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22 SUPERIOR COURT OF THE STATE OF CALIFORNIA
23 COUNTY OF SAN FRANCISCO

24 RAMBUS INC.,
25 Plaintiff,
26 vs.
27 MICRON TECHNOLOGY, INC., et al.,
28 Defendants.

AND RELATED CROSS-ACTIONS.

CASE NO. 04-431105

**RAMBUS'S SEPARATE STATEMENT OF
DISPUTED FACTS IN OPPOSITION TO
HYNIX'S MOTION FOR SUMMARY
ADJUDICATION OF THE INTENTIONAL
INTERFERENCE WITH PROSPECTIVE
ECONOMIC ADVANTAGE CLAIM**

Hearing Date: February 23, 2009
Hearing Time: 1:30 p.m.
Department: 304
Judge: Hon. Richard A. Kramer

Complaint filed: May 5, 2004
Trial Date: March 16, 2009

PUBLIC-REDACTED VERSION

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Pursuant to California Code of Civil Procedure Section 437c(b) and California Rules of Court 3.1350(h), Plaintiff Rambus Inc. ("Rambus") hereby submits this Response to Hynix's Separate Statement of Undisputed Material Facts In Support of Hynix's Motion for Summary Adjudication of the Intentional Interference with Prospective Economic Advantage Claim.

ISSUE 1: RAMBUS'S INTENTIONAL INTERFERENCE WITH PROSPECTIVE ECONOMIC ADVANTAGE CLAIM FAILS BECAUSE RAMBUS'S CLAIM IS TOO SPECULATIVE AND VAGUE.

	Defendant Hynix's Material Facts and Supporting Evidence	Rambus's Response and Supporting Evidence
1. 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	<p>Rambus alleges that because of Defendants' wrongful acts, Intel abandoned long-standing plans to design and build next-generation chipsets for use with RDRAM, which in turn disrupted Rambus's business relationships with other companies.</p> <p>Complaint, ¶ 117.</p>	<p>Partially disputed.</p> <p>It is undisputed that Rambus alleges that "[a]s a result of Defendants' intentional and wrongful acts, the business relationship between Rambus and Intel was disrupted and Intel abandoned longstanding plans to design and build its next generation chipsets for use with RDRAM." Exh¹. 153 (Complaint at ¶ 117).</p> <p>It is also undisputed that Rambus alleges that the disruption of the Rambus-Intel relationship in turn disrupted Rambus's business relationships with other companies, and <i>vice-versa</i>.</p> <p>The statement is incomplete and misleading, however, to the extent that it fails to acknowledge that Rambus also asserts that Defendants interfered directly in Rambus's relationships with other companies. See Exh. 153, Complaint, ¶ 117 ("as a result of Defendants' intentional and wrongful acts, the business relationship between Rambus and other companies was disrupted"); <i>id.</i> at ¶ 100 ("[Defendants'] unlawful actions eliminated RDRAM as a viable choice for most makers of computers and other electronic devices."). See also Rambus's Response to Material Fact No. 2.</p> <p>The record contains ample evidence regarding unlawful interference with Rambus's relationships with OEMs and other DRAM manufacturers. See Rambus's Additional Material Facts, <i>infra</i> ¶¶ 38-56, 62-66, 74-96. Among other things, Defendants' concerted refusal in May 2000 to meet Dell's RDRAM price targets resulted in a decreased demand for RDRAM from Dell. As Dell's procurement</p>

¹ Unless otherwise expressly noted, all references to "Exh." refer to the Declaration of Keith R. Hamilton In Support of Rambus Inc.'s Oppositions To Defendants' Motions For Summary Judgment Or, In the Alternative, For Summary Adjudications, filed concurrently herewith.

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	<p>manager wrote on June 9, 2000:</p> <p>To summarize, suppliers are not willing to sign up to our Rambus price targets [Dell] will not be planning to support the higher TAM numbers we were projecting in return for lower prices.</p> <p>Rambus's Additional Material Facts, <i>infra</i> ¶¶ 62-66.</p>
<p>2. Rambus's Complaint and the record contain no evidence as to the identities of the "other companies" with which Rambus allegedly had economic relationships.</p> <p>Mokhtari Decl. ¶ 2.</p>	<p>Disputed.</p> <p>With respect to OEMs, Rambus pled, <i>inter alia</i>, that:</p> <ul style="list-style-type: none">• "Rambus also had valid and existing business relationships with other companies to provide them with RDRAM." Exh. 153 (Complaint, at ¶ 114);• "[Defendants'] unlawful actions eliminated RDRAM as a viable choice for <i>most makers of computers and other electronic devices.</i>" (<i>id.</i> at ¶ 101) (emphasis added);• "As a result of Defendants' intentional and wrongful acts, the business relationship between Rambus and other companies was disrupted.; (<i>id.</i> at ¶ 117);• "But for Defendants' unlawful conduct, RDRAM would have been the <i>principal DRAM standard for desktop computers.</i>" (<i>id.</i> at ¶ 117) (emphasis added). <p>Rambus elaborated on these claims in Plaintiff Rambus Inc.'s Opposition to Samsung Defendants' Demurrer To Complaint, filed on August 30, 2005. Including:</p> <p>[REDACTED]</p> <p>[REDACTED]</p>

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Rambus's offer to amend its pleadings was mooted when Samsung withdrew its demurrer. Nonetheless, Hynix is clearly on notice of these additional assertions in the record.

Rambus further described the scope and impact of Hynix's interference with Rambus's business relationships with Dell, Compaq, and other OEMs in its detailed interrogatory responses. See Mokhatari Decl. Exh. 2 (Rambus's Responses To Hynix's First Set of Special Interrogatories, Nos. 9-12, 15-16). See especially, *id.*, Response to No. 12. at pp. 16-18 (listing instances of unmet RDRAM demand from Dell, Compaq and others); *id.*, Rambus's Response to No. 15. at p. 22 (discussing "computer manufacturers such as Compaq and Dell"); *id.*, Response to No. 15 at 27-34, 37-39 (discussing Defendants' conduct with respect to Dell, Compaq, and other OEMs).

Aware of these issues, Defendants planned to, and did, take extensive discovery related to these relationships. In their Discovery Roadmap filed with the Court on February 8, 2008, Defendants stated that "Hewlett-Packard Company (including Compaq Computer Corporation), Gateway, Inc., IBM Corporation, Apple, Inc., Dell Inc., and Sun Microsystems Inc. were significant purchasers of computer memory chips and manufacturers of computer products and systems incorporating those chips, known as original equipment manufacturers (or "OEMs"). Exh. 292 (Defendants' Discovery Roadmap at p. 20). Defendants took the planned discovery, including deposing representatives from HP (including Compaq), IBM, Dell and Sun MicroSystems. See Joint Case Management Conference Statement (July 18, 2008) at 8-9 and Exhibit A thereto.

Defendants also deposed Mike Kabealo, Rambus's former "Director of PC OEMs" who testified, among other things, that he successfully established business relationships between Rambus and OEMs "up and down the food chain at the accounts." Exh. 232 (6/24/08 Kabealo Depo. at 114:16-115:5).²

With respect to DRAM manufacturers, Rambus alleged that "Rambus entered into licensing agreements for the development and production of RDRAM chips with the world's leading DRAM


² In addition to the testimony cited herein, Rambus has attached testimony related the background and employment of each witness cited in this Separate Statement, and hereby incorporates that testimony for the convenience of the Court.

