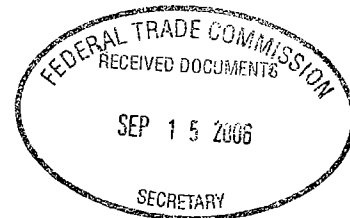


# Exhibit A

UNITED STATES OF AMERICA  
BEFORE THE FEDERAL TRADE COMMISSION



In the matter of )

RAMBUS INC., )

a corporation. )

) Docket No. 9302

**BRIEF OF AMICI CURIAE NVIDIA CORPORATION, MICRON TECHNOLOGY, INC., SAMSUNG ELECTRONICS CORPORATION, LTD., AND HYNIX SEMICONDUCTOR, INC. ON THE ISSUE OF THE APPROPRIATE REMEDY FOR RAMBUS'S VIOLATIONS OF THE FTC ACT**

Jared Bobrow  
WEIL GOTSHAL & MANGES LLP  
201 Redwood Shores Parkway  
Redwood Shores, CA 94065  
Phone: (650) 802-3000  
Fax: (650) 802-3100

William J. Baer  
ARNOLD & PORTER LLP  
555 Twelfth Street, NW  
Washington DC 20004  
Phone: (202) 942-5000  
Fax: (202)942-5999

*Counsel for Micron Technology, Inc.*

David Healey  
WEIL GOTSHAL & MANGES LLP  
700 Louisiana  
Suite 1600  
Houston, TX 77002-2784  
Phone: (713) 546-5000  
Fax: (713) 224-9511

*Counsel for Samsung Electronics  
Corporation, Ltd.*

Kenneth L. Nissly  
THELEN REID & PRIEST LLP  
225 West Santa Clara Street, 12th Floor  
San Jose, CA 95113  
Phone: (408) 292-5800  
Fax: (408) 287-8040

Theodore G. Brown, III  
TOWNSEND AND TOWNSEND  
AND CREW LLP  
379 Lytton Avenue  
Palo Alto, California 94301  
Phone: (650) 326-2400  
Fax: (650) 326-2422

David Beddow  
O'MELVENY & MYERS, LLP  
1625 Eye Street, NW  
Washington, DC 20006-4001  
Phone: (202) 383-5300  
Fax: (202) 383-5414

*Counsel for Hynix Semiconductor, Inc.*

David M. Shannon  
Sr. Vice President, General Counsel  
NVIDIA Corporation  
2701 San Tomas Expressway,  
Santa Clara, CA 95050  
Phone: (408) 486-8116  
Fax: (408) 486-2840

*Counsel for NVIDIA Corporation*

## TABLE OF CONTENTS

	Page
IDENTITY AND INTEREST OF AMICI CURIAE.....	1
ARGUMENT.....	2
I. THE COMMISSION SHOULD BAR RAMBUS FROM ENFORCING ITS RELEVANT PATENT RIGHTS AGAINST THE JEDEC STANDARDS .....	2
A. Under Its Remedial Authority, The Commission Has The Power To Bar Rambus From Enforcing Its Patents Against The JEDEC Standards.....	3
B. Barring Rambus From Enforcing Its Patents Against JEDEC Standards Is Consistent With The Commission’s Liability Findings And The Evidence.....	5
1. JEDEC Would Have Adopted Alternatives To Rambus’s Patented Technologies .....	6
2. Rambus Would Not Have Offered The Required RAND Assurances .....	7
C. The Enforcement Bar Should Be Broad Enough To Further The Aims Of The Antitrust Laws .....	8
1. The Remedy Should Extend To The DDR2 SDRAM Standard And Other Successor Standards.....	8
2. The Remedy Should Protect The JEDEC Standards As A Whole, Not Just The Four Technologies That Rambus Monopolized .....	11
3. The Remedy Should Extend To JEDEC-Compliant DRAMs Manufactured Or Sold Overseas .....	12
D. An Enforcement Bar Is Consistent With Remedies Available In Patent Cases .....	14
II. IN THE ALTERNATIVE, THE COMMISSION SHOULD FORCE RAMBUS TO GRANT A ROYALTY-FREE LICENSE UNDER ITS PATENT RIGHTS TO USE THE JEDEC STANDARDS .....	16
A. A Royalty-Free Compulsory License To Practice The JEDEC Standards Is Warranted.....	17
1. JEDEC Would Not Have Agreed To Pay Royalties For Main Memory Standards And, Instead, Would Have Adopted Alternative Technologies .....	17
2. A Royalty-Free License Would Not Prejudice Rambus .....	18
3. A Royalty-Free License Would Provide Maximum Benefit To Consumers.....	19

**TABLE OF CONTENTS**  
**(continued)**

	<b>Page</b>
B. The Commission Should Not Reward Rambus With A Royalty-Bearing License .....	20
1. A Royalty-Bearing License Would Provide A Windfall To Rambus And Encourage Deceptive Conduct At SSOs.....	20
2. A Royalty-Bearing License Would Hurt Consumers .....	21
3. The Victims Of Rambus’s Misconduct Should Not Be Required To Bear The Risks Involved In Calculating The Correct Ex Ante Royalty.....	21
C. If The Commission Allows A Non-Zero Royalty, The Royalty Should Reflect JEDEC’s Policies, The Low Cost Expectations Of Its Members, And The Feasibility Of “Designing Around” Rambus’s Patents Ex Ante .....	22
CONCLUSION.....	25

## TABLE OF AUTHORITIES

Page

### CASES

<i>A.C. Aukerman Co. v. R.I. Chaides Construction Co.</i> , 960 F.2d 1020 (Fed. Cir. 1992).....	14
<i>B. Braun Medical, Inc. v. Abbott Laboratories</i> , 124 F.3d 1419 (Fed. Cir. 1997).....	15
<i>Ecko Products Co.</i> , 65 F.T.C. 1163 (1964).....	10
<i>FTC v. Ruberoid Co.</i> , 343 U.S. 470 (1952).....	4, 11
<i>Ford Motor Co. v. United States</i> , 405 U.S. 562 (1972).....	3
<i>Hazel-Atlas Glass Co. v. Hartford-Empire Co.</i> , 322 U.S. 238 (1944).....	3
<i>In re American Cyanamid Co.</i> , 72 F.T.C. 623 (1967) 1967 FTC LEXIS 43, 151-52.....	16
<i>In re Dell Computer Corp.</i> , 121 F.T.C. 616 (1996).....	4, 5, 14
<i>In re Glaxo Wellcome, plc</i> , 2001 WL 147161 (F.T.C. Jan. 26, 2001).....	14
<i>In the Matter of Rambus, Inc.</i> no. 9302, 2006 WL 2330117 (F.T.C. Aug. 2, 2006) .....	5-8, 13, 15, 18, 21-23
<i>In re Roche Holdings, Ltd.</i> , 113 F.T.C. 1086 (1990).....	14
<i>In re Union Oil Co.</i> , no. 9305, 2005 WL 2003365 (F.T.C. Aug. 2, 2005) .....	4, 5
<i>In re Xerox Corp.</i> , 86 F.T.C. 364 (1975).....	14

**TABLE OF AUTHORITIES**  
(continued)

	<b>Page</b>
<i>Morton Salt Co. v. G.S. Suppiger Co.</i> , 314 U.S. 488 (1942).....	16
<i>Potter Instrument Co., Inc. v. Storage Technology Corp.</i> , 641 F.2d 190 (4th Cir.), cert. denied, 454 U.S. 832 (1981).....	14
<i>Rosenthal Collins Group, LLC v. Trading Tech. International</i> , Case No. 05 C 4088, 2005 WL 3557947 (N.D. Ill).....	15
<i>Samsung Electrics Co. v. Rambus Inc.</i> , No. 3:05cv406 (E.D. Va. July 18, 2006) .....	21
<i>Schine Chain Theatres v. United States</i> , 334 U.S. 110 (1948).....	4
<i>Stambler v. Diebold, Inc.</i> , 11 U.S.P.Q. 2d 1709 (E.D.N.Y. 1988).....	14
<i>United States v. Microsoft Corp.</i> , 253 F.3d 34 (D.C. Cir. 2001).....	22
<i>Wang Laboratories Inc. v. Mitsubishi Electronics America Inc.</i> , 29 U.S.P.Q. 2d 1481 (C.D. Cal. 1993).....	14

**STATUTES**

35 U.S.C. § 154.....	19
----------------------	----

## **IDENTITY AND INTEREST OF AMICI CURIAE**

Amici Curiae NVIDIA Corporation, Micron Technology, Inc., Samsung Electronics Corporation, Ltd., and Hynix Semiconductor, Inc. (collectively “Amici”) are global technology leaders. One Amicus, NVIDIA, manufactures and sells products (graphics processing units) that are designed to use, or interface with, JEDEC-compliant dynamic random access memory (“DRAM”), including single data rate synchronous DRAMs (“SDRAMs”) and double data rate synchronous DRAMs (“DDR SDRAMs”). Other Amici design, manufacture, and sell JEDEC-compliant DRAMs. Amici contribute billions of dollars in annual sales to the U.S. and world economy, invest hundreds of millions of dollars in research and development, hold thousands of United States patents, employ thousands of people both in the United States and overseas, and maintain membership in a variety of standard setting organizations (“SSOs”).

SSOs, the standard setting process, and JEDEC standards in particular are of great importance to Amici. The goal of many SSOs, including JEDEC, is to set “open” standards that are broadly available, low cost, and free from restrictive patent rights. Such open standards are beneficial to manufacturers and consumers alike, because they ensure interoperability of standardized products supplied by different firms. This, in turn, promotes competition, increases market acceptance, and helps achieve economies of scale.

These benefits of open standards can be achieved, however, only when the members of an SSO act in good faith and refrain from deceptive and exclusionary conduct. When an SSO member engages in such anticompetitive conduct with respect to its patent rights, those patent rights improperly may allow one member of an SSO to hold-up the standard and charge monopolistic rates to use the standard, all to the detriment of direct participants in the standard, others in the industry, and consumers.



After a lengthy hearing and a detailed review of the evidence, the Commission determined that Rambus Inc. (“Rambus”) engaged in bad faith and deceptive conduct in violation of the antitrust laws. Contrary to JEDEC’s policy and practice, contrary to the expectations of JEDEC members and those who rely upon open JEDEC standards, and in breach of its duty of good faith, Rambus undermined the JEDEC standard setting process by concealing its patent rights from JEDEC, misleading JEDEC members into believing that Rambus was not seeking patents over JEDEC-compliant SDRAMs and DDR SDRAMs, and secretly tailoring its patent rights in an effort to cover the JEDEC standards.

In 2000, after the JEDEC standards had been adopted, and after the industry was locked-in to those standards, Rambus exercised the monopoly power it had acquired through its subversion of the standard setting process. It was only then that Rambus attempted to enforce its patent rights against the JEDEC standards through patent infringement lawsuits, through U.S. International Trade Commission enforcement proceedings, and through a licensing campaign. At least one Amicus was forced to pay royalties to Rambus in response to its licensing and litigation campaign.

Amici submit this brief to express their views on the appropriate remedy to redress Rambus’s exclusionary conduct.

## **ARGUMENT**

### **I. THE COMMISSION SHOULD BAR RAMBUS FROM ENFORCING ITS RELEVANT PATENT RIGHTS AGAINST THE JEDEC STANDARDS.**

By failing to disclose its patent rights, and by other misleading conduct, Rambus led JEDEC and its members to adopt and implement technologies in the JEDEC standards that Rambus contends violate its patents. This, in turn, has given Rambus monopoly power. To remedy Rambus’s antitrust violations, the Commission should bar Rambus from enforcing its

patent rights against the SDRAM standard, the DDR SDRAM standard, and successors of these JEDEC SDRAM standards.<sup>1</sup>

**A. Under Its Remedial Authority, The Commission Has The Power To Bar Rambus From Enforcing Its Patents Against The JEDEC Standards.**

The Commission enjoys broad authority to remedy antitrust violations. This authority is not confined to prohibiting the specific conduct that the Commission has found to be illegal. As the Supreme Court explained in *Ford Motor Co. v. United States*, 405 U.S. 562 (1972):

[t]he relief which can be afforded under [the Sherman and Clayton Acts] is not limited to the restoration of the *status quo ante*. There is no power to turn back the clock. Rather, the relief must be directed to that which is “*necessary and appropriate* in the public interest *to eliminate the effects* of the acquisition offensive to the statute,” or which will “*cure the ill effects* of the illegal conduct, and *assure the public freedom from* its continuance.”

*Id.* at 573 n.8 (citations omitted).

The Supreme Court also has made clear that the public interest is the paramount guiding principle in the Commission’s development of a remedy: “The public welfare demands that the agencies of public justice be not so impotent that they must always be mute and helpless victims of deception and fraud.” *Hazel-Atlas Glass Co. v. Hartford-Empire Co.*, 322 U.S. 238, 246 (1944). In recognizing in one case that an injunction against future violations was “not adequate to protect the public interest,” the Supreme Court instructed:

If all that was done was to forbid a repetition of illegal conduct, those who had unlawfully built their empires could preserve them intact. They could retain the full dividends of their monopolistic

---

<sup>1</sup> In this brief, when Amici refer to a remedy that limits enforcement of Rambus’s “patent rights,” Amici are referring to those patent rights, domestic and foreign, that claim priority to or through a patent application that was filed on or before June 17, 1996, the date that Rambus withdrew from JEDEC. The remedy proposed herein would not impact the dozens of Rambus patents (many of which Rambus has licensed) that claim priority to applications after June 17, 1996.

practices and profit from the unlawful restraints of trade which they had inflicted on competitors.

*Schine Chain Theatres v. United States*, 334 U.S. 110, 128 (1948).

For these reasons, forward-looking remedies, such as “fencing in” violators, frequently are appropriate, especially when the anticompetitive conduct could be hidden. *FTC v. Ruberoid Co.*, 343 U.S. 470, 473 (1952) (explaining that fencing-in provisions serve to “close all roads to the prohibited goal, so that [the Commission’s] order may not be by-passed with impunity”).

Consistent with these authorities, the Commission has recognized that, when a patent owner subverts an SSO and misuses patent rights to hold-up a standard, the appropriate remedy is to bar the patent owner from enforcing its patent rights against the affected standard.

In *Dell*, for example, the respondent belonged to an SSO that considered, and ultimately adopted, a “VL-bus standard.” The respondent had patent rights that covered the VL-bus standard, but the Commission found that respondent had failed to disclose those rights and misled the SSO into adopting the standard. To remedy the respondent’s deceptive and exclusionary conduct, the Commission insisted on an order barring the respondent from enforcing its patents against the standard. *In re Dell Computer Corp.*, 121 F.T.C. 616, 624-25 (1996).

Similarly, in *Unocal*, the respondent presented technology to the California Air Resources Board and industry groups for a cleaner burning gasoline. The respondent represented to those bodies that its technology was non-proprietary. The respondent also influenced those bodies to incorporate its technology into industry regulations that established a statewide standard. At the same time, the respondent secretly prosecuted a patent that covered the technology. After the regulations were adopted, the respondent enforced its patent rights against

companies that complied with the standards, both through licensing and litigation. To remedy the respondent's deceptive and exclusionary conduct, the Commission again insisted on an order barring the respondent from enforcing its patent rights against gasoline that was made in compliance with the regulations. *In re Union Oil Co.*, no. 9305, 2005 WL 2003365 (F.T.C. Aug. 2, 2005).

