PUBLIC VERSION

UNITED STATES OF AMERICA

BEFORE THE FEDERAL TRADE COMMISSION

In the Matter of **RAMBUS INC.,** **a corporation.**	**Docket No. 9302**

MEMORANDUM BY RAMBUS INC. IN RESPONSE TO MOTION BY DEPARTMENT OF JUSTICE TO LIMIT DISCOVERY RELATING TO THE DRAM GRAND JURY

I. INTRODUCTION AND SUMMARY OF ARGUMENT

Respondent Rambus Inc. ("Rambus") submits this memorandum in response to the motion by the Department of Justice ("DOJ") to prevent discovery by Rambus into issues relating to price-fixing by DRAM manufacturers. The DOJ contends that Rambus's discovery will interfere with an ongoing criminal investigation by the DOJ and a federal grand jury.

The DOJ's motion should be denied. It is well settled that a "stay of civil discovery, pending the outcome of related criminal matters, is an extraordinary remedy" that is appropriate only in "extraordinary circumstances." *Weil v. Markowitz*, 829 F.2d 166, 174 n.17 (D.C. Cir. 1987). It is also settled that the DOJ bears a "heavy burden" on this motion, and that a mere allegation by the DOJ that civil discovery could prejudice a criminal proceeding "falls far short" of meeting the DOJ's burden. *Horn v. District of Columbia*, 210 F.R.D. 13, 16 (D.D.C. 2002).

The "extraordinary remedy" sought by the DOJ is not appropriate here. While Rambus cannot comment on the nature, scope or likely duration of the DOJ's criminal investigation, it *does* know that the order sought by the DOJ will substantially impair Rambus's ability to respond to Complaint Counsel's allegations at the hearing in this matter. As set forth in detail in section IIIA, below, Rambus has already located evidence showing concerted action by DRAM manufacturers that was intended to remove Rambus and its technology as a threat to the manufacturers' ability to control the pricing of their principal products. The relief requested by the DOJ would bar Rambus from continuing

to develop this evidence, which is highly relevant both to liability and to the remedy issues that may be addressed at the hearing in this matter.

Rambus has no desire to interfere with an ongoing criminal investigation. Rambus would, therefore, agree not to ask any deposition witness about any communications with the DOJ or the grand jury, and it would agree not to seek the production of correspondence between DRAM manufacturers and the DOJ or the grand jury. This agreement will relieve the DOJ's "greatest concern," according to the DOJ's motion. *See* DOJ Motion to Limit Discovery Relating to the DRAM Grand Jury ("DOJ Motion"), p. 2. The remaining relief sought by the DOJ is entirely unjustified in light of the resulting prejudice to Rambus.[1]

II. BACKGROUND

A. Complaint Counsel's Allegations And Rambus's Responses

The Complaint in this matter asserts that Rambus has monopolized or attempted to monopolize certain markets for technology related to dynamic random access memory ("DRAM"). It further alleges that Rambus participated in an industry standard-setting body called "JEDEC," and that it violated certain purported JEDEC rules that were "commonly known" to JEDEC members when it allegedly failed to disclose that it had filed, or might in the future file, patent applications that "might be involved in" JEDEC's standard-setting work. Complaint, ¶¶ 21, 24, 47-55, 70-80. The Complaint also alleges

[1] If the Court *were* to order the relief sought by the DOJ, it should stay all depositions pursuant to Rule 3.51(a) and continue the hearing in this matter, for the reasons discussed in section IIIB, below.

that several years *after* Rambus left JEDEC, it obtained patents that read on products that are compliant with several JEDEC standards, including standards proposed and voted on only after Rambus left JEDEC. *Id*., ¶¶ 82, 91.

According to the Complaint, JEDEC members were entirely unaware of the possibility that Rambus might obtain patents on technologies and features that were being incorporated in the JEDEC standards. *Id*., ¶ 2. The Complaint further states that if members had been aware of this possibility, they would have incorporated alternative technologies into the relevant standards. *Id*., ¶¶ 62, 65, 69. Finally, the Complaint alleges that as a result of Rambus's "scheme," DRAM manufacturers are now locked into selling JEDEC-compliant DRAM products and have no choice but to pay "excessive" royalties to Rambus. *Id*., ¶ 93.

