1	SUPERIOR COURT OF CALIFORNIA		
2	COUNTY OF SAN FRANCISCO		
3	HONORABLE JAMES J. MCBRIDE, JUDGE PRESIDING		
4	DEPARTMENT NO. 611		
5	00		
6	RAMBUS INC.,		
7	Plaintiff,) Case No. CGC-04-431105) JURY TRIAL		
8	vs.) Volume 65		
9) Pages 8721 - 8855 MICRON TECHNOLOGY, INC., et al.,		
10	Defendants.		
11	}		
12	AND RELATED CROSS-ACTIONS.)		
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16	REPORTER'S TRANSCRIPT OF PROCEEDINGS		
17	Tuesday, September 20, 2011		
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5	Closing Argument by Mr. Nissly (resumed) 8724 65 Closing Argument by Mr. Price 8800 65	
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Tuesday, September 20, 2011

8:34 a.m.

(The following proceedings were heard in the presence of the jury:)

THE COURT: On the record. Counsel are present, 12 jurors, 3 alternates.

Mr. Nissly, you may resume.

MR. NISSLY: Thank you, Your Honor.

CLOSING ARGUMENT (resumed)

MR. NISSLY: Good morning.

So yesterday we started to talk about what the evidence in the case has shown and I showed you the question that you have to answer, at least the first question on the verdict form; and I'll circle back to that at the end of my remarks and go through the verdict form in a little bit more detail.

And between then and now, I'm going to address the issues that I had on my board from yesterday starting with the evidence regarding Rambus's allegations concerning a conspiracy, as they put it, that involved Hynix that fits now their definition of the case, or at least the question you must answer, regarding whether or not there was an agreement to fix RDRAM prices high and DDR prices low.

Let's start, if we could, please, with a discussion of the Hynix plea, because you will recall that is actually the first thing I ever mentioned to you. When we were here in jury selection, if you remember back in June and remember how crowded, even more crowded than today, the chairs all the way up to here (indicating), and we were talking about what the evidence might show and how you would fulfill your role as

jurors; and I mentioned to you, you're going to hear evidence that Hynix pled guilty to a conspiracy involving SDR and DDR but not RDRAM and could you be fair under those circumstances and could you weigh that evidence along with the other evidence in accordance with the Court's instructions. And, of course, you all said yes, and obviously you're all going to follow the oath that you took as jurors to do that.

Because what the evidence has shown, Ladies and Gentlemen, is that the Department of Justice did start an investigation into the DRAM industry in 2002 and Hynix was investigated and Hynix cooperated and Hynix documents were produced to the Department of Justice and Hynix took responsibility for its actions in that regard, and four Hynix executives also took responsibility for their actions.

Now, Mr. Tabrizi and Mr. Byrd and Mr. Martinez, about whom you've heard during the trial, were also part of that investigation and, of course, they did not plead guilty to any conspiracy.

And, so, now let's look to see, you've heard all of the evidence and we've been talking about that since jury selection in June, let's look to see what that involves because the evidence has shown that has nothing to do with Rambus's claims in this case.

Could we look, please, at the first question on the verdict form?

So I showed this to you yesterday. So this is the question that you need to answer first, address first, and it is Rambus's burden to prove this agreement.

Now let's look at the Hynix plea. It's incorporated in Special Instruction Number 1, part of the jury instructions that you will get when you retire to the deliberation room.

Special Instruction Number 1 defines DRAM for purposes of the plea and, as you've heard us say many times and the judge said, but not RDRAM, not included by definition in that plea agreement.

Next.

The plea agreement, Special Instruction Number 1, specifically calls out the OEMs that were directly affected by that agreement; Dell, et cetera. Not Rambus.

Next.

And here is the key language in terms of what was the mechanism, if you will, what was the nature of the agreement there. And as the Special Instruction Number 1 provides, dealt with agreements to limit the rates of price declines, which were achieved with varying levels of effectiveness, and there were agreements on price increases. All right?

So the question before you is: Was there this alleged conspiracy to fix RDRAM prices high and DDR prices low?

And what the plea agreement is talking about is limiting the rate of decline or trying to raise prices, not Rambus's allegation. It doesn't prove Rambus's case.

And there was a limiting instruction. If we could look at that.

Like a lot of evidence in this case, this evidence was admitted with a limiting instruction which gives you rules that you are to follow in how you assess and weigh this evidence

along with the other evidence in the case, and it provides that the evidence is not to prove -- considered by you to prove that these folks had a bad character or a disposition to commit crimes. That's not what it's for.

And for the limited purpose for which you may consider the evidence, you weigh it in the same manner as you do the other evidence in the case. It's not some kind of super evidence. It gets weighed by you in accordance with the judge's instructions along with the other evidence in the case.

Okay, next.

So I'm going to turn to this in a minute, but I do want to take a moment to address the issue of the pleas of the individual Hynix executives who Counsel referred to yesterday in his comments.

First of all, the corporation Hynix is the Defendant here, not these individuals. So that's the plea with which we're concerned.

Two, it's the same companies in those individual pleas, the same list, Dell, et cetera, the same six, not Rambus. There's no mention of Rambus in the individual pleas. There's no mention of RDRAM.

And the issue there is the same issue that's being described in Special Instruction Number 1, which is limiting the rate of price decline or trying to raise the price of DDR. It has nothing to do with the alleged conspiracy of trying to fix prices to have this relative price gap or this difference, this Delta.

So if Counsel for Rambus tomorrow, when they get the final

word to come back to you, because they do get the final word since they have the burden of proof, if Counsel for Rambus comes back and talks to you about those, take a look at those in conjunction with the limiting instruction and Rambus's allegations and you will see that's not what this case is about. Those don't decide this case. That's not what the limiting instruction is about.

What you have to do is put that evidence on the table. You don't ignore it but you put it on the table with all the other evidence, and you look to see what evidence goes to the allegations Rambus has to prove. All right?

Now, let's look. So I just had summarized here in this chart a comparison of Rambus's allegations with the plea agreements, both the corporate plea and the individual pleas.

So Rambus alleges there was an agreement to set RDRAM prices high. It excludes RDRAM.

Rambus alleges there was agreement to set DDR prices low. Not what the Hynix plea's about.

Rambus alleges there was an agreement to limit the supply of RDRAM. The Hynix plea, the individual pleas, they don't say anything about limiting supply.

And Rambus alleges there was an agreement to target Rambus.

Question Number 1 on the verdict form says this alleged conspiracy to prevent, to prevent, Rambus from succeeding as main memory. The Hynix plea and the individual pleas talk about the affected OEMs.

So let's put that now aside and look at what evidence did
Rambus bring you to carry its burden of proof that addresses the

issues here and the conspiracy they are saying took place here.

So let's start with the jury instructions. Let's look at slide 13A, if we could, please, Eric. Thank you.

So here is the jury instruction that defines a conspiracy and agreement. So it says a conspiracy is an agreement with an unlawful purpose, and an agreement exists if two or more persons or companies combine for a common purpose. It doesn't have to be in writing. You don't have a specific document, but parties have to be known -- they must have known they were joining in an agreement. That's what the jury instruction says.

And what that means, Ladies and Gentlemen, there's no such thing in the law as an accidental conspiracy. You don't do this by accident. You have to intentionally know what you are doing and have a common purpose or goal. Okay?

So you have to find an agreement here, and a specific agreement, to do what Rambus alleges was done here. That's what the law requires and that's required by the burden of proof.

Look at the next slide.

So here's the burden-of-proof instruction and it's written in legal language. It says a party must persuade you. Now, it doesn't say "Rambus" there. It says "a party" and that's because the other jury instructions that define the elements of the case specify what Rambus has to prove. Okay? So you can read those words, "a party," to mean Rambus when you're thinking about what it is Rambus has to prove, the elements of the case.

So it is required to prove something is more likely to be true than not true. That's the burden of proof. And then this sentence: (reading)

"After weighing all of the evidence, if you cannot decide that something is more likely to be true than not true, you must conclude that the party did not prove it."

So what that means in practical terms, Ladies and Gentlemen, translation, if you look at all this evidence and you think back over the three months and all those witnesses and you think, "You know, I just can't decide. To me the evidence is equal," we don't think it's anywhere close to equal, but if you think, "Well, the evidence is equal," Rambus loses because Rambus has not carried its burden of proof. That's what that instruction says. Okay?

So, now, let's take a look at some of the pricing chart evidence because there was some presented by the economists in the case. Counsel for Rambus was arguing about it yesterday. And let's look to see what that proves. And let's look and start with the discussion by Mr. Elzinga, Dr. Elzinga, regarding the data.

If we can look at slide 25.

The Defendants in this case and other DRAM companies involved, and you heard the testimony on this, years ago presented all of their sales data, provided all their sales data in electronic form to the parties and the consultants and the economists in this case. So the Rambus folks have had this stuff for years. They had an opportunity to look at it, to massage it, you know, to put charts together, to do whatever it was they thought would help their case from this data.

And Dr. Willig -- or Dr. Elzinga said that he'd looked at

all this stuff, "And Professor Willig and I, we don't have any dispute about the accuracy or the legitimacy of these numbers."

And Dr. Ordover, who's the economist that we called on behalf of Hynix, agreed with Professor Willig and used the same data as Professor Willig on these issues.

So to the extent that Rambus is trying to argue to you now, "Well, there's some issues with that data, we're not sure what it really shows," what they are saying to you is, they had an opportunity for years to look at all of that data. They did not bring you any price charts at all. Instead, they're trying to say, "Well, we're not quite sure what that data shows," and that's because it doesn't help them.

Let's take a look at the next slide.

So what is this, Ladies and Gentlemen? This is a slide, a chart that Dr. Ordover presented during his testimony. And I thought I heard, and maybe I misheard, but I thought I heard Counsel yesterday say that Dr. Ordover didn't look at DDR pricing. Well, that's absolutely wrong. Not true. He did, of course.

It's reflected in the analysis that Dr. Ordover did regarding RDRAM, SDRAM, and DDR. So these are Hynix worldwide monthly prices per megabit. Okay? So they convert these things to a megabit basis so they can look at the prices of 128 or a 64 or 72 so they get them on a common basis. All right?

So they converted all of these to monthly prices per megabit and he charts them over time, 2000, '01, and '02, so forth, so you can look and see and compare. Is this consistent with Rambus's allegation of this alleged conspiracy to fix RDRAM high

and DDR low? No.

So when RDRAM comes into the market here, apparently Hynix sold very little at this time, you know, early in 2000.

Remember, at that time early 2000 Camino is just on the market.

Then there's a break and then Hynix starts to sell RDRAM.

And look to see what happens to the prices of RDRAM sold by Hynix. It falls from about 25 cents per megabit in mid-2000 all the way down to less than a nickel, less than a nickel per megabit, by the middle of '01 and then all the prices basically bump along the bottom here.

You'll recall the testimony that 2001 was a disastrous year in the DRAM business. Prices just collapsed because of the economic situation at the time. So here all of these prices here, as all of these products are bounced along the bottom, they can't go any lower because they're already less than a nickel. Right? So they're all bouncing around together.

So compare the line of RDRAM to DDR, because Rambus says that's what its case is about. Yesterday the charts you were shown by Counsel, they were looking at SDRAM prices. SDRAM. That's not Rambus's case. Rambus's case is about DDR.

Let's take that off for just a second. I do want to look at that in detail but not quite yet, Eric. Thank you.

So here we have this comparison of RDRAM prices and RDRAM starts higher than DDR because not much DDR is being sold in these early months of 2000, and then DDR is more expensive than RDRAM. It's not lower. There's no price gap that's lower. It's more expensive.

And they track each other fairly quickly. Then there is a

period of time when RDRAM is more expensive than DDR. And then they come back together again, and then all of the prices track together throughout this time period.

You were shown a chart yesterday and an argument was made to you that this period in late '01 and '02, when there's a little bit of a bump here, is somehow evidence of or proves Rambus's allegations. Well, not in the Hynix price charts. Hynix charts show we priced all those products together. There's no Delta here. There's no effort -- it doesn't show any indication that Hynix is holding RDRAM price high compared to DDR. That's not what the price chart shows at all.

You were shown and Counsel made an argument and drew your attention to June of 2001, and he did that because he referred to an email written by Linda Turner of Micron, which was an internal Micron email. And it is Exhibit -- let me put my glasses on here -- Exhibit 328, June 5, 2001. And the argument was made, and that was put up against a price chart, and the argument was made to you that shows that the conspiracy was working there. That's how they were doing it.

All right. Well, let's look at Hynix's prices. If you could call up that.

So here's June 2001 and that email is dated June 5, 2001, and, yeah, let's look at the relationships of the lines here.

So in June of 2001, what's happening with Hynix's pricing?

RDRAM pricing is coming down. It's coming down at a faster rate than the price of DDR is going down.

The gap between Hynix's RDRAM price and Hynix's DDR price is narrowing, not widening. It's narrowing. Rambus is trying to

tell you this price chart shows -- the chart that they were showing you somehow proves that there was a conspiracy and it's reflected in the data. That's not true. That is absolutely not true.

Hynix is lowering its price for RDRAM and it's lowering it an at a faster rate than the price for DDR, and these prices are all below a nickel a megabit.

You were given an argument yesterday that, well, the price charts don't show projections -- I'm finished with that, Eric; thank you -- the price charts don't show projections, that the Defendants aren't providing information about pricing projections.

Well, Rambus didn't introduce any evidence of pricing projections at all, and they've had all of this evidence for years.

And then the argument has been made in the trial that, well, there was a campaign of price parity. That was Micron's strategy, price parity, and the argument has been made to you that that's somehow relevant to Rambus's allegations.

Well, let's look to see did Hynix price DDR as the same price as SDR, did Hynix have price parity? Dr. Ordover showed you a chart.

Let's look at 207, please.

So this chart compares DDR to SDRAM because this argument is that there was price parity between DDR and SDRAM to encourage people to use DDR. So this is Rambus's allegation. And here's Hynix's chart.

Can we blow this -- can we pull the chart out, Eric?

And I should say -- take that off for a minute. I'm sorry.

I should say, see these numbers over here in the lower right? So what we have done, or at least we've tried to do, when I show you an exhibit, we put the exhibit number in that box and highlight it in yellow. So as I go through my argument this morning and you see me put up an exhibit and you're interested in looking at that exhibit in the jury room, write that number down. That's how you can keep track of it.

When I show you a piece of testimony, we put the trial transcript citation. It says "TT," trial transcript. You don't have the whole trial transcript in the jury room, but you do have an opportunity to ask for testimony under some circumstances if the judge permits it.

So now let's go back. So what does this chart show? If there was price parity, it's comparing the SDRAM -- or the DDR price, rather -- the DDR price by Hynix for this period of time to the SDRAM price; and if there was price parity, if the products had been priced the same, the blue line would be sitting flat on top of the black line.

If it was close to price parity, the blue line would be close to the black line bouncing along on top of it. But what does this chart show you? It shows you to the contrary. It shows Hynix's DDR price bouncing all over the place and in no way, shape, or form could you look at that chart and say that Hynix was engaging in any sort of price parity with DDR and SDRAM.

So Rambus's claim there doesn't hold water. Not true. Not proven.

