Safe Harbor for Forward-Looking Statements

This presentation will contain forward-looking statements under the Private Securities Litigation Reform Act of 1995 including those relating to our expectations regarding financial guidance for the second quarter of 2017, including revenue, operating costs and expenses, earnings per share and estimated, fixed, long-term projected tax rates. Such forward-looking statements are based on current expectations, estimates and projections, management’s beliefs and certain assumptions made by Rambus’ management. Actual results may differ materially. Our business is subject to a number of risks which are described more fully in our periodic reports filed with the Securities and Exchange Commission. Rambus undertakes no obligation to update forward-looking statements to reflect events or circumstances after the date hereof.

This presentation contains non-GAAP financial measures, including operating costs and expenses, operating margin, operating income (loss), adjusted EBITDA and net income (loss). In computing these non-GAAP financial measures, stock-based compensation expenses, acquisition-related transaction costs and retention bonus expense, amortization expenses, non-cash interest expense and certain other one-time adjustments were considered. The non-GAAP financial measures should not be considered a substitute for, or superior to, financial measures calculated in accordance with GAAP, and the financial results calculated in accordance with GAAP and reconciliations from these results should be carefully evaluated. Management believes the non-GAAP financial measures are appropriate for both its own assessment of, and to show investors, how the Company’s performance compares to other periods. Reconciliation from GAAP to non-GAAP results are made available and more fully described on our website.
Rambus At-a-Glance

Corporate Facts

- NASDAQ: RMBS, inc. in 1990; IPO 1997
- Headquartered in Sunnyvale, CA
- Operations throughout North America, Europe & Asia
- Q416 Revenue: $97.6M;
- 2016 Revenue: $336.6M
- ~800 employees
- ~2,500 patents & applications

Markets Served

Data Center
- 100+ SoC designs using Rambus PHYs
- Shipped over 10.5M buffer chips

Mobile Edge
- Nearly 9B devices secured with DPA Countermeasures annually
- 1B+ chips shipped with CryptoManager cores
- 1 of only 3 mobile payment solutions certified by VISA, MasterCard and American Express

Historic Business

Ner-term Growth
Rambus 1.0
Revolutionized the memory market with RDRAM and an innovative business model

Rambus 2.0
Diversified offering with continued focus on invention and licensing

Rambus 3.0
Delivering value in high growth markets through innovative product portfolio and supporting IP development

History of Technology Leadership

1990
Rambus founded

1996
Nintendo64 ships with RDRAM®

1999
Sony PLAYSTATION 2 ships

2000
PCs ship with RDRAM®

2005
500M RDRAM® devices ship

2006
Sony PLAYSTATION 3 ships

2011
Acquired Cryptography Research Inc.

2013
R+ solutions, Binary Pixel, Major IP licensing agreements

2014
Smart Sensor Technology, CryptoManager, Joined JEDEC R+ DDR4 Server DIMM Chipset

2016
Acquired four businesses to accelerate growth in security, memory and interface

2017
Launched HCE Ticket Wallet and Supporting App
Growth Through Acquisition for Data Center Needs

- **Architecture License**
  - Historic business
  - High margin; predictable; fuels investment

- **Cores**
  - DDRx PHYs
  - SerDes PHYs

- **Chips**
  - Buffer chips
  - High growth; differentiated margin

- Cloud:
  - Database

---

Historic business
Growing Opportunity in Data Center

Server DIMM Chipset Ecosystem

- Chip/DIMM Validation
- DIMM Validation
- Chip Validation List
- DRAM/Module Mfrs
- RDIMMs & LRDIMMs
- Support Services

Revenue, Architecture Licensing and Cores, Chips

<table>
<thead>
<tr>
<th>Year</th>
<th>Rev</th>
<th>SAM 2015</th>
<th>SAM 2017</th>
<th>SAM 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2020</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Growth in Services at the Mobile Edge

Foundational Embedded Security

- Architectural Licenses, Smart IP Cores

- Historic business; Cryptographic cores; Hardware root-of-trust

Secure Device Management

- CryptoManager Core in Customer Chips

- Silicon-based infrastructure feature manages and secures chips at manufacturing and throughout lifecycle

