

1 TOWNSEND AND TOWNSEND AND CREW LLP  
THEODORE G. BROWN, III (State Bar No. 114672)  
2 JORDAN TRENT JONES (State Bar No. 166600)  
379 Lytton Avenue  
3 Palo Alto, California 94301  
Telephone: (650) 326-2400  
4 Facsimile: (650) 326-2422

**RECEIVED**

MAR 29 2004

5 O'MELVENY & MYERS LLP  
PATRICK LYNCH (State Bar No. 39749)  
6 KENNETH R. O'ROURKE (State Bar No. 120144)  
400 South Hope Street  
7 Los Angeles, California 90071-2899  
Telephone: (213) 430-6000  
8 Facsimile: (213) 430-6407

**PAD**

9 THELEN REID & PRIEST LLP  
KENNETH L. NISSLY (State Bar No. 77589)  
10 SUSAN G. van KEULEN (State Bar No. 136060)  
225 West Santa Clara Street, Suite 1200  
11 San Jose, California 95113  
Telephone: (408) 292-5800  
12 Facsimile: (408) 287-8040

13 Attorneys for Plaintiffs  
HYNIX SEMICONDUCTOR INC.,  
14 HYNIX SEMICONDUCTOR AMERICA INC.,  
HYNIX SEMICONDUCTOR U.K. LTD., and  
15 HYNIX SEMICONDUCTOR DEUTSCHLAND GmbH

16  
17 **UNITED STATES DISTRICT COURT**  
18 **FOR THE NORTHERN DISTRICT OF CALIFORNIA**  
19 **SAN JOSE DIVISION**

20 HYNIX SEMICONDUCTOR INC.,  
HYNIX SEMICONDUCTOR AMERICA  
21 INC., HYNIX SEMICONDUCTOR U.K.  
LTD., and HYNIX SEMICONDUCTOR  
22 DEUTSCHLAND GmbH,

Case No. CV 00-20905 RMW

**PLAINTIFFS' SUPPLEMENTAL  
SUBMISSION REGARDING  
"SYNCHRONOUS MEMORY DEVICE"  
AND "PACKET"**

23 Plaintiffs,

24 v.

25 RAMBUS, INC.,

26 Defendant.  
27  
28

1 Hynix Semiconductor Inc., Hynix Semiconductor America Inc., Hynix Semiconductor U.K.  
2 Ltd., and Hynix Semiconductor Deutschland GmbH (collectively, "Hynix") submit the following  
3 information in response to the Court's request during the hearing held March 24, 2004. The Court  
4 requested the parties' comments on the Court's tentative construction of "synchronous memory device"  
5 and on the definition of "packet."

6 **I. SYNCHRONOUS MEMORY DEVICE**

7 The Court's tentative construction of "synchronous memory device" was posted as the  
8 following:

9 A memory device that receives an external clock to govern the response  
10 timing of the memory device's operation(s).

11 Hynix accepts this tentative construction and believes it is correct. As Hynix understands it,  
12 this construction correctly recognizes that the distinguishing characteristic of "synchronous memory  
13 devices" is that the timing of data input and output (for example) is governed by an external clock.  
14 The construction also reads on the preferred embodiments disclosed in the Rambus patents, including  
15 the embodiments in which more than one bus can be interfaced to a particular device (*see* Rambus  
16 '152 patent, col. 5:47-58), and comports with the plain meaning of the term.<sup>1</sup>

17 **II. PACKET**

18 **A. Dictionary Definitions**

19 Hynix has considered (and attaches) a number of potential sources of definitions for the term  
20 packet. The most relevant dictionary definitions are those that relate to data communications, but  
21 these have changed and proliferated over time. For example, the 1972 IEEE Standard Dictionary of  
22 Electrical and Electronic Terms (Exhibit A) did not define the term at all; the 1988 Edition of this  
23 dictionary defined both "packet" and "packet switching." (Exhibit B) "Packet" is defined as:

24  
25 \_\_\_\_\_  
26 <sup>1</sup> These remarks should not be interpreted as an agreement by Hynix, or a waiver of any objections  
27 Hynix may have, to the Court's tentative or actual construction of "device" or "integrated circuit  
28 device."

1 A group of binary digits including data and control elements which is  
2 switched and transmitted as a composite whole. The data and control  
3 elements and possibly error control information are arranged in a  
4 specified format.