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manufacturers, including Samsung, Hitachi, NEC, Toshiba, LG Semicon (formerly Goldstar) and Oki.” Exh. 153 (Complaint, ¶ 46).

Defendants planned to (and did) take discovery from “other DRAM manufacturers who have information and documents relevant to the claims at issue in this case, including the following companies: Toshiba, Corporation, Infineon Technologies AG, Elpida Memory, Inc., NEC Corporation, Winbond Electronic Corporation, and Mosel-Vitelec Corporation. Exh. 292 (Defendants’ Discovery Roadmap at p. 17); Joint Case Management Conference Statement (July 18, 2008) at 8-9 and Exhibit A.

The record contains ample evidence regarding these relationships and the economic advantage to Rambus flowing therefrom, including:

- Rambus had existing business relationships “up and down the food chain [at the OEMS].” See Rambus’s Statement of Additional Facts, *infra*. ¶ 29.
- These relationships resulted in, among other benefits, numerous “design wins” for the RDRAM technology. *Id.* at 28-32.
- Major OEMs *themselves* stated that, given reasonable price and availability, RDRAM would have made up a major portion of their product offerings. *Id.* at ¶ 30-31, 49-53, 62, 74-75.
- At various points, Hynix (and its co-conspirators) targeted their efforts specifically at Rambus’s relationship with key OEMs such as Dell and Compaq. *Id.* at ¶¶ 39, 43-44, 44-56, 62-66.
-  *Id.* at ¶ 65.
- Rambus had business relationships with DRAM manufacturers who planned to produce RDRAM – at least until “urged” by Hynix to “say no” to RDRAM. RSS-AF ¶¶ 34-37. See also RSS ¶ 2 (Complaint ¶ 46)

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	<p>(stating that Rambus had “entered into licensing agreements for the development and production of RDRAM chips with the world’s leading DRAM manufacturers, including Samsung, Hitachi, NEC, Toshiba, LG Semicon (formerly Goldstar) and Oki.”).</p> <ul style="list-style-type: none">•  RSS-AF ¶¶ 79. <i>See also id.</i> at ¶¶ 80 (Elpida roadmap).• The prospect that DRAM manufacturers would be required to pay royalty payments to Rambus was the very circumstance that Hynix foresaw and sought to disrupt. RSS-AF ¶ 25. As Farhad Tabrizi articulated in June 2000, the goal was to put Rambus out of business by “clos[ing] their income revenue” from RDRAM royalties. <i>Id.</i> at ¶ 64 (Tabrizi). <p><i>See also</i> Rambus’s Objections to Evidence Submitted In Support of Hynix’s Motion For Summary Adjudication Of the Intentional Interference With Prospective Advantage Claim (hereinafter “Rambus’s Evidentiary Objections”).</p>
<p>3. Rambus’s Complaint and the record contain no evidence as to any contract regarding RDRAM that Rambus would have entered with Intel but for Defendants’ interference.</p> <p>Mokhtari Decl. ¶ 3.</p>	<p>Partially Disputed.</p> <p>It is undisputed that Rambus’s Complaint does not describe a particular <i>future</i> contract with Intel. But the statement is irrelevant, incomplete, misleading.</p> <p>Rambus pled that it had a “valid and existing business relationship with Intel” that was disrupted by Defendants’ wrongful interference. Exh. 153 (Complaint, ¶ 114, 117). Rambus’s Interrogatory Responses contain a detailed summary of the evidence demonstrating that Hynix’s wrongful conduct disrupted the Rambus-Intel business relationship. Mokhtari Decl., Exh. 2, Rambus’s Responses to Hynix’s First Set of Special Interrogatories, Nos. 9, 12, 15-16.</p> <p>Defendants planned to (and did) take extensive discovery related to the Intel relationship, including several depositions of Intel employees. Exh. 292 (Defendants’ Discovery Roadmap at p. 17); Joint Case Management Conference Statement (July 18, 2008) at 8-9 and Exhibit A thereto.</p> <p>The record contains ample evidence regarding these relationships and the economic advantage to Rambus</p>

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	<p>flowing therefrom.</p> <ul style="list-style-type: none"> • Intel’s decision to promote RDRAM as the next generation technology DRAM, caused industry analysts, DRAM manufacturers and OEMs to predict that RDRAM would become the <i>de facto</i> memory standard for all segments of the DRAM industry for years to come. See Rambus’s Addition Material Facts, <i>infra</i> ¶¶ 18-33, 60-61, 72. • Intel’s own evaluations and product roadmaps, widely publicized throughout the industry, preview that result. <i>Id.</i> at ¶¶ 19, 57-58, 76-78. • Even <i>Hynix itself</i> was of the view that, absent interference, the Rambus-Intel relationship would directly result in Rambus’s wide-spread adoption in the PC market as well as “<i>all other applications.</i>” <i>Id.</i> at ¶ 24. (emphasis added). <p><i>See also</i> Rambus’s Evidentiary Objections.</p>
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ISSUE 2: RAMBUS’S INTENTIONAL INTERFERENCE WITH PROSPECTIVE ECONOMIC ADVANTAGE CLAIM FAILS AS A MATTER OF LAW BECAUSE HYNIX IS NOT A STRANGER TO RAMBUS’S ECONOMIC RELATIONSHIPS.

	Defendant Hynix’s Undisputed Material Facts and Supporting Evidence	
4.	<p>Rambus alleges that because of Defendants’ wrongful acts, Intel abandoned long-standing plans to design and build next-generation chipsets for use with RDRAM, which in turn disrupted Rambus’s business relationships with other companies.</p> <p>Complaint, ¶ 117.</p>	<p>Partially disputed. See Response to Hynix’s Undisputed Material Facts and Supporting Evidence Number 1.</p>

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5.	<p>Rambus did not manufacture, distribute or sell RDRAM chips.</p> <p>Complaint, ¶ 8.</p> <p>Response to Interrogatory No. 15, Rambus's Response to Hynix's First Set of Special Interrogatories, (Declaration of P. Kevin Mokhtari ("Mokhtari Decl.") Exh. 2), pp. 22-23.</p>	<p>Partially disputed.</p> <p>Undisputed that Rambus "did not manufacture its own memory chips." Exh. 153 (Complaint at ¶ 8). The statement, however, is incomplete, misleading, and irrelevant.</p> <p>Rambus provided RDRAM by licensing its technology, providing reference designs, and by providing engineering assistance. Exh. 227 (3/24/2008 Frank Depo. at 68:20-69:9, 393:17-23).</p> <p>In its complaint, Rambus acknowledged that it "sought to make [its] technology widely available in the industry" by "offering a reasonable license." Exh. 153 (Complaint at ¶ 114.)</p>
6.	<p>Rambus entered into license agreements with certain semiconductor manufacturers, granting them rights to produce and sell memory chips using the RDRAM design.</p> <p>Complaint, ¶¶ 45, 46.</p>	<p>Undisputed.</p>
7.	<p>Rambus is based on a licensing business model.</p> <p>Complaint, ¶¶ 8, 20, 44.</p>	<p>Partially Disputed.</p> <p>The business model of Rambus is to invent innovative technologies. If successful, the firm earns revenue by licensing its intellectual property to memory chip manufacturers who produce output using the Rambus technology. Basileo Decl, Exh. 29, Elzinga Report at 13.</p>
8.	<p>Rambus believed that, through its licenses, Rambus could induce manufacturers to produce and supply RDRAM computer chips.</p> <p>Complaint, ¶ 46.</p>	<p>Undisputed.</p>