Here, in the wake of a fully-litigated finding that Rambus violated the antitrust laws, there is even stronger reason to follow *Dell* and *Unocal* and bar Rambus from enforcing its patent rights against the JEDEC standards. Any lesser remedy would represent a step backward from the clear and consistent precedent the Commission already has established.

**B. Barring Rambus From Enforcing Its Patents Against JEDEC Standards Is Consistent With The Commission's Liability Findings And The Evidence.**

The Commission already has found that, had Rambus timely disclosed its patent rights, JEDEC would have adopted alternative technologies or, at the very least, would have demanded RAND assurances pursuant to JEDEC policy that bars the use of patented technologies without RAND assurances (Opinion at 74, 97).<sup>2</sup> Under either scenario, Rambus should be barred from enforcing its patent rights against the JEDEC standards. On the one hand, if JEDEC had adopted alternatives, Rambus would not be in a position today to enforce its patent rights against the standards. On the other hand, if JEDEC had demanded RAND assurances, JEDEC still would not have adopted Rambus's technologies, because the evidence makes clear that Rambus never would have offered RAND assurances to JEDEC. Because Rambus would not be in a position now to enforce its patent rights against the JEDEC standards had it acted in

---

<sup>2</sup> As used herein, "RAND assurances" means assurances that relevant patents would be licensed to all on reasonable and nondiscriminatory terms.

good faith and consistent with JEDEC's policies, practices, and expectations, the remedy should bar such enforcement.

**1. JEDEC Would Have Adopted Alternatives To Rambus's Patented Technologies.**

To begin with, the record evidence strongly shows that JEDEC would have adopted alternative non-infringing technologies had Rambus disclosed its patent rights. This is fully consistent with JEDEC's policies and historical practice.

The goal of JEDEC was to adopt open standards that were not encumbered by patent rights. CCFF 300, 301.<sup>3</sup> JEDEC policy provided that JEDEC should avoid using patented technologies. CCFF 303. Even Richard Crisp, Rambus's JEDEC representative, understood that "[t]he job of JEDEC is to create standards which steer clear of patents which must be used to be in compliance with the standard whenever possible." CCFF 301. JEDEC insists on open standards because everyone can use them, because they are not subject to hijack or the exercise of market power, and because they cost less to use (as royalties are generally avoided). CCFF 300, 302, 303.

Consistent with this policy, and as the Commission has recognized, when JEDEC knew of Rambus's patent rights and thought they might be relevant to a JEDEC standard, JEDEC "took deliberate steps to avoid standardizing the Rambus technology." Opinion at 74 & n.403 (describing JEDEC's immediate steps to avoid Rambus's "loop-back clock" technology in its '703 patent when NEC made a "loop-back clock" proposal in 1997). *See also* CCFF 2436-2439. Similarly, when JEDEC learned that patent rights might cover the Quad CAS standard

---

<sup>3</sup> Citations to "CCFF" are to Complaint Counsel's Proposed Findings of Fact, Conclusions of Law, and Order, dated September 5, 2003.

and the silicon signature standard, JEDEC took affirmative steps to avoid the patented technologies. CCFF 422, 424-432 (Quad CAS); CCFF 433 (silicon signature).

Numerous industry members testified that they would have adopted alternative technologies at JEDEC had Rambus timely disclosed its patents rights. CCFF 2101. *See also* Opinion at n.407. Given JEDEC's policies and history, there is no reason to doubt this testimony.

Incorporating alternative technologies into the JEDEC standards not only would have been consistent with JEDEC policy and practice, but it also would have been feasible. The Commission already has determined that “[a]lternative technologies were available when JEDEC chose the Rambus technologies, and could have been substituted for the Rambus technologies had Rambus disclosed its patent position.” Opinion at 76. The Commission also has found that “the evidence does not establish that Rambus’s technologies were superior to all alternatives on a cost/performance basis.” Opinion at 82.

## **2. Rambus Would Not Have Offered The Required RAND Assurances.**

Even assuming *arguendo* that JEDEC's first response would have been to demand RAND assurances, JEDEC ultimately would not have incorporated Rambus's claimed technologies into the JEDEC standards, because Rambus never would have provided JEDEC with the required RAND assurances. The evidence in the record on this point is conclusive.

To understand why Rambus would not have offered RAND assurances, it is important to understand Rambus's business model. This model involved developing proprietary technology, patenting the technology, and then securing royalties and fees by licensing the technology and enforcing its patents (through licensing or litigation). This was Rambus's sole source of revenue. Rambus did not manufacture or sell any products. As Rambus's contemporaneous documents make clear, RAND terms were inconsistent with Rambus's

business model and its business practices of charging the highest royalty rates it could and of refusing to license those it did not wish to license. CCFF 2419, 2427, 2432.

Consistent with its business model, Rambus manifested its disdain for RAND assurances on at least two relevant occasions. First, in response to a request from IEEE – another standard-setting organization – that Rambus provide RAND assurances, Rambus refused to do so. CCFF 2421-2426. Second, when Rambus withdrew from JEDEC, it stated that it was doing so because JEDEC’s rules were not consistent with Rambus’s business plan. CCFF 2428-2431. Given this evidence, there is no reason to believe that Rambus would have offered RAND terms to JEDEC.

Moreover, even assuming *arguendo* that Rambus had offered RAND terms, given Rambus’s business model as described above, there is no reason to believe that JEDEC members would have believed or accepted Rambus’s assurances. In fact, because Rambus was actively promoting its own RDRAM architecture, JEDEC would have been especially reluctant to adopt any standard that was allegedly covered by Rambus’s patents.

**C. The Enforcement Bar Should Be Broad Enough To Further The Aims Of The Antitrust Laws.**

**1. The Remedy Should Extend To The DDR2 SDRAM Standard And Other Successor Standards.**

The Commission found that Rambus’s exclusionary conduct is linked to JEDEC’s adoption of SDRAM and DDR SDRAM standards that incorporate four technologies over which Rambus claims rights – namely, programmable CAS latency, programmable burst length, dual-edge clocking, and on-chip PLL/DLL. Opinion at 77. The Commission also found that JEDEC’s adoption of standards that incorporate these technologies is linked to Rambus’s monopoly power. *Id.*

**NOTICE OF APPEARANCE**  
**BEFORE THE FEDERAL TRADE COMMISSION**



DOCKET No. 9302

In the Matter of RAMBUS INCORPORATED.

The below counsel enter their appearances on behalf of *Amicus Curiae* Hynix Semiconductor, Inc.

Kenneth L. Nissly is a member in good standing of the California bar.

Theodore G. Brown, III is a member in good standing of the California bar.

---

Kenneth L. Nissly  
THELEN REID & PRIEST LLP  
225 West Santa Clara Street, 12<sup>th</sup> Floor  
San Jose, CA 95113  
Phone: (408) 292-5800  
Fax: (408) 287-8040

A handwritten signature in black ink, appearing to read "Theodore G. Brown, III", written over a horizontal line.

Theodore G. Brown, III  
TOWNSEND AND TOWNSEND & CREW LLP  
379 Lytton Avenue  
Palo Alto, California 94301  
Phone: (650) 326-2400  
Fax: (650) 326-2422

Dated: September 15, 2006



Given these findings, and given that JEDEC would not have included the four patented technologies in the SDRAM or DDR SDRAM standards, the Commission's remedy certainly should bar Rambus from enforcing its patent rights against the SDRAM and DDR SDRAM standards. Allowing Rambus to enforce its patents against these standards would not restore competition and would allow Rambus to continue to exercise monopoly power.

The bar, however, should not be limited to the specific SDRAM and DDR SDRAM standards. Rather, the bar should extend to all JEDEC standards that are successors to the SDRAM and DDR SDRAM standards, including the DDR2 SDRAM standard. This remedy is needed to restore competitive conditions and protect the legitimate and pro-competitive expectations of JEDEC participants and others in the industry who rely on JEDEC standards. Because the four technologies as to which the Commission found a violation would not have been included in the SDRAM or DDR SDRAM standards had Rambus timely disclosed its patent rights, and because JEDEC standards evolve from one another, successor JEDEC DRAM standards (such as DDR2 SDRAM) also would not have included the four claimed features. There is no evidence that JEDEC would have *added* the four claimed features to the DDR2 SDRAM standard had they not already been included in the SDRAM and DDR SDRAM standards. Allowing Rambus to enforce its patent rights against successor JEDEC DRAM standards would unfairly allow Rambus to profit from its deceptive and exclusionary conduct, to the detriment of the industry and consumers.

The record demonstrates clearly that JEDEC's inclusion of the four patented technologies in the DDR2 SDRAM standard stems directly from the fact that those technologies were included in the first DDR SDRAM standard. The evidence uniformly shows that JEDEC standards are evolutionary. That is, each JEDEC standard is built on, and incorporates, as much

of the prior standards as possible. CCFF 127. JEDEC does this because evolutionary change reduces costs and eases the introduction of new standards. CCFF 128. This is true for DRAM manufacturers, logic chip makers, and OEMs. CCFF 128.

Here, the evidence shows that the DDR2 SDRAM standard evolved directly from the initial DDR SDRAM standard. CCFF 2573. The JEDEC committee that began working on DDR2 SDRAM in 1998 voted to use DDR SDRAM as the “baseline” for DDR 2 SDRAM. CCFF 3236-3237.<sup>4</sup> As a result, the four purported Rambus technologies in DDR SDRAM were incorporated into the DDR2 SDRAM standard. CCFF 3250-3261.

Given the evolutionary nature of JEDEC standard development, and given JEDEC’s strong desire to ensure backward compatibility, if JEDEC’s SDRAM and DDR SDRAM standards had not included Rambus’s claimed features, then JEDEC’s DDR2 SDRAM standard also would not have included those patented features.<sup>5</sup> Because Commission remedies endeavor to restore markets to the competitive conditions that would have existed but for the unlawful conduct, and because JEDEC would not have included those four features in the DDR2 SDRAM standard but for their inclusion in the original SDRAM and DDR SDRAM standards, the remedy should bar Rambus from enforcing its patent rights against DDR2 SDRAM and

---

<sup>4</sup> One of the benefits of having the initial DDR SDRAM standard serve as the baseline for DDR2 SDRAM was “backward compatibility.” CCFF 3244. Because the primary features of DDR2 SDRAM would be the same as DDR SDRAM, DRAM manufacturers could make and sell DDR2 SDRAMs that would be compatible with many of the same components and systems that had been designed and built to be compatible with the DDR SDRAM standard, thereby reducing the manufacturers’ risk in the event that the new standard is not adopted quickly. CCFF 3247-3248. Similarly, backward compatibility reduced the risk to memory controller manufacturers, because they could design a controller that could work with both standards. CCFF 3246, 3249.

<sup>5</sup> This conclusion is fully consistent with the Commission’s finding that, on the current record, it is unclear whether Rambus possessed durable monopoly power over DDR2. Even if JEDEC could in principle have switched *away* from Rambus technologies in DDR2 after those technologies had been incorporated in SDRAM and DDR, there is (as discussed) no reason why JEDEC members would have chosen to *add* those technologies to DDR2 had they not been present in prior standards in the first place.

similar successor JEDEC DRAM standards as well. *Ecko Prods. Co.*, 65 F.T.C. 1163, 1216 (1964), *aff'd sub nom. Ecko Prods. Co. v. FTC*, 347 F.2d 745 (7th Cir. 1965). If Rambus were allowed to enforce its patent rights against DDR2 SDRAM or other successor JEDEC DRAM standards, Rambus would receive an unjust windfall – the opportunity to use its monopoly power to recover supracompetitive profits against a standard that would not include Rambus's patented features but for Rambus's misconduct.<sup>6</sup>

**2. The Remedy Should Protect The JEDEC Standards As A Whole, Not Just The Four Technologies That Rambus Monopolized.**

In remedying exclusionary conduct, the Commission need not limit its remedy solely to the misconduct at issue. *FTC v. Ruberoid Co.*, 343 U.S. 470, 472-74 (1952) ("If the Commission is to attain the objectives Congress envisioned, it cannot be required to confine its road block to the narrow lane the transgressor has traveled; it must be allowed effectively to close all roads to the prohibited goal, so that its order may not be by-passed with impunity.").

JEDEC members and others anticipated that the technologies it adopted for its SDRAM and DDR SDRAM standards would be available for future versions of the synchronous DRAM standard: Indeed, both economic efficiency in design and production, as well as backward compatibility for computer system designers, require as much. Accordingly, the Commission should not simply preclude Rambus from enforcing its patent rights against the four technologies that Rambus monopolized through its deceptive conduct. Rather, Rambus should be barred from enforcing its patent rights against the JEDEC SDRAM and DDR SDRAM standards and successor JEDEC SDRAM standards, such as DDR2 SDRAM. If the standards as a whole are not protected from attack, and if Rambus is allowed to enforce its patents against

---

<sup>6</sup> The magnitude of potential harm to the market is clear. DDR2 SDRAM is expected to represent over 50% of all DRAM sales in 3Q2006 and grow to over 70% in 2007. See iSuppli Q2 2006 report attached hereto as Exhibit 1.

technologies other than the four it already has monopolized, then there will be a very real risk that Rambus will once again achieve monopoly power over the JEDEC standards through virtually identical misconduct that was directed towards additional standardized technologies.

The record shows that while Rambus was a JEDEC member, JEDEC discussed many features for inclusion or possible inclusion in a JEDEC standard, including features called low-swing voltage, external reference voltage, auto precharge, multi-bank design, and source-synchronous clocking. CCF 545-557, 645-648, 856, 3118, 3121-3182. The record also shows that while Rambus was a JEDEC member, Rambus had, or believed it could file, patent applications covering the same five features. CCF 857, 886, 888, 964-967, 967, 981, 1000-1003, 1045, 3119, 3121-3182. Yet, Rambus never disclosed to JEDEC that it had, or believed it could file, patent applications covering these features. CCF 3120, 3121-3182. Rambus is now obtaining patents that are directed to these same undisclosed features. *See, e.g.*, CCF 3117 (patent issued with claim relating to auto precharge).

Clearly, if the Commission's order is limited to the four technologies over which Rambus has asserted patent rights in litigations, and ignores additional technologies on which Rambus had not yet brought suit when this investigation began, there is a significant risk that Rambus will be permitted to achieve its monopolistic aims and secure the very result (monopoly power over JEDEC standards) through the very same conduct (deceptively failing to disclose its patent rights to JEDEC during the standard-setting process) that led the Commission to conclude that Rambus had violated the antitrust laws.

### **3. The Remedy Should Extend To JEDEC-Compliant DRAMs Manufactured Or Sold Overseas.**

To ensure that the remedy it chooses fully restores competition in U.S. commerce, including U.S. import and export commerce, the Commission should bar Rambus from enforcing

its foreign patent rights against the SDRAM and DDR SDRAM standards, including successor JEDEC DRAM standards such as DDR2 SDRAM, to the extent that such overseas enforcement would reach imports from, or exports to, the United States.

Rambus has obtained foreign patent rights that it claims cover the same four technologies as to which the Commission has found a violation. CCFF 1968-1974, 3214-3215. Rambus has asserted those foreign patent rights against JEDEC-compliant SDRAMs and DDR SDRAMs in foreign lawsuits, including in the United Kingdom, Germany, France, and Italy. CCFF 2026-2027, 3212, 3216-3219. Those foreign patents claim priority to or through patents and applications that Rambus filed on or before its withdrawal from JEDEC on June 17, 1996. CCFF 2024, 3184.