I want to turn my attention now to talk about Dell because Dell's a big part of this case. In fact, Dell is the only OEM that Rambus really came to you with any evidence about. Right? They talked about OEMs. They talked about this company and that company; but when it really came down to it, what company did they have any evidence about or any allegations about regarding alleged price fixing or misconduct? It was about Dell.

And let's talk about that because that is a critical fact in this case; and when you consider and look at the evidence that came in on Dell, what it shows is Rambus is flat wrong when it makes those accusations against Hynix.

Counsel for Rambus mentioned yesterday a couple of times, "Oh, there was a coverup. There's no paper trail of any of this," with regard to the Hynix evidence.

Nonsense. There are tons of exhibits. Rambus had them. Tons of exhibits. Emails, all of the information, our price information. In fact, I'm going to show you the price chart that had the exact prices that Hynix sold RDRAM to Dell to. They had all of this information.

Is Rambus trying to suggest to you that somehow somebody at Hynix went through all of the records and figured out how to get rid of anything that might prove Rambus's allegations in this case over all this period of time? That's nonsense. It's Rambus that is the one that had the companywide shred days and got rid of the backup tapes. That allegation is dust. It's smoke. It's just rhetoric.

Okay. So I'm going to show you a timeline for Dell, which means I have to put up a board.

So this is a timeline that summarizes key pieces of evidence that came in during the trial regarding Dell, and we've annotated this one with the TX numbers. And I'm going to keep the board up while I go through some of the evidence; but if you want to make a note of the date or the TX number, then it's here for you.

And the shading reflects the fact of the time period when Hynix was qualified at Dell. You'll recall lots of discussion about that.

So in the white over here on the left-hand side and there's a green, vertical green line here I'm pointing out with a pointer. That was the period of time that Hynix was not qualified to sell product to Dell.

And over here on the right-hand side there's a red line because, as the evidence showed, in August of 2001, Dell stopped doing business with Hynix, said that they didn't want to buy anything from Hynix at that point.

So if we start over here on the left-hand side in February of 2000, Sang Park, the president and CEO of Hynix, wrote that email that said, "Hynix will support Dell with as much RDRAM as we can produce."

And you will recall Mr. Tabrizi's testimony in that regard where he said that Sang Park instructed him, when the Camino chipset came into the marketplace, when product started to become available in early 2000, "Look, I want you to support Intel. That's what Intel wants us to do. Then that's what we will do." And, so, that is what that email discusses.

And then in March of 2000 there's a Dell summary that talks

about a worldwide excess.

Let's look at that slide, please, 21.

So this is March of 2000. March of 2000. Camino has been in the market now for, what, about four months, three months, something like that? And there have been suggestions made to you in this case that there was somehow a shortage of RDRAM at some period of time. And the only evidence that's ever been offered in that regard is from a few pieces of emails and evidence related very early in 2000.

And that's because what happened was, and Mr. Tabrizi explained this, other witnesses explained this, when Intel postponed the second launch of Camino, and they got to September and they had to postpone the second time.

Remember that was indefinite. It was an indefinite postponement. Dr. Horowitz said that. Mr. Tabrizi said that. And, so, the consequence of that was that the DRAM companies stopped putting wafers in their fabs. And the wafers we had in the fabs we had to stop because there was no market for those and we didn't know when the market would come, when Intel would release Camino so when we could actually start selling. So all those wafers stopped.

Then they released the product in November and they say, "Okay. Now we're ready to go. Let's go." And that means the DRAM companies have to go in, including Hynix, have to go in and put wafers in the fab and start it.

And the cycle time for those wafers is about 90 days. You put them in the front end. Three months later they come out the back end and then they have to be packaged and tested and stuff.

So there's about that three- or four-month window when you don't have any product because it takes you that long to manufacture it.

So if Rambus shows you some exhibits, if Counsel tomorrow argues to you, "There was a shortage" -- in fact, I think, if I recall right, Dr. Elzinga said something about this -- "There's a shortage. Why aren't they producing," well, in fact, there are wafers in the fab but it takes some time.

And it's clear that by March of 2000 there was plenty of RDRAM in the market because here is Dell, March 13, saying: (reading)

"Here's our summary of Rambus. We are anticipating WW," worldwide, "excess of Rambus for the first quarter of 2000."

They're say they have \$28.7 million too much, too much.

They don't need any more. And the above numbers assume the sales will hit their forecasts and current sales are only 20 to 70 percent of the forecast on most RIMMs, meaning most RDRAMs.

What is that telling us, Ladies and Gentlemen? What is that showing? So here's this product, Pentium 3, and the Camino chipset using RDRAM, and you know from the evidence in this case that it had no performance advantage. Pentium 3 with Camino and RDRAM had no performance advantage over the existing product in the market and it costs more because of all the reasons that you've heard about.

So here you have a product that costs more, that has no performance advantage. Guess what? That was not a great product. That was not a successful product. And that is

exactly what Dell is saying, "We don't have any consumer demand.

Our forecasts are only 20 to 70 percent of sales."

Now, let's look at the pricing email, and there's been much discussion about and much discussion yesterday regarding a so-called reference price email. You were shown this in argument yesterday and it's dated in April the 17th, April 17th, 2000.

So what does that show? Well, let's look at -- let's look at the pricing with regard to that email. Let's look -- and let's take this -- actually, you know what? Let me change subjects and go to the next slide. I'm sorry. I confused you. I confused myself.

So there was a lot of discussion about Dell asking for low prices. I'm going to come back to the reference price in a minute but let me talk about this issue first.

There was a lot of discussion yesterday about Dell asking for low prices and the argument was made to you that Dell asked for low prices at the end of the year and the DRAM companies wouldn't agree to it and Hynix wouldn't agree to it, and that showed somehow that there was an alleged conspiracy here. So let's look what the evidence actually showed.

So Dell at that meeting on May the 17th of 2000 asked DRAM companies to commit to sell RDRAM at \$140 by the end of the year. By the third quarter, okay? They're forecasting this price. They want \$140 by October. That's the exhibit number.

And the argument was made to you that Hynix wouldn't agree to that and that was somehow evidence of this alleged conspiracy. But look at what Dell internally was projecting the

price for that time period was for SDRAM.

This document, TX 6710, Dell is saying, "Our forecast for the price of SDRAM in the fourth quarter is \$165." \$165. \$25 more than what they're saying they want RDRAM sold to them for.

So Rambus is telling you that rejecting Dell's request for \$140 was wrong, that was somehow conspiratorial. But what Mr. Tabrizi told you was, "When Dell asked us for that price, I told them they were crazy."

There was this meeting held on May the 17th, 2000, the RDRAM Ramp Event. That was in Phoenix, if I recall correctly, when Intel called the DRAM companies together. They had Dell. They had other people. That's the meeting, remember, Mr. Tabrizi wrote the presentation slides for and he had to send them to Intel for approval and they sent them back a couple of times because they didn't think they were positive enough about Rambus.

And at that meeting Dell stood up in that meeting and said, with everybody present, and said, "We want \$140 by the end of the year." And Mr. Tabrizi testified, "That's crazy. We can't sell you SDRAM for that price. That's nuts." And other people at this same time in the same meeting said the same thing.

And Rambus argues, "Oh, well, that shows somehow that there was some kind of a conspiracy." But Dell internally knew that that price was crazy because they were projecting an even higher price for SDRAM. It doesn't prove anything.

And then you were shown Mr. Tabrizi's emails, and they referred to yesterday, the emails he wrote on June the 7th, 2000, from Micron and Infineon about that pricing demand. And

that was the one where he said, "You know, these people ought to get their head out of the you know what and go smell the roses."

And he was right about that.

And then Rambus even tried to argue to you, "Oh, look at the bottom of that email. It says confidential. Confidential.

Don't forward to unwanted persons. That shows you that that was conspiratorial." Come on. It was about the picture that was attached to it because there was nothing confidential about that information at all. That's what they had talked about in May. It doesn't prove a thing.

There was a lot of discussion about Hynix being qualified. If we look at the chart over here on the left-hand side, you see that in June of 2000, Hynix was finally qualified by Dell with the 700 megahertz parts. Hynix was never able to qualify on the 800 megahertz parts. Dell had actually qualified Hynix a month or so before this, but they wouldn't put them on the ASL, the approved supplier list, until June.

So finally in June Hynix gets qualified, is in a position now where they can sell and, so, Hynix did start to sell RDRAM to Dell.

And now let's look at the prices. Let's look at slide 24.

This chart is in evidence, Ladies and Gentlemen. It is in evidence under 11414A, although the version you get doesn't have the highlight. Okay?

And this information does not come, Dr. Ordover explained this, does not come from Hynix's sales information. This is Dell's documentation down here on the left-hand side, Dell's information that they provided. So this is Dell's information

about what they paid for RDRAM.

And the part that's being summarized on this chart, it's the same part that's being discussed in that so-called reference price email. That was the testimony. That was the evidence.

And what does it show? And Dr. Ordover testified to this. What does it show? It shows that in the 11 months in which Hynix sold RDRAM to Dell, Hynix was the lowest priced seven out of those eleven months. Hynix was the low price leader at Dell. That's what it shows.

And, so, it was argued to you yesterday that, "Oh, there was this reference price. Samsung had a 250-dollar reference price. They don't want anybody to go below that and somehow, some way there was some sort of an agreement."

Hynix didn't sell at \$250. The first RDRAM Hynix sold to Dell was at \$240. And then Hynix, the first RDRAM sold in June, was \$240. Then Hynix drops the price 50 bucks, \$50, to 190. Charges that for two months. In October Hynix's price is 184, but Toshiba was 180. And, remember, Toshiba and NEC, which eventually became Elpida, they're not alleged to be conspirators in this case. So you can look at that pricing chart and look at that.

Hynix keeps dropping the price, dropping the price, dropping the price. By March of 2001, nine months later, it's got the price down to \$120, 50 percent reduction.

Rambus is talking about an alleged conspiracy to hold RDRAM prices high. Every single time Hynix dropped the price, with the exception of one month it held it at 190 and one month it held it at 120. That, Ladies and Gentlemen, is not evidence of

a conspiracy. That is evidence of Hynix competing on price at Dell, the only significant buyer.

Hynix sells RDRAM to Dell at \$37. I don't know what that was about. And then \$70 is the last sale.

It's in evidence. You can compare for yourself. You can look at that. And you cannot look at that chart and those prices and look to see what Hynix did and come away with a conclusion that there's proof, there's any proof of a conspiracy here.

I would like, since I referred to it -- let me just find the right reference here.

Bring up 211, if you would, please, Eric.

So this is about the reference price email. And the argument was made to you that there was somehow an agreement with regard to the Samsung price. And you weren't shown the response to that email, which I showed you during trial and which you'll find in your books as Exhibit 10420.

So April 28, 2000, Byrd, Charles Byrd, is writing back to David, David Culp, who's the procurement guy at Dell, and he's giving him a quote on those units he was asked for in the reference price. And look to see, it's the same part, 6182T. That's the 128-megabit part that's the subject of that price chart I just showed you. It's that product description. And look at the quantity. Ten. Ten modules. Because these were for development purposes. And Hynix quotes \$248.

So so-called reference price was 250. Dell's price was 240. Hynix quotes 248. No agreement. The price chart shows that.

And then Mr. Byrd says: (reading)

"Is there any word on getting Hynix officially on the ASL? Our qual," qualification, "was completed on March 31st. Now it's April. I've been pushing hard to get Hyundai to increase production but this delay of adding us to the ASL is being interpreted that the demand for Rambus is not there and causing some doubt about Rambus being successful."

Causing -- being interpreted demand for Rambus is not there. And that's exactly consistent with that internal Dell document regarding the excess of RDRAM because RDRAM with Pentium 3 was not good. Performance wasn't good. It wasn't any better than what was in the marketplace already.

So here's Hynix pushing Dell, trying to sell to Dell, quoting prices to Dell, undercutting prices to Dell when they get qualified. And Rambus is saying there was a conspiracy. That's not what the evidence shows, Ladies and Gentlemen.

So if we go back to the chart here. And can we bring this, the chart, up on the big screen? There we go. Thanks.

So we've been talking basically about the chart through about the first half here. So Hynix is finally qualified, starts selling.

We've talked about the email that Rambus talked so much about regarding the pricing demands for Dell by the end of the year. And then there was an argument made to you that, well, there was a request by Dell for Hynix to quote pricing for 2001; and that Dell wanted Hynix to quote pricing for 2001, and they sent an email, and there is a discussion by Mr. Byrd about the so-called scenario one, scenario two, Exhibit 683.

The argument was made that that was evidence of an alleged conspiracy. And you were told that there's an email of the same day from Mr. K.C. Suh referring to some discussions, and that that was somehow evidence.

Well, look at that. Look at that in the jury room, because you'll see the email they're referring to from Mr. Suh has nothing to do with Dell and nothing to do with RDRAM. It doesn't discuss it, doesn't speak to it at all.

In fact, frequently yesterday, and I have every expectation it will be done again tomorrow, when there are references made to emails or to documents, Rambus is never clear or specific about are we talking about DDR, are we talking about RDRAM, are we talking about SDR, SDRAM. There's a constant effort made to brush over, to obscure, to throw dust in the air about what is being discussed, which product is being discussed.

And that's critical, Ladies and Gentlemen, to your review of the evidence because of Rambus's allegations here, because of what Rambus has to prove. So you look at emails. You look at documents. You consider the evidence in this case. Focus on what are they talking about because Rambus doesn't want you to look at this and this is a prime example.

They put an email the same day and they put it on top of and referred it to the discussion about Dell and trying to tell you that that shows that there's a connection when there isn't any such connection.

In fact, as the evidence showed, after Dell came to Hynix and said, "We'd like to talk to you about supplying us product for 2001," Hynix gave Dell a presentation for 2001. That's

Exhibit 10012. And in that presentation, the Hynix folks went to Dell, they sat down with them, and they said, "Okay. Here's the business we did with you in 2000 and here's our proposal for business in 2001, and here are the products we're going to support you with."

And Hynix specifically said to Dell, "We want to support you with RDRAM, and we'll have 800 megahertz this year. We know we didn't have it last year. We know you want that. We'll have that for you, 800 megahertz, and we'll have the next generation for you."

And they said to Dell, "We will give you MFC pricing." And Mr. Tabrizi explained that to you, that's most favored customer pricing. So Hynix goes to Dell in April of 2001 and gives them their presentation for the 2001 year business. And what does Dell do? They say, "We promise you the best price. We will support you," et cetera.

Dell, a few days later, a couple of weeks later, rejects

Hynix's efforts to qualify the 288-meg generation. That's the

Exhibit Number 10213.

So Hynix says, after the presentation, "Here is our 288-meg part. Please qualify it." You know, run it through those tests we talked about, et cetera. "Please qualify it so we can sell it to you." Dell writes back and says, "No thanks. We have plenty. We don't need you. We're not interested in qualifying your part."

And then in August, and that's the exhibit number there, 11288, Dell says to Hynix, "We don't want to do business with you anymore." They were consolidating their suppliers. They

wanted fewer suppliers. Hynix didn't make the cut.