None of these allegations is true. To begin with, there is now overwhelming evidence that JEDEC merely *encouraged*, and did not *require*, the disclosure of patent applications. In addition, Rambus has developed substantial evidence that JEDEC members were aware of the possibility that Rambus might seek patent coverage for various features that were under consideration by JEDEC. There is also substantial evidence that JEDEC members believed that Rambus's efforts would fail because of prior art that would, in the opinion of those members, render Rambus's patents invalid.[2]

[2] [FOOTNOTE PARTIALLY REDACTED PURSUANT TO PROTECTIVE ORDER.]

In sum, Complaint Counsel will not meet its burden of proving that JEDEC was lulled by anything Rambus said or didn't say into selecting any memory technology as an industry standard. Complaint Counsel, of course, will likely disagree. Complaint Counsel apparently intend to argue that it would have made no business sense for DRAM manufacturers to have incorporated certain features into memory devices if they suspected that they might eventually have to pay Rambus royalties on those devices.

Rambus will demonstrate in response that there were no commercially viable, equally performing, alternatives to many of the features in question, so that the manufacturers necessarily adopted those features in order to fulfill their customer's performance requirements. Rambus will *also* show that it made perfect sense in the mid and late 1990's for the DRAM manufacturers to take the risk that Rambus might obtain relevant intellectual property rights covering various features of the manufacturers' memory devices. It made perfect sense because the *alternative* – the *de facto* industry acceptance of Rambus-designed memory devices as the dominant memory product – was both unacceptable and a very real possibility in the 1996-1999 time frame. Had that occurred, the DRAM manufacturers would have been forced by their customers to build and sell Rambus-designed DRAMs, not the DRAMs that had been developed and

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Exhibit C, cited in this footnote, was designated as confidential information by a third party pursuant to the Protective Order in this case, a copy of which is attached as exhibit U to the Perry Declaration. In addition, exhibits B, D, F, I, J, L-N and P-T, and the information contained therein that is cited in this brief, were also so designated. Although it was believed at the time of filing the Non-Public version of this brief that exhibits E, G, H and K were also so designated, further review proved that not to be the case.

designed by the manufacturers. The manufacturers would thus have lost control over the future development path and, more importantly, the pricing, of their core products.

The evidence collected to date on these issues is described in more detail below. What that evidence shows is that in the face of the threat presented by Rambus, especially after Intel selected Rambus in 1996 as its choice for "next generation memory technology," some or all of the DRAM manufacturers joined together in a concerted effort to convince Intel and other purchasers of memory devices that: (1) Rambus DRAMs would be too difficult to build and therefore too expensive to buy; and (2) there were alternatives available that were cheaper and offered equal performance. In order to demonstrate their first point, the DRAM manufacturers deliberately *and in concert* kept their production of Rambus's DRAMs low and the price, therefore, high. In order to demonstrate their second point, the DRAM manufacturers borrowed features from Rambus devices in an effort to boost the performance of their own DRAMs. Then, after their efforts succeeded and Rambus's DRAMs no longer posed a substantial competitive threat, the DRAM manufacturers acted in concert to raise the price of their DRAMs.

Rambus recognizes that Complaint Counsel is likely to say that Rambus is simply trying to deflect attention from its own alleged misdeeds. Rambus also acknowledges that allegations of collusive conduct are more easily made than proven. That is why Rambus will set out here some of the evidence it has already collected, to demonstrate that it is not just "blowing smoke" and to show that the DOJ's request for a ban on price-fixing discovery would have a real and serious impact on Rambus's ability to prevail in

this matter. Rambus will begin by providing some background information regarding the DRAM industry in the mid and late 1990's.

B. The DRAM Industry In The 1990's

The following underlying facts relating to the DRAM industry are drawn largely from the expert report and appendix submitted in this matter by an economist named R. Preston McAfee, who was retained by Complaint Counsel. Dr. McAfee's report and appendix contain what he calls an "historical, empirically-based analysis" of DRAM technologies and DRAM industry developments throughout the 1990's. *See* McAfee Report, pp. 82-3.[3]

Rambus attended its last JEDEC meeting in December 1995. At that time, as Dr. McAfee points out, the DRAM industry was still manufacturing primarily "asynchronous" memory devices. McAfee Appendix, p. 107 (referring to the "general industry cross-over from asynchronous DRAM to SDRAM" that occurred in "mid-1998."). [4] In 1996, Intel became concerned that DRAM performance was not keeping pace with the existing and projected performance requirements of Intel's microprocessors, and it publicly announced that it had selected Rambus as its "next generation" memory technology. McAfee Report, p. 86. This meant that DRAM

[3] Because of the report's length (over 400 pages), Rambus has not submitted it to Your Honor in its entirety. The excerpts cited herein are included as exhibit A to the Perry Declaration. Rambus does not, by citing to the report, acknowledge that the report is in all respects accurate or should be admissible at trial.