Smart Transport

- Trusted Transactions

- Over-the-Air Updates

- In-field secure services; Digital wallets for payment and transactions; IoT provisioning
Growing Opportunity in Mobile Edge

Mobile Payments Ecosystem

- Merchant Acquirers
- Retailers
- Issuing Banks
- Mobile Wallet
- Card Schemes
- Merchant Acquirers
- Retailers
- Mobile Wallet
- Card Schemes

UPP Software & App
HCE & Tokenization Software

Source: ABI Research, Strategy Analytics, Gartner and Rambus estimates

Bar graph showing:
- 2015 Rev
- 2015 SAM
- 2017 SAM
- 2020 SAM

Legend:
- Architecture Licenses and Cores
- Provisioning IoT
- Mobile Payment
- Smart Ticketing
Growing Revenue Base

Large portion of our revenue is fixed & predictable

- Q1’17 revenue up 34% Y/Y
- Memory & Interfaces Division up 32% Y/Y
- Security Division up 65% Y/Y

Revenue ($M); Q4’16 includes revenue contribution from acquisitions that closed midway through Q3’16
## Non-GAAP Income Statement

<table>
<thead>
<tr>
<th>In Millions</th>
<th>Q1 2016</th>
<th>Q2 2016</th>
<th>Q3 2016</th>
<th>Q4 2016</th>
<th>Q1 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>$72.7</td>
<td>$76.5</td>
<td>$89.9</td>
<td>$97.6</td>
<td>$97.4</td>
</tr>
<tr>
<td>Total Operating Expenses¹</td>
<td>$49.0</td>
<td>$50.5</td>
<td>$60.8</td>
<td>$67.5</td>
<td>$66.8</td>
</tr>
<tr>
<td>Operating Income¹</td>
<td>$23.7</td>
<td>$26.0</td>
<td>$29.0</td>
<td>$30.1</td>
<td>$30.6</td>
</tr>
<tr>
<td>Operating Margin¹</td>
<td>33%</td>
<td>34%</td>
<td>32%</td>
<td>31%</td>
<td>31%</td>
</tr>
<tr>
<td>Diluted Earnings Per Share¹</td>
<td>$0.13</td>
<td>$0.15</td>
<td>$0.16</td>
<td>$0.16</td>
<td>$0.17</td>
</tr>
</tbody>
</table>

¹Please refer to reconciliations of non-GAAP financial measures included in this presentation and in our earnings release.

- **Revenue**: Growth from product revenue, royalties, incremental license agreements and acquisitions.
- **Total Operating Expenses¹**: Actively manage expenses through effective cost management.
- **Operating Income¹**: Operating Income consistently in line with expectations.
## Financial Strength

<table>
<thead>
<tr>
<th>In Millions</th>
<th>Q1 2016</th>
<th>Q2 2016</th>
<th>Q3 2016</th>
<th>Q4 2016</th>
<th>Q1 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Cash &amp; Marketable Securities</td>
<td>$225.6</td>
<td>$259.3</td>
<td>$150.8</td>
<td>$172.2</td>
<td>$187.6</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Assets</td>
<td>$752.8</td>
<td>$765.8</td>
<td>$800.3</td>
<td>$783.5</td>
<td>$826.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shareholder Equity</td>
<td>$534.7</td>
<td>$542.4</td>
<td>$552.8</td>
<td>$552.8</td>
<td>$601.6</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjusted EBITDA¹</td>
<td>$26.7</td>
<td>$29.0</td>
<td>$32.5</td>
<td>$33.6</td>
<td>$34.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

¹Please refer to reconciliations of non-GAAP financial measures included in this presentation and in our earnings release

- $122M of cash used for acquisitions in Q3 to support strategic initiatives
- Strong balance sheet with limited debt
- Solid cash generation continues
# Investment Summary