So that's the evidence, Ladies and Gentlemen, on Dell. This is the centerpiece of Rambus's argument that there was a conspiracy here regarding Hynix. Because the evidence is clear, Hynix made RDRAM, produced it, sold it. The Dell story falls apart when you look at the evidence in this case.

You were shown emails that had discussion about pricing and you have an instruction on that.

Can we look at slide 16?

This is the jury instruction on the exchange of price information. So this is the legal rule which governs this part of the case. Exchange of price information among competitors not illegal unless it's part of an agreement.

What was the evidence at trial about the availability of price information?

Let's look at slide 17.

The evidence at trial was that in the DRAM industry, there's a lot of information about pricing available. A lot.

This is a Rambus document, 7404. It's a conference call script that David Mooring, then president of Rambus, used when he was talking to analysts, security analysts; and he told them, "Oh, I just looked up RDRAM on pricewatch.com. I had 67 pages with a dozen line items per page."

Slide 161. Next slide.

And Mr. Tabrizi told you about DRAMexchange.com because that relates to the spot market. There's an element of the DRAM industry where they sell DRAMs to people who don't buy them under contracts. They buy them on the spot market as they need

them. And the spot market pricing information is widely available, including on DRAMexchange.com. You go there, you can seal the Hynix price, the Samsung price, et cetera.

And there are also distributors of DRAMs. We had evidence and exhibits on distributors. Distributors buy up DRAMs from various sources and they sell them, usually small quantities, to people who aren't buying from the big sellers. So you get price information from those folks as well.

So the idea here that there's not a lot of price information, nobody knows what people are charging, of course, that's not what the evidence showed.

And the evidence also showed that customers, OEMs, would tell DRAM companies what their competitors were charging because they were playing them off against each other. So they'd go into a customer and a customer would say, "Well, so-and-so is selling it for this. If you want my business, you've got to sell it for that." That's all going on.

Rambus also offered you evidence about language that they felt showed some kind of conspiratorial purpose or motive; and that, in particular with regard to Hynix, they were fond of Mr. Mr. Tabrizi's RDRAM killing email and there was a reference made to that yesterday as well.

So let's look at slide 18.

How many questions did Mr. Williams ask Mr. Tabrizi about that email? Ten? Twenty? I don't know. Many.

Mr. Tabrizi said, "Well, I really want to ask you to let me go back to my old mode of RDRAM killing." Look at that email in the jury room, Ladies and Gentlemen, it is Exhibit 762, and you

will see what Mr. Tabrizi was talking about was his difference of opinion with his boss, Sang Park, about the resources and the priorities that Sang Park had imposed on the company because Sang Park had decided that the company would support RDRAM and support Intel.

And you'll see that Mr. Tabrizi is saying, "Look, we have too many development projects here. We need to focus our resources. Let's focus them on this list." And RDRAM is on this list. And he says, "I want to promote open standards."

And you could not possibly have sat here and listened to Mr. Tabrizi testify and not come away with the clear conclusion that Farhad Tabrizi liked open standards. He did. He thought they were better for consumers. He thought there were benefits and advantages to open standards, and he said that to anybody who would listen: Rambus, the press, his superiors, et cetera.

And Rambus, did Rambus use that same kind of language? Yes I asked David Mooring, "Well, did you hear people at Rambus say they wanted to kill DDR?"

"Yes, I'm sure somebody's said that before."

How about their strategic plan, squash competition? How about Richard Crisp? He proposes to Micron, "Let's drop SyncLink. Shoot it in the head. Say it's hopeless."

So is this the kind of language that people use? Yeah, that's the kind of language, tough, rough language of competition that people use.

In fact, the argument was made to you yesterday that email was the basis for punitive damages against Hynix because it showed some sort of malice. What it shows is Farhad Tabrizi

expressing his opinion, as he has the right to do, about competition in the marketplace.

And then an argument was made -- can we look at slide 206?

An argument was made that, "Oh, there was no testimony about what Mr. Park said in response to that email or Mr. Tabrizi didn't go see him." But you were not shown what the evidence was in that regard.

He was asked:

Did Sang Park tell you he agreed with your recommendation?

He didn't say -- Sang Park never said he agreed with Mr. Tabrizi.

And after the email, did Hynix change its business plan one whit?

15 No.

Did you ever hear Sang Park say he wasn't absolutely committed to RDRAM?

18 No.

That's what the evidence is.

I want to address a couple of specific items here that were raised by Counsel yesterday because I think it's important to put them in context with the timelines we've been talking about as you assess the evidence in this case.

Let's look at Exhibit 208, please, or slide 208.

Reference was made and argument was made regarding an email that Mario Martinez wrote in July of 2000 -- pardon me, 1999, right, 1999. Mario Martinez, July 20th, 1999, that's the exhibit number. And the argument was made to you that that

shows somehow that there was an agreement with Samsung regarding pricing or supply.

Mr. Tabrizi was on that email along with Mr. Martinez and some other folks. And Mr. Tabrizi told you, "Look, this is some guy making a suggestion. I did not coordinate any meeting.

Nobody in my group had any meeting with Samsung to discuss controlling price for Rambus."

And look at the date. 1999. Camino's not in the market.

There is no market for RDRAM for main memory because it doesn't come out for months after this.

Again, this is kicking up some dust. In fact, there's no evidence from Samsung that any such meeting ever occurred. And Ordover, Dr. Ordover, showed you the differences between the various companies on pricing and production. That doesn't prove Rambus's allegations.

You were shown other emails.

Could we look, please, at 203?

And here, as you assess the evidence in the jury room, as I said briefly, as I said yesterday, my brief remarks, when we started to discuss the evidence in this case, you have to pay attention to the timeline and you have to figure out where does it fit because Rambus mixes all these up together.

Just like the one I just showed you from 1999, you know that there's no market for RDRAM until the end of 1999. It wasn't supposed to come out until before then and then they had the two slips. So when you see emails or documents before the date when Camino is in the market, take that into account in what it proves or doesn't prove regarding Rambus's allegations.

And then look to see, well, is this evidence after the contract between Rambus and Intel was terminated? Because, remember, they terminate the agreement in September of '01. September of '01. So no chipset support from Intel after that date. They had one in the pipeline before, but it was just a revision. That was Tehama-E, just a revision to Tehama.

So look at it after that date to see whether or not it proves anything or doesn't prove anything. And that's why I put there caution, evidence unreliable. Take a look at that evidence in conjunction with the timeline to figure out if it goes to any issue in this case. Look at 205.

And to the same extent, unreliable evidence, this is price information in exhibits. And I made this point just a few minutes ago. Does that document mention RDRAM? Does it talk about pricing DDR low? And there's a reference here to the jury instruction. Because Rambus's allegation is RDRAM high, DDR low, prevent RDRAM. Very specific kind of an allegation that they have to prove.

So you ought to be taking that, thinking about that, and taking it in to account when you assess the evidence in the case.

All right, let me change subjects on you.

We talked a lot in the case about Intel for obvious reasons, and let's look, please, at slide 108.

This is the substantial factor jury instruction. You see the jury instruction in your jury instruction book and you'll see the phrase "substantial factor" in the verdict form that we'll go over.

So this is the test by which you gauge whether or not there's causation here in terms of Rambus's allegations. So the first part of the instruction talks about a substantial factor. It's a factor a reasonable person would consider to have contributed. It must be more than remote or trivial. It doesn't have to be the only cause.

And then the second sentence, which is critical to this case: (reading)

"Conduct is not a substantial factor in causing harm if the same harm would have occurred without that conduct."

Here Rambus is alleging that its failure to become main memory was because of the conduct of the Defendants. So you have to look at the evidence and assess what were the factors that caused that.

So when you look at that evidence and you consider that evidence, your mind goes to the evidence that took up so much time in the case, principally starting with Intel. If Intel's decisions on RDRAM chipsets resulted in RDRAM becoming a niche product, not main memory, Rambus loses because the harm that Rambus is complaining of, that it didn't succeed as main memory, was caused by Intel under that determination of the fact, not because of any conduct of the Defendants. That's a critical issue in this case.

Rambus is complaining that it failed to become PC main memory and that's the responsibility of the Defendants, but Intel could make Rambus and they could unmake Rambus. Rambus itself acknowledges that.

So the conduct of the Defendants, as proven by the evidence in this case, did not cause Intel to make those decisions about RDRAM chipsets. There's no substantial evidence, there's no credible evidence that that's what happened here. No Intel witness who came here and testified told you that. Intel didn't -- Rambus didn't call an Intel witness to tell you that, and that's where that comes in, that evidence comes in to this case. That's what is a substantial factor. That's what that language is talking about.

And there was lots of other evidence of the reasons why RDRAM did not succeed as PC main memory. All of the flaws, all of the problems, the cost adders, the heat, the power, the latency, all of those issues, the rise of the value PC marketplace, part of the market where Rambus really has no value, no value proposition, all of those things, being rejected by key participants in the industry like AMD and Apple and others, all of those factors go right to this issue of substantial factor.

So conduct is not substantial factor in causing harm if the same harm would have occurred without that conduct. So look at that jury instruction and look at that phrase in the language of the verdict form because that is where Rambus's case falls apart.

So let's look at Intel in a little bit more detail.

So here's the same timeline from yesterday only this one I put the TX numbers on. So you can look at this one and if there are particular events or pieces of evidence there, you can jot down the TX numbers. So I'm not going to go through the

timeline again because I did that yesterday. 1 What I am going to do is look at some specific pieces of 2 evidence that relate to it, but it lays out the key dates 3 4 relating to Intel in the case; the Camino slips, ADT, the various meetings, and so forth. 5 6 Let's start at the beginning in the sense of let's look, what did the contract between Intel and Rambus provide with 7 regard to Intel's support? 8 Let's look at slide 54, please. 9 10 So this is the "Make Us King Agreement," November 15, 1996, 11 and here's the key language: (reading) 12 "Intel's main effort to develop a new interface for the mass production 1999-2002." 13 This is the gatekeeper, the gateway to PC main 14 1999-2002. memory and Intel's obligation is defined by that time period. 15 Instead what you've heard from Rambus in this case is, 16 "Well, that somehow doesn't count. It doesn't count. It could 17 18 be a lot longer, all the down -- you know, all the way to 2010." That's not what the deal was between those companies, and 19 20 there's no dispute about that. Let's look at the next slide. 21 22 Dave Mooring wrote a letter, October 1999: (reading) "Intel's commitment, RDRAM primary DRAM for PC 23 main memory 2000, 2001, and 2002." 24 I asked him about that sentence when he was on the stand. 25 asked him, "Mr. Mooring, you were referring to that language in 26 the contract; weren't you?" He said, "Yes." That's the 27

agreement between Rambus and Intel.

28

So they signed the contract. They start to develop the product. They assign engineering teams. The problems start. You know, they're having difficulty with the packaging. They're having difficulty with all these issues that are discussed in that post-mortem document that we talked about yesterday. If you will look at the post-mortem document, you'll see the discussion of all these issues.

And Intel knows -- let's look at the next slide -- Intel knows fairly quickly in the sequence of events here that there's going to be a problem and so does Rambus because they have a meeting in April of 1998. And this is Mr. Tate's summary of that meeting, executive summary. He says, "Intel says they are going to compete with us on the next generation." The next generation. And this is in 1998. Camino is nowhere near the market yet.

Then 1999 comes and the first Camino slip is announced in February of 1999. By that time -- well, they had the first slip in February. Because it was supposed to come out in June and they knew by February they were not going to be able to make that date so they announced the first slip.

And then can we see the next slide, please?

And then in March of 1999, Intel has an internal meeting where they talk about the desktop memory road map. March 17, 1999.

And, so, what Intel is doing on this page in that document, Exhibit 5853, Intel is listing the demand that they have from the OEMs versus Intel's projected demand. So they go through and they figure out, "Okay. What are the OEMs going to buy from

us?" And they're talking about the chipsets for RDRAM. "What are the OEMs going to buy from us? What do we think we're going to sell?"

So the OEM is 85 million units. Intel's projection is 162. Intel has got a 77-million-unit Delta here. Their projection is 77 million units higher. And they say, somebody is being a little bit -- this is an understatement here, "Well, we better reconcile that difference." Right?

And this is when Will Swope gets involved. He testified to you that this is when he's asked by his seniors to get involved in the RDRAM project because he's kind of the fixer. Right? His superiors tell him, "Look, there's a problem here. We've got a problem with this Rambus situation. We've got to figure out what's going on wrong and how can we fix this, because this is a big problem."

Let's take a look at the next slide.

One of the things that's the take-away from that low demand projection from the OEMs is there's no consumer demand for RDRAM. There's no consumer demand. Just what Dell saw. Because costs more, no performance, the other stuff is cheaper. This is not a good product.

Swope says, "This is a very, very big deal, what that chart says. We're going to have a product and not be able to sell it. This is a very, very big deal."

So 1999 continues. They continue to have the problems with RDRAM. They can't bring it out into the marketplace. Intel then starts the ADT project or restarts it, if you will. Intel announces in June the PC133 chipset for Pentium 3. And then

Intel talks to Hynix and the other DRAM companies about what's 1 coming next. 2 Slide 60. 3 4 So here we are in August 30 of 1999, Mr. Tabrizi talked about this presentation. And this is the one where they're 5 6 shown the road map that continues on to 2003 and identifies it's time to start working on the next technology because that's 7 what's coming next. 8 9 This is August of '99. Camino is not on the market. There 10 is no issue of pricing. There's no issue of availability. 11 not there, and it's not there because Intel and Rambus haven't 12 fixed the chipset. Next. 13 14 So in October of 1999, Intel holds that CSD meeting about which you heard so much. This was a meeting of the senior 15 executives of the company and they talk about the next memory 16 technology. They're talking about kicking off that next -- the 17 18 discussion with the industry leaders. Minimal, if any, role for There's an opportunity for a technology after RDRAM. 19 20 That's going to be cost focused because that's the most important thing, cost. And the first production target is 2003. 21 22 Next. 23 (reading) "Rambus is unstable with the industry." 24 You'll be able, obviously, to read the whole thing. 25 26 8207B: (reading) 27 "Rambus is unstable with the industry. Near term

minimize the business risk with a flexible road map."

28

So here was Intel's problem. This was discussed with you by the witnesses, by Mr. Tabrizi. Here's Intel's problem. They have this plan for these chipsets. They've got the Camino and the Carmel chipset coming, right, for Pentium 3 and they have SDRAM they can use with Pentium 3; but for Pentium 4 their plan is Rambus only. That is the plan that they've committed to.

And it takes 18 months or so to develop a new chipset. So Intel has a near-term problem, which is what they're discussing there, and then the long-term problem.

So what they say is, "Okay, for the near term, we'll support Rambus as the market delivers but we'll begin the backup for SDRAM and later to DDR." Because that's the issue they have to deal with near term. "For servers and work stations, embrace DDR; and then for the long term, transition away from Rambus for '03 and beyond via NMT," next memory technology. That's Intel's plan and that's Intel's decision in October of 1999, before Camino is on the market.

Remember I talked to you about substantial factor? When you read that jury instruction and look at the verdict form, think about what happened at the October CSD, and the witnesses told us about the decisions.