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9.	 Response to Interrogatory No. 15, Rambus's Resp. to Hynix's First Set of Special Interrogatories, (Mokhtari Decl. Exh. 2), p. 22-23.	Disputed. Rambus's business model depended on <i>some</i> manufacturers to "produce and supply RDRAM computer chips"; Rambus has never alleged that the <i>affirmative</i> participation of Hynix <i>in particular</i> , acting unilaterally, was a necessary ingredient for the marketplace adoption of RDAM. Exh. 156 (Complaint at ¶ 46). Rambus also sold RDRAM by securing design wins at OEMs. Rambus expended considerable engineering and marketing efforts aimed at encouraging OEMs to "design in" RDRAM in their product plan. Exh. 295 (11/13/2007 Chen Depo. at 48:21-49:11). Mike Kabcalo, Rambus's former Director of PC OEMs, testified that he successfully established business relationships between Rambus and OFEMS "up and down the food chain at the accounts." Exh. 232 (6/24/08 Kabaelo Depo. at 114:16-115:5). These relationships included "continued, ongoing meetings." <i>Id.</i> <i>See also</i> Rambus's Evidentiary Objections.
10.	Rambus alleges that Defendants accomplished their alleged conspiratorial objectives, in part, by not cost reducing RDRAM production. Complaint, ¶ 10(d).	Undisputed.

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11.	Rambus alleges that Defendants accomplished their alleged conspiratorial objectives, in part, by shifting resources to the development and production of other memory technologies. Complaint, ¶ 10(g).	Undisputed.
12.	According to Rambus, it had valid and existing business relationships with other companies to provide them with RDRAM. Complaint, ¶ 114.	Undisputed.
13.	RDRAM development, production and sale required significant efforts and expenditures by Hynix. Mokhtari Decl. Exh. 4 (Farhad Tabrizi FTC Trial Transcript, at 9136:14-9137:3.) Mokhtari Decl. Exh. 5 (Deposition of Avo Kanadjian, August 14, 2008, Exh. 3332.) at p.1. Mokhtari Decl. 6 (Deposition of Avo Kanadjian, August 14, 2008, at 183:5-14.)	Disputed. Rambus's business model depended on <i>some</i> manufacturers to "produce and supply RDRAM computer chips"; Rambus has never alleged that the <i>affirmative</i> participation of Hynix <i>in particular</i> , acting unilaterally, was a necessary ingredient for the marketplace adoption of RDRAM. Exh. 156. (Complaint at ¶ 46). Rambus also sold RDRAM by securing design wins at OEMs. Rambus expended considerable engineering and marketing efforts aimed at encouraging OEMs to "design in" RDRAM in their product plan. Exh. 295 (11/13/2007 Chen Depo. at 48:21-49:11). Mike Kabealo, Rambus's former Director of PC OEMs, testified that he successfully established business relationships between Rambus and OEMS "up and down the food chain at the accounts." Exh. 232 (6/24/08 Kabealo Depo. at 114:16-115:5). These relationships included "continued, ongoing meetings." <i>Id.</i> <i>See also</i> Rambus's Evidentiary Objections.

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14. [REDACTED]

Rambus Letter RF0646187 (Mokhtari Decl. Exh. 3), at pp. 87-88.

Disputed.

The referenced letter does not relate to Direct RDRAM. *See also* Rambus's Evidentiary Objections.

Rambus's business model depended on *some* manufacturers to "produce and supply RDRAM computer chips"; Rambus has never alleged that the *affirmative* participation of Hynix *in particular*, acting unilaterally, was a necessary ingredient for the marketplace adoption of RDRAM. Exh. 153 (Complaint at ¶ 46).

Rambus participated in establishing the RDRAM market by, *inter alia*, securing design wins at OEMs. Rambus expended considerable engineering and marketing efforts aimed at encouraging OEMs to "design in" RDRAM in their product plan. Exh. 295 (11/13/2007 Chen Depo. at 48:21-49:11). Mike Kabealo, Rambus's former Director of PC OEMs, testified that he successfully established business relationships between Rambus and OEMS "up and down the food chain at the accounts." Exh. 232 (6/24/08 Kabealo Depo. at 114:16-115:5). These relationships included "continued, ongoing meetings." *Id.*

Pursuant to C.C.P. § 437c(b)(3), Rambus sets forth the following additional facts that are material to this motion:

A. The DRAM Industry

The Economic Agents

1. The DRAM industry consists of a variety of interrelated businesses. DRAM manufactures (such as the Defendants) design and produce DRAM chips. Basileo Decl., Exh. 29, Elzinga Report at 12. The DRAM manufacturers are both potential customers for Rambus's innovations and its competitors in the development of memory chip technology. *Id.* at 12.

1 2. The business model of Rambus is to invent innovative technologies. If
2 successful, the firm earns revenue by licensing its intellectual property to memory chip
3 manufacturers who produce output using the Rambus technology. Basileo Decl, Exh. 29, Elzinga
4 Report at 13.

5 3. DRAMs are purchased by Original Equipment Manufacturers (or "OEMs")
6 who incorporate DRAMs into products such as Personal Computers. Basileo Decl, Exh. 29,
7 Elzinga Report at 14.

8 4. Intel, is the dominant seller of chipsets and computer processing units (CPUs).
9 DRAM chips must interoperate with Intel CPUs and chipsets in order to be considered for use in
10 these systems. Basileo Decl, Exh. 29, Elzinga Report at 14.

11 ***Mainstream DRAM Standards***

12 5. The DRAM industry tends to adopt a single "mainstream" memory technology
13 at any point in time, *i.e.*, a standard that makes up the majority of memory sales. Exh. 89
14 (12/19/08 Supp. Expert Report of Kenneth Elzinga at 5-6); Declaration of Kenneth Elzinga
15 (January 23, 2009) at p. 5.

16 6. Tipping toward one standard is driven in part by the steep decline in costs of
17 manufacturing a particular technology as the manufacturer expands output and gains experience
18 in that technology. Exh. 89 (12/19/08 Elzinga Supp. Report at 5-6).

19 7. Intel, as the dominant manufacturer of chipsets and computer processing units,
20 plays a critical role in the choice of the next mainstream memory standard. Exh. 89 (12/19/08
21 Elzinga Supp. Report at 6). Because of the prevalence of Intel CPUs, OEM manufacturers
22 demand memory chips that are compatible with Intel CPUs. Consequently, memory
23 manufacturers, seeking to make sales to these OEM manufacturers have a compelling incentive to
24 build chips based on the memory technology that Intel chooses. Basileo Decl., Exh. 29, Elzinga
25 Report at 15-16.

