RAMBUS INC
Form 10-K
February 22, 2013
Table of Contents

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

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Form 10-K

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(Mark One)

þ ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended December 31, 2012
or
o 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

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

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Delaware (State or other jurisdiction of incorporation or organization)	94-3112828 (I.R.S. Employer Identification Number)
1050 Enterprise Way, Suite 700 Sunnyvale, California (Address of principal executive offices)	94089 (Zip Code)

Registrant's telephone number, including area code:
(408) 462-8000

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

Title of Each Class	Name of Each Exchange on Which Registered
Common Stock, $.001 Par Value	The NASDAQ Stock Market LLC (The NASDAQ Global Select Market)

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

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Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes þ No o

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes o No þ

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 þ No o

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes þ No o

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of the 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. þ

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

Large accelerated filer ¨	Accelerated filer þ	Non-accelerated filer ¨ (Do not check if a smaller reporting company)	Smaller reporting company ¨

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes o No þ

The aggregate market value of the Registrant's Common Stock held by non-affiliates of the Registrant as of June 30, 2012 was approximately $531.1 million based upon the closing price reported for such date on The NASDAQ Global Select Market. For purposes of this disclosure, shares of Common Stock held by officers and directors of the Registrant and persons that may be deemed to be affiliates under the Act have been excluded. 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 111,525,021 as of January 31, 2013.

DOCUMENTS INCORPORATED BY REFERENCE

Certain information is incorporated into Part III of this report by reference to the Proxy Statement for the Registrant's annual meeting of stockholders to be held on or about April 25, 2013 to be filed with the Securities and Exchange Commission pursuant to Regulation 14A not later than 120 days after the end of the fiscal year covered by this Form 10-K.

Table of Contents

TABLE OF CONTENTS

Table of Contents

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K ("Annual Report") contains forward-looking statements. These forward-looking statements include, without limitation, predictions regarding the following aspects of our future:

- Success in the markets of our or our customers' products;
- Sources of competition;
- Research and development costs and improvements in technology;
- Sources, amounts and concentration of revenue, including royalties;
- Success in renewing license agreements;
- Technology product development;
- Outcome and effect of current and potential future intellectual property litigation and other significant litigation;
- Dispositions, acquisitions, mergers or strategic transactions and our related integration efforts;
- Write-down of assets;
- Pricing policies of our customers;
- Changes in our strategy and business model;
- Deterioration of financial health of commercial counterparties and their ability to meet their obligations to us;
- Engineering, marketing and general and administration expenses;
- Contract revenue;
- Operating results;
- International licenses and operations;
- Effects of changes in the economy and credit market on our industry and business;
- Ability to identify, attract, motivate and retain qualified personnel;
- Growth in our business;
- Methods, estimates and judgments in accounting policies;
- Adoption of new accounting pronouncements;
- Effective tax rates;
- Realization of deferred tax assets/release of deferred tax valuation allowance;
- Trading price of our Common Stock;
- Internal control environment;
- Corporate governance;
- The level and terms of our outstanding debt;
- Resolution of the governmental agency matters involving us;
- Litigation expenses;
- Protection of intellectual property;
- Terms of our licenses and amounts owed under license agreements;
- Indemnification and technical support obligations;
- Issuances of our securities, which could involve restrictive covenants or be dilutive to our existing stockholders; and

Table of Contents

- Likelihood of paying dividends or repurchasing securities.

You can identify these and other forward-looking statements by the use of words such as “may,” “future,” “shall,” “should,” “expects,” “plans,” “anticipates,” “believes,” “estimates,” “predicts,” “intends,” “potential,” “continue,” “projecting” or the neg terms, or other comparable terminology. Forward-looking statements also include the assumptions underlying or relating to any of the foregoing statements.

Actual results could differ materially from those anticipated in these forward-looking statements as a result of various factors, including those set forth under Item 1A, “Risk Factors.” All forward-looking statements included in this document are based on our assessment of information available to us at this time. We assume no obligation to update any forward-looking statements.

Table of Contents

PART I

Industry terminology, used widely throughout this annual report, has been abbreviated and, as such, these abbreviations are defined below for your convenience:

Differential Power Analysis	DPA
Double Data Rate	DDR
Dynamic Random Access Memory	DRAM
Field Programmable Gate Arrays	FPGA
Graphics Double Data Rate	GDDR
High Definition Television	HDTV
Input/Output	I/O
Light Emitting Diodes	LED
Liquid Crystal Display	LCD
Peripheral Component Interconnect	PCI
Rambus Dynamic Random Access Memory	RDRAM™
Simple Power Analysis	SPA
Single Data Rate	SDR
Synchronous Dynamic Random Access Memory	SDRAM
eXtreme Data Rate	XDR™

Table of Contents

From time to time we will refer to the abbreviated names of certain entities and, as such, have provided a chart to indicate the full names of those entities for your convenience.

