.

2.6 THE RMC, RAMBUS CHANNEL, TECHNICAL INFORMATION, SERVICES, AND ANY CONFIDENTIAL INFORMATION PROVIDED BY RAMBUS TO LGS ARE PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND, EXPRESS, IMPLIED, STATUTORY, OR OTHERWISE, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTIES OF MERCHANTABILITY, NON INFRINGEMENT, OR FITNESS FOR A PARTICULAR PURPOSE.

- 3. LGS Engineering Responsibilities
- 3.1 LGS will use its best efforts to deliver to Rambus the deliverables set forth in Exhibit B pursuant to the timetable set forth therein. LGS acknowledges that providing such deliverables is a critical part of co-development of the RMC and that any delay in delivery to Rambus of the items set forth in Exhibit B will impact Rambus' ability to meet the target dates for delivery of the RMC Deliverables provided in Section 2.1 above.
- 3.2 LGS will use its reasonable effort to perform the following role in this project:
- i) LGS will perform the Logic Design and verification by August 21, 1997, with the Architecture Design delivered by Rambus in accordance with the Section 2.2 ii) above, under Rambus' support. as set forth in Section 2.2, iii)
- ii) LGS will perform Logic Synthesis and Timing Verification for the LG RMC and integrating the LG RMC with RAC in Seoul by October 15.
- iii) Verification of data base, tape-out, and prototype manufacture for the LG RMC test-chip will be performed by LGS in Seoul. The evaluation of the LG RMC test-chip after its fab-out will be performed by LGS under Rambus' support as set forth in Section 2.2 iv) above.
- 3.3 LGS and/or LGE will be responsible for PCB board layout. Upon LGS' exercise of optional Section 2.3 above, Rambus will perform the engineering services as set forth in Section 2.3.
- 4. Engineering Services Fees & Applicable Running Royalties for the VDC Sale
- 4.1 In consideration for Rambus' engineering services in the design support of the LG RMC hereunder, LGS will pay to Rambus an engineering services fee of one hundred fifty thousand dollars (U.S.\$150,000), as follows:
- (a) fifty thousand dollars (U.S.\$50,000) within twenty (20) days of the Effective Date; and
- (b) fifty thousand dollars (U.S.\$50,000) on the delivery of completed Architecture

Design of LG RMC; and

- (c) fifty thousand dollars (U.S.\$50,000) on completion and verification of the Logic Design, or by October 15, 1997, whichever comes first.
- 4.2 In consideration for Rambus' engineering services, on LGS' optional request pursuant to Section 2.3, in performing the PCB layout LGS shall pay to Rambus an engineering services fee of fifty thousand dollars (U.S.\$50,000), payable upon Rambus' completion of those tasks (deliverables listed under Rambus PCB Deliverables, Exhibit A).
- 4.3 All payments by LGS to Rambus under the provisions of Sections 4.1 and 4.2 above will be nonrefundable and shall not be recoupable against any royalty or other payment obligations of LGS under the License Agreement. The parties understand that the engineering services fees to be paid to Rambus represent partial reimbursement of the total cost incurred by Rambus for engineering services to be performed hereunder.
- 4.4 If any of Rambus' obligations hereunder, including without limitation any consultation or evaluation services Rambus may provide to LGS, are performed in Korea by mutual agreement of Rambus and LGS, then LGS shall reimburse all travel and related living expenses incurred by Rambus with respect thereto within thirty (30) days after receipt of Rambus' invoice therefor.
- 4.5 All payments by LGS to Rambus under this Section 4 shall be made by telegraphic wire transfer to Rambus' bank account designated by Rambus in writing in advance.
- 4.6 For the avoidance of doubt, the VDC shall belong to Rambus Peripherals, so LGS shall pay Rambus running royalties on sales of the VDC incorporating Rambus RAC in accordance with the Amendment No. 1.
- 5. Ownership and License
- 5.1 Rambus shall own and retain all right, title, and interest in the RMC, and all intellectual property rights with respect thereto. Rambus hereby grants to LGS a limited license to use and modify (but not sell or externally distribute) the RMC to allow LGS to design the LG RMC hereunder. Nothing in this Amendment shall prevent or restrict Rambus from developing similar RMC integrations for or with third parties, including use by Rambus of information developed or learned by Rambus in connection with the work performed hereunder, except for Confidential Information of LGS provided to Rambus.
- 5.2 Rambus and LGS shall jointly own all right, title and interest in the LG RMC as modified and designed in accordance with this Amendment, so LGS shall have the right to use and modify the LG RMC to incorporate it into any LGS' semiconductor products.
- 5.3 LGS shall retain all right, title and interest in LGS' technology which may be used or contained in the VDC including, but not limited to, LGS process technology.
- 6. Term and Termination