26 8. The PC Market accounted for roughly two thirds of the DRAM market in the
27 1999-2002 period. Exh. 7 (11/20/02 Tabrizi Depo. Exh. 29); Exh. 263 (11/20/02 Tabrizi Depo. at
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1 133:1-25) (noting that “PCs are about 70% of the DRAM market). According to a market
2 outlook analysis conducted by Hynix, [REDACTED]
3 [REDACTED] Exh. 293 (5/00 DRAM
4 Market Outlook report at HR905_125365).

5 9. If a DRAM technology successfully penetrates the PC market, penetration in
6 other applications segments typically will follow. Exh. 20 (12/98 SG Cowen Report at RF
7 0153103). Sherry Garber of Semico Research Group (an individual currently retained by Hynix
8 as a purported expert) has stated that the “application that currently drives the type, density and
9 organization volume is the PC.” Exh. 294 (2003 Semico Report at 1); *see also* Exh. 296 De Dios
10 Exh. 6051 (detailing DDR penetration by application segment)³; Ex. 277 (Declaration of Craig
11 Hampel (January 26, 2009) (“Hampel Decl.”) at ¶¶ 13-15).

12 10. It is not unusual for the commercial “lifecycle” of a DRAM technology to last
13 well over four years. Exh. 294 (2003 Semico Report at 11, Table 9) (illustrating SDRAM life
14 cycle); Exh. 94 (Supplemental Report of Avram S. Tucker, at p. 9, Chart 1) (illustrating DDR
15 (and DDR2) lifecycle).

16 **B. Rambus Develops Business Relationships To Ensure That RDRAM Will**
17 **Become The Next Generation Mainstream DRAM Product**

18 ***Rambus & Intel Partner To Develop “Next Generation” DRAM & Chipsets***

19 11. In 1996, Intel announced that its “next generation” microprocessors would be
20 engineered to take advantage of Rambus’s revolutionary DRAM technology, Direct RDRAM,
21 expected to be available in the late 1990’s. Exh. 5 (Appleton Depo. Exh. 614); Exh. 215 (5/7/08
22 Appleton Depo. at 20:8-23:20).

23 [REDACTED]
24 [REDACTED] Exh. 27 (Williams Depo. Exh. 2939 at
25 906DOC00002); Exh. 270 (Williams Depo. at 291:4-294:11). [REDACTED]

26 ³ At the time of filing this declaration, Rambus has not received a certified copy of the transcript
27 or exhibits for the deposition of Mr. De Dios. Rambus understands that Exhibit 296 to the
28 Hamilton Declaration corresponds to the referenced Exhibit from that deposition. At the Court’s
request, Rambus will provide a copy of the exhibit (and pertinent testimony thereon) from the
certified transcript when it becomes available.

1 [REDACTED]
2 [REDACTED]
3 13. In 1996 Rambus and Intel signed the "Semiconductor Technology Licensing
4 Agreement." Exh. 2 Fahey Depo. Exh. 3016; Exh. 225 (08/26/08 Fahey Depo. at 136:14-22;
5 138:22-139:16).

6 14. [REDACTED]
7 [REDACTED]

8 15. The 1996 Semiconductor Technology Licensing Agreement (hereinafter "1996
9 Agreement") provided for the coordinated development and marketing of Direct RDRAM, as
10 well as Intel chipsets compatible with Direct RDRAM. Exh. 2 (Fahey Depo. Exh. 3016 at § 4.1);
11 Exh. 225 (08/26/08 Fahey Depo. at 136:14-22; 138:22-139:16).

12 16. One purpose of the 1996 Agreement was to achieve mass-market success for
13 Direct RDRAM and compatible Intel chipsets in the 1999-2002 timeframe. Exh. 2 (Fahey Depo.
14 Exh. 3016 at § 4.1(b)); Exh. 225 (08/26/08 Fahey Depo. at 136:14-22; 138:22-139:16).

15 17. The 1996 Agreement was scheduled to remain in force (subject to certain
16 conditional termination rights) "until the expiration of the last to expire Rambus patent" covered
17 by the agreement. Exh. 2 (Fahey Depo. Exh. 3016 at § 9.1); Exh. 225 (08/26/08 Fahey Depo. at
18 136:14-22; 138:22-139:16). *See also* Exh. 15 (Fahey Depo. Exh. 3017) (Amendment No. 1 To
19 Semiconductor Technology License Agreement); Exh. 225 (8/26/08 Fahey Depo. at 139:17-
20 140:20).

21 ***Economic Benefit Flowing From RDRAM's Adoption As Next Generation Technology***

22 18. In 2000 and 2001, Intel supplied the processors used in roughly 80% of
23 personal computers, and used with an estimated 60% of *all* DRAM whether deployed in personal
24 computers or other devices. Basileo Decl., Exh. 29 (11/6/08 Elzinga Report) at p. 16. *See also*
25 Exh. 7 (11/20/02 Tabrizi Depo. Exh. 29); Exh. 263 (11/20/02 Tabrizi Depo. at 133:1-25) (noting
26 that "PCs are about 70% of the DRAM market.")
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1 19. [REDACTED]

2 [REDACTED]

3 [REDACTED] Exh. 98 (211DOC078883-91).

4 20. Rambus would have earned substantial revenues flowing from RDRAM's
5 adoption as the next *de facto* memory standard, had that occurred. Exh. 94 (Supplemental Report
6 of Avram S. Tucker at 15-19).

7 ***Analysts' View That RDRAM Would Become The Next Generation Technology***

8 21. A 1998 report published by CIBC Oppenheimer report stated: "Direct RDRAM
9 appears most likely to become the mainstream standard." Exh. 12 (1998 Oppenheimer Report at
10 RF 0161440).

11 22. A December 1998 report by analyst SG Cowen stated that it was RDRAM's
12 "destiny" to become "the mainstream DRAM technology." Exh. 20 (12/98 SG Cowen Report at
13 RF 0153103). The report continued:

14 Historically, [] one dominant DRAM type emerges and captures the
15 bulk of the market. Thus, if [Rambus] becomes the mainstream PC
16 desktop technology, we would expect, based on historical
precedent, that it will also eventually dominate other DRAM
markets.

17 *Id.* at RF 0153117. The SG Cowen Report also stated that Rambus had significant earnings
18 potential in "2001, 2002 and beyond." *Id.* at RF 0153126.

19 23. An article published in February 1997 indicated that the Rambus-Intel
20 partnership would not only impact the DRAM market in the foreseeable future, but also that
21 "[m]ore profound consequences may follow." Exh. 8 (Tabrizi 11/20/02 Depo. Exh. 30); Exh. 263
22 (11/20/02 Tabrizi Depo. at 141:1-19). The article continued, "[s]ome observers expect that at
23 some point, Intel will build a Rambus interface into its processors, rather than using [the currently
24 planned] Rambus-enabled memory controller." *Id.*

25 ***Hynix's View That RDRAM Would Become The Next Generation Technology***

26 24. In September 1996, Farhad Tabrizi, Hynix's Worldwide Vice President of
27 Marketing, predicted: "If Intel implements Rambus, all other applications will move that
28

1 direction to leverage the strength and volume of the PC market . . . I urge you to please educate
2 others and get their agreement to say 'NO TO RAMBUS AND NO TO INTEL
3 DOMINATION.'" Exh. 1 (Tazbrizi Depo. Exh. 24) (emphasis in original); Exh. 263 (11/20/02
4 Tabrizi Depo. at 116:11 – 117:15). See also Exh. 265 (7/17/08 Tabrizi Depo. at 42:8-44:2).