To restore competition in U.S. commerce, and in the U.S. import and export markets, any remedy should prevent Rambus from enforcing its foreign patent rights against the JEDEC standards. This is so for at least two reasons.

First, the JEDEC standards are worldwide standards. CCFF 3188. The same JEDEC standards that govern the manufacture and sale of JEDEC-compliant DRAMs in the United States also govern the manufacture and sale of JEDEC-compliant DRAMs overseas. CCFF 3188. Thus, by failing to disclose its U.S. patent rights to JEDEC, and by engaging in misleading conduct about its patents, Rambus denied JEDEC the opportunity to adopt standards that would have avoided Rambus's foreign patent rights.

Second, permitting Rambus to enforce its foreign patents against the JEDEC standards will injure competition in the United States. The Commission has found that the technology markets that Rambus monopolized are worldwide. Opinion at 5 n.3. Consistent with this finding, the record shows that JEDEC standard parts are freely exported from, and imported

into, the United States in large volumes. CCFF 3190. Indeed, the United States is a net importer of DRAM. CCFF 3183. Moreover, SDRAM and DDR SDRAM are manufactured by companies that have operations in the United States and overseas. CCFF 3189-3198. Thus, if JEDEC members, for example, are enjoined under Rambus's foreign patents from making SDRAM in Europe and exporting those SDRAMs to the United States, the supply of SDRAMs in the United States will be disrupted, resulting in price increases and harm to U.S. consumers. See CCFF 3183, 3221-3224. Rambus itself has suggested that if it can succeed in enforcing its patent rights against JEDEC SDRAM in one major jurisdiction, it will disrupt markets for SDRAM in other jurisdictions. CCFF 3226. To ensure that competition in the United States is restored, the Commission must ensure that Rambus cannot capture the JEDEC standards by enforcing foreign patents against them.<sup>7</sup>

**D. An Enforcement Bar Is Consistent With Remedies Available In Patent Cases.**

A patent enforcement bar of the sort discussed above is fully consistent with the relief that courts award when a patent owner is equitably estopped from enforcing its patents. *A.C. Aukerman Co. v. R.I. Chaides Constr. Co.*, 960 F.2d 1020, 1028 (Fed. Cir. 1992). The elements of equitable estoppel are: (1) misleading conduct by the patentee, (2) reliance by the alleged infringer, and (3) prejudice if the patent were to be enforced against the relying alleged infringer. *Id.* at 1028. Equitable estoppel need only be proven by a preponderance of the

---

<sup>7</sup> The Commission has the authority to order a company to cease and desist from enforcing foreign patents when necessary to remedy a violation of the antitrust laws. In the past, the Commission has obtained consent orders which bind the parties to refrain from enforcing non-U.S. patent rights. See, e.g., *In re Xerox Corp.*, 86 F.T.C. 364 (1975); *In re Dell Computer Corp.*, 121 F.T.C. 616, 621 (1996). In the Clayton Act §7 context, see *In re Glaxo Wellcome, plc*, 2001 WL 147161 (F.T.C. Jan. 26, 2001); *In re Roche Holdings, Ltd.*, 113 F.T.C. 1086 (1990).

evidence. *Id.* at 1040-41. When equitable estoppel is established, a court will bar the patent owner from enforcing its patent rights.<sup>8</sup>

Here, the Commission's findings clearly satisfy all of the elements of equitable estoppel. The Commission expressly found that "Rambus engaged in representations, omissions, and practices that were likely to mislead JEDEC members acting reasonably under the circumstances, to their substantial detriment, and . . . that Rambus willfully engaged in deceptive conduct." Opinion at 68. These misrepresentations included Rambus's representation that it did not have patents or applications that would cover implementations of the JEDEC standards under discussion. *Id.* at 4. The Commission further found reliance by JEDEC's members on Rambus's misleading conduct when they unknowingly adopted the standards that Rambus now contends are covered by its patents, and thereafter when they designed and produced products conforming to those standards. *Id.* at 78. Prejudice to JEDEC's members from Rambus's enforcement of its patents against products that consist of, or interface with, JEDEC standard products, and collection of royalties on those products, is particularly evident in light of the Commission's finding of Rambus's durable monopoly power. *Id.* at 77-78, 110.<sup>9</sup>

Barring Rambus from enforcing its patent rights also is consistent with the doctrine of patent misuse. Patent misuse is an "extension of the equitable doctrine of unclean hands, whereby a court of equity will not lend its support to enforcement of a patent that has been misused." *B. Braun Med., Inc. v. Abbott Labs.*, 124 F.3d 1419, 1427 (Fed. Cir. 1997).

---

<sup>8</sup> See, e.g., *Potter Instrument Co., Inc. v. Storage Technology Corp.*, 641 F.2d 190 (4th Cir.), cert. denied, 454 U.S. 832 (1981); *Wang Laboratories Inc. v. Mitsubishi Electronics America Inc.*, 29 U.S.P.Q.2d 1481 (C.D. Cal. 1993); *Stambler v. Diebold, Inc.*, 11 U.S.P.Q.2d 1709, 1715 (E.D.N.Y. 1988), *aff'd*, 878 F.2d 1445 (Fed. Cir. 1989).

<sup>9</sup> Rambus itself understood that its deceptive conduct could create issues of equitable estoppel. For example, Lester Vincent (Rambus's outside patent counsel) admitted in documents that "there could be an equitable estoppel problem if Rambus creates impression on JEDEC that it would not enforce its patent or patent [applications]." CCF 422.

While a patentee's conduct may constitute patent misuse without rising to the level of an antitrust violation, a "finding of an antitrust violation requires a finding of patent misuse" when a patent is used as the instrument of competitive harm. *See Rosenthal Collins Group, LLC v. Trading Tech. Int'l*, Case No. 05 C 4088, 2005 WL 3557947, at \*7 (N.D. Ill.). Here, the Commission determined that Rambus's deceptive and exclusionary conduct in connection with its patent rights violated the antitrust laws. Under these circumstances, the doctrine of patent misuse would dictate that Rambus should be barred from enforcing its patent rights against the relevant JEDEC DRAM standards in order to purge the misuse. *Morton Salt Co. v. G.S. Suppiger Co.*, 314 U.S. 488, 494 (1942).

**II. IN THE ALTERNATIVE, THE COMMISSION SHOULD FORCE RAMBUS TO GRANT A ROYALTY-FREE LICENSE UNDER ITS PATENT RIGHTS TO USE THE JEDEC STANDARDS.**

Instead of barring Rambus from enforcing its patent rights, the Commission also could attempt to remedy Rambus's exclusionary conduct by ordering Rambus to grant users of the JEDEC standards a license under its patent rights to practice the standards. *In re American Cyanamid Co.*, 72 F.T.C. 623 (1967), 1967 FTC LEXIS 43, 151-52, *aff'd*, *Charles Pfizer & Co. v. FTC*, 401 F.2d 574 (6th Cir. 1968). This remedy, although similar to an enforcement bar, is more complex, because the Commission generally must consider whether the compulsory license will be royalty-free or whether, instead, users of the JEDEC standards must pay a royalty to Rambus under the license.

Here, should the Commission decide to pursue the compulsory license remedy rather than the enforcement bar remedy, Amici urge the Commission to require that Rambus grant royalty-free licenses under its patent rights to practice the JEDEC DRAM standards. A royalty-free license is consistent with the evidence that JEDEC would not have adopted a royalty-bearing standard for main memory, is not prejudicial to Rambus, and would benefit



consumers. In contrast, allowing Rambus to collect such a royalty would give Rambus an undeserved windfall, would not deter others from subverting SSOs in the future, and would unfairly impose a risk of loss on the victims of Rambus's monopolistic conduct.

**A. A Royalty-Free Compulsory License To Practice The JEDEC Standards Is Warranted.**

**1. JEDEC Would Not Have Agreed To Pay Royalties For Main Memory Standards And, Instead, Would Have Adopted Alternative Technologies.**

A principal goal of a Commission remedy is to restore competition to affected markets. Thus, if JEDEC would not have agreed to pay Rambus a royalty *ex ante*, and would have opted instead for alternative technologies, then the Commission should not award Rambus a royalty today for the use of the JEDEC standards. Put simply, if JEDEC would have adopted alternatives rather than pay royalties, then Rambus's patented technologies would not be in the JEDEC standards today and Rambus would not be in a position to extract royalties for the use of the JEDEC standards.

Here, the evidence demonstrates convincingly that JEDEC would not have agreed to pay royalties for the use of Rambus's patented technologies. Indeed, JEDEC consistently has tried to avoid the adoption of royalty-bearing main memory standards and has adopted royalty-free open standards whenever possible.

To begin with, JEDEC has avoided royalty-bearing main memory standards because the industry insists that main memory be low cost. In any product that uses DRAM, the cost budget for main memory is limited. When main memory is costly, it is difficult for OEMs to meet pricing targets and supply their products at prices that consumers will accept. Royalties on DRAMs increase the cost of main memory and, as a result, increase product cost and reduce OEM profits and sales. CCF 93, 99, 100, 107-109, 261.

Thus, ensuring that standards were low cost was a driving force at JEDEC. Indeed, the FTC has found that “JEDEC members – DRAM manufacturers and customers – were highly sensitive to costs, and that keeping costs down was a major concern within JEDEC.” Opinion at 74 & n.404; *id.* at 75 & nn.405, 408; CCFF 2442-2447.

The record contains strong evidence that JEDEC would have objected to a royalty-bearing standard for main memory. Andy Bechtolsheim of Sun testified that Sun “would have strongly opposed the use of royalty-bearing elements in an interface patent – in an interface specification.” Opinion at 75 & n.408. Richard Heye of AMD testified that AMD had not paid royalties on memory interfaces to anyone other than Rambus. Opinion at n.539. This led the Commission to find that “Payment of royalties on memory interfaces has been very much the exception, rather than the rule, in the computer industry.” Opinion at 96-97.

Put simply, the evidence shows that JEDEC would not have adopted the existing SDRAM and DDR SDRAM standards had JEDEC known that there were royalties associated with those standards. CCFF 2448. Rambus should not be awarded a royalty today when it would not have received a royalty *ex ante*.

## **2. A Royalty-Free License Would Not Prejudice Rambus.**

Should the Commission order Rambus to offer a royalty-free license, Rambus will not be prejudiced.

First, the royalty-free license would extend only to JEDEC standard parts. It would not apply to Rambus’s proprietary RDRAM family (Base, Concurrent, or Direct RDRAM), to Rambus’s other proprietary memory interfaces (e.g., XDR), or to any other of Rambus’s various interface technologies (such as Rambus’s Serial Link technology, its FlexIO Processor technology, PCI Express technology, and ABP Link technology). Thus, Rambus would be free to seek royalties on any parts that are not JEDEC-compliant parts or that do not

interface with or use JEDEC-compliant parts. In fact, Rambus licenses its technologies to numerous licensees for such other uses.<sup>10</sup>

Second, Rambus would be free to assert any patent rights that do not claim priority to or through patent applications filed on or before June 17, 1996 – the date that Rambus withdrew from JEDEC. Rambus holds numerous patents that do not claim priority to such applications. Under the proposed remedy, Rambus would be free to assert many other patents and seek to recover royalties for infringement of those patents, even as against JEDEC standard parts.

Third, many of Rambus’s patents that claim priority to or through an application filed on or before June 17, 1996 will be expiring soon. For example, the Rambus patents that claim the benefit of Rambus’s 1990 patent application generally will be expiring in 2010, that is, 20 years after their effective filing date. 35 U.S.C. § 154. Thus, the duration of the remedy is not unreasonable.

### **3. A Royalty-Free License Would Provide Maximum Benefit To Consumers.**

The victims of Rambus’s misconduct, including OEMs and consumers, should not have to bear any costs that result from that misconduct. Short of a complete bar on enforcement, a zero royalty rate is the best way to assure that no such costs are passed on to them. On the other hand, a royalty bearing license would unfairly impose costs on OEMs, consumers and other victims of Rambus’s misconduct.

---

<sup>10</sup> See [www.rambus.com/us/patents/licensing/licensees.html](http://www.rambus.com/us/patents/licensing/licensees.html).

**B. The Commission Should Not Reward Rambus With A Royalty-Bearing License.**

**1. A Royalty-Bearing License Would Provide A Windfall To Rambus And Encourage Deceptive Conduct At SSOs.**

Rambus has been collecting royalties on JEDEC SDRAMs and DDR SDRAMs for over six years. Rambus already has enjoyed the benefits of extracting monopoly rents on those patents and collected tens or hundreds of millions of dollars in ill-gotten gains. To allow Rambus to continue to collect royalties over the remaining life of these patents will only further encourage such deceptive conduct at SSOs.

As set forth above, the evidence shows that had Rambus not engaged in exclusionary conduct, JEDEC would not have included the features over which Rambus claims patent rights in the SDRAM and DDR SDRAM standards. As such, allowing Rambus to collect a royalty today would place Rambus in a much better position than it would have been in if it had done the right thing and disclosed its patent rights to JEDEC. Put simply, a royalty-bearing license would provide a windfall to Rambus and, contrary to public policy, would reward Rambus for its deceptive conduct rather than deter it.

Such a result would send precisely the wrong message to potential wrongdoers in Rambus's situation. The message from the Commission would be that taking a chance at deceiving an SSO is a "no lose" proposition, because even if you are caught red-handed, you nonetheless will receive supracompetitive royalties.

In contrast, if Rambus were required to license its patents royalty-free, the message would be entirely different. Potential wrongdoers in Rambus's position would understand that deceiving an SSO may impair their patent rights and will not result in any financial gain. Such a remedy may well deter potential wrongdoers from engaging in the kind of conduct that gave Rambus its monopoly power.

**2. A Royalty-Bearing License Would Hurt Consumers.**

Forcing the industry to pay a royalty to Rambus would hurt consumers. As the Commission has indicated, and as Complaint Counsel's economic expert (Preston McAfee) testified, royalty costs will be passed on to consumers in the long run, with the effect of lowering output in the downstream DRAM market and increasing prices. Opinion at 114 & n.622; CCF 3050-3051. As the Commission has found, the cost of a running royalty (at least on Rambus's monopolistic terms) to the industry – and the size of the windfall to Rambus – could be enormous (hundreds of millions or billions of dollars per year). Opinion at 75-76 & nn.409-410. The fact that royalty costs on these high volume products would be so high is one of the reasons why JEDEC would have adopted alternatives to Rambus's technology in the first place had Rambus disclosed its patent rights.

**3. The Victims Of Rambus's Misconduct Should Not Be Required To Bear The Risks Involved In Calculating The Correct Ex Ante Royalty.**

Attempting to determine today what royalty rate industry members would have paid *ex ante* had Rambus disclosed its patent rights and offered RAND terms would impose an enormous and unfair risk of loss on the victims of Rambus's misconduct and should not be undertaken.