Advanced Micro Devices Inc.	AMD
Broadcom Corporation	Broadcom
Cooper Lighting, LLC	Cooper Lighting
Cryptography Research, Inc.	CRI
Elpida Memory, Inc.	Elpida
Freescale Semiconductor Inc.	Freescale
Fujitsu Limited	Fujitsu
General Electric Company	GE
Hewlett-Packard Company	Hewlett-Packard
Hynix Semiconductor, Inc.	Hynix
Infineon Technologies AG	Infineon
Inotera Memories, Inc.	Inotera
Intel Corporation	Intel
International Business Machines Corporation	IBM
Joint Electronic Device Engineering Councils	JEDEC
Lighting and Display Technology	LDT
LSI Corporation	LSI
MediaTek Inc.	MediaTek
Memory and Interfaces Division	MID
Micron Technologies, Inc.	Micron
Mobile Technology Division	MTD
Nanya Technology Corporation	Nanya
NVIDIA Corporation	NVIDIA
Qimonda AG (formerly Infineon’s DRAM operations)	Qimonda
Panasonic Corporation	Panasonic
Renesas Electronics	Renesas
Samsung Electronics Co., Ltd.	Samsung
Semiconductor Business Group	SBG
Sony Computer Electronics	Sony
Toshiba Corporation	Toshiba

Table of Contents

Item 1. Business

Rambus Inc., referred to as we, us or Rambus, was founded in 1990 and reincorporated in Delaware in March 1997. Our principal executive offices are located at 1050 Enterprise Way, Suite 700, Sunnyvale, California. Our website is www.rambus.com. You can obtain copies of our Forms 10-K, 10-Q, 8-K, and other filings with the SEC, and all amendments to these filings, free of charge, from our website as soon as reasonably practicable following our filing of any of these reports with the SEC. In addition, you may read and copy any material we file with the SEC at the SEC's Public Reference Room at 100 F Street NE, Room 1580, Washington, D.C. 20549. You may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. The SEC also maintains a website that contains reports, proxy, and information statements, and other information regarding registrants that file electronically with the SEC at www.sec.gov.

We are an innovative technology solutions company that brings invention to market. Unleashing the intellectual power of our world-class engineers and scientists in a collaborative and synergistic way, we invent, develop, offer and license solutions that challenge and enable our customers to create the future. While we are best known for creating superior semiconductor memory architectures, we are also developing world-changing products and services in security, advanced LED lighting and displays, and immersive mobile media. We believe we have established an unparalleled business platform and licensing platform that will continue to foster the development of new foundational technologies. In addition to licensing, we are creating new business opportunities through offering products and services where our goal is to perpetuate strong company operating performance and long-term stockholder value. We generate revenue by licensing our inventions and solutions and providing services to market-leading companies.

While we have historically focused our efforts on the development of technologies for electronics memory and chip interfaces, we have been expanding our portfolio of inventions and solutions to address additional markets in lighting, displays, chip and system security, digital media, as well as new areas within the semiconductor industry, such as imaging and non-volatile memory. We intend to continue our growth into new technology fields, consistent with our mission to create great value through our innovations and to make those technologies available through both our licensing and non-licensing business models. Key to our efforts, both in our current businesses and in any new area of diversification, will be hiring and retaining world-class inventors, scientists and engineers to lead the development of inventions and technology solutions for these fields of focus, and the management and business support personnel necessary to execute our plans and strategies.

Rambus has four business units: (1) Memory and Interfaces Division, or MID, which focuses on the design, development and licensing of technology that is related to memory and interfaces; (2) Cryptography Research, Inc., or CRI, which focuses on the design, development and licensing of technologies for chip and system security and anti-counterfeiting; (3) Lighting and Display Technologies, or LDT, which focuses on the design, development and licensing of technologies for lighting and displays; and (4) Mobile Technologies Division, or MTD, which focuses on the design, development and licensing of multi-media solutions.