5 25. According to meeting minutes drafted by an HP executive regarding a January
6 1997 meeting of the SynchLink Consortium (also attended by DRAM manufacturers Hynix,
7 Micron, Samsung, and Infineon, among others), a Hynix representative stated:

8 [The Rambus-Intel relationship is] a dooms day scenario for
9 DRAM business: If Intel/Rambus control all IP, DRAM suppliers
10 will be nothing more than foundries, with profits going into Rintel's
11 [Rambus + Intel's] pockets.

12 Exh. 6 (1/13/97 email at HPW0000928.2). Andreas von Zitzewitz, Infineon's [then Siemens']
13 Vice President and General Manager of the Memory Products Division stated "This doomsday
14 scenario is *not* paranoid" *Id* at HPW0000928.3. (emphasis added).

14 ***Rambus's Business Relations With OEMs***

15 26. Rambus considered OEMs and other DRAM consumers to be among their
16 most important "customer[s]." Exh. 295 (11/13/2007 Chen Depo. at 48:21-49:11).

17 27. A Rambus business plan from August 1999 states:

18 Ultimately the people who determine if our technology will be used
19 in a project is the OEM or system designer who chooses to use our
20 technology. In many cases, this company is not a Rambus licensee
21 [memory chip manufacturer] . . . However, the system companies
22 who make the memory choice are our real customers.

23 Exh. 31 (August 1999 Business Plan at R1611407).

24 28. Rambus expended considerable engineering and marketing efforts aimed at
25 encouraging OEMs to "design in" RDRAM in their product plan. Exh. 295 (11/13/2007 Chen
26 Depo. at 48:21-49:11).

27 29. Mike Kabealo, Rambus's former Director of PC OEMs testified that he
28 successfully established business relationships between Rambus and OEMS "up and down the

1 food chain at the accounts.” Exh. 232 (6/24/08 Kabealo Depo. at 114:16-115:5). These
2 relationships included “continued, ongoing meetings.” *Id.*

3 30. An October 1998 Compaq presentation reported that [REDACTED]
4 [REDACTED] Exh. 91 (Bromley Depo. Exh. 3376 at HP0000044); Exh. 217
5 (8/20/08 Bromley Depo. at 183:3-22).

6 31. In February of 2000, Dell predicted that, by the fall of 2000, RDRAM would
7 ship in 40% of Dell’s product line. Exh. 46 (Sadler Depo. Exh. 547 at 1); Exh. 257 (4/25/08
8 Sadler Depo. at 136:23-137:23); Exh. 222 (8/28/08 Culp Depo. at 236:24-237:19).

9 32. Hynix, Micron, Samsung, and Rambus all considered Compaq and Dell to be
10 among their largest and most important PC OEM customers. Exh. 288 (9/27/07 Sun Choi Depo.
11 at 11: 11-17); Exh. 257 (4/25/2008 Sadler Depo. at 161:1-162:1); Exh. 232 (6/24/2008 Kabealo
12 Depo. at 24:24 - 25:7); Exh. 238 (9/9/2008 I.U. Kim Depo. at 60:13-16).

13 33. A Compaq presentation from 1999 [REDACTED]
14 [REDACTED] Exh. 297 (HR905_412347 at
15 IIR905_412352).

16 ***Rambus’s Business Relationships With DRAM Manufacturers***

17 34. In preparation for RDRAM’s expected emergence as the next generation
18 mainstream technology, a number of the world’s leading DRAM manufacturers entered into
19 agreements with Rambus to license and manufacture RDRAM, including, *inter alia*: Samsung,
20 Elpida (formerly NEC), Toshiba, Infineon, Hynix, and Micron. Exh. 94 (Supplemental Report of
21 Avram S. Tucker at 15-19). *See also* Declaration of David R. Garcia In Support of Samsung’s
22 Motion for Summary Judgment on Rambus’s Complaint, Exh. 173 (Samsung-Rambus
23 Agreement).

24 35. Rambus created “reference designs” for RDRAM parts that were then provided
25 to DRAM manufacturers free of charge. Exh. 227 (3/24/2008 Frank Depo. at 68:20-69:9, 393:
26 17-23).

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36. A Samsung presentation from March 2000

[REDACTED]

Exh. 313

("Samsung RDRAM, March, 2000 at SSI-0005136580).

37. Rambus would have earned substantial revenues flowing from RDRAM's sales by these manufacturers, had RDRAM been adopted as the next *de facto* memory standard. Exh. 94 (Supplemental Report of Avram S. Tucker at pp. 14-19).

C. RDRAM KILLING COMMENCES

38.

[REDACTED]

Interference Through "Carefully Planted Rumors"

39. Hynix worked with Micron and other DRAM manufacturers to ensure that "carefully planted rumors" discouraged OEMs and others from selecting RDRAM in new product designs. Exh. 17 (Tabrizi Depo. Exh. 731); Exh. 265 (7/17/08 Tabrizi Depo. at 101:9-103:9, 105:13-24).

40.

[REDACTED]

Exh. 11 (Mailloux Depo. Exh. 415); Exh. 244 (1/17/08 Mailloux Depo. at 58:1-59:18).

41. Hynix's Tabrizi reportedly presented Intel with inflated RDRAM price projections and production volumes and "encourage[d] every DRAM manufacturer to do the same in order to let Intel not generate a Rambus oversupply." Exh. 92 (11/00/1998 email).

42. A Hynix email from October 1998 states Hynix's intention to "overstate our Direct Rambus production . . ." Exh. 16 (FTC Trial Exh. Rx-1295); Exh. 246 (1/19/2005 Martinez Depo. at 98:13-100:4).

1 43. A Hynix meeting summary from November 1998 [REDACTED]
2 [REDACTED]
3 [REDACTED] Exh. 19 (Byrd Depo. Exh. 668); Exh. 218 (5/29/08
4 Byrd Depo. at 130:2-131:22).

5 44. Hynix Vice President Mark Ellsberry publicly acknowledged in 1998 that DDR
6 was a "long shot." Exh. 13. (4/11/98 Mailloux-Tabrizi email); Exh. 265 (7/17/08 Tabrizi Depo.
7 at 39:13-41:13). In response to Mr. Ellsberry's statements Micron executive Jeff Mailloux sent an
8 email to Hynix's Farhad Tabrizi asking if Hynix was "still on board?" with the conspiracy and
9 adding "[h]ope that [Hynix] has not caved into the 'dark side.'" *Id.* A few weeks later, in April
10 1998, [REDACTED]
11 [REDACTED]
12 [REDACTED] Exh. 14 (Tabrizi
13 Depo. Exh. 720); Exh. 265 (7/17/08 Tabrizi Depo. at 45:4-47:25).

14 ***Interference Through Illegal Agreements and Misleading RDRAM Price Quotes***

15 45. By May of 1999, [REDACTED]
16 [REDACTED] Exh. 24 (Byrd Depo. Exh. 643); Exh.
17 218 (5/29/08 Byrd Depo. at 22:17-24:2, 25:3-27:8).