Slide 61.

This is the testimony from Dr. Bhandarkar. I know I'm mispronouncing the man's name. He says: (reading)

"The CSD recommendation was to get away from Rambus technology. It was a broadly held view we had to do something different."

That was Intel's decision. And this is the gentleman who's

responsible for Intel's road maps. His title at the time was the director of Intel architecture and strategic planning, responsible for Intel road maps, including the processor and the chipsets. And he's saying in that October meeting, "That was the decision. We've got to do something different."

So Intel did do something different and they started along this path.

Let's look at 64, please.

So they had the dual road maps. They had the road maps that were public that were shown at IDFs and other functions. This is the one shown in February of 2000. That's its exhibit number. They were shown that showed the road map through '02, but the private road map shown to the DRAM companies had '03 on it and showed the next technology.

And, of course, the reason why, you know, because you heard the witnesses explain it to you, the reason why is they've got to have Rambus in the near term.

And that's exactly what they told Hynix and that's what Mr. Tabrizi said and that's what he said his boss Sang Park told him to do. "When Intel comes to us and says we need your help in the short term because we've got to have Rambus support for Pentium 4, otherwise we have no way to sell Pentium 4 processors in the short term until we can get out a chipset for SDR and DDR for Pentium 4," but in '03 things are different. "We're changing, redesigning and coming out with new chipsets, and we're moving away." And all through this time period, that's what the witnesses have talked about.

So what does Rambus do in response to that? What is

Rambus's response? Because they know what's going on. They make a critical decision, Ladies and Gentlemen. Rambus makes a critical decision, a critical choice. In January of 2000, Rambus starts its lawsuit campaign. It starts suing people and it starts with Hitachi.

Rambus has taken the position with you that that did not have any significant impact on its relationship with Intel. And that is wrong. Paul Fahey came to trial, testified and told you about the impact that that decision had on the relationship with Intel.

Let's look at slide 65, please.

January 2000, Rambus launches Lexington. And the actual answer that Mr. Fahey gave is quite long. We couldn't put it on a slide so if you indulge me for a minute, I'm going to read it to you.

This was Mr. Fahey's answer and you probably recall how emotional he got when he said this to you. He was asked: (reading)

"How was this devastating to Intel, Intel's state of mind?

"Because for the Intel people working on this project, we believed that if we didn't have RDRAM, we would not be able to ship our key processors. We would lose an enormous amount of business to AMD and it would be -- it would just be absolutely devastating to Intel's business. So we dedicated our lives. We had people that took medical leaves of absence. I had colleagues whose marriages were

ruined because they worked so hard on this project.

"And, on the other hand, the Rambus people working with us, we were puzzled, continuously puzzled, that they just didn't seem as concerned and we couldn't understand why because we thought it was do or die for their company. If Rambus worked, there company flew. If it didn't, it sunk.

"And when we saw this notice and started hearing from the memory suppliers that they were all going to be asked to pay for the non-Rambus memory, everybody that I talked to, everybody that I worked through this all had the same reaction, the same conclusion as me, that there was always a plan B. This was just about Rambus trying to get their money one way or another. If RDRAM worked, I get my money. But I had plan B and if it didn't work, I'll get my money that way. That's why they didn't care."

Paul Fahey was the program manager for Intel who told you about how hard he worked on this. And Rambus tries to suggest to you that their decision, their choice to start suing people, the customers, supposedly the DRAM companies that they call their partners, that that had no impact on their relationship with Intel? That is not what Paul Fahey told you and you'll recall how he gave that testimony.

At the same time, virtually the same time, January 2000, Will Swope testified to you about his efforts to work out these contract issues with Rambus. Mr. Swope told you how concerned Intel was about the so-called guillotine clause in their

agreement. That Rambus had the right to cut off Intel's rights under that agreement and that they could stop Intel from shipping its processors, and how he thought that was untenable and he needed to get that out of the agreement so they could work -- go forward working together in some sort of a more mutually cooperative relationship.

So let's look at 66.

So Mr. Swope testified in good faith it's very difficult to work with somebody who is supplying you the product who has the ability to stop you from shipping your own products. In response to this situation, Intel made Rambus an offer.

65A, please.

Here's the offer that Mr. Swope made to Rambus trying to work out this issue. January the 19th, 2000, Mr. Swope writing to Bill Davidow, the chairman of Rambus, proposes Rambus waives its right under the "Make Us King Agreement" to terminate the Rambus licenses granted to Intel. That was the guillotine clause that Mr. Swope described. So Intel proposes, "Rambus, you please waive that clause."

In exchange, Intel will commit to continuing offering -- to continue offering an RDRAM-compatible solution in each of the performance and mainstream through all of '02 and in the value segment starting in '01 through all of '02.

Will Swope was offering Rambus a choice in offering Rambus
Intel's chip support. This is the most important valuable thing
that Rambus needs. Because without Intel's chipset support, no
market. No disagreement about that; right?

So he offers them, "Please, remove that clause that we think

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is a guillotine hanging over our heads." Remember guillotine?
 1
     French revolution? Cut off the head? He's offering that
 2
     agreement in exchange for chipset support.
 3
 4
         What does Rambus say? No. Rambus says no. Rambus chooses
     no because Rambus had chosen plan B. Rambus had chosen to start
 5
 6
     suing people. In the words of Paul Fahey, "That's how they were
     going to get their money."
 7
         66.
 8
 9
         Did Rambus agree to remove the guillotine? No. Will Swope,
10
     senior Intel Executive: (reading)
11
             "Did you make recommendations to Mr. Otellini,
12
         even a more senior executive at Intel?
13
             "Yes.
14
             "What did he tell Mr. Otellini?
             "We can't do business with people that can put us
15
         out of business."
16
         Next slide.
17
         He was asked that question, I think it was one of the last
18
     questions Will Swope was asked, he was asked:
19
                                                    (reading)
20
             "Mr. Swope, what was your view of the
         relationship between Intel and Rambus after they
21
22
         ejected that offer?
             "I thought it was doomed."
23
         Think of that testimony, Ladies and Gentlemen, when you look
24
     at the verdict form and think about substantial factor.
25
26
         Next slide.
         So Intel goes on, very clear, they have to execute the
27
     decisions they made at the October 1999 CSD. And, so, they
28
```

```
They have the secret road map. This is Project Road.
     continue.
 1
     That trial exhibit number, you'll find it in your binders:
 2
     (reading)
 3
 4
             "RDRAM is on a slow path to be a premium niche
         technology. The 820," that's Camino, "very weak
 5
 6
         outside of work stations. Permanent cost
         disadvantage 70 percent in the year 2000."
 7
         That document says that Intel believed there was a
 8
     70 percent cost disadvantage. (reading)
 9
             "RDRAM more expensive in the year 2000."
10
11
         In '01 they thought they might get it done at 35 percent.
12
     In '02 maybe they could get it down to 20. Willamette, that's
     Pentium 4, solely RDRAM, is the only position keeping it alive.
13
14
     And this is Intel's dilemma here because they've got Willamette
     coming end of 2000. Rambus becoming more offensive to the
15
     industry.
16
         In July of 2000, Intel announced the SDRAM chipset for
17
18
     Pentium 4. That was the Brookdale announcement where publicly,
     for the first time, Intel says, "Okay. Pentium 4 no longer
19
20
     exclusively Rambus. No longer exclusively Rambus."
         Intel switched its resources, started to develop the chipset
21
22
     for Pentium 4 using SDRAM and it's telling the world, "That's
     what we're going to do." It's going to the open standard.
23
         Then we see -- 70A, please -- we see the email written by
24
     Dr. Bhandarkar, "Management by Hope." August 21, 2000,
25
     Dr. Bhandarkar writes to Pete MacWilliams: (reading)
26
             "DDR is it. RDRAM is on life support at best.
27
         It's time to get away from management by hope."
28
```

Intel's position. This is written by the man, as I said, 1 who was in discharge of the Intel chipset road map. 2 71. 3 4 Dr. Bhandarkar clearly on August 21st, 2000, "My state of mind was that RDRAM was not going to work." 5 6 Now, there was an effort, I believe, made yesterday and presumably will be repeated again tomorrow, to try to tell you 7 that the evidence shows that Intel changed its mind because of 8 something the Defendants did, something that Hynix did, this 9 alleged conspiracy. Absolutely not what the Intel people said. 10 11 Let's look, please, at slide 167. 12 Mr. Swope testified: (reading) "Why did Intel revamp its road maps?" 13 He was asked basically the same question twice and these 14 were the answers that he gave: (reading) 15 "The inherent RDRAM cost disadvantage, the 16 importance of the value segment, that the value PC 17 18 segment coming, competition from AMD, " because, remember, AMD had decided not to use RDRAM, "the 19 20 power consumption of RDRAM, latency of RDRAM, the fact that servers needed physical memory." 21 22 And he was asked a similar question, he said: (reading) "The technical problem, the competition, value 23 segment, onerous contractual obligations, " the 24 quillotine clause. 25 The people who knew came here and told you why they took 26 27 those decisions -- why they made those decisions. They are not

the reasons Rambus is offering you in its case.

28

No Intel witness came and testified in a way that supports Rambus's case. There was a suggestion to you yesterday by Mr. Eskovitz where he referred to some testimony by Mr. Swope concerning the February 2001, February 2001, presentation at IDF.

Mr. Swope testified he left the RDRAM project in February of 2000. You weren't told that, but he was gone by the time that presentation was made that Mr. Eskovitz referred to. And that question, "What was going on with that presentation," was asked to Dr. Bhandarkar.

Let's get exhibit -- or slide 210.

What Dr. Bhandarkar said, he was shown that presentation 4279A, and he was asked about that and he said: (reading)

"I don't understand why Pete MacWilliams showed his. That's not the road map we were on."

So Intel demanded arbitration. They got into that fight with Rambus. They demanded that arbitration under the agreement and the parties agreed to terminate the "Make Us King Contract."

Let's look at 71A, please.

In September of 2001, that contract is terminated. So that clause, that provision, that key support for Rambus in the "Make Us King Contract" to define the time period in which Intel would support Rambus was eliminated.

Next slide, 72.

I asked Mr. Mooring that question. There's a reference there to Exhibit 10771-S. "S" means the exhibit is sealed. That's when we had to clear the courtroom to talk about, but it's in your binders. Okay?

So under that agreement, it was terminated and the parties obligations to each other were extinguished.

That's a choice, Ladies and Gentlemen, that Rambus made. So Rambus agreed with Intel to release Intel from any further obligations to provide support to it under the "Make Us King Agreement."

That's another critical date in this case and one, I suggest to you, when you're shown evidence, measure it against that date. Is it after that date? If so, take into account what does it show or not show regarding what's important in this case.

Was Rambus unaware of what was happening? Was Rambus clueless about the situation? Far from it.

Exhibit -- or slide 74.

Let's skip that one, please.

So on August the 8th of 2000, there was a meeting between Intel and Rambus. This is the meeting in which Intel handed Rambus its demand for arbitration and these are the slides that Rambus presented at that meeting.

Rambus characterized its relationship with Intel as being on a downward spiral started by Intel. Of course, Rambus blames Intel. And they said, well, the reasons for that were Intel was looking at DDR for servers; ADT; the fast chipset for the Pentium 4, that's the Brookdale chipset; Intel looking at DDR for D/T, desktop; license; and now the arbitration. Rambus knew what was going on.

Next?

And in 2001 they have another meeting and Rambus describes