Here, reconstructing an *ex ante* royalty negotiation after more than a decade has passed, after Rambus has shredded documents on a massive scale<sup>11</sup>, and after Rambus's misconduct has led to dislocation in the technology markets will be risky and uncertain. Because Rambus engaged in misconduct, and because Rambus's misconduct has made any royalty

---

<sup>11</sup> *Samsung Elecs. Co. v. Rambus Inc.*, No. 3:05cv406, *slip op.* at 80 (E.D. Va. July 18, 2006) (“The record proves that Rambus engaged in pervasive document destruction in 1998 and 1999 while it anticipated litigation, or reasonably should have anticipated litigation, and in 2000 while it was actually engaged in litigation.”).

evaluation more difficult, the victims of Rambus's monopolistic behavior – OEMs, consumers, DRAM manufacturers, and JEDEC – should not have to bear the risk that the Commission will err in calculating an *ex ante* rate. Rather, the risk should be borne by Rambus. As the Commission explained (Opinion at 81) when it cited *United States v. Microsoft Corp.*, 253 F.3d 34, 79 (D.C. Cir.), *cert. denied*, 534 U.S. 952 (2001), with approval:

Rather than requiring plaintiff “to reconstruct the hypothetical marketplace absent a defendant’s anticompetitive conduct,” the court explained, “To some degree the defendant is made to suffer the uncertain consequences of its own undesirable conduct.”

Given the irreducible uncertainties and complexities, there is a substantial risk that any royalty determined today would be higher or lower than what actually would have resulted from an *ex ante* negotiation. While it is appropriate for Rambus to bear the risk of a too-low royalty, it is not appropriate for the victims of Rambus's exclusionary conduct, including consumers, to bear the risk of an excessively high royalty.

**C. If The Commission Allows A Non-Zero Royalty, The Royalty Should Reflect JEDEC's Policies, The Low Cost Expectations Of Its Members, And The Feasibility Of “Designing Around” Rambus's Patents *Ex Ante*.**

If the Commission determines that JEDEC would have paid a royalty *ex ante*, and that a royalty therefore should be paid to Rambus for a compulsory license under Rambus's patents to use the JEDEC standards, the Commission should set a royalty that reflects the Commission's findings that feasible alternative technologies were available.<sup>12</sup>

In determining what royalty Rambus and industry members would have agreed to *ex ante*, an important factor is the cost of designing around Rambus's patents. If feasible alternatives were available, a rational licensee generally would not have agreed to pay more for a

---

<sup>12</sup> A compulsory license also would have to include provisions that restricted Rambus's exercise of monopoly power through the imposition of non-royalty terms, such as “patent pooling” and “grant back” provisions.

license than it would have cost to design around the patents and implement the alternatives. Here, the negotiations with Rambus would have taken place before the industry had launched SDRAM and DDR SDRAM in large quantities. At that stage, designing around Rambus's patents would have been virtually without cost. Moreover, the Commission already has found that unpatented alternative technologies were available (Opinion at 97), that Rambus's claimed technologies were not superior to all alternatives (Opinion at 83), and that Rambus failed to demonstrate that alternatives would have been more expensive than its claimed technologies (Opinion at 94). Given these findings, nothing more than a nominal royalty, if any, would be warranted.

The royalty rates that Rambus extracted from DRAM manufacturers for licenses to sell DRDRAM do not reflect what JEDEC would have paid *ex ante*. To begin with, DRDRAM is Rambus's proprietary DRAM design. It is not an "open" memory standard, which is what JEDEC was attempting to develop. Moreover, the evidence shows that there was broad dissatisfaction -- both among DRAM manufacturers and OEMs -- with the royalty rates that Rambus charged for DRDRAM. CCFF 1815-1822. In early 1997, in the context of discussions over SyncLink/SLDRAM for main memory, Siemens stated that a 0.1% royalty for DRDRAM would be "okay" but that a 1-2% royalty would be "ridiculous." CCFF 1819. As Micron's Terry Lee explained, the 2% royalty for DRDRAM "was larger than anything we'd ever heard of for an interface technology and certainly the largest thing we ever heard of for some sort of fee we'd have to pay to produce main memory." CCFF 1817. Nonetheless, Micron was forced to pay the 2% because of Intel's 1996 announcement of exclusive support for DRDRAM as the memory standard for future generations of main memory. CCFF 1614 (Tr. at 6870:7-18 (in explaining Micron's decision to take a license from Rambus for DRDRAM, Mr. Lee explained

that Micron was under “economic pressure . . . . We had no choice but to provide products in support of the Intel platforms. That would have been not economically good for us.”)). In effect, the DRAM manufacturers agreed to pay 1-2% royalties on DRDRAM because they had no alternative, given Intel’s share of the chipset business worldwide. CCFF 1609, 1611-1615. Here, in contrast, the Commission already has found that JEDEC had alternatives available to the features over which Rambus claims patent rights.

Of course, JEDEC rules prohibit JEDEC from including patented or patentable material in a JEDEC standard without written assurance from the patent owner that it will grant a license for free or on reasonable and non-discriminatory terms. CCFF 347. Any license must be non-discriminatory to ensure that any competitor that uses a JEDEC standard is not disadvantaged compared to any other competitor that uses the standard. Consistent with the requirement of non-discrimination, the Commission should ensure that any royalty it sets does not disadvantage one DRAM manufacturer compared to the others.

Accordingly, the Commission should take notice of the Settlement and License Agreement between Rambus and Infineon Technologies AG, a major DRAM manufacturer.<sup>13</sup> Effective March 18, 2005, Infineon obtained a license under *all* Rambus patents to sell *any* semiconductor memory device (including SDRAM, DDR SDRAM, DDR2 SDRAM, but also including Rambus’s proprietary RDRAM and XDR DRAM devices and including devices other than DRAM, such as SRAM, Flash, EPROM, and the like). Under the Agreement, Infineon’s payments to Rambus will range between \$50 million and \$150 million. These payments cover not only Infineon’s DRAM sales going forward, but also its sales prior to the Effective Date.

---

<sup>13</sup> A redacted version of the Rambus/Infineon Agreement, available from Rambus’s SEC filings, is attached hereto as Exhibit 2.

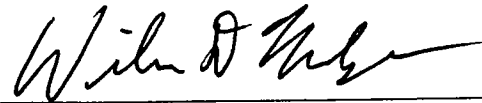


The Rambus/Infineon Agreement sets a very high outer boundary for the Commission, because Infineon received much more from Rambus under its Agreement than other JEDEC members, industry participants, or the public will receive in the event that the Commission orders a compulsory license. For example, in consideration of Infineon's payments to Rambus, Rambus agreed to dismiss an antitrust suit against Infineon that Rambus had filed in California. In addition, Infineon has rights under all of Rambus's patents, whereas the remedy requested by Amici would extend only to those patent rights that claim priority to or through an application filed on or before June 17, 1996. And Infineon has rights to make and sell virtually any memory device, including Rambus's proprietary RDRAMs and XDR DRAMs, whereas the remedy requested by Amici would merely extend to SDRAM, DDR SDRAM, and successor JEDEC DRAM standards (such as DDR2 SDRAM). For these reasons, any royalty set by the Commission should be substantially less than the Rambus/Infineon Agreement.

### **CONCLUSION**

Amici curiae NVIDIA Corporation, Micron Technology, Inc., Samsung Electronics Corporation, Ltd., and Hynix Semiconductor, Inc. respectfully request that the Commission impose the following remedies: (a) an order barring Rambus from enforcing its patent rights that claim priority to or through any application filed on or before June 17, 1996 against JEDEC-compliant SDRAM and DDR SDRAM devices (or against DRAMs that are compliant with successors of those DRAM standards such as DDR2 SDRAMs) and against any devices that use or interface with such DRAMs; (b) an order barring such enforcement in the United States and overseas to the extent that such overseas enforcement would reach imports from, or exports to, the United States.

Respectfully submitted,



---

Jared Bobrow  
WEIL GOTSHAL & MANGES LLP  
201 Redwood Shores Parkway  
Redwood Shores, CA 94065  
Phone: (650) 802-3000  
Fax: (650) 802-3100

William J. Baer  
Wilson D. Mudge  
ARNOLD & PORTER LLP  
555 Twelfth Street, NW  
Washington DC 20004  
Phone: (202) 942-5000  
Fax: (202)942-5999

*Counsel for Micron Technology, Inc.*

DAVID HEALEY

David Healey  
WEIL GOTSHAL & MANGES LLP  
700 Louisiana  
Suite 1600  
Houston, TX 77002-2784  
Phone: (713) 546-5000  
Fax: (713) 224-9511

*Counsel for Samsung Electronics  
Corporation, Ltd.*

KENNETH L. NISSLY

Kenneth L. Nissly  
THELEN REID & PRIEST LLP  
225 West Santa Clara Street, 12th Floor  
San Jose, CA 95113  
Phone: (408) 292-5800  
Fax: (408) 287-8040

Theodore G. Brown, III  
TOWNSEND AND TOWNSEND  
AND CREW LLP  
379 Lytton Avenue  
Palo Alto, California 94301  
Phone: (650) 326-2400  
Fax: (650) 326-2422

David Beddow  
O'MELVENY & MYERS, LLP  
1625 Eye Street, NW  
Washington, DC 20006-4001  
Phone: (202) 383-5300  
Fax: (202) 383-5414

*Counsel for Hynix Semiconductor, Inc.*

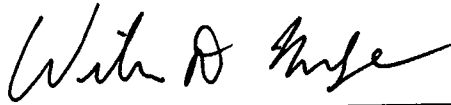
*for*  
David M. Shannon

David M. Shannon  
Sr. Vice President, General Counsel  
NVIDIA CORPORATION  
2701 San Tomas Expressway,  
Santa Clara, CA 95050  
Phone: (408) 486-8116  
Fax: (408) 486-2840

*Counsel for NVIDIA Corporation*

**CERTIFICATE OF SERVICE**

I, Wilson D. Mudge, hereby certify that, on this the 15th day of September, 2006, I caused copies of the foregoing BRIEF OF AMICI CURIAE NVIDIA CORPORATION, MICRON TECHNOLOGY, INC., SAMSUNG ELECTRONICS CORPORATION, LTD., AND HYNIX SEMICONDUCTOR, INC. ON THE ISSUE OF THE APPROPRIATE REMEDY FOR RAMBUS'S VIOLATIONS OF THE FTC ACT to be served by the method indicated below upon the following:



Wilson D. Mudge

**Via Hand Delivery**

Richard B. Dagen, Esq.  
Assistant Director  
Bureau of Competition  
Federal Trade Commission  
601 New Jersey Ave., N.W.  
Washington, D.C. 20580

A. Douglas Melamed, Esq.  
Wilmer, Cutler & Pickering  
2445 M Street, N.W.  
Washington, D.C. 20037  
*Counsel for Rambus, Inc.*

Donald S. Clark, Secretary  
Federal Trade Commission  
Room H-159  
600 Pennsylvania Avenue, N.W.  
Washington, D.C. 20580

Geoffrey Oliver, Esq.  
Federal Trade Commission  
601 New Jersey Avenue, N.W.  
Washington, D.C. 10580  
*Complaint Counsel*

**By Facsimile and Overnight Delivery**

Gregory P. Stone, Esq.  
Munger, Tolles & Olson LLP  
355 South Grand Avenue  
35th Floor  
Los Angeles, CA 90071  
(213) 687-3702 – Facsimile  
*Counsel for Rambus, Inc.*

# **Exhibit 1**

TAM by Technology (by Mbit) - Q2 2006 Update

ISUPPI

Quarterly TAM by technology

	2006 Q1	2006 Q2	2006 Q3	2006 Q4	2007 Q1	2007 Q2	2007 Q3	2007 Q4	2008 Q1	2008 Q2	2008 Q3	2008 Q4	2009 Q1	2009 Q2	2009 Q3	2009 Q4	2010 Q1	2010 Q2	2010 Q3	2010 Q4	Total
FP/EDO	0.0%	0.4%	0.3%	0.3%	0.2%	0.2%	0.2%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.0%
RDRAM	3.0%	1.5%	0.9%	0.7%	0.4%	0.3%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.1%
SDRAM	25.9%	22.8%	19.9%	19.3%	20.7%	20.2%	17.7%	15.3%	13.3%	12.7%	12.4%	11.8%	10.5%	9.5%	8.5%	8.0%	7.3%	6.3%	5.5%	5.0%	4.6%
DDR	70.0%	75.0%	75.9%	79.8%	78.0%	77.0%	74.9%	74.9%	64.0%	61.0%	54.4%	50.5%	45.3%	40.0%	33.0%	25.0%	18.0%	14.0%	10.0%	8.0%	8.0%
DDR2	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
DDR3	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Graphic	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Note: portion of DDR2/6.3/3.4/0.4 max depends on price premium

SDRAM includes mobile DRAM

Yearly TAM by technology

	2006	2007	2008 A	2008 Q1	2008 Q2	2008 Q3	2008 Q4	2009 A	2009 Q1	2009 Q2	2009 Q3	2009 Q4	2010 A	2010 Q1	2010 Q2	2010 Q3	2010 Q4	Total
FP/EDO	5.5%	1.5%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.0%
RDRAM	3.2%	1.7%	1.0%	0.8%	0.7%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.1%
SDRAM	81.2%	87.5%	85.2%	83.9%	83.0%	82.0%	80.9%	77.2%	75.0%	73.9%	72.4%	71.2%	64.0%	61.0%	54.4%	50.5%	45.3%	40.0%
DDR	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
DDR2	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
>DDR3	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Graphic	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

DDR2/DDR1 crossover

DDR/SDRAM crossover

DDR2/DDR crossover

DDR3/DDR2 crossover

# **Exhibit 2**



**SETTLEMENT AND LICENSE AGREEMENT**

**THIS SETTLEMENT AND LICENSE AGREEMENT** (the "Agreement") is made by and among Rambus Inc. ("Rambus"), on the one hand, and Infineon Technologies AG, Infineon Technologies North America Corp. and Infineon Technologies Holding North America Inc. (collectively, "Infineon"), on the other hand, effective as of March 18, 2005 ("Effective Date").

**WHEREAS**, Rambus and Infineon have rights under certain U.S. and foreign patents and patent applications including the right to license such patents;

**WHEREAS**, Rambus and Infineon are currently parties to a number of disputes and court actions relating to certain memory products and memory interface technology;

**WHEREAS**, Rambus and Infineon wish to settle such disputes and court actions and all claims between them related thereto;

**WHEREAS**, Rambus wishes to grant Infineon a license to U.S. and foreign patents and patent applications relating to memory products, as hereinafter defined, under which Rambus now has, or may hereafter, acquire any rights, and Infineon wishes to grant Rambus a license to U.S. and foreign patents and patent applications relating to memory interfaces, as hereinafter defined, under which Infineon now has, or may hereafter, acquire any rights

**WHEREAS**, Rambus and Infineon have agreed to the conditions, releases, and other obligations set forth herein as full, final and complete resolution of the claims asserted in such disputes and court actions; and

**WHEREAS**, this Agreement is entered into for the purpose of settlement and compromise only.

**NOW, THEREFORE**, in consideration of the promises and the mutual covenants herein contained and for other good and valuable consideration, the adequacy and receipt of which are hereby acknowledged, Rambus and Infineon agree as follows.

**ARTICLE I**

**Definitions**

The following terms used herein with initial capital letters shall have the respective meanings specified in this Article I.