- 6.1 This Amendment shall become effective on the "Effective Date", and shall terminate upon any termination of the License Agreement. Termination of this Amendment, however, for default hereof, shall be severable from termination of the License Agreement and each prior amendment thereto. That is, this Amendment shall be terminable for default, in accordance with the procedures specified in Section 8.2(a) of the License Agreement, by either party with respect to a default of either party's obligations hereunder, or with respect to obligations pursuant to the License Agreement as applied to the design of the LG RMC. Any such termination of this Amendment, however, shall not result in termination of the License Agreement or any prior amendment thereto.
- 6.2 Upon termination of this Amendment by Rambus pursuant to Section 6.1 above, LGS' rights and licenses with respect to the RMC shall terminate. Otherwise, such rights and licenses of LGS shall survive, conditioned on LGS' continuing compliance with its obligations under the License Agreement and this Amendment. The parties' rights and obligations pursuant to Section 5 shall survive any termination or expiration of this Amendment.

7. Government Approvals

LGS shall be responsible for any required filings of this Amendment with Korean government agencies.

8. License Agreement

Except as expressly provided in this Amendment, as previously amended, shall remain unmodified and in full force and effect. In the event of any inconsistency or conflict, the provisions of this Amendment shall control and govern over the provisions of the License Agreement.

LG SEMICON CO., LTD.	RAMBUS INC.
Ву:	Ву:
Printed Name:	Printed Name:
Title:	Title:
Date:	Date:

EXHIBIT A

RMC DELIVERABLES

- 1. Verilog code of the RMC and documentation to be delivered within ten (10) days from the date of signature on this Amendment.
- 2. Architectural specification of the LGS RMC by July 27, 1997.

RAMBUS PCB DELIVERABLES

- 1. Rambus Channel layout to be delivered within ten (10) days after receipt of LGS' optional written request pursuant to optional Section 2.3 above.
- 2. Gerber file of reference Rambus Channel PCB layout to be delivered 10 days after LGS' exercise of optional Section 2.3 above.
- 3. Complete review of proposed package electricals within 10 days of Rambus receipt of package drawings and electrical specifications and after LGS' exercise of optional Section 2.3 above.
- 4. Assist LGS and LGE with the debug of Rambus Interface portion of VDC chip.

EXHIBIT B

LGS RMC DELIVERABLES

- 1. English specification of LG RMC with particular emphasis on timing information of existing memory controller to be delivered within ten (10) days from the date of signature on this Amendment.
- 2. Verilog code, and documentation, of final LG RMC by August 21, 1997

LGS PCB DELIVERABLES

- 1. LGE's PCB layout documentation.
- 2. Package mechanical drawings and electrical specifications.

RAMBUS INC. AND SUBSIDIARY

Statement Re: Computation of Net Income (Loss) Per Share (in thousands, except per share amounts)