<table>
<thead>
<tr>
<th>Point</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Focused on key technology areas in the Data Center &amp; Mobile Edge</td>
<td></td>
</tr>
<tr>
<td>Pursuing profitable growth, both organically and inorganically</td>
<td></td>
</tr>
<tr>
<td>Accelerating our growth through strategic acquisitions &amp; execution of key programs</td>
<td></td>
</tr>
<tr>
<td>Large portion of our revenue is fixed, and committed long-term</td>
<td></td>
</tr>
<tr>
<td>High, predictable margin from recurring royalties and fees</td>
<td></td>
</tr>
<tr>
<td>Strong balance sheet to support strategic initiatives</td>
<td></td>
</tr>
</tbody>
</table>
## Reconciliation of Non-GAAP Financial Measures

### Net Income

<table>
<thead>
<tr>
<th></th>
<th>Q1 2016</th>
<th>Q2 2016</th>
<th>Q3 2016</th>
<th>Q4 2016</th>
<th>Q1 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>GAAP Net Income (Loss)</td>
<td>2</td>
<td>4</td>
<td>4</td>
<td>(3)</td>
<td>3</td>
</tr>
<tr>
<td>Adjustments:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stock-based compensation</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Acquisition-related transaction costs &amp; retention bonus</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
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<tr>
<td>Purchase accounting adjustment for inventory fair value step-up</td>
<td></td>
<td></td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Amortization</td>
<td>8</td>
<td>8</td>
<td>10</td>
<td>11</td>
<td>10</td>
</tr>
<tr>
<td>Impairment of long-lived assets</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>18</td>
</tr>
<tr>
<td>Adjustment to contingent consideration</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(7)</td>
</tr>
<tr>
<td>Non-cash interest expense</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Provision for (benefit from) income taxes</td>
<td>(3)</td>
<td>(3)</td>
<td>(5)</td>
<td>(9)</td>
<td>(3)</td>
</tr>
<tr>
<td>Non-GAAP Net Income</td>
<td>15</td>
<td>17</td>
<td>18</td>
<td>19</td>
<td>19</td>
</tr>
</tbody>
</table>

### Operating Income

<table>
<thead>
<tr>
<th></th>
<th>Q1 2016</th>
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<th>Q4 2016</th>
<th>Q1 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>GAAP Operating Income</td>
<td>9</td>
<td>12</td>
<td>12</td>
<td>1</td>
<td>13</td>
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<td>Adjustments:</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>(7)</td>
</tr>
<tr>
<td>Non-GAAP Operating Income</td>
<td>24</td>
<td>26</td>
<td>29</td>
<td>30</td>
<td>31</td>
</tr>
<tr>
<td>Depreciation</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Adjusted EBITDA</td>
<td>27</td>
<td>29</td>
<td>32</td>
<td>34</td>
<td>34</td>
</tr>
</tbody>
</table>
The Data Center
Data Center Products and Solutions

**Offerings**
- **SerDes PHYs**
  - Multi-Protocol PHYs with data rates up to 56G: CEI6/11/25, PCIe1/2/3/4, XAUI, 10GbE, SATA, JESD, FC, CPRI, HMC, etc.
- **DDRn PHYs**
  - DDR4 PHY
  - DDR4 Multi-modal PHY
  - DDR3 PHY
- **Server DIMM Chipsets**
  - Register Clock Driver
  - DDR4 Data Buffer
  - DDR3 Register Clock Driver
  - DDR3 Isolation Memory Buffer

**Enablement**
- **LabStation Validation Platform**
- **System, Board and Chip Co-Design**
- **Bring-up, De-bug and Characterization Support**

**Markets**
- Data Center
- Enterprise
- Networking
- Storage
- Mobile
DDRn PHYs

With their reduced power consumption and industry-leading data rates, our line-up of enhanced memory interface solutions support a broad range of industry standards with improved margin and flexibility.

**Fully Standards-Compatible**
- Compliant with the latest JEDEC and industry-standard specifications
- Support for multi-modal functionality

**Enhanced Design Flexibility**
- Support for multitude packaging options
- Enhanced margin and yield

**Reduced Power**
- Improved power efficiency
- Lower signaling and stand-by power

**Improved Performance**
- Increased data rates
- Improved bandwidth
- Higher capacity
SoC Cost and Complexity on the Rise

Increasing design complexity and cost combined with increasing performance requirements driving the need for verified, high-margin IP solutions

- Approaching ~200 IP blocks per SoC
- Over $160M in design implementation costs
- $10M+ potential revenue loss if late to market due to re-spin

Source: International Business Strategies
SerDes PHYs

Optimized for power and area, our line-up of SerDes interface solutions deliver maximum performance and flexibility for today’s most challenging systems.