18 46. In May of 1999, Hynix manager Andy Ha recommended that Hynix "get
19 together with Samsung and ask them to suggest [to] Micron to have a joint management meeting
20 for price control in the future." Exh. 25 (Kim Depo. Exh. 596); Exh. 237 (4/30/08 D.S. Kim
21 Depo. at 57:9-59:4).

22 47. Similarly, in June of 1999, Hynix's [REDACTED]
23 with Samsung regarding "rambus business" after learning that Samsung, like Hynix, wanted to
24 "work [together] to limit the supply [of RDRAM] in the market." Exh. 23 (D.S. Kim Depo. Exh.
25 593); Exh. 262 (7/26/07 Suh Depo. at 67:5-68:1); Exh. 265 (7/17/08 Tabrizi Depo. at 128:22-
26 129:16).

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48. In June 1999,

Exh. 110 (Fahey Depo. Exh. 3067); Exh. 225 (8/26/08

Fahey Depo. at 391:17-392:12).

Turning Away From RDRAM Demand In Late 1999 and Early 2000

49.

Exh. 36 (Byrd Depo. Exh. 647); Exh. 218 (5/29/08 Byrd

Depo. at 37:1-38:25).

50. A Hynix salesman reported on January 11, 2000

Exh. 42 (Chung

Depo. Exh. 6); Exh. 221 (5/10/07 Chung Depo. at 43:22-44:18, 45:9-16).

51. In a January 25, 2000 email,

Exh. 45 (Chung Depo. Exh. 7); Exh. 237 (4/30/08 D.S. Kim Depo. at 62:7-

64:7); Exh. 221 (5/10/07 Chung Depo. at 46:21-47:19, 48:19-49:15).

52. On February 1, 2000, Dell's Director of Memory Procurement wrote to Micron's

Vice President of Sales to tell him that "Dell remains committed to Rambus," that Dell's sales

were impaired by a lack of supply and that Dell "need[s] Micron's support" in supplying

RDRAM. Exh. 46 (Sadler Depo. Exh. 547); Exh. 222 (8/28/08 Culp Depo. at 236:24-237:19);

Exh. 257 (4/25/08 Sadler Depo. at 136:23-137:23).

Exh. 49 (Sadler Depo.

Exh. 548); Exh. 257 (4/25/08 Sadler Depo. at 144:3-145:16, 147:8-22).

1 53. A February 21, 2000 Hynix email stated, [REDACTED]
2 [REDACTED] Exh. 48 (Byrd Depo. Exh. 651); Exh. 218
3 (5/29/08 Byrd Depo. at 67:24-69:16).

4 54. But Hynix refused to do so. A February 23, 2000 Hynix email states [REDACTED]
5 [REDACTED]
6 [REDACTED] Exh. [51] (Byrd Depo. Exh. 653); Exh. 218 (5/29/08 Byrd Depo. at 75:1-77:16).
7 Internal emails from this time period refer to the "need to confirm Samsung's price" in order to
8 determine Hynix's RDRAM pricing. Exh. 50 (Byrd Depo. Exh. 652); Exh. 218 (5/29/08 Byrd
9 Depo. at 71:4-72:8). See also Exh. 50 ("Can we find out what SS says their pricing is with your
10 contact").

11 55. A Hynix sales representative at Dell reported in April 2000 that Samsung had
12 established a "reference price" for RDRAM that Samsung "does not want anyone to go below."
13 Exh. 53 (Byrd Depo. Exh. 655); Exh. 218 (5/29/08 Byrd Depo. at 86:23-88:19); Exh. 54 (Kim
14 Depo. Exh. 601); Exh. 218 (5/29/08 Byrd Depo. at 86:23-89:5). Samsung's "reference price" was
15 above Dell's "target" price. *Id.*

16 56. [REDACTED]
17 [REDACTED] Exh. 89
18 (Supplemental Report of Kenneth Elzinga at pp. 45-46).

19 **D. Summer 2000: Intel and Others Continue To Support RDRAM Over DDR;**
20 **RDRAM Killing Continues**

21 ***Intel RDRAM Support Continues***

22 57. [REDACTED]
23 [REDACTED]
24 [REDACTED]
25 [REDACTED]
26 [REDACTED]

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[REDACTED]

58.

[REDACTED]

Exh. 271 (5052DOC00327-8).

59. A May 2000 industry article predicted that “[i]f there’s a reasonable supply at a somewhat reasonable price for [Intel’s RDRAM compatible chipsets], people will buy it. That will probably get the snowball rolling . . . RAMBUS use could then spread across the whole PC spectrum.” Exh. 300 (5/4/00 article).

60. Also in May 2000, an independent research firm summarized that same month:

[REDACTED]

Exh. 57 (DRAM Supply/Demand Quarterly Statistics at HR905_060574) (emphasis added).

61. A few months later, Dataquest was predicting that “while Rambus still makes up less than 10% of total megabytes in the DRAM market this year, Dataquest predicts that figure to rise to more than 50% by 2002 while DDR attains only 17%”. Exh. 301 (September 2000 Electronic Business Article).

Interference with Dell’s RDRAM Roadmap

62. Also in May 2000 Dell remained committed to RDRAM. At a meeting on May 9, 2000, Michael Dell, the CEO and founder of Dell, advised Rambus that (1) “dell workstation line

1 is now 100% rambus based - selling very well; gaining share,” (2) “1GHz systems - can sell all
2 they can get; getting 1000’s/month; pushing for more; big market demand” and (3) “at 20-30%
3 rdram price premiums, the pc volumes will be MUCH higher.” At the same meeting, Michael
4 Dell and Dell Executive Vice President Carl Everett conveyed that (1) “the premium they are
5 paying now to samsung is 130% over sdram,” (2) “mainstream market is going to 815/sdram at
6 this time due to price premium,” and (3) “they realize that what they need is to get at least one
7 other major supplier with a significant chunk of dell’s business to get pressure on samsung.”
8 Messrs. Dell and Everett further expressed “agree[ment] that with more suppliers, more
9 quals/oem and price>>cost that this will eventually work out,” and Mr. Everett expressed that he
10 “thinks this is a 1-2 quarter problem to get through and is lobbying Intel to subsidize the pc
11 companies.” Exh. 205 (Mooring Depo. Exh. 2825); Exh. 249 (8/15/08 Mooring Depo. At 849:9-
12 851:20). *See also* Exh. 164 (8/29/08 Everett Depo. Exh. 3902 at DEL-RAMB 013477-80); Exh.
13 224 (8/29/08 Everett Depo. at 205:10-207:21).

14 63. A May 2000 email authored by Dell executive Kevin Kettler stated:

15 Dell has booked our products over the last year around the
16 assumption that RDRAM prices would decline and close on
17 SDRAM. This would help us create demand. . . . the memory
18 vendors have shown no desire to drop prices, therefore we are
19 reevaluating our strategies so the message to them is drop
20 prices or we will continue to decrease our RDRAM forecasts and
21 we will architect next generation systems around DDR. . . . we will
22 give the memory vendors till the end of May to reply to our request
23 . . . if they still have no desire to drop prices, we should push ahead
24 rearchitecting chipsets around DDR.