Historical Net Income (Loss) Per Share

	Year Ended September 30,		
	1997	1996	1995
Primary:			
•			
Net income (loss)	\$ 1,981 =====	\$(4,415) ======	\$(7,020) =====
Shares used in computing net income (loss) per share:			
Weighted average common shares outstanding	19,548	5,687	5,264
public offering based on the Treasury Stock method	201	401	401
Additional dilutive options	1,962		
	21,711	6,088	5,665
	======	======	======
Net income (loss) per share	\$ 0.09	\$ (0.73)	\$ (1.24)
	======	=====	======
Fully diluted:			
Net income (loss)	\$ 1,981	\$(4,415)	\$(7,020)
	======	======	======
Shares used in computing net income (loss) per share:			
Weighted average common shares outstanding	19,548	5,687	5,264
public offering based on the Treasury Stock method	201	401	401
Additional dilutive options	2,028		
Additional dilutive warrants	313		
	22.090	6,088	 5,665
	======	=====	======
Not income (local) you should	* 0.00	å (0.72)	d (1 04)
Net income (loss) per share	\$ 0.09	\$ (0.73)	\$ (1.24)

RAMBUS INC. AND SUBSIDIARY

Statement Re: Computation of Net Income (Loss) Per Share--(Continued) (in thousands, except per share amounts)

Pro Forma Net Income (Loss) Per Share

TO TOTILA NEE THEORIC (BODD) TEL SHALE	Year Ended September 30,		
	1997	1996	1995
Primary:			
Net income (loss)	\$ 1,981 ======	\$ (4,415) ======	\$ (7,020) ======
Shares used in computing net income (loss) per share:			
Weighted average common shares outstanding	19,548	5,687	5,264
"if converted" method)		11,297	11,297
public offering based on the Treasury Stock method	201 1,962	401 	401
	21,711 ======	17,385 ======	16,962 =====
Net income (loss) per share	\$ 0.09	(0.25)	(0.41)
Fully diluted:			
Net income (loss)	\$ 1,981 ======	\$ (4,415) ======	\$ (7,020) ======
Shares used in computing net income (loss) per share:			
Weighted average common shares outstanding	19,548	5,687	5,264
"if converted" method)		11,297	11,297
public offering based on the Treasury Stock method	201	401	401
Additional dilutive options	2,028 313		
	22,090 ======	17,385 ======	16,962 ======
Net income (loss) per share	\$ 0.09	\$ (0.25) ======	\$ (0.41) ======

Exhibit 23.1

CONSENT OF INDEPENDENT ACCOUNTANTS

We consent to the incorporation by reference in the registration statements of Rambus Inc. on Form S-8 (File No.'s 333-38855 and 333-28597) of our reports dated October 10, 1997, on our audits of the consolidated financial statements and financial statement schedule of Rambus, Inc. and Subsidiary as of September 30, 1997 and 1996 and for the years ended September 30, 1997, 1996, and 1995, which reports are included in this Annual Report on Form 10-K.

COOPERS & LYBRAND L.L.P.

San Jose, California December 12, 1997

ARTICLE 5

THIS SCHEDULE CONTAINS SUMMARY FINANCIAL INFORMATION EXTRACTED FROM THE ACCOMPANYING FINANCIAL STATEMENTS AND IS QUALIFIED IN ITS ENTIRETY BY REFERENCE TO SUCH FINANCIAL STATEMENTS.

MULTIPLIER: 1,000

PERIOD TYPE	12 MOS
FISCAL YEAR END	SEP 30 1997
PERIOD START	OCT 01 1996
PERIOD END	SEP 30 1997
CASH	20,641
SECURITIES	51,184
RECEIVABLES	935
ALLOWANCES	(10)
INVENTORY	Ó
CURRENT ASSETS	80,757
PP&E	11,261
DEPRECIATION	(6,923)
TOTAL ASSETS	87,878
CURRENT LIABILITIES	31,021
BONDS	0
PREFERRED MANDATORY	0
PREFERRED	0
COMMON	22
OTHER SE	26,639
TOTAL LIABILITY AND EQUITY	87,878
SALES	26,015
TOTAL REVENUES	26,015
CGS	5,491
TOTAL COSTS	5,491
OTHER EXPENSES	18,570
LOSS PROVISION	0
INTEREST EXPENSE	194
INCOME PRETAX	3,296
INCOME TAX	1,315
INCOME CONTINUING	1,981
DISCONTINUED	0
EXTRAORDINARY	0
CHANGES	0
NET INCOME	1,981
EPS PRIMARY	0.09
EPS DILUTED	0.09

End of Filing



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