[4] The Complaint states that the essential difference between asynchronous and synchronous DRAMs, or "SDRAMs," is that in the latter, memory functions are linked to a "system clock," which allows the device to operate more quickly. Complaint, ¶ 12.

manufacturers – whose ultimate principal customer was Intel – would have to manufacture Rambus-designed DRAMs. McAfee Appendix, p. 44.

This announcement had a "profound" impact on Rambus and on DRAM manufacturers. *Id*., pp. 44-48. As Dr. McAfee points out, "the single fact of Intel patronage in 1997 all but crowned Rambus as the victor in the DRAM wars from the perspective of many industry analysts and observers in the trade press, and even the most vocal proponents of competing memory architectures conceded publicly that RDRAM would be the dominant form of PC main memory going into the next decade." *Id*., p. 48. The announcement also "prompted a backlash as well, however, as OEMs and DRAM manufacturers disgruntled with the Intel choice increased efforts to bring to market commercially available and cost-effective versions of . . . alternative technologies." McAfee Report, p. 87.

Today, six years after Intel's selection of Rambus DRAMs as the "next generation" memory technology, it is the industry-sponsored DDR SDRAM, not the Rambus DRAM, that is the "dominant form of PC main memory," and Dr. McAfee asserts that Rambus's "likelihood of securing a sizable share of the DRAM market hereafter is slim." McAfee Appendix, p. 177. Dr. McAfee attributes Rambus's fall from favor to what he describes as various manufacturing and technical difficulties in the 1998-2000 time period that kept the production of Rambus DRAMs low and their prices high. *Id*., pp. 134-165.

As these excerpts from the report by Complaint Counsel's economics expert demonstrate, Complaint Counsel intend to explain at the hearing that Rambus attempted

to compete in the marketplace for DRAM technologies, and that the Rambus DRAM was selected by Intel in 1996 as the next generation memory device, thus making it likely to become a *de facto* industry standard. Complaint Counsel will tell Your Honor that DRAM manufacturers were unhappy about Intel's selection of Rambus DRAMs and pushed Intel to adopt SDRAM and DDR SDRAM instead, which devices were being jointly developed by the manufacturers. Finally, Complaint Counsel will tell Your Honor that Intel ultimately "abandoned" Rambus and threw its support to the manufacturers' chip designs, and that Rambus then and only then revealed its IP claims over features and technologies included within the SDRAM and DDR SDRAM devices.

One of Complaint Counsel's underlying assumptions is that the DRAM manufacturers were promoting SDRAM and DDR SDRAM because they believed (having been "lulled" by Rambus) that those technologies represented an "open standard" unimpaired by royalties. As noted above, there is an alternative explanation that is more consistent with the evidence. The alternative explanation is that the DRAM manufacturers *took a calculated risk* that Rambus might some day obtain patents covering their devices, because the manufacturers simply could not accept a loss of control over future DRAM development. The DRAM manufacturers could not accept that loss of control because it necessarily entailed a loss of control over the *pricing* of the DRAM devices that the manufacturers would be building. This risk was considered such a threat that neither the possibility that Rambus might someday assert patent claims to SDRAM or DDR SDRAM, nor the prohibitions contained in the antitrust laws, stood in

the manufacturers' way as they sought to block customer acceptance of Rambus's DRAMs. The evidence on this issue is described in section III, below.

III. ARGUMENT

A. The Discovery That The DOJ's Motion Seeks To Restrict Is Highly Relevant To The Liability And Remedy Issues In This Case.

As Complaint Counsel's expert, Dr. McAfee, has explained, the "fundamental" reason why "DDR was seen as succeeding where RDRAM failed" was that DDR, *unlike the Rambus DRAM*, gained "sufficient acceptance in the mainstream platform to achieve a sort of critical mass in production, which in turn worked to bring down fabrication costs such that DDR could be even more widely adopted." *Id*., p. 165. In other words, the DRAM manufacturers were charging much higher prices for Rambus DRAMs than for the SDRAMs and DDR SDRAMs that the manufacturers were promoting as alternatives to the Rambus DRAMs. This price premium was largely caused by the failure – or refusal – of DRAM manufacturers efficiently to manufacture Rambus DRAMs in sufficient quantities. As Dr. McAfee puts it, because the price difference between the Rambus DRAM and the manufacturer-sponsored alternatives "threatened the commercial viability of the Rambus architecture," Rambus's fate "lay in the hands" of the DRAM manufacturers:

> "Intel . . . required that commercial quantities of RDRAM and RDRAM-compatible system elements be widely available by its targeted introduction dates, which meant that much of Rambus's fate lay in the hands of the manufacturers responsible for

> successfully implementing cost-effective fabrication of the products in sufficient volume to meet demand."