25 Exh. 55 (5/9/00 Kettler email); Exh. 236 (1/15/03 Kettler Depo. at 133:6-134:1); Exh. 265
26 (7/17/08 Tabrizi Depo. at 219:13-25).

27 64. On June 8, 2000, after learning of Dell’s request, Mr. Tabrizi begged for
28 permission to “go back to my old mode of RDRAM killing” and further recommended that that
Hynix reject the request in an effort to put Rambus out of business by “clos[ing] their income
revenue” from RDRAM royalties. Exh. 63 (Chung Dep. Exh. 14); Ex. (7/17/08 Tabrizi Depo at
217:17-218:4.). Mr. Tabrizi knew that Hynix could not alone “kill” RDRAM, so he
communicated directly to Infineon and Micron seeking their support. In separate emails sent on

1 June 7, 2000, Tabrizi informed top executives at Infineon and Micron that Hynix would not meet
2 Dell's targets, and he asked them to join Hynix in sending a message to Dell to remove its head
3 from its posterior with respect to RDRAM. Exh. 61 (6/7/00 Tabrizi-du Preez email discussing
4 Dell's price targets and attaching an obscene photograph at HR905_435635).

5 65. [REDACTED]

6 [REDACTED]
7 [REDACTED]
8 [REDACTED]
9 [REDACTED]
10 Exh. 64 (DEL-RAMB 016951); Exh. 223 (11/13/07 Everett Depo. at 137:11-138:18, 143:22-
11 144:14).

12 66. A June 27, 2000 report stated [REDACTED]

13 [REDACTED]
14 [REDACTED] Exh. 68 (6/23/00 email HR905_130332); Exh.
15 218 (5/29/08 Byrd Depo. at 98:3-16, 101:16-19).

16 *Interference With Intel's RDRAM Roadmap*

17 67. In a July 26, 2000 memorandum by [REDACTED]

18 [REDACTED]
19 [REDACTED]
20 [REDACTED]
21 [REDACTED]
22 [REDACTED]
23 Exh. 67 (Williams Depo. Exh. 2943); Exh. 270 (8/13/08 Williams Depo. at 307:24-308:18).

24 68. An internal Intel email from September 2000 [REDACTED]

25 [REDACTED]
26 69 (Fahey Depo. Exh. 3073); Exh. 225 (8/26/08 Fahey Depo. at 405:11-406:12).

1 **E. The Launch of Pentium IV; Evaluation of Future RDRAM Roadmaps**

2 ***The Launch of the Pentium IV***

3 69. In late 2000, Intel launched its new Pentium IV chipset, which was optimized
4 to take advantage of the enormous bandwidth offered by RDRAM. Exh. 302 (Fahey Depo. Exh.
5 3072 at 40146DOC01821); Exh. 225 (8/26/08 Fahey Depo at 403:1-21). [REDACTED]

6 [REDACTED]
7 [REDACTED] *Id.* at 40146DOC01822. See also Exh. 277 (Hampel Decl. at ¶ 5-7)

8 70. In early 2001, design and production problems were hindering the launch of
9 DDR chips. Exh. 73 (Sadler Depo. Exh. 567).

10 71. [REDACTED]
11 [REDACTED] Exh. 74 (Byrd
12 Depo. Exh. 683); Exh. 218 (5/29/08 Byrd Depo. at 170:3-25, 172:19-22). [REDACTED]

13 [REDACTED]
14 [REDACTED] Exh. 77 (Kang Depo. Exh. 50); Exh. 235 (7/20/07 Y.H. Kang Depo. at 152:2-23);
15 Exh. 253 (10/27/07 Quinn Depo. at 64:5-25). [REDACTED]

16 [REDACTED] *Id.*

17 72. A November 2000 report by Gartner Dataquest stated that: “there are too many
18 technical problems with DDR ” Exh. 257 (RF0492809 at RF0492810); “RDRAM is more
19 expensive to make now but that is because volumes have not ramped” (*id.* at RF0492811);
20 and therefore “we expect to see RDRAM as the dominant DRAM technology by 2003” (*id.* at
21 RF0492813).

22 73. [REDACTED]
23 [REDACTED]
24 [REDACTED]
25 [REDACTED]
26 [REDACTED]
27 [REDACTED]
28 [REDACTED]

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[REDACTED]

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Dell's Future Roadmap Decisions Turn on RDRAM Price & Availability

74.

[REDACTED]

Exh. 75

Kim Depo. Exh. 819 (emphasis added); Exh. 239 (9/10/08 I.L. Kim Depo. at 158:15-159:16).

75. In February 2001,

[REDACTED]

Exh. 71 (Culp Depo. Exh. 3872); Exh.

222 (8/28/08 Culp Depo. at 287:16-288:1).

Intel's Future Roadmap Decisions Turn on RDRAM Price & Availability

76.

At an Intel Developers Forum in February 2001, Intel's roadmap continued to

feature RDRAM as the main memory solution for the PC segment through at least 2003. Exh. 102 (Kettler Depo. Exh. 3 at DEL-RAMB029449-50); Exh. 236 (1/15/03 Kettler Depo. at 111:16-112:14). DDR was featured as a possible solution but the presentation noted that "competitive RDRAM pricing minimizes the role of DDR."

77.

Throughout 2001 and 2002, Intel was still considering potential *future* chipsets

to be compatible with RDRAM, rather than DDR or DDR2. At an Intel Developers Forum in Spring of 2001, Intel announced that its "next generation chipset in 2002" would be compatible with RDRAMs utilizing a "4i" bank design. Exh. 102 (Kettler Depo. Exh. 3); Exh. 236 (1/15/03 Kettler Depo. at 111:16-112:14).

⁴ At the time of filing this declaration, Rambus has not received a certified copy of the transcript or exhibits for the deposition of Mr. De Dios. Rambus understands that Exhibits 307-09 to the Hamilton Declaration correspond to the referenced Exhibits from that deposition. At the Court's request, Rambus will provide a copy of the exhibits (and pertinent testimony thereon) from the certified transcript when it becomes available.

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78.

[REDACTED]

Exh. 92 (8/27/02 Intel Presentation at 40055DOC02268). See also Exh. 277 (Hampel Declaration at ¶¶ 7-12).

DRAM Manufacturers

79.

[REDACTED]

Exh. 84 (Marlow Depo. Exh. 3113 at TAEC-RMBS-v-MU6930-32); Exh. 245 (9/12/08 Marlow Depo. at 181:25-183:17).

[REDACTED]

Exh. [84] (Marlow Depo. Exh. 3113 at TAEC-RMBS-v-MU6945).

80.

A few months prior, in February 2001, Elpida announced at the Intel

Developer's Forum an RDRAM roadmap through at least 4Q2002. Exh. 102 (DEL-RAMB 029437 at DEL-RAMB 029472); Exh. 236 (1/15/03 Kettler Depo. at 111:16-112:14). Samsung's Roadmap went out through 2003, including RDRAM speed grades of 1066, 1200 and 1600 MHz. *Id.* at DEL-RAMB 029490.

81.

In April 2002,

[REDACTED]

Exh. 304 (4/02 Samsung presentation) (SSI 0010042449 at SSI 0010042453).

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F. "RDRAM Killing" Results In DDR, Rather Than RDRAM, Emerging As The Next Generation Technology.