**Fully Standards-Compatible**
- Compliant with the latest industry-standard specifications
- Support for multi-modal functionality

**Enhanced Design Flexibility**
- Support for multiple packaging options
- Enhanced margin and yield

**Reduced Power**
- Improved power efficiency
- Lower signaling and stand-by power

**Improved Performance**
- Increased data rates
- Improved bandwidth
- Higher capacity
SerDes for Data Centers

High-speed, multi-protocol SerDes interfaces optimized for challenging enterprise systems

Demonstrated Excellence

- 15+ years of high-speed SerDes design
- Full suite of high-speed SerDes up to 56G in leading-edge CMOS processes
- Complete simulation, modeling and design of interfaces, interconnects and systems
- State-of-the-art signal and power integrity internal tool methodology
Server DIMM Chipsets

Built for speed, power efficiency and reliability, the DDR4 and DDR3 chipsets for RDIMM and LRDIMM server modules delivers the top-of-the-line performance and capacity needed to meet the growing demands on enterprise and data center systems.

Industry-leading Performance
- Fully-compliant with the latest JEDEC standards
- Operational speeds up to 2666 Mbps

Enhanced Margin
- Wide margin I/O design with advanced programmability
- Exceed JEDEC reliability standards for ESD and EOS

Optimized Power
- Advanced power management
- Frequency-based, low-power optimization

Superior Debug and Serviceability
- Integrated tools for bring-up and debug
- Works out-of-the-box with no BIOS changes required
Standard Made Better

**DDR4 Server DIMM Chipset**

**Industry-leading Performance and Margin**
- Compliant with latest JEDEC spec @ 2666 Mbps; built-in support for 3200Mbps
- Wide margin IO design with advanced programmability
- Exceeds JEDEC reliability requirements

**Optimized Power**
- Frequency-based power optimization

**Best-in-class Debug and Serviceability**
- Integrated tools for bring-up and debug
- Works out of the box with default system BIOS
Mobile Edge Products and Solutions

Offerings
- DPA Countermeasures
- CryptoManager
- Secure Mobile Payment
- Secure Smart Ticketing
- Cryptography Research

Enablement
- DPA Workstation Platform
- DPA Validation Program
- Design, product evaluation and training

Markets
- Mobile
- IoT
- Enterprise
- Government
- Digital Entertainment
- Automotive
DPA Countermeasures

Protecting nearly 9 billion products a year, our DPA countermeasures include fundamental solutions and techniques for securing devices against side-channel attacks.

**Superior Protection**
- Robust countermeasures to protect against side-channel attacks
- Broad range of hardware, software and protocol approaches to secure tamper-resistant devices
- Cores validated to resist DPA attacks in millions of traces

**Improve Time-to-Market**
- Simplified device testing for power analysis vulnerabilities
- Training, evaluation services and analysis equipment
- Ready-to-use, DPA Resistant solutions

**High Flexibility**
- Solutions can be optimized for performance, size, and security level
- Solutions integrate with standard cipher modes such as CBC, ECB, etc.
DPA Countermeasure Solutions

License countermeasures and cores
- Fundamental portfolio protects against side-channel attacks
- DPA Resistant Cores support full range of protocols
- Software libraries ease adoption
- DPA Workstation™ test platform
- Design and testing services

Customers
Security Cores

Our cores complement existing security implementations, and are ideal for preventing counterfeiting and piracy in a broad number of applications.