Id., p. 134. *See also id*., p. 135 (noting reports that a "volume supply" of Rambus DRAM was a "necessary" condition to "drive down the price premium associated with the Rambus technology").

In short, as Complaint Counsel's own expert states, the failure by the DRAM manufacturers "to ramp up capacity had the potential to devastate Rambus commercially." *Id*., p. 145. Dr. McAfee appears to attribute the manufacturing shortfalls -- and the resulting price premium that caused the Rambus RDRAM to "fail" -- to technical difficulties that kept production low and prices high. *Id*., pp. 134-165. He *hints*, however, at the possibility that concerted action was involved. For example, he points to trade press reports in the spring of 1999 that "[c]hip companies, from NEC to Toshiba, said they will refrain from building a large amount of [Rambus DRAM] production capacity to avoid a possible market glut later this year." *Id*., p. 144. And he quotes other reports from the spring of 1999 that DRAM manufacturers were applying financial and staffing resources "that could have been spent on bringing the cost of Rambus memory down" to the development of *other* memory technologies. *Id*., pp. 133-4. And in a footnote, he suggests that what he calls "political influences" might have delayed the widespread introduction of Rambus DRAMs, citing to a press report that "argued that Micron might stonewall the [Rambus] architecture to favor instead the lower-cost, presumably higher-profit SDRAM." *Id*., p. 160 n.804.

A decision by an *individual* manufacturer to "stonewall" Rambus DRAM

development by keeping production low and prices high is not, of course, itself a violation of the antitrust laws. But if the failure of DRAM manufacturers to "ramp up" RDRAM production in 1999 and 2000 was the result of *concerted* action, Complaint Counsel's case against Rambus looks very different.

Rambus will not burden Your Honor with *all* of the evidence of concerted action that it has obtained to date. The evidence set out below is sufficient to demonstrate that collusion is highly likely to have occurred:

(1) On November 27, 1996, a few weeks after Intel announced that it had chosen Rambus's DRAMs as the next generation memory device, [REDACTED].

(2) The minutes of a December 3, 1996 meeting of a membership-restricted manufacturer "consortium" called the "SyncLink Consortium" state that "[m]any suppliers are paranoid over the prospect of a single customer, e.g., Intel, having control of market. *We can't resist such a possibility individually. We need some united strategy."* *Id*., ex. E (emphasis added).

(3) [REDACTED]

(4) The following month, at a meeting of the SyncLink Consortium, a manufacturer representative acknowledged that "Intel won't change course unless Rambus fails." *Id*., ex. H.

(5) [REDACTED]

(6) [REDACTED]

(7) Among the messages delivered by Mr. McComas to DRAM manufacturers at the April 1998 seminar was a prediction that Intel was likely to try to force manufacturers to bear whatever higher costs might be involved in Rambus DRAM production, so that the Rambus DRAM is a "guaranteed bad bet for margin enhancement." *Id*., ex. K. Possible strategies to avoid this "bad bet" included "[r]esist popular deployment of" Rambus DRAM. *Id*. One suggested way to accomplish this was by keeping Rambus DRAM production low: "tape out *but do not fully productize or cost reduce*" Rambus DRAMs. *Id*. (emphasis added).

(8) After McComas' presentation, a Texas Instruments employee, Roberto Cartelli, invited McComas to address a meeting of senior executives of the various DRAM manufacturers in June 1998. [REDACTED]

(9) At the June 1998 meeting of DRAM manufacturer executives, McComas suggested that he receive the manufacturers' Rambus DRAM production forecasts in order to create, and circulate, a combined industry forecast. *Id*., ex. M. As he explained in an August 1998 e-mail to a Hynix executive, this service would be useful because "[d]uring the critical production ramp-up phase of Direct Rambus, DRAM vendors will need a constant flow of information to help make wise decisions and *to walk the fine line between a pleasant shortage and a disastrous oversupply*" of Rambus DRAMs. *Id.* (emphasis added). [*See also* Tabrizi, p. 180]. [REDACTED]

(10) The Hynix executive who received McComas' e-mail conceded in his deposition that an "oversupply" of Rambus DRAMs would have been "disastrous" because the price would have gone "way down." *Id*., ex. O. He also agreed that Intel "couldn't start the ramp-up" of Intel products that incorporated Rambus DRAMs unless the price of Rambus DRAMs *did* come "way down," or at least came "very close to the industry standard." *Id*.