```
their relationship with Intel in 2000 as being separated.
 1
         Now, here, the Rambus witnesses denied these things.
 2
         Can we look at 76, please?
 3
         Here the Rambus people said, "Well," Dr. Horowitz, "Rambus
 4
     world. We actually had products shipping. We were in a pretty
 5
     good mood." Mr. Swope.
 6
         Next.
 7
         David Mooring, "Things were going great. Things were going
 8
     great all three fronts. Things were going fine."
 9
10
         Paul Fahey, "Devastating."
11
         Next.
12
         "Intel was fully behind Rambus." That was Mr. Karp.
         Dr. Bhandarkar, "We knew it wasn't going to work."
13
14
         So, Ladies and Gentlemen, that is a summary of the evidence
     reflected on the timeline regarding the relationship between
15
16
     Intel and Rambus.
         Is it time for a break, Your Honor?
17
         THE COURT: I'm going to guess the jury would be grateful.
18
19
         MR. NISSLY: Okay.
20
         THE COURT: Why don't you take 25 minutes? 25 minutes be
     back in your seats. That's 25 minutes after the hour.
21
                        (Recess taken at 9:59 a.m.)
22
23
                    (Proceedings resumed at 10:26 a.m.)
         (The following proceedings were heard in the presence of the
24
     jury:)
25
         THE COURT: On the record. Counsel are present, 12 jurors,
26
     3 alternates.
27
         Go ahead.
28
```

MR. NISSLY: Thank you, Your Honor.

So I put back kind of my table of contents slide here and I have been working my way through the various topics here. We're down to talking about the reasons why RDRAM was flawed about which there's been a lot of evidence in the case.

And really the next three or four bullet points, because of limited time and time allocations, these will be a little bit quicker than I've been proceeding this morning. But you've heard a lot of evidence so I'm just hitting the high points on some of this evidence. You will have all of the access clearly to the exhibits, and so forth, in the jury room; but, please, when I talk about a subject, I'm sure you will recall evidence on these specific points and you'll go back and be able to take a look at it.

So on the issue of the problems with RDRAM, let's look at slide 29, if we could.

So you'll recall the testimony of Mr. Halbert. He was the Intel engineer who came and testified. Mr. Halbert actually worked in the DRAM industry so he knew about DRAMs. He knew about DRAM manufacturing and he was given the job by his superiors of looking into this issue of cost because Intel was so concerned about it. And he went around and visited the DRAM companies and got their information and compared their information and spot checked their information and tried to figure out: Is what these people are saying about the cost problems with this product, is that true? And he said, "Yes, it was."

Mr. Halbert did his analysis and said it was upwards of

70 percent more expensive than PC100 at the time. And that project road document we looked at a few minutes ago, that had the same number, 70 percent. That's a platform cost number. So it's the problem with the chip, the cost adders on the chip, and then the overall platform. In his document there, TX 8118, has that same number in it, the 70 percent number.

Slide 30, please.

So then Mr. Fahey gave us a very long list of why it was RDRAM was more expensive by design, by the choices that Rambus made in designing the product, and these are technical choices. When you design a product, I think one of the engineers told us, it's a series of choices. It's a series of trade-offs. You can have this but usually you have to pay some price for it. If you want higher bandwidth, then there's a choice, you know, that costs something in terms of engineering resources and in terms of some other aspect of the design.

So Mr. Fahey said the die size, about which you heard so much, low yields, testers, expensive printed circuit boards, the little green board the modules are on, the motherboard was more expensive. They had a connector that was special and one of those extra RIMMs that cost more. The heat spreader, that was the little metal piece over the top of the module because of the way RDRAM worked. It only worked -- one chip worked at a time. It got very hot and the special clock chip. So all of those contributed to the additional cost of RDRAM and attributed -- or contributed to the issues with regard to the case.

And then the problem of latency was discussed, obviously a great deal in the case, and the difficulty of the Rambus

technology was discussed.

2 Let's look at slide 36, please.

Mr. Fahey again said, "Look, even to this day at Intel, Rambus's code, as hard as it gets," and he compared DDR as being like a cake walk compared to it.

AMD found the same thing.

Slide 37.

Mr. Heye from AMD said he assigned his team of engineers to it, to develop a chipset and work with it and see if they could turn it into a product. He said, "Every possible consideration. Rambus is difficult. DDR is a better solution."

These are independent industry people coming to you and telling you what the true facts were at that time. None of these issues does Rambus deal with.

The latency, we had a lot of discussion in the case.

41, please.

This is Mr. Heye again discussing the latency issue, and he says, "Look, the data from the AMD solution," that is the AMD processor, "just got their faster." And that was one of the reasons, there were dozens of others, but that was one of the reasons, from a system point of view, AMD was better.

This is when AMD came out with their Athlon processor at the end of 2000 and the benchmarks showed, and I'll show you a slide in a minute, the benchmarks showed that AMD with DDR in the Athlon processor on a system-level basis was better, performed better on most of the benchmarks than did Pentium 4 with RDRAM.

There was discussion about heat and power yesterday.

Let's look at slide 44, please.

So this is a trial Exhibit, may 21, 2001. It's Trial Exhibit 10174. And it's a fairly long set of PowerPoints slides on why DDR. And there's a lot of information in there comparing DDR to RDRAM so you might want to take a look at it. And this particular page, Page 6, compares power consumption for RDRAM with DDR.

And you can see here that the DDR power consumption was about a sixth or RDRAM was about six times as high as the power consumption for DDR when the parts were operating. When they were in power-down mode, which is about 95 percent of the time, the DDR power consumption was about a third as much as the RDRAM power consumption.

So people in the industry who have to make these things work are telling you this is what the facts were.

So on top of all of those issues, Camino was late, as we had talked about. It didn't perform any better than its competition; and then when we look at the benchmarks for Pentium 4, we see that.

Remember the Rambus witnesses when they were asked about the performance of Pentium 3, they said, "Well, it didn't use the bandwidth." They admitted it wasn't any better, but it didn't use the bandwidth. "Just wait. Pentium 4 will be better."

That was their position.

I asked Mr. Mooring about the presentation he had given in Taiwan on that issue and he was asked a question about that, and he said, "Well, it was true about Pentium 3, but wait until Pentium 4. It will be better.

Let's look at slide 89.

This slide is from that same presentation on why DDR, same trial exhibit number, and it is a comparison of performance with Pentium 4, AMD DDR versus RDRAM.

Eric, can we just pull out the chart?

Now, I apologize, the chart is a little bit -- yeah -- very hard to read, obviously, because it's so dark. The exhibit actually is more readable.

But when you look at comparison here of DDR versus RDRAM or Rambus here, the higher, the higher column here, the higher bar chart, shows DDR's better performance on these various benchmarks and that's comparing Pentium 4 version RDRAM with AMD.

And initially when Pentium 4 came out, it came out with a 1.5 gigahertz speed. That's the version that came out at the end of 2000. So when they ran these benchmarks, it didn't perform very well.

I'm quite confident that tomorrow you're going to see performance benchmark tests from 2002 because there was a later version, a faster version of Pentium 4 that ran at 2 gigahertz but those are much, much later. Those are 2002. The ship had long since sailed by 2002. When Pentium 4 came out with RDRAM at the end of 2000, the performance was not compelling. It was not good. So Pentium 3 didn't perform and Pentium 4 didn't perform with RDRAM, and that was a big problem.

Slide 90.

So here's Mr. Heye at AMD talking about how Athlon with DDR was as good or better than Willamette with Rambus; and, as a result, AMD's market share went up in the market. And he says,

"Look, when your market share is 15 percent, when you go up three or four points, that is a lot of machine. That's a big deal." And that was attributable to AMD using DDR with its Athlon processors.

So what was Rambus's response to all these problems? Oh, you know, the latency, the die size, all of these issues, what was Rambus's response?

Slide 46, please.

Mr. Fahey told us this, and it was apparent when we cross-examined the witnesses that Rambus did call in its case, that these folks really had no experience. They were academics. They had no experience in what it takes to actually develop a real product that a real company makes that they can make a real business out of. These folks were smart, well-educated people, there's no question about that, but they didn't have any experience at actually making something.

The DRAMs get made, as you've heard, by the millions and millions per month. Millions per month. You have to have a lot of experience in how to make something, take it out of the idea lab, take it out of academia, take it out of your postgraduate degree studies and turn it into something real that you can put in system after system, and they didn't have that kind of expertise.

Slide 47.

Mr. Leddige testified and he said, "Look, a lot of the times the Rambus people just didn't know what to do. They just didn't know how to fix the problems."

There was a lot of other evidence on those issues, which

will be available to you in the jury room.

Rambus also had the problem that they were the wrong product at the wrong time, and this is the issue of the value segment.

Slide 82, please.

I call this one "Swope's Pyramid." It's probably still over there on one of the pages on the pad. But when he was testifying, he said: Okay, look, here's the market. The market is a pyramid. Here's the market. At the very top performance, this little piece at the top, and that's where Intel was positioning RDRAM, at the very top.

Then this next big segment you have price performance.

Performance is an issue but price is an issue.

And then there's a value segment of the market, the big part here. In fact, he drew it and he said, "Well, that's not big enough." He went back and the little -- you know, he drew more here on the bottom and cross-hatched it out because that was the biggest chunk of the market.

Let's look at 82A.

So this is the growing value segment of the market. It doesn't care about performance. He found out that 30 to 40 percent of the customers didn't care because they're just working on the lowest price. And that's obviously a part of the market where Rambus doesn't do very well.

And Intel noted the rise of the value PC market in the post-mortem document.

We can look at 170.

So here we are looking at the post-mortem document again, 6391. And as Intel was looking back to see what had happened,

they said, "Well, to make matters worse, the value PC segment,"

Intel's name for the sub-1,000-dollar PC segment, "started to

emerge as a significant percentage of the total market."

So the market is shifting away. They have the schedule of when they're supposed to bring out RDRAM with Camino, Pentium 3. They miss the schedule. So they missed it by months.

And now, in the meantime, the market is shifting away, the piece of the market that RDRAM was aimed at is shifting away; and, to make matters worse, they don't have a good performance story. Again, all factors that contributed to the situation with regard to RDRAM.

The industry, Ladies and Gentlemen, preferred open standards. There was a lot of discussion in this case about open standards versus proprietary standards or closed standards; and, of course, as you know by now, Rambus was a closed standard, a proprietary standard. It was an Intel-Rambus standard in contrast to DDR, SDR before it, and then DDR, which was developed at JEDEC, open standard.

And the advantage of the open standard was explained to you by the various witnesses. So explained at JEDEC. Everybody who's got a piece of this, everybody in the industry comes together and they sit there and they work together on the technical problems.

So you have hundreds of companies with thousands of engineers all focused on their issues and their products and their designs, and they're working together to define the technical standards that they can all use and that they can all live with. So you get all of these resources, all of this

effort focused on solving those problems as contrasted with Intel and Rambus.

Rambus well-trained, smart-academic types creating this design in a bit of a vacuum. And when they provide it to the Intel folks, the Intel folks are pulling out their hair trying to figure out how to make it work. That's what the issue is here.

And the industry people clearly preferred open standards. Let's look at slide 95.

This was Mr. Tabrizi, called himself, I think, the champion of open standard. He said, "Look, I believe in the open standard. That's the competition. That's when we win. That's when the consumer wins when this open standard is developed where everybody can contribute."

Rambus was defined in a vacuum. Rambus didn't understand manufacturing, et cetera.

Rambus likes to talk to you about waterfall, and I'll come back to waterfall when I discuss their damages. Rambus likes to talk about waterfall. Never has a proprietary standard like RDRAM or Rambus waterfalled. They didn't present you any evidence because it never happened.

The standards that waterfalled were open standards, were JEDEC standards, and that's because of the nature of the way in which they were developed.

Rambus is trying to compare itself to something it isn't.

Let's look at slide 96.

This is Mr. Pautrat from HP. He's talking about it's even better for using components which are standard across the

industry. Standard needs to be open, clear at least, to all the participants and to the industry.

HP wants open standard, JEDEC standard product. All right?
Because if you can get more suppliers, you get more input.

Open standard critically important to AMD -- let's look at slide 97 -- particularly with regard to the competition between Intel and AMD. Because, as Mr. Heye explained, if Intel has access to a standard that AMD doesn't, AMD is at a disadvantage. So AMD pushed very heavily to have open standards that both AMD and Intel had access to.

98.

Mr. Chang from VIA. VIA was getting into the chipset business at this time. Started out small. Got a lot bigger as the time period went on. And he said at the JEDEC meetings, "Every participant can have their voice." Subtask group actually working on the technical data to support the standard.

So the industry prefers these kinds of standards for those reasons; many more resources, many more folks focusing their attention.

And as the evidence has shown you, many of the players in this industry rejected RDRAM for technical reasons.

If we look at slide 89, this slide summarizes for you,
Ladies And gentlemen, just by the company logos of the companies
from whom you heard evidence or about which you've heard
evidence that they rejected RDRAM for main memory for the
reasons we've been talking about; AMD, VIA, et cetera.

For example, if we look at slide 100, Mike Culbert from Apple came to you and testified about the various suites of

- tools that he had used at Apple. He's still involved in that
 business. He was involved in evaluating RDRAM. They tested it,
 they looked at it purely on technical merits, purely on
 technical merits, not an issue of price, not an issue of
 availability.

 Mr. Culbert said, "Look, we tested it. DDR had lower
 - latency. We knew our system designs would be much faster."

 There was attempt made to kind of brush off Apple yesterday by saying, "Well, they had low market share in PCs." At that time they probably did.
 - But look at the number of segments Apple was in and look at the technical influence and importance of Apple in this industry. And these folks who know what they're doing looked at this and said, "This is not the right solution. This is not good."

Next slide.

Rich Heye from AMD, '98, "We realized Rambus is not going to work."

Next?

VIA. VIA basically couldn't afford a license from Rambus.

Couldn't afford a license, so they said, "Well, we can't afford that. We're going to develop open standard."

And the argument was made to you yesterday, "Well, these companies would have come back. If things had worked out the way we wanted them to work out, they would have to come back to us."

Basically what Rambus is saying there is that these companies would be forced to come back, that it would be a

choice imposed upon them from above through this proprietary standard instead of an open standard. That can't possibly be a good situation for consumers when that's what happens.

Next.

HP limited RDRAM to the niche products as Mr. Pautrat testified to.

Next, please.

IBM, Mr. Tressler testified by video. I have to admit that was not the most scintillating video I ever watched, but he was clear about the reasons why RDRAM didn't work for them. He said, "They made an extensive effort to achieve the functionality of Direct Rambus in a PC application and they were not able to do so." This is IBM. That's what Mr. Tressler testified to.

Compaq. And now when I click through these quickly, but you'll remember the witnesses and you'll remember the testimony, when I click through these, remember what I said a few minutes ago that Rambus's case was focused on Dell, Rambus's only OEM that they had any evidence about was Dell? Their case on Dell doesn't work for them, but they don't have any evidence on these other OEMs. Because when those folks came and the industry came and testified to these issues, this is what they said:

Brenda Bromley from Compaq: "Were people pleased or displeased?

"We were relieved we had an alternative solution, that Intel would be supporting more than just RDRAM in the next generation."

Gateway, 106.

Mr. Zolnowsky: "Since Intel was the main enabler, it was clear they were not going to be enabling RDRAM with their products so the long-term viability of the product was not good." That's what Mr. Zolnowsky said.

The suggestion was made to you yesterday that

Mr. Zolnowsky's testimony supported the use of RDRAM in servers.

Of course, you weren't shown any evidence, because there wasn't any, that Gateway ever used RDRAM in a server; and, more importantly, you were never shown any evidence that Intel put out a server chipset because they didn't.