- 1.1 **Affiliate**. The term "Affiliate" means any entity controlling, under common control with, or controlled by, a party. The term "control" means the possession, directly or indirectly, of the power to direct or cause the direction of management or policies (whether through ownership of securities, partnership or other ownership interests, by contract or otherwise), provided that, in any event, any entity that owns or holds, directly or indirectly, more than fifty percent (50%) of

---

\*\*\* Confidential treatment has been requested for the bracketed portions. The confidential redacted portion has been omitted and filed separately with the Securities and Exchange Commission.

---

the voting securities, partnership or other equity interests of any other entity will be deemed to control such entity.

- 1.2 Disputes. The term "Disputes" means the court actions listed hereinafter and any and all disputes related thereto:
- (a) the Richmond patent litigation (*Rambus Inc. v. Infineon Technologies AG et al.*, No. 3:00cv524 (E.D. Va. Filed Aug. 8, 2000) ("The Richmond Patent Litigation")
  - (b) the California patent litigation (*Rambus Inc. v. Hynix Semiconductor Inc. et al.*, No. C05-00334 EDL (N.D. Cal. Filed Jan. 25, 2005) ("The California Patent Litigation")
  - (c) the California anti-trust litigation (*Rambus Inc. v. Micron Technology Inc. et al.*, No. 04-431105 (Supr. Ct. Cal., San Fran. Filed May 5, 2004) ("The California Anti-trust Litigation")
  - (d) the German Infringement litigations 7-O-317/00; 7-O-301/04
  - (e) the German and European patent office actions Gbm9117296 L6 I 183/00; 5W(pat)443/03; XZB28/04; opposition EP 0525068, T0081/03-351, opposition EP 1004956, opposition EP 1022642, opposition EP 1019911, opposition EP 0870241,
  - (f) the respective complaints against the other party filed with the European Commission.
- 1.3 Leading Suppliers. The term "Leading Suppliers" means, subject to Section 6.6, [\*\*\*]
- 1.4 Licensed Rambus Patents. The term "Licensed Rambus Patents" means all patents, utility models, and patent applications, in all countries of the world having a first effective filing date, in any country in the world, prior to March 18, 2005 including, without limitation, all reissuances, continuations, continuations-in-part, revisions, extensions and reexaminations thereof, and any patents and patent applications related thereto, filed or issued in any country of the world, that are owned or controlled by Rambus or any of its Affiliates on March 18, 2005 (and patents that may issue thereon) to the extent Rambus or its Affiliates is entitled to grant licenses thereunder without the payment of fees to any third party.
- 1.5 Infineon Patents. The term "Infineon Patents" means (i) all patents, utility models, and patent applications, in all countries of the world having a first effective filing date, in any country in the world, prior to March 18, 2005, including, without limitation, all reissuances, continuations, continuations-in-part, revisions, extensions and reexaminations thereof, and any patents and patent applications related thereto, filed or issued in any country of the world, that are owned or controlled by Infineon or any of its Affiliates on March 18, 2005 (and patents that may issue thereon) to the extent Infineon or its Affiliates is entitled to grant licenses thereunder without the payment of fees to any third party. Infineon Patents shall not include any patents, utility models, and patent applications, in all countries of the world, pertaining to semiconductor manufacturing or testing technology.
- 1.6 Infineon Licensed Products. The term "Infineon Licensed Products" means any existing or future Infineon Memory ICs, Infineon Memory Portion, Infineon Memory Modules, or Infineon Module Component. Notwithstanding the foregoing sentence, the parties agree that Laundry

---

[\*\*\*] Confidential treatment has been requested for the bracketed portions. The confidential redacted portion has been omitted and filed separately with the Securities and Exchange Commission.

---

Products and Distri Products are excluded from the definition of Infineon Licensed Products. The term Infineon includes Infineon Affiliates for the purpose of this Section.

1.7 Laundry Product. The term "Laundry Product" means any product:

- (a) made by or for Infineon or its Affiliates; and
- (b) the design for which product is provided by or on behalf of a third party ("Designing Party") or owned or controlled by the Designing Party; and
- (c) where such product is supplied by or for Infineon or its Affiliates to the Designing Party or to entities designated by the Designing Party.

"Distri Product" means any product:

- (a) made by a third party ("Manufacturer") and acquired by Infineon or its Affiliates; and
- (b) for which Infineon and its Affiliates perform only the packaging, or no, or only insubstantial manufacturing activity, such as (without limitation) only marking of such product or performing a minor process step on such product; and
- (c) is sold or otherwise transferred to a third party by Infineon or its Affiliates; and
- (d) is not a design owned or controlled by Infineon.

Notwithstanding the foregoing sentence, a product that meets the above definition of Distri Product shall be deemed not to be a Distri Product if such products are labeled with a part number and trademark of Infineon or its Affiliates (except such labeling requirement shall not apply for low quality, scrap, or other substandard products) and:

- (e) all or a substantial portion of the manufacturing technology the Manufacturer employs in manufacturing such product is provided by Infineon or its Affiliates; or

Infineon or its Affiliates owns or controls (as used in the definition as per Section 1.1) at least twenty percent (20%) of the Manufacturer, and Infineon or its Affiliates have participated substantially in the Manufacturer's acquisition of the manufacturing technology the Manufacturer employs in manufacturing such product.

1.8 Memory IC. The term "Memory IC" means any semiconductor memory device, or equivalent, having information storage as its primary function and that is not capable of performing any substantial data processing that is not related to information storage, retrieval, or error correction, including but not limited to SDR SDRAM, DDR SDRAM, DDR2 SDRAM, DDR3 SDRAM, GDDR2 DRAM, GDDR3 DRAM, RLDRAM, RLDRAM2, RDRAM, XDR DRAM, Cellular RAM, low power DRAM, SRAM, Flash, MRAM, FRAM, ROM, PROM, EPROM, EEPROM and any subsequent generation of any such products.

1.9 Memory Module. The term "Memory Module" means any unitary substrate (for example, silicon, ceramic or PC board) having at least two (2) Memory ICs or semiconductor devices each having a Memory Portion, physically connected, physically secured or physically stacked onto a unitary substrate device to provide a device having information storage as its primary function.

---

\*\*\*] Confidential treatment has been requested for the bracketed portions. The confidential redacted portion has been omitted and filed separately with the Securities and Exchange Commission.

---

where such device itself is not capable of performing any substantial data processing that is not related to information storage, retrieval, error correction or other functions typically performed by or on a Memory IC. For the avoidance of doubt, devices of the type known as fully buffered DIMMs as of the Effective Date are deemed not to be capable of performing any data processing function that is not related to memory storage or retrieval and thus are included within the definition of "Memory Modules."

- 1.10 Module Component. The term "Module Component" means any component of a Memory Module other than a Memory IC, provided that such component is marketed by Infineon or its Affiliates solely to facilitate the functions of a Memory Module.
- 1.11 Memory Portion. The term "Memory Portion" means, for any integrated circuit that is not a Memory IC, any portion(s) of such integrated circuit which performs the functions of a Memory IC, but no other portion of such device. Examples of such excluded portions include without limitation any portion of such device that provides memory controller functionality. An example of a Memory Portion is the memory and memory related circuitry in an embedded memory device, such as in embedded DRAM, embedded MRAM, and embedded Flash memory.
- 1.12 Memory Interface. The term "Memory Interface" means an interface, or portion thereof, between a logic integrated circuit and a memory integrated circuit, whereby interface shall mean an electrical bus or other similar information path between integrated circuits that is capable of transmitting and/or receiving information between two or more integrated circuits together with the set of protocols defining the electrical, physical, timing and/or functional characteristics, sequences and/or control procedures of such bus or information path.
- 1.13 Qualifying License Agreement. The term "Qualifying License Agreement" means a license agreement, with Rambus as licensor and a Leading Supplier as licensee, for a license covering [\*\*\*] and (to the extent that [\*\*\*] is not one of the aforementioned types of [\*\*\*] (as defined herein below), where [\*\*\*] are defined by their respective [\*\*\*] For the purpose of this Section 1.13, the [\*\*\*] means the type of [\*\*\*] that, during the [\*\*\*] preceding the date when Rambus and the [\*\*\*] have both signed the license agreement [\*\*\*] as published by Gartner-Dataquest (or its successor) [\*\*\*] (or if not published [\*\*\*], for the last period of at least [\*\*\*] for which such statistic was so published by Gartner-Dataquest (or its successor). A license agreement shall be deemed a Qualifying License Agreement [\*\*\*] as described herein.
- 1.14 Change of Control. The term "Change of Control" of Infineon means a transaction or a series of related transactions in which (i) Infineon, or "control" of Infineon (where control has the meaning set forth in the definition of the term "Affiliate"), is acquired by one or more third parties (including without limitation a merger in which Infineon is not the surviving entity), or (ii) Infineon or any of its Affiliates acquires, by merger, acquisition of assets or otherwise, all or substantially all business or assets of a Memory Unit (as defined herein below). For this purpose, a "Memory Unit" means (A) any entity that manufactures (or has manufactured) and sells Memory ICs, or (B) any division (or other business unit) of an entity, which division (or other business unit) manufactures (or has manufactured) and sells Memory ICs and is responsible for all or substantially all of such Memory IC manufacturing (or having manufactured) and sales of the entity.

---

[\*\*\*] Confidential treatment has been requested for the bracketed portions. The confidential redacted portion has been omitted and filed separately with the Securities and Exchange Commission.

---

## ARTICLE 2

### Licenses

2.1 License Grant to Infineon. Rambus and its Affiliates hereby grant to Infineon and its Affiliates a nonexclusive, worldwide irrevocable license (without the right to grant sublicenses) under the Licensed Rambus Patents, for the life of such Licensed Rambus Patents, as set forth in Section 2.2.

2.2 Scope of License. The license granted pursuant to Section 2.1 is a license:

- (i) to make, have made, use, lease, sell, offer to sell, import or otherwise transfer Infineon Licensed Products; and
- (ii) to make, have made, use, lease, sell, offer to sell, import, or otherwise transfer machines, tools, materials, and other instrumentalities, insofar as such machines, tools, materials, and other instrumentalities are involved in, or incidental to, the development, manufacture, testing, use, or repair of Infineon Licensed Products, provided that the license granted under this Section 2.2 (ii) for lease, sale, offers for sale or other transfers shall apply only to those machines, tools, materials, and other instrumentalities which Infineon has or its Affiliates have actually used to develop, manufacture, test, use, or repair more than a de minimis quantity of Infineon Licensed Products.

For the avoidance of doubt, to the extent that Infineon or its Affiliates are exercising their have made rights granted in Section 2.2, the license shall include any Infineon Licensed Products made for Infineon by any of Infineon's existing and future foundry partners, including but not limited to [\*\*\*], but only to the extent that such products are sold by Infineon and/or its Affiliates.

It is the intention of the parties that the principles of patent exhaustion under U.S. law apply to the licenses granted hereunder. Thus, the parties agree that, at the minimum, in the event a party sells or otherwise disposes of a product licensed hereunder, then to the extent a patent claim licensed hereunder is directly infringed by such product, such claim is exhausted and may not be asserted against such product regardless of its further use or distribution.

To the extent that any Rambus patent claim is licensed to Infineon under this Agreement for an Infineon Licensed Product, Rambus and its Affiliates covenant that they will not assert a claim of contributory infringement or inducing infringement against Infineon or its Affiliates based upon (a) Infineon or its Affiliates performing any of the activities licensed in Section 2.2; or (b) any activities undertaken by any direct or indirect customer or distributor of Infineon or its Affiliates with respect to such Infineon Licensed Product; or (c) any instructions, information, whitepapers, datasheets or the like that Infineon or its Affiliates may publish or supply with respect to such Infineon Licensed Product. The parties agree that the foregoing sentence shall not limit Rambus' or its Affiliates' rights with respect to any third party.

To the extent that [\*\*\*] asserts against any [\*\*\*] a claim for [\*\*\*] under this Agreement, Rambus agrees that [\*\*\*] any such claim [\*\*\*] that claim against the [\*\*\*] and any other entity

---

[\*\*\*] Confidential treatment has been requested for the bracketed portions. The confidential redacted portion has been omitted and filed separately with the Securities and Exchange Commission.

- that may have any [\*\*\*] for the [\*\*\*] Rambus further agrees that upon any resolution [\*\*\*] or other entity [\*\*\*]
- 2.3 Most Favored Licensee. If Rambus after [\*\*\*] enters into, or as soon as Rambus has in effect, an agreement entered into after [\*\*\*] with any third party (other than an Affiliate of Infineon) that [\*\*\*] and has [\*\*\*] in any one of the prior [\*\*\*] calendar years, and where such agreement grants to such third party a license for the then current [\*\*\*] under [\*\*\*] than those provided [\*\*\*] for the previous [\*\*\*] (where the respective [\*\*\*] are determined by reports in Gartner Dataquest), then Rambus shall [\*\*\*] and Infineon shall have the right, in its sole discretion, within [\*\*\*] by written notice to Rambus, to [\*\*\*] payments [\*\*\*] for so long as such [\*\*\*] are in effect. For the purpose of this Section 2.3, the [\*\*\*] means the type of [\*\*\*] at the effective date or during the term of this license agreement during any given [\*\*\*] had the [\*\*\*] (as measured in [\*\*\*] as published by Gartner-Dataquest (or its successor) for the [\*\*\*] preceding the effective date or any [\*\*\*] during the [\*\*\*] of the respective license agreement (or if not [\*\*\*] for the last period of at least [\*\*\*] for which such statistic was so published by Gartner-Dataquest (or its successor).
- 2.4 Limited License under other Rambus patents. Until Infineon has made the last of the quarterly payments specified under Article 6, but, in any event, at least for the period of [\*\*\*], Rambus and its Affiliates hereby grant to Infineon and its Affiliates a nonexclusive, world-wide, irrevocable license (without the right to grant sublicenses), of the same scope as per Section 2.2, under all patents and patent applications, other than Licensed Rambus Patents, including, without limitation, all reissuances, continuations, continuations-in-part, revisions, extensions and reexaminations thereof, filed or issued in any country of the world, that are owned or controlled by Rambus or any of its Affiliates now or hereafter (and patents that may issue thereon) to the extent Rambus or its Affiliates is entitled to grant licenses thereunder without the payment of fees to any third party. At the expiration of the period set forth in this Section 2.4, and subject to Article 3, the licenses granted under this Section 2.4 shall terminate.
- 2.5 Infineon License to Rambus. Infineon hereby grants to Rambus and its Affiliates a non-exclusive, non-transferable, worldwide, irrevocable, fully paid license (without the right to grant sublicenses) under the Infineon Patents, for the life of such Infineon Patents, to make, have made, use, lease, sell, import, or otherwise transfer Memory Interfaces and designs for Memory Interfaces in any form.
- 2.6 No Implied Licenses. The parties agree that except as expressly granted in this Agreement, there are no patent or other intellectual property licenses or rights granted or arising hereunder to either party or to any third party, expressly, by implication, estoppel, or under any other legal theory.

### ARTICLE 3

#### License Request

- 3.1 Upon request of Infineon, Infineon and its Affiliates shall be entitled to obtain and Rambus shall grant an additional license of the same scope as per Section 2.4, at the then applicable most favored licensee terms and conditions. During the period of [\*\*\*] following the later of (i) Infineon's last quarterly payment under this Agreement or (ii) [\*\*\*], the terms and conditions of this additional license may not exceed a quarterly payment of [\*\*\*].