5 This definition of packet generally is consistent with the usage of the term in the Rambus  
6 patents, except that the concept of "switching" is not particularly relevant to the patents. The 1992  
7 (5th) Edition of the IEEE Dictionary (Exhibit C) includes three definitions of "packet," while the 2000  
8 Edition (Exhibit D) contains 14 definitions. Many are specific to particular buses, but the proliferation  
9 is probably due to the increasing common use of "packet protocols" (such as TCP/IP) for voice and  
10 data network communications, particularly "packet switched" networks, such as the Internet.

11 Another contemporaneous dictionary definition is similar, but somewhat more detailed, and  
12 probably more appropriate to network communication:

13 In data communications, a self-contained component of a message,  
14 comprising address, control, and data signals, that can be transferred as  
15 an entity within a data network.

16 Van Nostrand Dictionary of Information Technology, Third Edition (1989) (Exhibit E)

#### 17 **B. Definition In The Patent Specification**

18 Hynix believes that the definitions contained in the Rambus patents themselves are the most  
19 relevant to the issues currently before the Court, and should control. *Merck & Co., Inc., v. Teva*  
20 *Pharms. USA, Inc.*, 347 F.3d 1367, 1371 (Fed. Cir. 2003) ("A fundamental rule of claim construction  
21 is that terms in a patent document are construed with the meaning with which they are presented in the  
22 patent document."). Rambus's definitions are consistent with the dictionary definitions from the  
23 relevant time.

24 The Rambus patents define "request packet" in two places and provide an example in Figure 4.  
25 The "request packet" is defined as "a sequence of bytes comprising address and control information."  
26 Rambus '152 patent, col. 6:53-54. In another instance, Rambus defines a request packet as "a  
27 contiguous series of bytes containing address and control information." Rambus '152 patent, col.  
28 8:55-57.

Dr. Farmwald, one of the named inventors of the patents in suit, defined a "packet" in  
essentially the same way:

1 Q. Tell me what you mean or what you understand the term packet  
2 protocol to mean and then we will use that, we can use that definition.

3 A. Well, off the top of my head -- this is without being, you know,  
4 having a careful thought about it, but packet protocols come from  
5 generally synchronous systems, and generally what happens is you  
6 bundle the information that you need to access the, in this case memory.  
7 We are talking about memory devices. You put the control information,  
8 the address information and potentially the data information if it's under  
9 certain kinds of transactions -- certain kinds don't need data -- you  
10 bundle them into a series of clocked transactions that get the bits you  
11 need into the memory so it can start independently running its cycle, its  
12 operation. And that's a packet, roughly.

13 Supplemental Declaration of Theodore G. Brown In Support of Hynix's Motions For Summary  
14 Judgment ("Brown Suppl. Summary Judgment Decl."), Ex. 85, p. 21:18-22:9 (emphasis  
15 added).

16 The only other packet explicitly referenced is the "Reject (NACK) Control Packet" shown in  
17 Figure 5 and described as a "retry response" from a slave in the corresponding discussion in the  
18 Rambus '152 patent at col. 11:65 - 12:39. The format shown for this other packet is not inconsistent  
19 with the definitions of the request packet, in that Figure 2 shows a "contiguous series" or "sequence"

20 ///

21 ///

22 ///

23 ///

24 ///

25 ///

26 ///

27 ///

28 ///

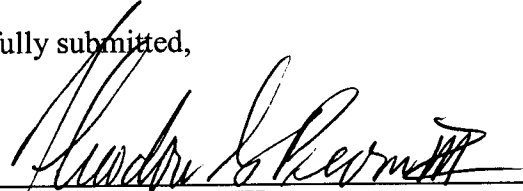
1 of (2) bytes of control information and "INFO" rather than address information. There is no mention  
2 in the Rambus specifications of a "reply packet."

3 **C. Hynix Definition Of Packet**

4 Hynix submits that a "packet" is "a sequence or contiguous series of bytes comprising control  
5 information and other information such as address information."  
6

7 DATED: March 26, 2004

Respectfully submitted,

8  
9 By: 

10 Theodore G. Brown, III  
11 Jordan Trent Jones  
12 TOWNSEND and TOWNSEND and CREW LLP

13 Patrick Lynch  
14 Kenneth R. O'Rourke  
15 O'MELVENY & MEYERS LLP

16 Kenneth L. Nissly  
17 Susan G. van Keulen  
18 THELEN REID & PRIEST LLP

19 Attorneys for  
20 HYNIX SEMICONDUCTOR INC.,  
21 HYNIX SEMICONDUCTOR AMERICA, INC.,  
22 HYNIX SEMICONDUCTOR U.K. LTD., and  
23 HYNIX SEMICONDUCTOR DEUTSCHLAND GmbH

24 60175250 v1