As of December 31, 2012, our semiconductor, lighting, display, security and other technologies are covered by 1,735 U.S. and foreign patents. Additionally, we have 1,121 patent applications pending. Some of the patents and pending patent applications are derived from a common parent patent application or are foreign counterpart patent applications. We believe our patented innovations provide our customers with the ability to achieve improved performance, lower risk, greater cost-effectiveness and other benefits in their products and services.

Our inventions and technology solutions are offered to our customers through either a patent license or a solutions license. Today, our revenues are primarily derived from patent licenses, through which we provide our customers a license to use a portion of our broad portfolio of patented inventions. The license provides our customers with a defined right to use our innovations in the customer's own digital electronics products, systems or services, as applicable. The licenses may also define the specific field of use where our customers may use or employ our inventions in their products. License agreements are structured with fixed, variable or a hybrid of fixed and variable royalty payments over certain defined periods.

We also offer our customers solutions licenses to support the implementation and adoption of our technology in their products or services. Our solutions license offerings include a range of technologies for incorporation into our customers' products and systems. We also offer a range of services as part of our solutions licenses which can include

know-how and technology transfer, product design and development, system integration, and other services. These solutions license agreements may have both a fixed price (non-recurring) component and ongoing royalties. Further, under solutions licenses, our customers typically receive licenses to our patents necessary to implement these solutions in their products with specific rights and restrictions to the applicable patents elaborated in their individual contracts with us.

Background

The demand for increased performance in computers, tablets, smartphones, consumer electronics and other electronic systems rises dramatically with each passing year. Semiconductor and system designers face key challenges in sustaining this pace of innovation. We strive to offer compelling technologies that provide value to our customers. A key component of our current business model is intellectual property licensing. Our intellectual property broadly includes (but is not limited to) our technologies, solutions, and patents that incorporate our innovations. We focus on intellectual property that has the potential to enable future high-volume, mass-market platforms.

Memory and Interfaces

There are three main areas of focus in our Memory and Interface Division: mobile memory, server memory and links, and custom solutions. The main markets for these memory types include memory (DRAM today, NAND in the future), System-on-a-Chip (SoCs) that connect to memory (DRAM controllers), and SoCs that use high-speed serial link interfaces. Since battery technology improves modestly over time, mobile device designers face adding increased functionality and higher performance with only small increases in power budget. For plug-in systems, there is a strong desire to reduce power consumption for both economic and environmental reasons while still providing increased computing capability and more visually compelling displays. At the chip level, it becomes increasingly difficult to maintain signal integrity and power efficiency as data transfer speeds rise to support more powerful, multi-core processors.

To address these challenges and enable the continued improvement of electronics systems, ongoing innovation is required. The many contributions and patented innovations developed by Rambus scientists and engineers have been, and continue to be, critical in addressing some of the most difficult chip and system challenges. To maximize the value of our intellectual property, we have adopted a licensing strategy that takes advantage of the adoption life cycle of new technologies. During early adoption, we enable our customers to utilize our innovations through technology solutions that offer value in large and/or emerging markets. As our innovations reach broad adoption, we also pursue patent licensing to monetize products not covered by our solutions licenses.

We have developed technologies, advanced designs, and development tools for building high-performance and low-power memory and serial-link interface cores for semiconductor chips. We develop both proprietary and industry-standard interfaces that we provide to our customers under solutions license agreements. We also offer a range of services as part of our solutions licenses which can include know-how and technology transfer, product design and development, system integration, and other services. In January 2013, we introduced a set of solutions under the name R+™ enhanced standard solutions. Fully compatible with industry standards, R+ solutions offer compelling benefits that enable our customers to differentiate their products. Also in January 2013, we announced the first R+ solution, the R+ LPDDR3 memory architecture. The R+ LPDDR3 architecture includes improvements to power efficiency and performance that enable longer battery life and enhanced mobile device functionality for streaming HD video, gaming and data-intensive applications. We continue to focus significant resources and effort to help bring products to market under solutions license agreements with leading companies in the industry.

Chip and System Security Technology

Security challenges are increasingly prevalent in a multitude of industries, including high-growth sectors such as mobile and content distribution, providing a variety of opportunities for our hardware-based security technologies and services. This market trend provides us with the opportunity to provide critical technologies, and we are deploying and developing products to enable us to achieve this objective. Through our acquisition of CRI in 2011, we own a portfolio of patented inventions and technology solutions that are needed for creating secure tamper-resistant electronic devices and systems. CRI's patented DPA countermeasures are critical in protecting devices against side channel attacks such as differential power analysis, which involve monitoring the variations in power consumption or electromagnetic emissions of a device. In addition, CRI's CryptoFirewall™ cores provide a robust hardware-based solution to protect electronics systems from counterfeiting, piracy, and other attacks. We believe the hardware based security that can be achieved with our technologies is vastly superior to many software-based security solutions.