So let's look at slide 91B because there's been some discussion about the long run performance and some argument made that RDRAM would do better over the long term and, so, consumers have been denied some kind of choice or been denied some kind of benefit.

This evidence gets a little bit on the technical side. But Rambus introduced this Exhibit 2585A. It was a presentation at the spring 2001 Gold Partner meeting. You may remember the testimony about that one. That was the one that was held, Gold Partners and Rambus, I believe it was held in Korea.

And then we introduced this exhibit, this May 21st, 2001, "Why DDR" exhibit, and the charts are very similar and what the charts are comparing are bandwidth and how bandwidth will grow over time.

Now notice -- can we blow up the chart on the left hand-side here, please?

Notice this chart is from 2000 and 2006. The other chart I'll show you in a minute ends in 2004. So if we look at 2004,

what's being compared here is or what's being projected here is bandwidth and Rambus is saying, "Well, the bandwidth of our solution, our products, is going to be 4.2 gigabytes or if we do this, 4.8 gigabytes." That's what Rambus is saying about their bandwidth performance.

Mr. Eskovitz yesterday was talking to you about the speed of the DRAM interface. He was saying -- he cited some testimony from Mr. Tabrizi and he said, "DDR couldn't catch up to RDRAM.

RDRAM was much faster." And he referred to some testimony about 400 megahertz.

He was confusing, Ladies and Gentlemen, the speed of the interface with the bandwidth, which is the module, and it's the module bandwidth that counts because the module bandwidth is the measure of the information that the module is putting over the interface into the memory controller.

So now let's look at DDR. I put these side by side so you can compare.

When you look at 2004, this is the DDR2 road map, and you can see in 2003 it is generating 3.2 gigabytes per second; and then 2004, 6.4 gigabytes per second when it got to the DDR2 800 standard. And Mr. Tabrizi testified about this one.

So don't be misled or confused by Rambus's arguments about better performance. It didn't have better performance. DDR's performance over the long term was as good or better than RDRAM's ever would have been. And all of the products that you've seen in the marketplace over all of these years, all of the advances we have seen have all been using industry standard product.

Can we look at 107, please?

This is simply a summary of the comparison of the various issues and advantages; and on all of these issues, open standard, cheaper, high bandwidth, et cetera, DDR, better than RDRAM.

RDRAM has high bandwidth. That's one advantage of it. It does have high bandwidth, but the price they paid for that was latency and latency turned out to be a big, big deal.

I said that I would talk about Hynix's business plan and Hynix's conduct and I will do so briefly because of time constraints, but I think you will recall the evidence on these points and the fact that Rambus never even responded to this evidence.

Rambus would like to have you believe that Farhad Tabrizi alone and by himself was Hynix and, of course, that's not what the evidence was.

Let's look at slide 109.

Hynix signed its agreement with Rambus when it became clear that Intel was going to select it. This document is actually signed before "Make Us King," but when it was clear in the industry that Rambus was moving -- or Intel was moving towards a Rambus solution.

Then look at slide 117A, please.

And here's Mr. Tabrizi's testimony; that Hynix invested easily over a hundred million dollars into the Rambus product and the Rambus project. And I showed him some PowerPoint slides, which you will see in the exhibit binders, that go through the cost of the testers and the discussions with Intel

about the Intel investment and the poor Hynix yield, and so forth.

And you were told yesterday this is a case about power and money, power and money, and that this is a case about Hynix wanting power and money.

You also saw the evidence from Dr. Ordover, Hynix sold about \$38 million worth of RDRAM. Hynix was not making money. This was a terrible business for Hynix but it did it because that's what Intel wanted during the time period that Intel wanted it.

It's not about power. Hynix had 3 percent of the RDRAM market, three, compared to everybody else.

The argument about power and money, that's rhetoric. That's lawyer's rhetoric. That's what that is.

Let's take a look at slide 118.

These are the products that Hynix developed, the RDRAM products that Hynix developed over the time period; 64-meg and 72-meg, and those are the trial exhibit references where you can go and look and see that that's what those things say. 64 and 72.

Now, you haven't heard a lot of evidence in this case about those products because they were very early in the cycle. Those were the generations that were supposed to come out when Camino was first scheduled. But when Camino was postponed in 1999, Hynix had to take the development on the 64-meg and the 72-meg and throw it away because there was no market for those products anymore. The market was moving from 64 and 72 to the next generation, the 128-, 144-meg generation, right at that time.

And, so, when those -- when that schedule slipped and they

couldn't do Camino when it was supposed to come out in June, that market died. Hynix had to take all that work, all those mask sets, throw that away and say, "Okay. Now we've got to work on the 128/144-meg generations." And Hynix did those, sold those. That's mostly what they sold to Dell. Remember the 144 is that ECC version. And then Hynix went on and developed the 256- and 288-meg generations. Those are the ones they tried to sell to Dell and Dell didn't want to qualify.

So there's no question about Hynix's investment and Hynix's efforts to make RDRAM succeed. None of this evidence was even addressed in any significant way by Rambus.

Take a look at slide 120.

This slide, Ladies and Gentlemen, I titled "Intel's Disappearing RDRAM TAM."

Remember what the evidence showed here? And I'm not sure I did a good enough job of explaining this to you. Intel controls the size of the RDRAM market. They control the size of the RDRAM market because they're the only ones making a chipset. Right? You can't sell an RDRAM unless you can connect it to a chipset. There aren't any other chipset manufacturers than Intel.

So Intel controls the size of that market. When Intel tells you the market is going to be this big, they know how big the market is going to be because they're the ones making the chipsets. And this slide tells you what Intel told Hynix about the size of that market and it shows the market, Intel's projections, going down and down and down and down.

50 million units for 2000, 135 million units in 2001.

That's the total market. You're talking about single-digit percentages of the market. Intel's telling Hynix RDRAM is a niche product and Intel knows because they're making the chipsets.

124.

I used this slide also with Mr. Tabrizi. This slide explains to you how Hynix followed Intel's instructions with regard to the RDRAM market; how it changed its strategy when Intel changed its strategy; and how, down at the box here on the bottom, if we can pull that out, how when Intel told Hynix that it had changed its strategy, Hynix said, "Okay. We will minimize our Rambus projects just for work stations and high-end desktops," which is what Intel had said, "focus on costs down and ECC."

Rambus is saying Intel -- Hynix was part of a conspiracy.

Hynix is telling you from documents at the time, contemporaneous documents, what they were doing and why they were doing it.

Okay. My time is growing quite short so I'm going to talk for a little bit about Rambus's document destruction and then I'm going to turn to a discussion of damages and the verdict form.

So another timeline, Ladies and Gentlemen. This one we also put the TX numbers on so you can follow these.

And I'll move through this fairly quickly for which I apologize, but you've heard the evidence and it came in towards the end of the case so it may be more recent in your memory.

You will recall the evidence of Rambus getting battle ready.

That's early on. That's in February. That document

specifically refers to Hyundai or to Hynix as a target of Rambus's campaign.

Apparently the suggestion was made or the argument will be made to you that this was just an ordinary corporate policy; but, of course, the evidence was far to the contrary. It was specific. It was targeted. It was get ready to sue these people and get rid of the evidence that they could use against us.

Presented at a Board of Directors meeting. Rambus destroys the backup tapes. Mr. Karp said it was all the backup tapes in the history of the company. Roll it out to the employees.

Mr. Steinberg testified about this. Mr. Steinberg who was hired in 1998 to prepare for litigation.

Shred days in '98 and '99 and again in 2000.

And the Nuclear Winter Scenario document, I recommend that one to your attention in the jury room, 7960. Again, specifically names Hynix as a target, specifically says they're thinking about planning for antitrust litigation, patent litigation, breach of contract litigation against the DRAM companies. It's written in the format of a hypothetical. And you know what? Exactly what they're talking about there is exactly what happened.

Then they sue Hitachi. They accuse Hynix of patent infringement, and they go on.

I'll just pause and look at Exhibit 133.

Email, "Throw it away." This was Mr. Karp's instruction to the employees at Rambus, "Get rid of your email because it is evidence, because it is discoverable in litigation, get rid of

it." And you saw how much evidence in this case relates to email.

Destroying documents because you don't want to give them to the other side in a lawsuit you are planning, Ladies and Gentlemen, is conduct that strikes at the very heart of the fairness of our justice system.

Rambus intentionally tried to get rid of evidence so it could not be used against it; and then it comes in to this courtroom, comes in to this courtroom and tells you, you should give it billions of dollars. That's the conduct Rambus has engaged in. That's what its doing.

I don't think Rambus has proven its case. Obviously my comments yesterday and today make that clear. I don't think that they've proven the conspiracy that they allege. I don't think that they've proven that any conduct of the Defendants was a substantial factor, but they've talked about damages. I think Mr. Eskovitz spent about an hour on them. I'm obligated by my duties to Hynix to speak about damages, but I hope you don't take that as any kind of concession on my part that I think Rambus is entitled to something because they are not.

You do get jury instructions on this.

Let's look at slide 159.

You are not to speculate or to guess. Rambus must prove -- let me just stop there -- Rambus must prove it is reasonably certain.

The argument was made to you that you start with Rambus's number and you discount it and that it's somehow the Defendants obligation to prove discounts.

That's not what the law is. That's an effort to flip the law on its head. Rambus is trying to say to you, "Oh, we get to start up here with whatever number our guy could come up with and it's up to you to discount that." No, no, no.

If you prove -- if Rambus proves it has a case on liability, which it cannot, if Rambus proves that the Defendants' conduct was a substantial factor, which it could not and cannot, then you start damages at zero, and Rambus must prove by a preponderance of the evidence its entitlement to any damages. That's what the instructions say and that's your obligation as a juror. That's the oath you take. You don't start with their number. There has to be a reasonable basis.

So what did Rambus bring you? 136A.

They brought you Mr. Ching. Mr. Ching testified in his view about products that Rambus could be used in or might be used in or, well, we were in one HP server when even the guy from HP couldn't remember what that was, didn't know what that was; or, you know, we were in this product or that other product, that's what Rambus had.

Balanced against that was the testimony from all these folks in the industry -- and kind of hard to see; it's supposed to be a picture of Mr. McAlexander -- all this other testimony by people who were actually involved who said, "No, Rambus was not good for servers or laptops or whatever."

And then on the basis of that, Rambus presented Mr. Tucker.

Next slide.

And Mr. Tucker presented the waterfall argument. And

Mr. Tucker assumed, the basis of his testimony was that he assumed Intel's support for 10 years. And then he assumed no technical differences between DDR and RDRAM, the so-called perfect yardstick.

And you will see a Jury Instruction 24 that tells you, if you find that the assumptions of an expert are not reasonable or not proven, you should reject them. And that's the jury instruction you should use to evaluate Mr. Tucker's testimony.

Because you know, based upon the evidence you've heard, assuming Intel's chipset support for 10 years does not make any sense, particularly when Rambus agreed with Intel to terminate the "Make Us King Contract," but that's what Mr. Tucker assumed.

So he said, "Okay. With those assumptions and ignoring the fact that no proprietary DRAM standard has ever waterfalled, here's my opinion."

Next slide.

But the evidence showed was that Intel had its hand on the tap; and when Intel turned off the tap; there isn't any waterfall. Cost and latency prevented any waterfall into these other segments, and cost and latency and power and heat prevented any waterfall into the other segments. There was never going to be any waterfall.

Mr. Eskovitz criticized Mr. Regan for not calculating
Rambus's damages. He said, "Well, Mr. Regan didn't do anything
to figure out how much money Rambus should be entitled to in
this case." Fair enough. He didn't. Not his job. It's
Rambus's job to prove starting from dollar zero what it's
entitled to. What Mr. Regan pointed out was Mr. Tucker's errors

in applying his model and why it wasn't reliable and why it
wasn't useful.

Can we see slide 171A, please?

Rambus is not entitled to damages, Ladies and Gentlemen.

Rambus and Intel terminated their relationship, but Tucker assumed ongoing support. Rambus's model, presented through Mr. Tucker, shows no damages in 2001.

You will recall that board, it was used during the testimony of Mr. Regan, and he talked about the various problems with Mr. Tucker's analysis. And he said, "Okay. But if we look at 2001 and 2002, that's the adjusted number with all the problems." He said, "That's not the right number; but if that's the mechanism that's used, that's the adjusted number."

And the reason why that makes sense, if you take

Mr. Tucker's analysis, is because Intel and Rambus terminated

the "Make Us King Agreement" in 2001.

Every single penny of Mr. Tucker's damage claim and calculation here is after, after the termination of the "Make Us King Agreement." Every single penny.

Tucker assumed that there would be a waterfall, even though it's never happened. And Mr. Tucker assumed that you could not back out of his calculation DDR royalties associated with those companies and market segments about which you've heard so much testimony.

Ladies and Gentlemen, Rambus has not proven a damage claim. Even if you were to get to the damage claim, the model that's been offered to you is useless and that's Rambus's obligation.

Let's take a look at the verdict.

Could we bring up the first page? Let's look at the first question.

So I've talked about this one a lot. I'm not going to repeat it, but this is the first question you have to answer. You have to gauge and value and judge the evidence based upon Rambus's claim of what the so-called conspiracy was in this case. We believe the answer to that question is no.

Number three.

This is the substantial factor question. This is the causation question. This is the one I talked to you about at some length. This is where substantial factor works into the verdict form, and here's where you apply the rules and the jury instruction and the facts that I told you about before; Intel's role, the impact and influence of all the other issues, the flaws in RDRAM, industry participation, et cetera.

Let's look at question 13, please, Page 3. Down here at the bottom. Yes.

If you get this far on the verdict form, then you're asked this question: (reading)

"Was anticompetitive conduct of these companies a substantial factor in preventing RDRAM from becoming the standard for any of the following industry segments?"

So we see there, again, the role of substantial factor and we see it segment by segment. And if you get to this question, then you need to think about: What was the evidence on these segments?

Because Rambus wants to totally gloss over this. You were

not shown this. You were not explained this yesterday. Rambus wants to totally gloss over it; and that's why because, when you look at these segments, you realize that Rambus hasn't proven a case; value, notebooks and laptops, et cetera. But that's where you look at it industry segment by industry segment.

Now, I'm sure that Rambus tomorrow is going to come back to you and say that there was evidence in this regard, but the only thing they gave you was Mr. Ching and then Mr. Tucker with his assumptions. That's all. Balanced against all the industry testimony from all the other folks.

Let's look at Question Number 14.

So this question asks you: (reading)

"Was anticompetitive conduct committed by these companies after May 4?

Again, substantial factor. May 4. That date has significance. And let me show you 53D. 53D.

This is the Intel timeline, Ladies and Gentlemen, with that date highlighted, okay, May the 4th, 2000.

So when you're answering that question, if you get to that question, I don't think you will, but if you do and you're answering that question, you've got to think about, you've got to separate in your mind the evidence before and after that date and look at what happened vis-a-vis Rambus and Intel before that date and what happened after.

Before that date, all the problems in 1999 with Camino.

Intel's decision at the CSD to change road maps, starting of ADT, Will Swope, conversation trying to renegotiate the contract, and Rambus starting its lawsuit campaign.

And then go back to Question 14. 1 (reading) 2 So: "Was anticompetitive conduct a substantial factor 3 4 after that date?" And then 15: (reading) 5 6 "If so, what damages?" So go back to 14 for a second. 7 So that's the issue. Because Rambus has to prove, if it has 8 9 any damages, it has to prove that those damages relate to 10 conduct, events that occurred after May 4. After. 11 happened before, if it happened before, that does not get Rambus 12 any damages. That's the way that works. Rambus has another claim. This is for intentional 13 The same conduct, the same issues, the same 14 interference. substantial factors, all of those issues, relate to intentional 15 16 interference as well. Ladies and Gentlemen, Rambus hasn't carried its burden of 17 18 proof here. There was no Hynix RDRAM conspiracy. allegation of fixing RDRAM prices high and DDR low is made to 19 20 you by Rambus with no pricing analysis despite the fact that they had the information. 21 22 They offered you the Dell evidence and that story completely fell apart. The facts showed that Hynix sold RDRAM to Dell, 23 tried to sell RDRAM to Dell, and was the low price leader on 24 RDRAM at Dell. 25 And then Rambus focused on Mr. Tabrizi and then that fell 26 27 apart on them. He was the champion of open standards. supported Intel when Intel asked Hynix to do so. Followed Intel 28