(11) In April 1999, an article appeared in the trade press describing the efforts of some DRAM manufacturers to support SDRAM and DDR SDRAM in lieu

of Rambus DRAMs. The article *also* described, however, that Samsung was planning on *increasing* its Rambus DRAM production capacity and thought that it could meet the industry's entire demand in 1999. *Id*., ex. P. [REDACTED]

(12) [REDACTED]

This brings us to the year 2000, when the refusal of DRAM manufacturers to provide a "volume supply" of Rambus DRAMs sufficient "to drive down the price premium" between Rambus DRAMs and SDRAMs finally caused Intel's support for Rambus to "evaporate." McAfee Appendix, pp. 135, 176. In September and October of 2000, Intel announced that it was largely phasing out its product plans involving Rambus DRAMs and intended instead to introduce products incorporating DDR SDRAMs. *Id*., p. 176.

That move by Intel – and the adoption by other customers of the DDR SDRAM device – allowed the DRAM manufacturers to regain control over the development and pricing of their core product. They still had one problem, however. Prices for SDRAM were far too low, and by 2001 SDRAM devices were reportedly selling at or below their production costs. This was alone sufficient to alarm DRAM manufacturers, but the situation was complicated by their past promises to Intel and other customers that DDR SDRAM would – unlike the Rambus DRAM – be priced at or near the SDRAM price. To keep that promise at the SDRAM price levels in effect in the summer of 2001 would mean huge losses. As one September 24, 2001 press report noted, "many companies fear

that the price of DDR SDRAM may follow the path of SDRAM and drop below its production cost in the future." Perry Decl., ex. R.

Having ensured by this point, however, that Intel would not adopt Rambus's technology, the manufacturers were free to increase prices on their SDRAM and DDR SDRAM devices, and they did just that. [REDACTED] The evidence strongly suggests that these price increases were the product of concerted action. While Rambus's discovery in this area has been seriously hampered by the DOJ's motion,[5] Rambus has learned that [REDACTED]. *Id*., ex. T (emphasis added).

[5] Mr. Appleton's deposition was unilaterally cancelled by Micron when the DOJ filed its motion for a temporary stay, and several other depositions were postponed as a result of Your Honor's ruling on that motion. In addition, the temporary stay has led several DRAM manufacturers to refuse to produce DRAM pricing and production documents to Rambus. Perry Decl., ¶ 22.

In sum, there is substantial evidence of concerted action by DRAM manufacturers to affect DRAM production and prices over an extended period of time. When Rambus was a competitive threat to the manufacturers' domination of "main memory" products, the concerted action was targeted at Rambus. When Rambus was removed as a threat, the concerted action was intended to raise SDRAM and DDR SDRAM prices.

This evidence is relevant and important to many issues in this case:

(1) the evidence demonstrates that the DRAM royalties that Rambus has charged since 2000 in connection with its newly issued patents have *not* – contrary to Complaint Counsel's earlier allegations – caused DRAM prices, or the prices of products incorporating DRAMs, to rise;

(2) the evidence also demonstrates that the purported "victims" of Rambus's alleged scheme are not properly viewed as victims at all and instead appear to have engaged in joint boycott and price-fixing activities that are *per se* violations of the antitrust laws;

(3) the evidence undermines Complaint Counsel's fundamental proposition that JEDEC standardization drives memory technology choices or operates to "lock in" those choices. The evidence shows that it was Intel's influence, not JEDEC's decisions, that drives those technology choices. Intel chose Rambus-designed DRAMs not because that design was

standardized (it was not), but because it offered meaningful performance advantages. Intel then chose DDR SDRAM over Rambus technology not because the former had been through the JEDEC standard process (it had), but because the market price of devices incorporating Rambus technology had been artificially inflated by the concerted action of manufacturers anxious to retain control over product development and pricing;

(4) the evidence also undermines Complaint Counsel's contention that DDR SDRAM was adopted by DRAM manufacturers because they were "lulled" by Rambus into believing that it would not assert any intellectual property rights over that technology. The evidence shows instead that the DRAM manufacturers were willing to take that risk because the alternative (the widespread acceptance and use, driven by Intel, of Rambus-designed memory devices) was unacceptable; and

(5) the evidence raises substantial credibility and bias issues for those witnesses on Complaint Counsel's witness list who are shown to have had involvement in or knowledge of unlawful concerted action. If these witnesses are willing to ignore the antitrust laws to assist their employer in an effort to eliminate Rambus as a competitive threat, their testimony in this proceeding about such issues as their recollection of oral presentations about patent policy at JEDEC meetings, or their own awareness of Rambus's patent rights, will be subject to serious doubt.