For DPA countermeasures, our business model is to provide a combination of patent licenses, technology, consulting services (training, evaluation, and design), and test equipment. We are recognized worldwide for our expertise in this area, and our strategy is to strengthen our offering beyond stand-alone patent licensing. We discovered the existence of SPA and DPA vulnerabilities in the 1990s, and patented the fundamental techniques for preventing against this method of attack. DPA protections are a critical security ingredient in tamper-resistant products, and are important or

required for a broad range of applications and devices (including smart cards, mobile devices, FPGAs, government/defense applications, consumer set-top boxes, FPGAs, postage meters and security tokens).

In addition to the DPA countermeasures portfolio, we have developed technologies, expertise, advanced designs, and development tools for building highly secure cryptographic semiconductor cores. We provide semiconductor cores under our CryptoFirewall™ brand. We have successfully deployed these cores in two primary application areas where effective security

is valued and paid for by customers: content protection and anti-counterfeiting. For CryptoFirewall™ cores, our most common business model is to partner with chip manufacturers to integrate our technology, and then license it to downstream customers. We have completed integrations with content-protection SoC partners which compromise more than 75% of set-top box chipsets.

Mobile Technology Division

The Mobile Technology Division (MTD) is a new business unit that was previously an initiative developed by our corporate R&D organization. MTD is developing solutions for a major new market trend: the creation of a compelling and interactive media experience which naturally connects people to information. The two core opportunities are in the areas of content interactivity and access. In addition, the mobile device is emerging as the hub of content access, discovery and interactivity, and will co-exist with television to provide a common canvas for video consumption. Our strategic positioning is to create the first integrated video platform with the mobile device being the hub for content discovery, access and interactivity while seamlessly integrating premium video and commerce and delivering an immersive and uncompromised viewing experience across platforms. This multi-media solution, called the Imerz™ media platform, consists of the following key components: single point of integration for Content Rights Owners; unique searching interface to discover and select video content; seamless connection between TV and mobile, including mobile-based media remote control; deep social integration so consumers can be connected through their social networks to share, post, and discuss what they're viewing from their mobile device and TV; on-screen interactivity with video and broadcast content, including frame-by-frame synchronization of temporal/spatial tags for story-telling, product information and e-commerce; unparalleled communication opportunities for consumers to use in-app instant messaging, voice chat, video chat and on-TV social viewing; and content tagging service, including curated or live metadata logging.

Lighting and Display Technology

The continued evolution of the light-emitting diodes (LED) as a bright, reliable and energy-efficient light source creates significant market opportunities in consumer electronics and in general lighting. Harnessing the benefits of LEDs, however, presents a new set of challenges for companies that offer and provide electronics and lighting products and solutions. Our technology allows customers to efficiently and uniformly spread the point source of light emitted from an LED over a large area in a very cost effective way. Moreover, we can control and direct the emitted light to improve the overall product performance or application efficiency. This technology enables class-leading price/performance and freedom of design in both the lighting and display fields. This value proposition is equally valuable across all segments of our business - lighting fixtures, bulbs and display backlights. We believe our patented technology, software and know-how, which enables precise placement of MicroLens® on light guides, provides our customers with a fundamental competitive advantage over alternative products in the market. We continue to focus resources and effort to help bring these new products to market under solutions license agreements with leading companies in the industry. Our business model is a blend of patent and technology licensing, product sales and services to help bring innovative products to market.

Corporate Research & Development

We have a centralized R&D and business incubation organization which is focused on consolidation of early-stage investments, longer-term research activities, and worldwide engineering. This organization has been structured to ensure support from the business units for the majority of its spending. However, certain risk-reducing technology approaches in the business units will be considered. The current investment profiles reflect best development practices as well as affordability. This function reflects a start-up funding model for new businesses being incubated and a reduction in total engineering capacity to better align with current internal and external demand.

Design and Manufacturing

Our technology solutions are developed with high-volume commercial manufacturing processes in mind. Our solutions can be delivered in a number of ways, from reference designs to full turnkey custom development deliverables. A reference design engagement might include an architectural specification, data sheet, theory of operation and implementation guides. A custom development project would entail a specific design implementation optimized for the customer's manufacturing process. In some cases, we may provide supply chain enablement services where we assist our