---

[\*\*\*] Confidential treatment has been requested for the bracketed portions. The confidential redacted portion has been omitted and filed separately with the Securities and Exchange Commission.

- 3.2 Any payments made by [\*\*\*] granted in accordance with Section 3.1 shall be [\*\*\*] be obligated [\*\*\*] obligations according to Section [\*\*\*] are [\*\*\*] under Section [\*\*\*] of Section [\*\*\*]. Additionally, [\*\*\*] Infineon makes payments in accordance with Section [\*\*\*] receives notice from Rambus of [\*\*\*] that [\*\*\*] Section [\*\*\*] Infineon shall [\*\*\*] during the full period that it makes payments under Section [\*\*\*] Sections [\*\*\*] beginning on the date of notice of [\*\*\*]. For example, [\*\*\*] Section [\*\*\*] and made [\*\*\*] before receiving [\*\*\*] on [\*\*\*] will be treated as [\*\*\*] beginning [\*\*\*]
- 3.3 Further, upon request of Infineon, Infineon and its Affiliates shall be entitled to obtain and Rambus shall grant to Infineon and its Affiliates a license under any patents, utility models, and patent applications, including, without limitation, all reissuances, continuations, continuations-in-part, revisions, extensions and reexaminations thereof, filed or issued in any country of the world, that are owned or controlled by Rambus or any of its Affiliates now or hereafter (and patents that may issue thereon) to the extent Rambus or its Affiliates is entitled to grant licenses thereunder without the payment of fees to any third party, for [\*\*\*] at the then applicable most favored licensee terms and conditions.

#### ARTICLE 4

##### Releases

#### 4.1 Releases by Rambus.

- (a) Patent Release. Rambus hereby irrevocably releases, acquits and forever discharges any and all patent infringement claims it has or may have had against any entity's making, having made, using, leasing, selling, offering to sell, importing or otherwise transferring any Infineon Licensed Product where such activity took place prior to the effective date, solely to the extent that such activity, had it occurred after the Effective Date would be licensed under Article 2 of this Agreement. For the avoidance of doubt, and because Inotera is a defendant in the California Patent Litigation, to the extent that Infineon or its Affiliates were having Infineon Licensed Products made by Inotera prior to the Effective Date, and to the further extent that such activity would be within the license granted to Infineon and its Affiliates in Article 2 of this Agreement had such activities occurred after the Effective Date, the release granted in the preceding sentence shall extend to the benefit of Inotera for such activities.
- (b) General Release. Rambus hereby irrevocably releases, acquits, and forever discharges Infineon, its Affiliates, its and their respective former or current directors, officers, and employees from any claims, counterclaims, demands, damages, debts, liabilities, accounts, actions and causes of action of any kind and nature (including, without limitation, patent infringement, antitrust, unfair competition, conspiracy or competition based claims), whether known or unknown, suspected or unsuspected, throughout the world, that (i) were asserted by Rambus in the Disputes, or (ii) could have been asserted by Rambus.
- (c) Releases between Rambus and Siemens. Rambus and Siemens each grant the other the release as set forth in Exhibit 4.1(c) hereto.

---

[\*\*\*] Confidential treatment has been requested for the bracketed portions. The confidential redacted portion has been omitted and filed separately with the Securities and Exchange Commission.

4.2 Releases by Infineon.

- (a) Patent Release. Infineon hereby irrevocably releases, acquits and forever discharges any and all patent infringement claims it has or may have had against any entity's making, having made, using, leasing, selling, offering to sell, importing or otherwise transferring any products or designs where such activity took place prior to the Effective Date, solely to the extent that such activity, had it occurred after the Effective Date would be licensed under Article 2 of this Agreement.
- (b) General Release. Infineon irrevocably releases, acquits and forever discharges Rambus, its Affiliates, and its and their respective former or current directors, officers, and employees from any claims, counterclaims, demands, damages, debts, liabilities, accounts, actions and causes of action of any kind and nature (including, without limitation, patent infringement, antitrust, unfair competition, conspiracy or competition based claims), whether known or unknown, suspected or unsuspected, throughout the world, that (i) were asserted by Infineon in the Disputes, or (ii) could have been asserted by Infineon.

4.3 Releases Shall Remain Effective. Each of Rambus and Infineon acknowledges that, after entering into this Agreement, they may discover facts different from, or in addition to, those they now believe to be true with respect to the conduct of the other party. Each of Rambus and Infineon intends that the releases and discharges set forth in this Article 4 shall be, and shall remain, in effect in all respects as written, notwithstanding the discovery of any different or additional facts.

4.4 Waiver of California Civil Code § 1542. In connection with the releases and discharges described in this Article 4, each of Rambus and Infineon acknowledges that it is aware of the provisions of section 1542 of the Civil Code of the State of California, and hereby expressly waives and relinquishes all rights and benefits that it has or may have had under that section (or any equivalent law or rule of any other jurisdiction), which reads as follows:

A GENERAL RELEASE DOES NOT EXTEND TO CLAIMS WHICH THE CREDITOR  
DOES NOT KNOW OR SUSPECT TO EXIST IN HIS FAVOR AT THE TIME OF  
EXECUTING THE RELEASE, WHICH IF KNOWN BY HIM MUST HAVE  
MATERIALLY AFFECTED HIS SETTLEMENT WITH THE DEBTOR.

4.5 Stipulations and Orders for Dismissal.

- (a) Concurrent with the execution of this Agreement, Infineon, its respective Affiliates, and Rambus, shall execute stipulations and orders for the dismissal with prejudice of all claims and counterclaims against one another and between Rambus and Siemens in The Richmond Patent Litigation, the California Patent Litigation and the California Anti-trust Litigation in the form attached hereto as Exhibit 4.5.
- (b) Rambus shall within ten (10) business days of the Effective Date, file a motion to withdraw with prejudice any of its infringement claims against Infineon and its Affiliates pending at the Federal Court of Mannheim (Landgericht Mannheim), Germany. Likewise, within ten (10) business days of the Effective Date, Infineon shall file a motion

---

\*\*\* Confidential treatment has been requested for the bracketed portions. The confidential redacted portion has been omitted and filed separately with the Securities and Exchange Commission.



---

to withdraw with prejudice all its office actions pending at the German and European Patent offices and or patent courts against any of the Licensed Rambus Patents. To the extent a withdrawal of an action is not possible, Infineon shall within ten (10) business days of the Effective Date inform the respective patent office or patent court that Infineon does no longer actively pursue such action.

4.6 Costs and Attorneys' Fees.

For the infringement claims pending at the Federal Court of Mannheim (Landgericht Mannheim), Germany, and the case of the utility model (Gbm 9117296U1) Rambus shall bear the responsibility for and pay the court fees, and in case of the utility model, the court and patent office fees.

For all cases, the parties agree that each will pay its respective attorneys' fees.

Both parties will, within ten (10) business days following the Effective Date, inform the European Commission that they have settled their disputes and that they no longer wish to actively pursue those aspects of the complaints the parties have filed against each other or against Siemens AG and its Affiliates.

Both parties will, within ten (10) business days following the Effective Date, inform the United States Federal Trade Commission that they have settled their disputes.

4.7 No Admission. Nothing contained in this Agreement, or done or omitted in connection with this Agreement, is intended as, or shall be construed as, an admission by any party of any fault, liability or wrongdoing.

4.8 No Contest. Infineon and its Affiliates agree that they shall not contest in any proceeding the validity, scope, or enforceability of any of the Licensed Rambus Patents or any claim thereof, except to the extent that Rambus assert any claim of infringement of any such patent against Infineon or its Affiliates. Rambus and its Affiliates agree that they shall not contest in any proceeding the validity, scope, or enforceability of any of the Infineon Patents or any claim thereof except to the extent that Infineon assert any claim of infringement of any such patent against Rambus or its Affiliates.

## ARTICLE 5

### Term

5.1 Term. The term of this Agreement shall be from the Effective Date until the expiration of the last to expire of the Licensed Rambus Patents. Neither party may terminate this Agreement for any reason prior to its expiration. This Agreement is based upon an assumption shared by both parties that in the Richmond Patent Litigation there have been no substantive findings or judgments (related to any claims or defenses of the parties) entered since the completion of trial and prior to filing the stipulation of dismissal referenced herein, other than any findings or judgments either reflected in the docket printout attached hereto as Exhibit 5.1, or known by the parties (e.g. due to their inquiry with the Court and Clerk's Office prior to filing the stipulation of dismissal). If this assumption proves to be incorrect, either or both of the parties understand that they may move pursuant to Rule 60 of the Federal Rules of Civil Procedure for relief from any

---

[\*\*\*] Confidential treatment has been requested for the bracketed portions. The confidential redacted portion has been omitted and filed separately with the Securities and Exchange Commission.

judgment or stipulation dismissing the case with prejudice, and to the extent that the motion is granted and has the effect of returning the case to its state just prior to the filing of the stipulation of dismissal, then this Agreement shall be null and void.

5.2 Survival. The provisions of Articles 1, 3, 4, 5, 7, 9, 10 and 12 shall survive expiration of this Agreement.

## ARTICLE 6

### Payment

- 6.1 Notification of Qualifying License Agreements. Within thirty (30) days of each date on which a Leading Supplier becomes or ceases to be subject to a Qualifying License Agreement, Rambus shall notify Infineon of the existence of such Qualifying License Agreement, provided that Rambus' failure to provide such notice in a timely fashion shall not constitute a breach of this Agreement.
- 6.2 Payments to First Cap. Subject to Section 6.5, Infineon shall pay Rambus for each calendar quarter starting October 1, 2005 an amount of five million and eight hundred fifty thousand U.S. dollars (US \$5,850,000), up to a cumulative amount not exceeding fifty million U.S. dollars (US \$50,000,000) (the "First Cap").
- 6.3 Payments to Second Cap. Subject to Section 6.5, and upon Rambus' notice to Infineon of the existence of a [\*\*\*] with each of [\*\*\*], and further for so long as these [\*\*\*] remain in effect during the period [\*\*\*] Infineon shall continue to pay, or – as the case may be - shall resume payment for each calendar quarter following such notice of [\*\*\*] an amount of five million and eight hundred fifty thousand U.S. dollars (US \$5,850,000) up to a cumulative amount not exceeding one hundred million U.S. dollars (US \$100,000,000), including payments to the First Cap (the "Second Cap"). Notwithstanding anything to the contrary in the foregoing sentence, in the event that Rambus fails to provide timely notice of [\*\*\*] pursuant to Section 6.1, but later provides such notice, Infineon's payment obligations under this Section 6.3 shall commence upon such notice. In the event Infineon resumes making payments towards the Second Cap at any point in time, Rambus hereby releases Infineon and its Affiliates from any patent infringement claims under patents other than Licensed Rambus Patents, it may have or may have had for making, having made, using, selling, offering to sell, importing or otherwise transferring any Licensed Products where such activity took place prior to date of resuming such payments.
- 6.4 Payments to Final Cap. Subject to Section 6.5, and upon Rambus' notice to Infineon of the existence of [\*\*\*] with each of the [\*\*\*] and further for so long as these [\*\*\*] remain in effect during the period [\*\*\*] Infineon shall continue to pay, or – as the case may be - shall resume payment for each calendar quarter following such notice of [\*\*\*] an amount of five million and eight hundred fifty thousand U.S. dollars (US \$5,850,000) up to a cumulative amount not exceeding one hundred fifty million U.S. dollars (US \$150,000,000), including payments to the Second Cap (the "Final Cap"). Notwithstanding anything to the contrary in the foregoing sentence, in the event that Rambus fails to provide timely notice of the existence of the [\*\*\*] pursuant to Section 6.1, but later provides such notice, Infineon's payment obligations under this Section 6.4 shall commence upon such notice. In the event Infineon resumes making payments towards the Final Cap at any point in time, Rambus hereby releases Infineon and its Affiliates

[\*\*\*] Confidential treatment has been requested for the bracketed portions. The confidential redacted portion has been omitted and filed separately with the Securities and Exchange Commission.

---

from any patent infringement claims under patents other than Licensed Rambus Patents, it may have or may have had for making, having made, using, selling, offering to sell, importing or otherwise transferring any Licensed Products where such activity took place prior to date of resuming such payments.

- 6.5 Cessation of Payment Obligations. Except as set forth in Sections 6.3 and 6.4, and subject to Sections 9.1 and 9.4, Infineon shall have no further obligation to make, and may elect at any time to discontinue making, payments under this Agreement once payments by Infineon to Rambus under this Agreement have reached a cumulative aggregate amount equal to the respective applicable cap as per Sections 6.2, 6.3 or 6.4 and Infineon shall in no event have any obligation to pay a cumulative aggregate amount exceeding one hundred fifty million U.S. dollars (US \$150,000,000).
- 6.6 Changes in Identity or Status of Leading Suppliers.
- (a) Except as set forth in Sections 6.6 (b), (c) and (d), in the event that a Leading Supplier ceases to do business ("Former Leading Supplier"), the entity that has [\*\*\*] (for the last reported calendar year prior to such cessation of business) [\*\*\*] according to Gartner-Dataquest publications "[\*\*\*]" or any successor report thereto, that was not previously a Leading Supplier shall be deemed a Leading Supplier in place of the Former Leading Supplier.
  - (b) In the event that a Leading Supplier (or all or substantially all of its [\*\*\*] business and/or assets) is acquired by an entity that is not a Leading Supplier (including without limitation Infineon or its Affiliates), such acquiring entity shall be deemed substituted as such Leading Supplier.
  - (c) In the event that one or more Leading Supplier(s) (or all or substantially all of its [\*\*\*] business and/or assets) is acquired by an entity that is a Leading Supplier, such acquiring entity shall be deemed to constitute either two (2) Leading Suppliers (in the event of the acquisition of a single other Leading Supplier) or three (3) Leading Suppliers (in the event of the acquisition of both other Leading Suppliers).
  - (d) In the event that a Leading Supplier acquires rights under this Agreement pursuant to Sections 9.1 or 9.4, such Leading Supplier or the resulting entity, as applicable, shall be deemed to be a Leading Supplier and this Agreement shall be deemed a Qualifying License Agreement.
- 6.7 Wire Transfer. Payments owed under this Agreement shall be made by wire transfer to
- Rambus Inc., Account [\*\*\*]
  - SWIFT Account: [\*\*\*]
  - [\*\*\*]
  - [\*\*\*]
  - [\*\*\*]
  - ABA # [\*\*\*]

---

[\*\*\*] Confidential treatment has been requested for the bracketed portions. The confidential redacted portion has been omitted and filed separately with the Securities and Exchange Commission.

---

within forty-five (45) days after the end of each calendar quarter. The first such payment shall be due on November 15, 2005. Rambus shall promptly acknowledge receipt of such payment in writing to Infineon.

Any payments to Rambus hereunder shall be in United States dollars.

Infineon shall be entitled to deduct and pay to the German government any withholding taxes imposed by the German government, in accordance with U.S.-German tax treaties, on any payments payable to Rambus pursuant to this Agreement. Infineon shall promptly provide Rambus with copies of official tax receipts showing that such payments have been made.

- 6.8 Late Payments. Any payment not received in full by Rambus when due hereunder shall bear interest at the rate of twelve percent (12%) annually (or, if less, the maximum allowed by applicable law) computed for the period beginning on the date such payment is due and ending upon Rambus' receipt of such payment with applicable interest.