and then followed Intel out of the RDRAM relationship when Intel said that that's what they had decided to do.

Mr. Eskovitz argued that Mr. Tabrizi was incredible, and judging the credibility of witnesses is uniquely your job as jurors. You see them testify. You get to judge whether or not you believe them and what parts of the story and their testimony you believe or disbelieve.

I suggest to you that a man like Mr. Tabrizi, who is very clear and very open and very candid about his views, is somebody that's worthy of your belief, but that's up to you to decide.

The testimony of the other Hynix employees who testified by videotape, those folks answered truthfully. They admitted what they had done was wrong and they took responsibility for that, and they had no motive or incentive to lie about those things and you can judge those things for yourself.

And contrast that with the testimony you heard from the Rambus witnesses who tried to dodge and evade, paper over the facts. So those are things for you to decide.

The evidence showed that RDRAM ended up as a niche not because of this alleged conspiracy, but because of the other factors involved; and Rambus did not prove that the conduct of Hynix was any substantial factor in anything that happened here. Intel controlled the chipsets. Intel changed its mind. And all the other flaws with RDRAM, the cost, the latency, the die size, all of those things we talked about, the market changed and key industry witnesses rejected this.

I don't have another chance to talk to you. This is it for me. Rambus does get another opportunity because they have the

burden of proof, and that's fair.

And when you hear Counsel for Rambus speak to you tomorrow, then you should keep certain questions in mind. And those questions include:

Why shouldn't Rambus, why shouldn't Rambus take responsibility for the choices it made?

Why shouldn't Rambus take responsibility for the design decisions with regard to RDRAM that it made?

Why shouldn't Rambus take responsibility for deciding not to work with Intel but instead to reject Intel's requests when it was offered chipset support and sued?

Those are all choices that Rambus made. Instead, Rambus tells you that you should do justice; and in Rambus's world, "justice" means money for them.

And I'd suggest to you, Ladies and Gentlemen, you've been here for three months, you've heard the testimony, you've heard the witnesses, you've heard the evidence, the justice in this case, Ladies and Gentlemen, is applying the facts to the law and finding that Rambus ought to be held responsible for its conduct. And it hasn't proven its case and that's why I'm asking you for a verdict on behalf of Hynix, because Rambus has not proven its case.

I would be remiss if I sat down without thanking you. It's been a very, very long case. Three months. You lost your summer, sat here day after day, listened to us ask questions about die size and all kinds of crazy things, and I appreciate that.

Nobody could do more as jurors than you folks have done; but

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it is important for you to decide, and I suggest to you the
 1
     evidence shows that these folks didn't prove a case.
 2
         Thank you.
 3
 4
         THE COURT: Thank you, Mr. Nissly.
         Do you want to take a look gap here?
 5
 6
         MR. PRICE:
                    That would be preferable, yes. Thank you.
         THE COURT: Okay. So I remind you that we' had a request
 7
     for jurors that they be allowed to handle lunch before 12:00 to
 8
     avoid the lines.
 9
10
         So you still want to do that? You want about 25 minutes
11
     starting at 10 minutes to 12:00? Yes?
                                             No?
12
         ALL: Yes.
         THE COURT: You're going to get a break; right? 25 minutes.
13
14
     He needs five minutes to set up.
15
         A JUROR: Whatever.
         THE COURT: You know, you call it. It's up to you.
16
17
         MR. PRICE: Certainly we want to start --
         THE COURT: Take five minutes now to set up; and when you
18
     want to do it, they're going to get 25 minutes.
19
20
         MR. PRICE: That sounds great.
         THE COURT: Okay.
21
22
                       (Recess taken at 11:16 a.m.)
23
                    (Proceedings resumed at 11:23 a.m.)
         (The following proceedings were heard in the presence of the
24
     jury:)
25
         THE COURT: On the record. Counsel are present, 12 jurors.
26
     3 alternates, I think. Can you see them?
27
28
         MR. PRICE: Yep.
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THE COURT: All right. For Micron.

CLOSING ARGUMENT

MR. PRICE: Ladies and Gentlemen, I'm going to try to keep this as interesting as I can with all the oxygen depleted from the room; but I want to talk to you a little bit, obviously, awhile this afternoon and awhile tomorrow morning about this case and what it's about.

And the case reminded me, you know, a few years ago in New York before they had video cameras on buses, if there was a bus crash, like a fender-bender, there was a requirement that the bus driver lock the doors and the reason wasn't to keep people from leaving. The reason was to keep people from jumping on and saying they had hurt themselves and they had hurt their back. Those people were called ghost riders.

Well, that's what this case is about. Now, there wasn't a bus crash, but there was price fixing and there were victims and Rambus isn't one of them.

I told you from the opening statement that there was price fixing and that Hynix and Micron had discussions and there were agreements to increase the price of DDR and SDRAM, and that that activity was wrong and that there are victims to that, that overcharging.

And what they did was, you know, even -- and it's wrong.

Even at times when SDRAM, which was the big chip in the market at the time, you know, was crashing because of the burst of the tech bubble, even when that was happening and we went from, like, 15 cents per megabit down to 4, you know, Hynix and Micron had agreements to try to slow that down or to sometimes

increase. And the victims were the original equipment manufacturers. You saw on the special instruction or you heard the special instruction about Dell and IBM. And that was wrongful even in that context.

But Rambus wasn't a victim. You know, if you increase those prices, DDR and SDRAM, higher than they would have otherwise crashed, I mean, that actually wouldn't hurt Rambus because Rambus is a competing product. It's sort of like if you have a gas station across the street from another and your competitor increases his prices, that's not going to harm you.

And, so, what Rambus has done here is they've taken something that we have told you from the beginning was true and said they were victims when they weren't. And what you did not hear during the trial or during the closing is evidence supporting the conspiracy Rambus says took place here.

And that conspiracy is a conspiracy which Professor Elzinga and Professor Willig both tell you they've never seen in their entire careers. It's a conspiracy where supposedly Micron agreed to handicap itself. Micron agreed not to do -- agreed not to do RDRAM, to let people get way ahead and to make hundreds of millions of profits.

And Micron agreed, it wasn't because of the technology or because of its own business practice, Micron agreed to sit back even when, according to Rambus, Intel was saying, "We're going to force this down everyone's float," and even when the original equipment manufacturers, you know, like IBM and HP and others, were saying, "We've got to have this," that Micron would agree to handicap itself.

And then the other part was that Micron would then agree to take a hit on DDR, you know, and lower that price. And that eventually, you know, those companies who had the head start and were making hundreds of millions of dollars, would say, "Oh, now we're going to switch to DDR before RDRAM kills Micron."

And that's the allegation in this case and then it's far different from anything that's ever happened and it did not happen in this case. And we'll go through that evidence, that that allegation makes no sense at all and is totally inconsistent with the pricing data that we presented to you and that Rambus did not.

Now, so, first, Rambus skips this key question, which is, you know: Was the conspiracy in this case what happened?

And then there's another question and that is: Why did RDRAM not become main memory? I mean, it's undisputed it didn't become main memory. So that doesn't answer the question.

But Rambus is saying: Look, we didn't become main memory and, therefore, if not for what Defendants did, in your cell phone there would be an RDRAM chip draining the power from that battery; in your laptop, you know, you would have this RDRAM chip burning your thighs; in your value PCs, you would have RDRAM chips, even though they inherently cost more to make.

AMD would be forced to use RDRAM chips even though Mr. Heye said, "I'm betting my badge on this and we don't want to use it." IBM would have to use it even though they didn't want to use it. Microsoft would have to put it in its Xboxes. I mean, basically, you're going to have everyone forced to do this; and that would have happened if not for this conspiracy which they

haven't proven.

Well, we need to actually look at that and see why didn't
Rambus become mainstream memory. And Rambus is basically
saying: Ignore the problems. Ignore the cost it took to
manufacture it. Ignore the latency. Ignore the fact that they
ended up really upsetting and embarrassing the company that made
them king, Intel. Ignore it all and give us billions.

And, by the way, when they say, "Give us billions," these aren't billions that we made. When they say, "You know, we're entitled to 3 or 4 billion," remember, Rambus was going to charge a royalty of 2 percent. And we had Mr. Horowitz on the stand and we asked him, "Okay. What happens if costs increase?" And I think this is slide 528.

The cost to the manufacturer affects the cost to the OEMs.

And he says, "Yes, no question."

So what would happen in Rambus's ideal world is they would get paid 2 percent and then that would be charged by the manufacturers to the OEMs. So it's a wash. And the OEMs would pay more and then the consumer would pay more. That's the ideal world.

And what's amazing is Mr. Eskovitz came up and said, you know, "Mr. Williams is going to get up in rebuttal and cover things we didn't anticipate." Wait a minute. They didn't anticipate we were going to talk about the actual conspiracy they alleged? They didn't anticipate we were going to talk about the manufacturing cost and the die size and the relationship with Intel?

They knew we would but they want the last word, and they

will get it, and you'll have to decide whether it's sandbagging.

But what has happened in this case and what happened in his closing is a clear example of misdirection.

And I do this with my kids is, it's sort of like a magician, you know, when a magician wants you to look at someplace, he says, "Hey, look way over here. Look way over here. Don't look there."

So Rambus is saying, "Look, there was price fixing. SDR and DDR increased in price. Look over here." It's like a magician takes a coin and says, "Look here. Look here. Look here." And he doesn't want you to look where the action is really taking place. He doesn't want you to look -- in this case Rambus doesn't want you to look at why RDRAM did not become mainstream memory. They don't want you to look at what Micron actually did and why, and what Hynix did and why, and whether or not the conspiracy they allege in this case makes any sense.

So instead of throwing paper in the air, let's lock those bus doors and let's go through some of the evidence. Okay? And I've got to do it with some speed, at least certainly in less time than three months when you folks have heard all of it.

So I want to start with what is a familiar topic, and I'm going to try not to repeat too much of what Mr. Nissly said, and I want to start with Intel because the evidence is undisputed that Intel lifted Rambus up, selected it to make Rambus king, and Intel dethroned Rambus and the question is why.

And what the evidence has shown is that in 1996, based upon expectations about RDRAM -- and I'm going to show you based upon deceit as well -- Intel chose RDRAM to be its next generation

primary main memory.

And what happened between 1996 and 1999 -- you know, I have a chart here which I'll get to in a second -- well, not a second, minutes, which goes up to 1999.

What happened is that Intel lived with Rambus. Intel lived with these product specifications. They lived with trying to turn this into a product. They lived with Rambus itself. They lived with Geoff Tate. They lived with Dave Mooring. They lived with the engineers.

And what they concluded at the end was that RDRAM was not the product they thought it was, that Rambus was not the company that they thought Rambus was. And based upon their view of the product, Rambus, and the changing market, by the end of 1999, Intel had decided we are not going to make Rambus king in mainstream memory anymore.

And they had a problem, though. We'll get to this. The problem was that they had a contract with Rambus that required them to support Rambus's main memory through 2002. They had a contract to publicly market as main memory, and they had a problem in that they had Pentium 3 chipsets coming out in late '99, Pentium 4 which had been in the pipeline for a couple of years and only worked with RDRAM, and they had to tell sell those processors with those chipsets.

And, so, after '99 what they did is they would tell people, "Oh, RDRAM is great. Oh, use it for these processors that we're putting out." But their internal road maps and their decisions were, "We want nothing to do with RDRAM and Rambus in the future."

Now, I'm going to put up -- we had this big outline, but there are a few points I want to focus on with the Intel-Rambus relationship.

And if we can put up, I think it's slide 240.

I want to focus on these dates and lead up to them. In April 1998, Intel decided it was going to compete, not partner with but compete with Rambus after 2002. That's the end of that contract. That's back in April 1998. Defendants had nothing to do with that.

But in March 1999, Intel had moved from Rambus even for the current generation. It realized it couldn't stay with Rambus for 2001, 2000, exclusively as it had hoped to. Not because of the Defendants, but because their experience with Rambus and that product.

In October 1999, there was that corporate strategic discussion meeting where they officially say, "We're transitioning away from Rambus."

And then December '99 there's a post-mortem where Intel looks back and says to itself, "How did this happen? Why did this happen?" And that will be an interesting document for you folks to read.

So you're going to have these important changes in Intel's mind, and you heard from their witnesses. And, by the way, you heard from them not because of Rambus, by the way. They did read to you some testimony of Mr. MacWilliams in their case, which focused on why Intel chose Rambus to begin with; but on the issue of why did Intel dethrone Rambus, pretty critical issue in the case, don't you think, you heard nothing in

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1
     Rambus's case.
         And we brought you Mr. Swope.
 2
         And this is 241, I believe.
 3
 4
         I'm sorry, Mr. Fahey we'll start with. And the Court was
     asking him questions about: (reading)
 5
 6
             "Did you think it was a winner? You keep going
         pass the minimum contract requirement."
 7
         That's to 2002. And he says:
                                        (reading)
 8
 9
             "My personal belief was at the time I was told
10
         this, " and this is about the slips, "that the market
11
         had already past and that people weren't going to be
         interested in RDRAM."
12
13
         The Court: (reading)
14
             "And when did this happen? When did you develop
         this understanding?
15
             "I developed my understanding of my belief in the
16
17
         marketplace by the time we launched our Camino in
18
         1999."
         Mr. Fahey, by the way, lives in the area. We subpoenaed him
19
20
     to come here. You were told in opening that, "Oh, you won't
     hear from Intel witnesses because, you know, we can't make them
21
22
     come here." Yes, you could make Mr. Fahey come here, but he
     wasn't going to say anything good about Rambus.
23
         And then you heard -- if we can go to 242.
24
         This is Mr. Bhandarkar, I think is how he pronounces his
25
26
     name, and he said: (reading)
27
             "Pursuant to the decisions that were made in that
         October 1999 CSD, was there any plan to use RDRAM on
28
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a long-term basis after 2002?" 1 His answer, "No." 2 And then Mr. Swope: (reading) 3 4 "Mr. Swope, what was your view of the Intel-Rambus relationship when your offer was 5 6 rejected in January of 2000? "I thought the relationship was doomed. 7 That was what I said to Paul and -- sorry, Paul Otellini and 8 Pat Gelsinger." 9 10 Now, let's look behind that a little bit, into those 11 details: Why did RDRAM not become mainstream memory? 12 And, by the way, when I say that Rambus didn't call anyone on this, I want to call particular attention to Mr. or 13 14 Professor Horowitz because they put Professor Horowitz on the stand to talk about Direct RDRAM. Now, that's the product that 15 16 Intel and Rambus agreed to make, Direct RDRAM. 17 Remember, concurrent was before and Base was before. 18 talking about Direct RDRAM. And they put up Professor Horowitz to talk about the 19 20 problems, the delays. He said there was only one Camino delay. And what he said, though, was -- and if we can put up slide 21 10 -- is that he wasn't even a full-time employee after 1991 and 22 he wasn't involved directly in the Rambus-Intel relationship 23 from 1999 to 2002. Here's somebody who couldn't tell you about 24 25 this critical question, "Why was Rambus dethroned?" 26 In fact, he said in one deposition and later in another, in 27 two depositions, that he wasn't even really familiar with the architecture of the Direct RDRAM product. 28

And that's slide 253.

He was read, this is in 2008, in a deposition: (reading)

"You testified in August of 2001, you were asked,
'Are you generally familiar with the architecture and

operation of Direct RDRAM?' Your answer was, 'No.'

"Did anything change after August 2001 that would make that answer different today?

"A. No. And I'm glad I said 'no' then because certainly the answer is 'no' now."

So why did you hear from Professor Horowitz? It's part of the litigation strategy.

You recall you saw Exhibit I think it's 1093, and it's an email Mr. Mooring wrote June 25, 1998, to the executives at Rambus, and he talks about "our perception before legal action." And he talks about, "You know what we're going to do?"