82. [REDACTED]

[REDACTED] Exh. 72 (Lee Depo. Exh. 692); Ex. 242 (6/12/08 SW Lee Depo. at 41:17-42:3, 43:18-45:17).

83. [REDACTED]

[REDACTED] Exh. 76 (Park Depo. Exh. 479); Exh. 252 (4/16/08 Y.H. Park Depo. at 49:18-50:21).

84. [REDACTED]

[REDACTED]

85. [REDACTED]

[REDACTED] Exh. 78 (D.S. Kim Depo. Exh. 605); Exh. 237 (4/30/08 D.S, Kim Depo. at 82:1-83:15).

86. [REDACTED]

[REDACTED]

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Exh. 52 (Lauer Depo. Exh.

359); Exh. 241 (12/19/07 Lauer Depo. at 118:11-119:3).

87. This campaign was intended to keep DDR prices lower than market forces would otherwise dictate, and indeed kept prices below variable costs. Exh. 91 (Morrissey Depo. Exh. 192); Exh. 250 (10/4/07 Morrissey Depo. at 172:21-174:11); *See also* Exh. 95 (Micron 10K for FY 2002, at 19) (stating that “average selling prices for semiconductor products [had] been below manufacturing costs . . .”)

88. This joint strategy was explained in a June 5, 2001 email written by a Micron vice president named Linda Turner. Ms. Turner was responding to reports by her staff that Hynix was lowering its DDR pricing. Rather than view this price competition with alarm, Ms. Turner was enthusiastic about it:

“No problem! We want DDR to explode into the marketplace so have actually been requesting Infineon, Samsung, and Hynix to lower their DDR pricing to help it become a standard (*and drive Rambus away completely*).”

Exh. 79 (Turner Depo. Exh. 328); Exh. 268 (12/13/08 Turner Depo. at 119:16-120:21) (emphasis added).

89. In 2002, Hynix and its coconspirators became concerned that the shrinking “DDR/SDR price gap” would lead a renewed marketplace interest in the RDRAM device. A January 16, 2002 news article entitled “DDR Fumbles, RDRAM Scores” noted that “rising DDR prices spur Rambus resurgence.” Exh. 197 at 1 (Sadler Depo. Exh. 534); Exh. 257 (4/25/08 Sadler Depo at 80:5-82:9). The article pointed out that “swiftly rising” DDR prices had called “into question the validity of tech articles written when you could buy 512 MB of DDR for under \$60. . . .” Exh. 197 at 2. The article concluded:

[I]n the rush to the DDR promised land, we may have lost track of the reason we started – price/performance. As of today, RDRAM gets a higher rating in this regard. . . .

Id. at 3.

1 90. In response to this “threat,” Micron’s Worldwide Vice President of Sales Mike
2 Sadler asked a direct report, Bill Lauer, to “re-educate” other DRAM manufacturers about the
3 “virtues” of price parity between SDRAM and DDR. Exh. 303 (Lauer Depo. Exh. 370); Exh. 241
4 (12/19/2007 Lauer Depo at 155:21-156:14). See also Exh. 184 (Lauer Depo. Exh. 371); Exh. 241
5 (12/19/07 Lauer Depo. at 164:20-165:11). A few weeks later, in March 2002, Hynix manager
6 Chung reported that Hynix was quoting “DDR pricing in parity” with SDRAM and that this price
7 “must be from Micron,” thus acknowledging that Hynix, like Samsung and Infineon, was taking
8 direction from Micron regarding DRAM pricing. Exh. 140 (Quinn Depo. Exh. 393); Exh. 237
9 (4/30/08 DS Kim Depo. at 98:4-21). Mr. Chung also stated that he had “[i]ntentionally leaked
10 this information to my buddy at [Samsung] and asked them to hold tight.” *Id.* The Hynix
11 executive reported that Samsung had agreed to “stay firm at \$42 for both Sync and DDR.”

12 91. [REDACTED]
13 [REDACTED]
14 [REDACTED] See, e.g., Exh. 141 (Quinn Depo. Exh. 392); Exh.
15 253 (12/20/07 Quinn Depo. at 146:15-147:13, 148:21-25) [REDACTED]
16 [REDACTED]; Exh. 142 (Kang Depo. Exh. 60);
17 Exh. 235 (7/20/07 Kang Depo. at 171:21-172:12).

18 92. Throughout the spring and summer of 2002, [REDACTED]
19 [REDACTED]
20 [REDACTED]
21 [REDACTED]
22 [REDACTED] Exh.
23 129 (Seibert Depo. Exh. 274); Exh. 258 (10/30/07 Seibert Depo. at 97:5-21). See also Exh. 129
24 (Quinn Depo. Exh. 394) [REDACTED]; Exh. 253
25 (12/20/07 Quinn Depo. at 151:20-152:22); Exhs. 131, 132 [REDACTED]
26 [REDACTED] Exh. 253 (12/20/07 Quinn Depo. at
27 154:6-20; 157:12-158:9); Exh. 133 (Quinn Depo. Exh. 399) [REDACTED]
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[REDACTED] Exh. 253 (12/20/07 Quinn Depo. at 163:20-164:15); Exh. 134
(Waddel Depo. Exh. 236) [REDACTED]
[REDACTED] Exh. 269 (10/18/07 Waddel Depo. at 94:25-96:22); Exh. 135 (Lauer Depo. Exh. 349)
[REDACTED] Exh. 241 (12/19/07 Lauer Depo.
at 79:19-80:6); Exh. 136 (Kang Depo. Exh. 64)
[REDACTED]; Exh. 235 (7/20/07
Kang Depo. at 180:5-181:18).

93. [REDACTED]
[REDACTED] Exh. 185 (Waddel
Depo. Exh. 234); Exh. 269 (10/18/07 Waddel Depo. at 87:8-88:12; 89:16-25).
[REDACTED]
[REDACTED]
[REDACTED] Exhs. 186-187 (Seibert Depo. Exhs. 275-76); Exh. 258 (10/30/07 Seibert Depo. at
101:25-102:10; 103:4-19).

94. [REDACTED]
[REDACTED] Exh. 208 (Sadler Depo. Ex.
532); Exh. 257 (4/25/08 Sadler Depo at 70:1-20); Exh. 209 (Sadler Depo. Ex. 533); Exh. 257
(4/25/08 Sadler Depo. at 74:19-75:21); Exh. 210 (Sadler Depo. Ex. 538); Exh. 211 (Sadler Depo.
Ex. 539); Exh. 212 (Sadler Depo. Ex. 540); Exh. 257 (4/25/08 Sadler Depo. at 94:10-96:2, 98:1-
99:12, 101:20-102:5, 103:11-105:21, 107:1-7, 108:5-12, 109:9-110:3, 110:3, 110:20-25, 112:3-
20).


95. Absent the acts of interference described in ¶¶ 38 to 94, above, RDRAM would
have become the next dominant memory standard after SDRAM. *See also* Basileo Decl. Exh. 29,
Elzinga Report at pp. 99-103). Ex. 159 (Elzinga Decl. pp. 5-7).

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96. DDR and DDR II became the dominant memory standard for the better part of a decade, with sales projected to continue well into 2012. See Exh. 94 (Supplemental Report of Avram S. Tucker, at p. 9, Chart 1).

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