## ARTICLE 7

### Warranties

- 7.1 Authority. Rambus represents and warrants that it has the full right and power to grant the licenses, rights, releases and discharges, and to make the covenants, set forth in Articles 2, 3 and 4, that there are no outstanding agreements, assignments or encumbrances inconsistent with the provisions of such licenses, rights, releases and covenants and/or with any other provision of this Agreement, and that neither Rambus nor any of its Affiliates owns, or has the right to grant licenses under, any patents or pending patent applications in the United States or any country which are not Licensed Rambus Patents, except those patents for which Rambus or its Affiliates may grant licenses only if it pays a fee to a third party. Rambus shall indemnify and hold harmless Infineon and its Affiliates from any claims of a third party based on such third party's claim of any rights, title or ownership in or under any of the Licensed Rambus Patents. Infineon represents and warrants that it has the full right and power to grant the licenses, rights, releases and discharges, and to make the covenants, set forth in Articles 2 and 4, that there are no outstanding agreements, assignments or encumbrances inconsistent with the provisions of such licenses, rights, releases and covenants and/or with any other provision of this Agreement, and that neither Infineon nor any of its Affiliates owns, or has the right to grant licenses under, any patents or pending patent applications in the United States or any country which are not Infineon Patents, except those patents for which Infineon or its Affiliates may grant licenses only if it pays a fee to a third party. Infineon shall indemnify and hold harmless Rambus and its Affiliates from any claims of a third party based on such third party's claim of any rights, title or ownership in or under any of the Infineon Patents licensed hereunder.
- 7.2 No Assignment of Claims. Each party represents and warrants that it has not assigned any claim or cause of action, or any right(s) underlying any claim or cause of action, it had, has, or may have against the other or its Affiliates as of, or prior to, the Effective Date of this Agreement.
- 7.3 No Parent Entities. Rambus Inc. and Infineon Technologies AG each respectively represent and warrant that as of the Effective Date, it is not controlled by any other entity, as control is defined in the defined term Affiliate.

---

[\*\*\*] Confidential treatment has been requested for the bracketed portions. The confidential redacted portion has been omitted and filed separately with the Securities and Exchange Commission.

---

## ARTICLE 8

### Notices and other Communications

Any notice or other communication required or permitted to be made or given to either party pursuant to this Agreement shall be sufficiently made or given within fifteen (15) days of the date of mailing if sent to such party by registered First Class mail, postage prepaid, addressed to such party at the address set forth below, or to such other address as a party shall designate by written notice given to the other party:

In the case of Infineon:

Infineon Technologies AG  
General Counsel  
St.-Martin-Straße 53  
81669 München  
Germany  
Fax: +49 89 234 26983

In the case of Rambus:

Rambus Inc.  
John Danforth  
Senior Vice President and General Counsel  
4440 El Camino Real  
Los Altos, CA 94022  
Fax: +1 650 947 5001

(with a copy, which shall not constitute notice, to the following:)

Robert Eulau  
Chief Financial Officer  
Rambus Inc.  
4440 El Camino Real  
Los Altos, CA 94022

## ARTICLE 9

### Assignments

Assignment by Infineon. Infineon may [\*\*\*] except that subject to Section 9.6, Infineon shall have the right, [\*\*\*] (respectively to the extent specified in the last sentence of this Section 9.1)) under this Agreement [\*\*\*] of this Agreement which shall [\*\*\*] whether by way of merger, acquisition, corporate reorganization, the sale of all, or substantially all, assets of its business, or otherwise expressly or by operation of law, provided that the [\*\*\*] including without limitation all of [\*\*\*] pursuant to this Agreement, and provided further that, effective as of the effective date of the Assignment:

---

[\*\*\*] Confidential treatment has been requested for the bracketed portions. The confidential redacted portion has been omitted and filed separately with the Securities and Exchange Commission.

- (a) if there is no Assignee License Agreement, then [\*\*\*] (as hereinafter defined) [\*\*\*] in the last [\*\*\*] immediately preceding the Assignment and [\*\*\*] in the last [\*\*\*] immediately preceding the Assignment.

For example if Infineon's [\*\*\*] prior to the Assignment was [\*\*\*] and Infineon [\*\*\*] then the [\*\*\*] prior to the Assignment was [\*\*\*]. If further the [\*\*\*] as per (i) [\*\*\*] as per (ii) [\*\*\*], then the following [\*\*\*] shall apply: the [\*\*\*] following the Assignment shall be [\*\*\*] the [\*\*\*] shall be unchanged at [\*\*\*] and the applicable [\*\*\*] the respective [\*\*\*] pursuant to Sections [\*\*\*] shall be [\*\*\*]

- (b) If there is an Assignee License Agreement, then Rambus and the Successor Entity shall negotiate, diligently and in good faith, an appropriate [\*\*\*], if applicable, under this Agreement to account for any additional [\*\*\*] under this Agreement resulting from the Assignment. If within [\*\*\*] and the [\*\*\*] do not reach agreement on the [\*\*\*]

[\*\*\*], considering that it is the intent of the parties that:

- (1) Distribution of a [\*\*\*] should not obligate the [\*\*\*] to [\*\*\*] under both [\*\*\*] above and under the terms of the Assignee License Agreement.
- (2) If, after the effective date of the Assignment, no [\*\*\*] is the [\*\*\*] then, prospectively, [\*\*\*] shall apply.
- (3) Rambus should be able to [\*\*\*], with respect [\*\*\*] that would be payable if there were no Assignee License Agreement. The extent of such benefits shall be determined according to the [\*\*\*]
- (4) Rambus should not receive [\*\*\*] as a result of the Assignment than if there were no Assignee License Agreement.
- (5) Any late payments resulting from this negotiation and/or arbitration shall bear interest at the rate of twelve percent (12%) (or, if less, the maximum allowed by applicable law) per year, from the date that such payment would otherwise have been due

(For example, [\*\*\*] provided for payment to Rambus of [\*\*\*] for the right to make and sell up to [\*\*\*] then Rambus would retain this [\*\*\*] but there would be [\*\*\*] of the [\*\*\*] By way of further example, if [\*\*\*]

The parties shall meet within [\*\*\*] after the Effective Date to discuss additional such principles and further details of such principles.

For the purpose of this Section 9.1:

"[\*\*\*] Sales" shall mean the worldwide value in U.S. dollars of sales, transfers and other distributions of [\*\*\*].

"Infineon" means Infineon and its Affiliates.

---

[\*\*\*] Confidential treatment has been requested for the bracketed portions. The confidential redacted portion has been omitted and filed separately with the Securities and Exchange Commission.

---

\*\*\* means the type of \*\*\* during the \*\*\* preceding the effective date of the Assignment, had the \*\*\* as published by Gartner-Dataquest (or its successor) \*\*\* for which such statistic was so published by Gartner-Dataquest (or its successor).

“Assignee” means the entity to which this Agreement is assigned (or, if a series of related assignments pursuant to a series of related transactions, the entity that is the assignee of this Agreement pursuant to the last such assignment and is therefore the ultimate holder of this Agreement), and its Affiliates.

“Assignee License Agreement” means an agreement, if any, pursuant to which, as of the effective moment of the Assignment, the Assignee is licensed by Rambus to make, use, and sell one or more types of \*\*\* (“Assignee Licensed DRAMs”), provided that one of the Assignee Licensed DRAMs is the \*\*\*.

It is understood and agreed that upon any Assignment of this Agreement by Infineon, all references to “Infineon” in the body of this Agreement (except Section 1.2) shall be deemed to be references to the Assignee, including without limitation all references to “Infineon” in Sections 1.6 and 1.7.

It is understood that, subject to \*\*\*, the \*\*\* (respectively to the extent specified in the last sentence of this Section 9.1) shall \*\*\* as of the corresponding scope as per \*\*\*, and further \*\*\* (with respect to Leading Suppliers). \*\*\*

9.2 Assignment by Rambus. Rambus may not transfer or assign any rights or licenses under this Agreement, except that Rambus shall have the right, without the approval of Infineon, to assign this Agreement to any successor to all or substantially all of Rambus’ business or assets, provided that the licenses granted to Rambus and its Affiliates hereunder shall terminate in the event of such assignment. For the avoidance of doubt, also the assignee of this Agreement shall not be licensed under the assigned Agreement.

9.3 Assignment of Patents. Any assignment or transfer by a party hereto of all or part of its ownership interest in any patent or patent application owned or controlled by the party shall be subject to this Agreement and to all amendments, modifications, replacements, and extensions of this Agreement. Any such assignment or transfer shall not make any commitments to others inconsistent with, or in derogation of, any rights granted to the other party in this Agreement, and such assignee or transferee shall take subject to the pre-existing rights.

9.4 Change of Control of Infineon.

For the purpose of this Section 9.4:

“\*\*\* Sales” shall mean the worldwide value in U.S. dollars of sales, transfers and other distributions of \*\*\*.

“Infineon” means Infineon and its Affiliates.

\*\*\* means the type of \*\*\* during the last \*\*\* preceding the effective date of the \*\*\*, had the \*\*\* as published by Gartner-Dataquest (or its successor) \*\*\* for the last period of at least \*\*\* for which such statistic was so published by Gartner-Dataquest (or its successor).

---

\*\*\* Confidential treatment has been requested for the bracketed portions. The confidential redacted portion has been omitted and filed separately with the Securities and Exchange Commission.

---

“Successor Entity” means the entity resulting from a Change of Control.

“Prior Entities” means all of the entities (including without limitation companies and business units of companies) that, after the Change of Control, comprise the Successor Entity, and their Affiliates, as such entities and their Affiliates existed immediately preceding the Change of Control, but excluding Infineon and its Affiliates as they existed immediately preceding the Change of Control.

“Prior Entities License Agreement” means an agreement, if any, pursuant to which, as of the effective moment of the Change of Control, any of the Prior Entities is licensed by Rambus to make, use, and sell one or more types of [\*\*\*] (“Prior Entities Licensed DRAMs”) provided that one of the Prior Entities Licensed DRAMs is the [\*\*\*].

- (a) if there is no [\*\*\*], then upon a [\*\*\*] the payment obligations under this Agreement shall be [\*\*\*] immediately preceding the [\*\*\*] immediately preceding the [\*\*\*]

For example [\*\*\*] prior to the [\*\*\*] and [\*\*\*] had already paid [\*\*\*] then the payment obligations prior to the [\*\*\*] as per (i) [\*\*\*] as per (ii) [\*\*\*] then the following adjustment shall apply: the [\*\*\*] following the [\*\*\*] shall be [\*\*\*]

- (b) If there is a [\*\*\*], then Rambus and the Successor Entity shall negotiate, diligently and in good faith, an appropriate [\*\*\*] under this Agreement resulting from the Change of Control. If within [\*\*\*] after the [\*\*\*]

The parties shall negotiate, and the arbitrator shall render his decision, considering that it is the intent of the parties that:

- (1) Distribution of a [\*\*\*] should not obligate the [\*\*\*] to [\*\*\*] under both [\*\*\*] above and under the terms of the [\*\*\*].
- (2) If, after the effective date of the Change of Control, no [\*\*\*] is the [\*\*\*] then, prospectively, [\*\*\*] shall apply.
- (3) Rambus should be able to [\*\*\*], with respect [\*\*\*], to the extent such [\*\*\*] that would be payable if there were no [\*\*\*]. The extent of such benefits shall be determined according to the [\*\*\*]
- (4) Rambus should not receive less [\*\*\*] than if there were no [\*\*\*]
- (5) Any late payments resulting from this negotiation and/or arbitration shall bear interest at the rate of twelve percent (12%) (or, if less, the maximum allowed by applicable law) per year, from the date that such payment would otherwise have been due.

(For example, [\*\*\*] provided for payment to Rambus of [\*\*\*] for the right to make and sell up to [\*\*\*] then Rambus would retain this [\*\*\*] but there would be [\*\*\*] of the [\*\*\*] By way of further example, if [\*\*\*]

The parties shall meet within [\*\*\*] after the Effective Date to discuss additional such principles.

---

[\*\*\*] Confidential treatment has been requested for the bracketed portions. The confidential redacted portion has been omitted and filed separately with the Securities and Exchange Commission.



---

It is understood and agreed that upon any [\*\*\*] in which [\*\*\*] is merged into a successor, all references to [\*\*\*] in the body of this Agreement [\*\*\*] shall be deemed to be references to the [\*\*\*], including without limitation the references to [\*\*\*] in [\*\*\*]

It is understood that, subject to [\*\*\*], the [\*\*\*] (respectively to the extent specified in the last sentence of this paragraph) shall fully extend to the entity resulting from the [\*\*\*] and any entity resulting from a [\*\*\*], subject to such resulting entity's [\*\*\*], and further [\*\*\*]

In addition, upon any Change of Control of Infineon in which Infineon becomes controlled (as "control" is defined in the definition of "Affiliate") by an Affiliate, then Infineon shall be entitled, on written notice to Rambus, to Assign this Agreement, in accordance with Section 9.1, to any of its Affiliates that controls Infineon.

- 9.5 Impermissible Assignments Null and Void. Any purported transfer or assignment of this Agreement not expressly permitted under this Article 9 shall be null and void and of no effect.
- 9.6 Limited Extension of Releases. Notwithstanding anything to the contrary contained in this Agreement, the [\*\*\*] set forth in [\*\*\*] and granted, extended and/or transferred to a [\*\*\*], or to [\*\*\*], may only be so granted, extended and/or transferred to such entity if (a) such entity is not a [\*\*\*] as of the Effective Date; or (b) such entity is a [\*\*\*] as of the Effective Date (or a successor to all or substantially all of the assets and liabilities of a [\*\*\*] as of the Effective Date) [\*\*\*], been granted, extended and/or transferred to a [\*\*\*]
- 9.7 Arbitration for purposes of Section 9.1 and 9.4:

The arbitration shall be under the then current International rules of the American Arbitration Association, subject to the additional limitations set forth herein, and shall take place in New York, New York. The arbitration shall be conducted by a single arbitrator appointed in accordance with such rules. Each party to the arbitration shall prepare a written proposal setting forth its position with respect to the substance of the dispute. Without delaying the arbitration procedures, for a period not to exceed three (3) days commencing no later than fifteen (15) days after the arbitrator has been selected, the parties shall exchange and discuss their respective written proposals in good faith in an effort to resolve the matter. The arbitrator shall select one of the requested positions as his decision, and shall not have authority to render any substantive decision other than to so select the position of either Rambus or the Successor Entity. If one party does not submit to the arbitrator a written proposal setting forth its position within the time period established by the arbitrator therefor, the arbitrator shall select the other party's position. The costs of such arbitration shall be shared equally by the parties, and each party shall bear its own expenses in connection with the arbitration. The parties shall use good faith efforts to complete arbitration under this section within ninety (90) days following a request by a party for such arbitration. Likewise, the arbitrator shall limit discovery as reasonably practicable to complete the arbitration in the foregoing time frames. Judgment on the award rendered by the arbitrators may be entered in any court having jurisdiction thereof.

---

[\*\*\*] Confidential treatment has been requested for the bracketed portions. The confidential redacted portion has been omitted and filed separately with the Securities and Exchange Commission.