Finally, this evidence raises substantial doubts about the remedies proposed by

Complaint Counsel, which are supposedly intended to restore competition to a DRAM technology market impaired by anti-competitive conduct. The Complaint in essence seeks to strip Rambus of its valid[6] patent rights because of its alleged failure to disclose to JEDEC its intention to obtain those patent rights. The Complaint argues that had Rambus disclosed those intentions, the industry would not have adopted the DDR SDRAM technology. But if it is true, as Dr. McAfee himself states, that the DRAM manufacturers' "failure to ramp up capacity had the potential to devastate Rambus commercially," McAfee Report, p. 145, and if it is true that that "failure to ramp up" was the consequence of concerted action, then the "but for world" that would have existed in a *competitive* marketplace is a world of Rambus DRAMs. *Any* remedy that would ever be recommended by Your Honor or imposed by the Commission must surely take that fact into account, for any other result would do nothing to rid the DRAM technology market of the impact of the DRAM manufacturers' price-fixing activities, and would instead represent an extraordinary windfall to them.

In short, the DOJ's motion should be denied because the relief it seeks threatens Rambus' ability, and its right, to obtain the evidence necessary to present its case to Your Honor.

[6] Complaint Counsel concede for purposes of this matter that Rambus's patents are valid and that Rambus's founders did in fact invent revolutionary new approaches to improving the performance of memory devices.

B. If Your Honor Grants The DOJ's Motion, You Should Also Stay All Depositions And Continue The Hearing Date.

The DOJ has not met its heavy burden of establishing the need for the "extraordinary remedy" it seeks. *Weil*, 829 F.2d at 174 n.17. Rambus acknowledges, however, that it has not reviewed (and cannot review) the declaration and evidence submitted to Your Honor *in camera*. If Your Honor were to consider granting the relief sought by the DOJ, considerations of due process and fundamental fairness should lead Your Honor also to stay all deposition discovery and to continue the hearing date in this case. *If* the DOJ's interest in prosecuting the price-fixing activities described above is deemed so important that Rambus's discovery into these activities is to be postponed, that cannot mean that Rambus is required to defend itself at the hearing in this matter *without the evidence it needs*. That would mean that the DRAM manufacturers who are the principal beneficiaries of Complaint Counsel's proposed remedies would *also* benefit from their own apparently unlawful conduct.

Accordingly, if Rambus is barred from taking discovery into the price-fixing activities described in this brief, Your Honor should stay all depositions, and continue the hearing, for a sufficient time to allow the DOJ to question Mr. Appleton and the other individuals it would like to interview.

C. A Postponement Of The Discovery Cut-Off And Hearing Date Is Appropriate Even If Your Honor Denies The DOJ Motion, Because Of The Substantial Schedule Disruption That Has Already Occurred.

Fact discovery closes only 30 days from now, on February 3, 2003. As a result of the DOJ's motion for a temporary stay and Your Honor's order granting it, four depositions were continued, a substantial document production (by Infineon) was unilaterally postponed by Infineon less than 24 hours before it was to commence, and other third parties delayed their document productions as well. Perry Decl., ¶ 22. These delays have caused serious disruption to an already overloaded January schedule, and it has become clear that a continuance of the discovery period is necessary, even if the DOJ's pending motion is denied.

DATED: January 6, 2003 Respectfully submitted,

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UNITED STATES OF AMERICA
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RAMBUS INCORPORATED, a corporation.	)	

CERTIFICATE OF SERVICE

I, Jacqueline M. Haberer, hereby certify that on January 7, 2003, I caused a true and correct copy of this public version of the *Memorandum by Rambus Inc. in Response to Motion by Department of Justice to Limit Discovery Relating to the DRAM Grand Jury* to be served by facsimile at 415-436-6687 and overnight delivery to Niall E. Lynch at the United States Department of Justice, Antitrust Division, 450 Golden Gate Avenue, Room 10-0101, San Francisco, California 94102-3478, and on the following persons by hand delivery:

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