**Superior Security**
- Provides robust hardware root-of-trust for highest level of security to protect against counterfeiting
- Independent hardware core maintains security even if other parts of the chip are compromised
- Secure, integrated channel for delivery and maintenance of encryption data

**Improve Profitability**
- Reduce revenue lost to unauthorized access and counterfeits
- Simplifies device validation to improve time-to-market
- Reduces cost with embedded security cores for device design
- Enables new features and services with no changes to hardware

**High Flexibility**
- Reduces implementation time with a comprehensive suite of ready-to-use components
- Compatible with standard manufacturing process
- Support for a wide array of applications and easy integration into existing and new designs
Security Cores

DPA Resistance
- Cores and services
- Accelerate integration & TTM

Anti-Counterfeiting
- Consumable authentication
- Major printer OEMs

Content Protection
- Integrated into Set top boxes
- Broadcast and OTT

Data In

Data Out

Entropy In

Key In

Ctrl/Status

PRNG

Key Schedule

State Machine

Interface Logic

LMD3F

AES Engine

Peripheral

Untrusted communication

Device SoC

Cache with (back-end) Encrypted messages

Keys and Configuration Data

CryptoMedia Content Protection Core

Data from head-end or server

Key

DVB-CSA or AES Descrambler

Rights or EMM data

ECM or content data

Device authentication

Trust Boundary
CryptoManager Platform

From chip management to device personalization to downstream feature provisioning, the CryptoManager security platform creates a trusted path from the SoC manufacturing supply chain to downstream service providers with a complete silicon-to-cloud security solution.

Complete Lifecycle Solutions
- Robust silicon-to-cloud security
- Secure provisioning and tracking of keys from manufacturing to in-field

Improved Profitability
- Reduce NRE and operating costs
- Improve time-to-market
- Reduce inventory waste

Superior Security
- Provide a robust hardware root-of-trust
- Protect valuable secret keys, identity credentials, and other sensitive data
- Protect against reverse engineering and counterfeiting

Streamline Operations
- Automate provisioning of keys
- Enable common platform across product lines
- Integrate easily into existing manufacturing flow
Providing Chip-to-Cloud-to-Crowd Solutions

CryptoManager Platform

- Trusted Provisioning Services
- Root-of-trust
- SoC Management
- Device Personalization
- In-field Provisioning
- Secure Applications and Services
- Design
- Fab
- OEM
- Ticketing
- Payment
- Automotive
Mobile Payments

Certified and award-winning management software to enable secure integration with mobile OEM pay and independent mobile wallets for banks and retailers.

**Improved Time-to-market**
- Reduce implementation time with a unified platform to connect to payment schemes and OEM Pay
- Compatible with existing EMV schemes and contactless infrastructure

**Enhanced User Experience**
- Retain branding and drive digital engagement with mobile wallet
- Support loyalty programs, gift cards and more for a unified purchasing experience

**Superior Security**
- Maintain user privacy without sharing data with schemes
- Utilizes HCE with tokenization to minimize unauthorized use of cardholder data

**Reduced Cost**
- Eliminate tokenization fees from payment schemes
- Save on transaction fees as the issuing and acquiring bank
Unified Payment Platform

From Secure Payments to Trusted Transactions

• **Digitize** "physical" cards (gift card, loyalty, private label) to a single, secure wallet

• **Connect** to multiple 3rd-party platforms and schemes simultaneously

• **Convert** different types of digital value to a unified "currency"

• **Manage** unified currency in-house

• **Enhance** consumer experience with simple white-label app
Smart Ticketing

Suitable for multi-modal transport solutions including rail, bus, ferry and taxi, our end-to-end smart ticketing solutions can be implemented in any transport scenario.

Ease of Integration
- Comprehensive solutions from back office, to mobile device, to smart card
- Compatible with existing smart systems and suppliers

Improved Profitability
- Enhanced business intelligence through account-based ticketing and data analytics
- Easy management of transaction data to ensure correct reimbursements

Superior Security
- Reduced risk of fraud with smart technology versus paper tickets
Making Travel Easier with HCE Ticketing

- A complete HCE Mobile Ticketing solution
  - HCE Ticket Wallet Service
  - HCE Ticketing App
- Enables transport operators to quickly and securely transition from physical to virtual smart cards
- Allows travelers to tap through existing gates using a smart phone as a ticket

Smart Transport Ticketing

- HCE Ticket Wallet Service
- HCE Ticketing App
- Remote Ticket Download
- HOPS
- Card Management System
- Data Warehouse and Analytics