---

## ARTICLE 10

### Dispute Resolution

- 10.1 Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the United States and the State of Delaware, without giving effect to any choice-of-law or conflict-of-law provision or rule (whether of the State of Delaware or any other jurisdiction) that would cause the application of the laws of any jurisdiction other than the State of Delaware or the United States.
- 10.2 English Language. This Agreement is executed in the English language and no translation shall have any legal effect.
- 10.3 Jurisdiction and Venue. Any legal action, suit or proceeding arising under, or relating to, this Agreement, shall be brought in the federal or state courts of the State of Delaware and each party agrees that any such action, suit or proceeding may be brought only in such courts. Each party further waives any objection to the laying of venue for any such suit, action or proceeding in such courts.

## ARTICLE 11

### Audits

- 11.1 [\*\*\*] and in addition within [\*\*\*] months following notice to Infineon of a Qualifying License Agreement which would lead to the respective higher payment cap pursuant Sections 6.2 through 6.4, or a notice as per Article 2.3, which could lead to adjustment of payments, Rambus shall permit an independent certified public accounting firm designated by Infineon and reasonably acceptable to Rambus and subject to reasonable confidentiality obligations to have access during normal business hours to Rambus' facilities and premises, to allow such accounting firm to conduct an audit, at Infineon's sole expense, of Rambus' books, records and agreements for the sole purpose of verifying: (i) Rambus' compliance with its obligations under Section 2.3; and (ii) the existence and terms of Qualifying License Agreements and whether such agreements are, or remain, in effect and are fulfilled by the respective parties, provided that such accounting firm shall report to Infineon only whether such license agreements meet the requirements of Qualifying License Agreements and/or the amount of an adjusted quarterly payment as per Article 2.3.
- 11.2 Rambus Audit Right. Rambus shall have the right, [\*\*\*] within [\*\*\*] months following each event as per Section 9.1 (Assignment) or Section 9.4 (Change of Control) to examine and audit, at Rambus' cost, through an independent certified public accounting firm mutually acceptable to both parties (Infineon's approval not to be unreasonably withheld or delayed), during normal business hours, all such records as bear upon the Payment Amount adjustments pursuant to Sections 9.1 and 9.4. Prompt adjustment shall be made by Infineon to compensate for any errors and/or omissions disclosed by such examination or audit which result in an underpayment of royalties hereunder, together with interest thereon from the date the payment was due at an annual rate equal to twelve percent (12%) (or, if less, the maximum allowed by applicable law).

---

[\*\*\*] Confidential treatment has been requested for the bracketed portions. The confidential redacted portion has been omitted and filed separately with the Securities and Exchange Commission.

---

## ARTICLE 12

### Miscellaneous

- 12.1 Entire Agreement. This Agreement constitutes the entire agreement between the parties regarding the subject matter hereof, and supersedes any and all prior negotiations, representations, warranties, undertakings or agreements, written or oral, between the parties regarding such subject matter.
- 12.2 Relationship of the Parties. Nothing contained in this Agreement shall be construed as creating any association, partnership, joint venture or the relation of principal and agent between Rambus and Infineon. Each party is acting as an independent contractor, and no party shall have the authority to bind any other party or its representatives in any way.
- 12.3 Confidentiality. Neither party shall disclose the terms and conditions of this Agreement to any third party without the prior written consent of the other party, except as provided in Section 4 herein or as may be required by law or as may be reasonably necessary to enforce this Agreement. Each party may disclose the terms of this Agreement: (i) to its legal counsel or, under a suitable confidentiality agreement, to accountants or its other professional advisors; (ii) to any governmental or regulatory authority to comply with regulatory requirements (in a redacted or sealed form to the extent possible after consulting with the other party and as determined by the good faith advice of the applicable party's outside counsel); (iii) to any court or governmental body or agency compelling such disclosure (after consulting with the other party and in a redacted or sealed form to the extent possible); (iv) under a suitable confidentiality agreement, to a prospective successor (whether by way of merger, corporate reorganization, the sale of all, or substantially all, assets, or otherwise) in connection with due diligence activities relating to any such prospective transaction; (v) as otherwise may be required by applicable securities and other law and regulation (after consulting with the other party and in a redacted or sealed form to the extent possible as determined by the good faith advice of the applicable party's outside counsel), including to legal and financial advisors in their capacity of advising a party in such matters; (vi) under a suitable confidentiality agreement, to banks, investors and other financing sources and their advisors; or (vii) during the course of litigation so long as the disclosure of such terms and conditions are restricted in the same manner as is the confidential information of other litigating parties and so long as (A) the restrictions are embodied in a court-entered protective order limiting disclosure to outside counsel and (B) the disclosing party informs the other party in writing at least ten (10) business days in advance of the disclosure and shall discuss the nature and contents of the disclosure, in good faith, with the other party.

For the avoidance of doubt, upon execution of this Agreement, or thereafter, Rambus, in its discretion, shall be entitled to file a copy of this Agreement with the U.S. Securities and Exchange Commission (after consulting with Infineon and in a redacted or sealed form to the extent possible as determined by the good faith advice of Rambus' outside counsel).

In addition, Rambus shall be entitled to disclose the terms and conditions of this Agreement to independent auditors to the extent necessary to comply with any "most favored customer" provisions of any other agreement to which Rambus is a party.

---

[\*\*\*] Confidential treatment has been requested for the bracketed portions. The confidential redacted portion has been omitted and filed separately with the Securities and Exchange Commission.

- 12.4 Headings. The headings of the several articles and sections are inserted for convenience of reference only and are not intended to be a part of or to affect the meaning or interpretation of this Agreement.
- 12.5 Amendment. This Agreement may not be modified or amended except in a writing executed by authorized representatives of each of the parties.
- 12.6 Interpretation. Each party confirms that it and its respective counsel have reviewed, negotiated and adopted this Agreement as the agreement and understanding of the parties hereto and the language used in this Agreement shall be deemed to be the language chosen by the parties hereto to express their mutual intent. Neither party shall be considered to be the drafter of this Agreement or any of its provisions for the purpose of any statute, case law, or rule of interpretation or construction that would, or might cause, any provision to be construed against such party.
- 12.7 Successors and Assigns. This Agreement shall benefit, and be binding upon, the parties hereto and their respective permitted assignees, successors in interest, and Affiliates.
- 12.8 Authority. Each party represents that it is fully authorized to enter into the terms and conditions of, and to execute, this Agreement.
- 12.9 No Third Party Beneficiaries. Unless otherwise expressly stated herein, nothing in this Agreement, express or implied, is intended to confer upon any person other than the parties hereto or their respective permitted assignees, successors in interest, and Affiliates any rights or remedies under or by reason of this Agreement.
- 12.10 Severability. If any provision of this Agreement is held to be invalid or unenforceable, the meaning of such provision shall be construed, to the extent feasible, so as to render the provision enforceable, and if no feasible interpretation shall save such provision, it shall be severed from the remainder of this Agreement, which shall remain in full force and effect. If any provision is so severed, Rambus and Infineon shall use their respective best efforts to negotiate, in good faith, a substitute, valid and enforceable provision or agreement, that most nearly effects the parties' intent in entering into this Agreement.
- 12.11 No Waiver. The failure of either party to enforce, at any time, any of the provisions of this Agreement shall in no way be construed as a waiver of such provisions, and shall not be deemed in any way to affect the validity of this Agreement or any part thereof, or the right of either party to later enforce each and every such provision. No waiver of any breach of this Agreement shall be held to be a waiver of any other or subsequent breach.
- 12.12 Counterparts; Facsimile Transmission. This Agreement may be executed in multiple counterparts, each of which shall constitute an original, but all of which together shall constitute one and the same agreement. Each party may rely on facsimile signature pages as if such facsimile pages were originals.
- 12.13 Public Statements. The parties agree that no later than the first business day after the Effective Date, each shall issue the press release attached hereto as Exhibit 12.13. Thereafter, Rambus and Infineon shall consult with each other and agree before issuing a press release or otherwise making any public statement with respect to the terms and conditions of this Agreement and shall

---

[\*\*\*] Confidential treatment has been requested for the bracketed portions. The confidential redacted portion has been omitted and filed separately with the Securities and Exchange Commission.

---

not issue such press release or make any such public statement prior to such agreement, except that either party shall be free to repeat all or any portion of the information contained in the press release in Exhibit 12.13 and each party shall be free to discuss the existence of the Agreement and its own reasons for entering into it.

- 12.14 Non-Disparagement. Each party shall not make any public statements relating to the Disputes or this Agreement disparaging the other party or its shareholders, directors, officers, employees or agents.
- 12.15 Release of Documents. Infineon agrees that Rambus' outside counsel of record in the California Anti-trust Litigation may immediately have access to and make use of for purposes of the California Anti-trust Litigation all documents previously produced by Infineon to plaintiffs' counsel for the DRAM consumer class actions currently pending in California involving DRAM. Access to and use of such documents shall otherwise be prohibited except as permitted in the protective orders in the DRAM consumer class actions or as permitted in the protective order the trial judge has indicated will shortly be entered in California Anti-trust Litigation. If Rambus exercises its right to such immediate access and use, then, if Rambus should seek further discovery from Infineon in The California Anti-Trust Litigation, Rambus shall pay 100 % of Infineon's attorneys' fees, expenses and costs related to Infineon's successful efforts in obtaining a protective order against any portion of future discovery Rambus may seek from Infineon.

If Rambus exercises its right to such immediate access and use, Rambus further agrees that it will not use any confidential Infineon document at any public hearing or trial, or otherwise cause a confidential Infineon document to become public, without either the prior written consent of Infineon or on ten (10) days notice to Infineon in writing so that Infineon may file any appropriate motions or other applications in the relevant forum to protect the confidentiality of the document.

/ \*\*\*

---

[\*\*\*] Confidential treatment has been requested for the bracketed portions. The confidential redacted portion has been omitted and filed separately with the Securities and Exchange Commission.

**IN WITNESS WHEREOF**, each of the parties hereto, by its duly authorized representative, has executed this Agreement as of the Effective Date first written above.

RAMBUS

Rambus, Inc.

By: /s/ Harold Hughes

Name: Harold Hughes

Title: C.E.O.

Date: 3/21/2005

INFINEON

Infineon Technologies AG

By: /s/ A.V. Zitzewitz Guenther Stang

Name: A.V. Zitzewitz

Guether Stang

Title: Member of Mgmt Board IFX / Corp. Counsel

Date: 29.3.05

Infineon Technologies North America Corp.

By: /s/ Miriam Martinez

Name: Miriam Martinez

Title: VP & CFO

Date: 3/21/2005

Infineon Technologies Holding  
North America Inc.

By: /s/ Miriam Martinez

Name: Miriam Martinez

Title: V.P. & CFO

Date: 3/21/2005

\*\*\* Confidential treatment has been requested for the bracketed portions. The confidential redacted portion has been omitted and filed separately with the Securities and Exchange Commission.

---

EXHIBIT 4.1 (c)

**SETTLEMENT AGREEMENT AND MUTUAL RELEASE**

This Settlement Agreement and Mutual Release (hereinafter, "Agreement") is made and entered into by and between Rambus Inc. (referred to herein as "Rambus") and Siemens AG and Siemens Corporation (collectively referred to herein as "Siemens").

WHEREAS, there is pending in the Superior Court of the State California for the City and County of San Francisco, an action filed by Rambus captioned as *Rambus Inc. v. Micron Technology, Inc. et al*, Case No. 04-43 1105 ("The California Anti-trust Litigation");

WHEREAS, Rambus desires to resolve any claims it might have against Siemens, anytime and anywhere that arise out of or are related to or are similar to the claims alleged in The California Anti-trust Litigation, in an expeditious manner;

WHEREAS, Siemens desires to resolve any counter- or cross-claims it might have against Rambus, anytime and anywhere that arise out of or are related to or are similar to the claims alleged in The California Anti-trust Litigation, in an expeditious manner;

WHEREAS, Siemens denies liability to Rambus and, if Rambus pursued any claims against Siemens, Siemens would assert a number of defenses in response to such claims;

WHEREAS, Rambus denies liability to Siemens and, if Siemens pursued any counter or cross-claims against Rambus, Rambus would assert a number of defenses in response to such claims; and

WHEREAS, Rambus and Siemens agree that neither this Agreement nor any statement made in the negotiation thereof shall be deemed or construed to be an admission by or evidence against either party or any of its alleged co-conspirators or evidence of the truth of any allegations in any actions, except in an action to enforce this Agreement.

---

NOW, THEREFORE, in consideration of the promises and covenants contained herein, and other good and valuable consideration, the receipt and sufficiency of which is acknowledged by the parties, Rambus and Siemens agree as follows:

1. Definitions. As used in this Agreement, the following terms shall be defined as indicated:

- (a) "Rambus Releasees" shall mean Rambus Inc., its respective current and former direct and indirect parents, subsidiaries and affiliates, the present and former officers, directors, employees, agents, attorneys, insurers, and representatives of each of the foregoing, and the predecessors, successors, heirs, executors, administrators and assigns of each of the foregoing.
- (b) "Siemens Releasees" shall mean Siemens Corporation and Siemens AG, their respective current and former direct and indirect parents, subsidiaries and affiliates, the present and former officers, directors, employees, agents, attorneys, insurers, and representatives of each of the foregoing, and the predecessors, successors, heirs, executors, administrators and assigns of each of the foregoing.

2. General Release by Rambus. Rambus hereby irrevocably releases, acquits and forever discharges the Siemens Releasees from all manner of claims, demands, actions, suits, causes of action, whether class, individual or otherwise in nature, damages whenever or wherever incurred, liabilities of any nature whatsoever, including without limitation costs, expenses, penalties and attorneys' fees, known or unknown, suspected or unsuspected, asserted or unasserted, in law or in equity, which Rambus, whether directly, representatively, derivatively or in any other capacity, ever had, now has or hereafter can, shall or may have, relating in any way to any



---

conduct occurring prior to the effective date of this Agreement, whether now known or unknown, concerning all claims it filed in The California Anti-trust Litigation against Siemens and any other claims, including counter or cross-claims, whether arising under state, federal, or common law, it could have asserted against Siemens relating to or arising out of the matters alleged in the Complaint in The California Anti-trust Litigation.

3. General Release by Siemens. Siemens hereby irrevocably releases, acquits and forever discharges the Rambus Releasees from all manner of claims, demands, actions, suits, causes of action, whether class, individual or otherwise in nature, damages whenever or wherever incurred, liabilities of any nature whatsoever, including without limitation costs, expenses, penalties and attorneys' fees, known or unknown, suspected or unsuspected, asserted or unasserted, in law or in equity, which Siemens, whether directly, representatively, derivatively or in any other capacity, ever had, now has or hereafter can, shall or may have, relating in any way to any conduct occurring prior to the effective date of this Agreement, whether now known or unknown, concerning any claims, including counter and/or cross claims, whether arising under state, federal, or common law, it could have asserted against Rambus relating to or arising out of the matters alleged in the Complaint in The California Anti-trust Litigation.

4. Waiver of Cal. Civil Code § 1542. With respect to the released claims, both Rambus and Siemens separately and expressly waive and relinquish, to the fullest extent permitted by law, any and all provisions, rights and benefits conferred by (a) § 1542 of the California Civil Code, which provides:

A general release does not extend to claims which the creditor does not know or suspect to exist in his favor at the time of executing the release, which if known by him must have materially affected his settlement with the debtor.