Let's go to 294.

"We'll play up the role of Horowitz early on. The Stanford Ph.D. inventor who worked on these concepts 10 years ago supports us as the inventor in our academic ties." And, so, that's why you heard from Professor Horowitz even though he had nothing to say about the technology in this case or the key relationships in this case.

So let's talk about that and how it started. And Mr. Nissly talked to you about the original contract and about Intel's obligations under that contract to support main memory until 2002.

I want to talk to you about Rambus's obligations. And it started -- there was a kickoff meeting before the contract was

signed, and I don't know if you remember Mr. Hampel saying 1 biggest meeting he had attended at Rambus because they're 2 talking about that relationship. 3 4 And that's shown in Exhibit 5092. This is an email, an internal Rambus email, about that kickoff meeting written by 5 6 Laura Fleming to all the executives. And you can look at everybody who attended from Intel and from Rambus. 7 And this is June 29, 1996, the email. It's about a 8 9 June 25th meeting, and it talks about the objectives: (reading) 10 "Performance has to be same or better latency 11 than SDRAM from the beginning. The unit cost no greater than 64-megabit 12 100 megahertz SDRAM." 13 14 They focus very early on on: How much is this going to manufacture? And, by the way, Mr. MacWilliams testified the 15 cost here is talking about the cost to manufacture, not the cost 16 to the consumer or the cost to the OEM. 17 And if we go to the second page of this, there's more about 18 cost. And here he talks about maintaining overall system cost: 19 20 (reading) "The cost of each generation desktop platform 21 22 must remain fixed or decrease if possible." And he talks about: 23 (reading) "Cost increases in one area are acceptable only 24 if they result in direct cost reduction in another 25 26 area." So this is the kickoff meeting. And then the contract, and 27 there's a publicly available version of the contract, which is 28

somewhat redacted but we showed you at trial, and that was 890A.

In the contract, it's gotten a little looser in terms of costs, but in the contract, and this is Exhibit 890A, it talks about the cost of Rambus DRAM, Direct RAM, being within 5 percent of 100 megahertz SDRAM.

And then if you really want to know whether that was a requirement, look at the internal Rambus presentation made just a couple of days after the contract was signed. And that's Exhibit 5143. And this is in January -- I'm sorry, November 18, 1996.

And let's go to the next slide, Ken, because we've talked about....

Here we have what Rambus's commitments are. What do we have to do to win? And one is, is says: (reading)

"Deliver our commitments to Rambus II. Costs within 5 percent of SDRAM 100 megahertz."

And that was critical because it was understood that for a new technology to go into mainstream memory as opposed to being a niche, as opposed to being just in high end, everyone knew you had to keep the cost down to manufacturers to within 5 percent.

And, in fact, later, years later, when Rambus was coming up with XDRAM and it wanted to try to make that main memory compared to DDR2, Rambus did an internal presentation, and I discussed that with Mr. Hampel.

And that's slide 778.

This is Exhibit 7858. And, so, when they're doing their XDR main memory task force proposal, you see one of the key metrics: (reading)

"Cost must be less than 5 percent of DDR2."

So when they're trying to become main memory later with a different product, it is still, you've got to be able to manufacture this at a low cost.

And here's the problem: Intel lifted them up. Not only did they not perform, but Rambus knew they weren't going to perform. In fact, they didn't tell Intel how they had failures and problems. They kept it from them intentionally.

If you look at Exhibit 5073, this is before the contract is signed when Intel has talked about schedules. This is an internal Rambus email, Dave Mooring to Professor Horowitz, also Mr. Farmwald. And this is Exhibit 5073. And one of the things he discusses is the schedule reality: (reading)

"The odds that Rambus II," and it's undisputed

"Rambus II" means the Direct RDRAM we're talking

about here, "will meet the chipset schedule they're

targeting is low. If we don't convince them that the

Concurrent is good enough for the first generations

of products, then we are in a precarious situation."

The Concurrent was never used by Intel. It was rejected by Intel. And, so, negotiating this contract Rambus knows, "We're not going to meet the schedules. We're in a precarious situation." Also, before entering into the contract they knew about the problems with Direct RDRAM that Intel did not know.

And that's Exhibit 5099. This is an email again within Rambus, before the signing of the contract, July 24, 1996, from one of the head engineers, Rick Barth, to the entire executive team talking about Intel's strategy and it talks about:

(reading) "RB II, " again that's the Direct RDRAM, "has 2 significant problems to solve." 3 4 It talks about speed, power, cost, and then he asks two (reading) 5 questions: 6 "Is the value proposition of Concurrent," that's not Direct, that's the prior thing, "compared to 7 100 megahertz times 32 SDRAM strong enough to get 8 9 Intel to switch DRAM technologies twice?" 10 And Professor Horowitz told you undisputed the answer to 11 that was no. Intel wasn't interested in Concurrent. 12 Next question: (reading) "Is there any way to get Intel into an RB I 13 14 strategy than RB II strategy?" "RB I" refers to Concurrent. RB II refers to the 15 Direct RDRAM that Intel was going to try to make with Rambus. 16 17 Undisputed the answer to that was no. Intel's contract was 18 about Direct RDRAM. (reading) "If the answers to both questions are 'no,' then 19 20 during the RB II, " the Direct RDRAM, "architectural phase, "we have to downplay the significant problems 21 and let Intel discover them for themselves." 22 And what the result of that would be would be to drag out 23 the development. It would be that, you know, there might be 24 25 result in support from Intel for other technologies. BX was the former technology. It actually became PC133. If there are no 26 significant competitors, that's no problem; but as you learned 27 later, there were. So this relationship is conceived in fraud. 28

1

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And, by the way, Professor -- Mr. MacWilliams of Intel told
 1
     you they did discover these problems.
 2
         I think slide it's 1106.
 3
 4
         He's asked:
                      (reading)
             "The last major bullet says 'Technology
 5
 6
         Development Challenging.' What does that refer to?
             "That means after we signed the contract and
 7
         started to dig into some of the details beyond the
 8
         basics of what Direct RDRAM needed to be, we saw
 9
10
         there were some issues that needed to be solved and
11
         that had a lot of work left to do. It wasn't all
12
         done as we had hoped."
         That was no mistake. That was intentional.
13
                                                       That was
14
     Rambus's intent, to be lifted up, to become king, by withholding
     from Intel information about its own product.
15
         Now, I said I'd go for 25 minutes, is this -- shall I go --
16
17
     is this a good time?
         THE COURT: Okay.
18
         MR. PRICE: Have a nice lunch.
19
20
         THE COURT: Be back in your seats at a quarter after,
     quarter after the hour. 15 minutes after.
21
2.2
                       (Recess taken at 11:49 a.m.)
23
                    (Proceedings resumed at 12:16 p.m.)
         (The following proceedings were heard in the presence of the
24
     jury:)
25
         THE COURT: On the record. Counsel are present, 12 jurors,
26
     3 alternates.
27
28
         You may continue.
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MR. PRICE: Ladies and Gentlemen, I hope you got some lunch and fresh air.

So let me continue. And, by the way, on the timeline we have in front of you, we've gone through the Intel-Rambus contract and you see in '97 it says, "Value PCs emerge," and that's Exhibit 5290. It turns out I don't have that blown up yet, but remember there was discussion in around '97 where Intel informed Rambus, "You know, we don't see this waterfalling into Segment 0 anymore because the value PC segment is getting so much larger."

So let me, then, talk about what else happened after 1997.

And, remember, between '96 and the April '98 time where Intel said it was going to compete with Rambus on the next generation, Rambus was living with Intel. And in that time frame Rambus went around to all the DRAM manufacturers, including Micron, and basically said, "You've got to license our technology or you're going to be dead."

And Mr. Horowitz, you know, testified, he said, "You know, you had to license with us in case Intel decided to drive this into mainstream memory."

Slide 756, where I was asking him: (reading)

"By '97 your understanding was Intel had made a commitment to make Rambus RDRAM the primary mainstream memory and because of that, pretty much every DRAM manufacturer had to sign up with a license with Rambus or else it might be left out of the next generation marketplace?"

And his answer was: (reading)

"Half the world is DRAM BIS attached to Intel silicon. So if Intel said it was going to be primary, then any DRAM -- any DRAM manufacturer would want to participate."

And, in fact, you might remember Exhibit 5144, it had gorilla pictures in it and I think that's slide 24, where they kind of had, this would be a funny letter, this letter wasn't actually sent, basically saying: (reading)

"Your products must be ready to support D series RDRAMs or your could will become extinct."

And although that was a joke in this presentation, that was true. And, so, Rambus did things, like approaching Micron, and said, "Hey, we'll even bribe -- we'll give you \$6 million if you agree not to look and research any competitive sort of memory chip," that all would behind one arrow, the idea that Mr. Crisp suggested, and Micron was able to say no on that definitively, "We are going to be able to support and create other memory technology."

But in that time frame they were doing this to a number of manufacturers and Intel saw this happening. In fact, one thing Intel saw was that Rambus's goal was to have no competition whatsoever. And in '97 Intel, you know, having figured out there's going to be a value PC market and trying to make this work, thought, "Well, maybe we should do a DDR backup chipset." And they actually had in mind kind of a hub that would allow their processor to work with either RDRAM or DDR.

And we can see what Rambus's reaction was in Mr. Tate's email. It's Exhibit 5258. This is in August of 1997, and it's

sent by Mr. Tate to Mr. Mooring and Ms. Fleming. And it talks 1 about -- if we can pull up -- it talks about Intel talking about 2 a backup chipset. And he says: (reading) 3 4 "They need to know that a DDR backup chipset is, first, real bad for their objectives; and, second, 5 6 one that we cannot except under our original 'Make Us King' deal." 7 So having lived with Rambus for a couple of years and 8 realizing what Rambus had provided, which wasn't what Intel 9 10 expected, having realized that they were bullying DRAM 11 manufacturers, hadn't realized what Rambus really wanted, which 12 was no competition, Intel goes and talks to them or Rambus talks to Intel. 13 14 And Mr. Nissly talked to you about how in April '98 Intel told them, "We're going to compete, not partner, with you." 15 Well, on April 11, prior to the April 14th email, there was 16 an email -- if we can -- oh, by the way, I meant to say, I don't 17 18 know if you saw the subject of that email we just put up, which was -- if we can go back to 908 -- the subject is a meeting with 19 20 Jerry Parker and Pat Gelsinger at Intel and the subject was the "DDR Crush Plan." 21 22 And, so, we go to April 11th, 1998. And if we can put up Exhibit 5417. 23 This is an email from Geoff Tate to Mr. Fleming and Dave 24 Mooring and it's about conversations they had with Intel. And 25 Jerry Parker of Intel said: (reading) 26

"Rambus should get no shot at the next generation."

27

28

What appears to bug Parker significantly is that Rambus uses Intel as a club. He goes on to say: They generally have an impression that Intel is doing too much of the work. Rambus is getting a free ride, which was Rambus's idea back in 1996 when it wasn't going to tell them about the problems and let Intel discover themselves; that the DRAM companies are still unsupportive, and that's not these Defendants here, just these alleged conspirators. These are the DRAM companies who had to manufacture this and make this work, including the companies that aren't alleged to be conspirators.

And then we, referring to Rambus, aren't executing that well. Cost. Remember the 5 percent to get to mainstream.

Performance. And then ramp means actually being able to build it.

So three days later, there's an email on April 14, and
Mr. Nissly showed you this one. This was from Geoff Tate to the
executives. And you remember how precise Mr. Tate was in
answering questions? Remember when he would look at a document?
I mean, this is a guy who's very focused. Let's say focused.
And here's his executive summary of a fairly long email:
(reading)

"Intel says they are basically going to compete with us on next generation."

That's his succinct summary of this email. No partnership. You don't want to be competing with Intel if you're Rambus; right?

So that's in April '98. Now there's another interesting thing on this; and that is, before this paragraph, there's a

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paragraph on this first page -- if we can go to, I think it's
 1
     slide 769 -- and it says, you know: (reading)
 2
             "Don't pass on this information. Also, Gary
 3
 4
         needs to talk to Wilson Sonsini to see if this
         information is a reason to block trading for
 5
 6
         insiders. Gary will advise as soon as possible."
         Now, Wilson Sonsini is not a person. That's a law firm.
 7
     And what they're talking about here is they've just been told by
 8
 9
     Intel, "We're going to compete with you in the next generation
10
     after 2002, " and they're wondering, "Well, does that mean we
11
     can't trade our stock?" Because, you know, that kind of
12
     information, it's going to hurt the company. It's going to
     lower the stock price. So they're saying, "We've got to contact
13
14
     Wilson Sonsini to see if we can do that, you know, sell some
     stuck before people know."
15
         And they come to the conclusion, it's last paragraph,
16
17
     insider trading block: (reading)
18
             "Bill's thinking was definitely flag Wilson
         Sonsini and get their input."
19
20
         But then they add this: (reading)
             "This is primarily a next generation issue, not
21
22
         near term, and nothing we've said or the contract
23
         says indicates that Intel will use our next
         generation."
24
         And, so, basically they're saying, "The reason we can sell
25
     our stock, even though we got this information and the public
26
27
     doesn't know it, is the contract doesn't say Intel will support
    us anyway after 2002." You see, they're asking for damages to
28
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what, 2010?

Damages tell you, by the way, a lot about what the real reason for the lawsuit is. It tells you about the entire credibility of the lawsuit.

So this is as of April 1998. And, so, what happens between April '98 and the first Camino delay?

Well, for one thing, Rambus did not deliver that turnkey package and Mr. MacWilliams told you that. The other thing that Intel found was that, "This is just something that's so difficult to produce. If we had to do it over again, we never would have done it." That's Exhibit 5571.

This is Geoff Tate summarizing a meeting. This is in September 8, 1998: (reading)

"The Camino team," and that's referring to the
Intel team, "recently stated that if they knew how
hard Direct was going to be to use, they would not
have done it. I know a few of them will shy way from
RDRAM-based systems because it is so difficult to
use."

And you saw Mr. Nissly put up Mr. Fahey's testimony about how Rambus is code for "as hard as it gets." Well, Mr. Fahey explained what he meant by that.

And that's, I think it was, 246, Ken.

This explains where he reported directly to Mr. Ahmad and he's currently director of Intel's Platform Memory Operations and a member of the JEDEC, but at the time he was the RDRAM program manager.

And if we can go to, I think it's, 1107. (reading)

1 "You know, what do you mean it's as hard as it 2 qets?" And he basically says: (reading) 3 "It costs too much and it's too hard to do. 4 That whenever somebody's trying to develop a new 5 technology, and I've worked on some of these at 6 Intel, and that's why I'm saying that there would be 7 a new memory technology where someone's got some 8 bright idea, 'Hey, you know, what if we do this? 9 10 We'll go that much faster how great it would be.' 11 And people always come back and ask the same 12 question, 'Are you sure this isn't a Rambus thing?' 13 That sounds great on paper and it's really whizzy technology but in reality it's going to be, you're 14 underscoring it, it's going to be a huge problem. 15 It's going to cost so much." 16 17 It's just like kind of a benchmark at Intel to compare, 18 right, to say Rambus is code for, "Are you trying to bite of more than you can chew?" 19 20 So they're discovering this while they're working with Rambus and with this product. They're not saying this is a 21 22 great product. They're saying, "This is almost impossible." 23 And Mr. Fahey told you that the Rambus folks had no idea 24 what they were doing. Mr. Nissly put up part of the quote. I want to put up slide 61, Ken. 25 He gives examples and they're critical examples about this 26 27 product. He says: (reading) "For example, I would just say what I thought 28

would be -- just be common sense. If the die size is
2 percent bigger, then you know it's going to cost
more than 25 percent in the fab process to make it."

You remember, there's die size costs. There's also yield costs; right? There's also tester costs. There's also getting new equipment. (reading)

"It's going to be far worse than that and this would just seem to go over their heads; or to say, you know, that the package is going to cost more and that's a big problem. And they would just say, 'Well, the spreadsheet shows it's only such and such a percent so that's no big deal.' But in reality it's a very, very big deal.

"And, so, I just came to realize these people had no experience at all with what it takes to actually develop a real product, a real product that a real company makes, and they sell it and they can make a real business out of it."

And you heard Mr. Fahey testify about how they got Camino to finally work and ship in volumes really only for the high-end memory market -- I'll get to that later -- like .2 percent of the market; and you heard him testify as to who really put in the effort in '99 to make that happen and you heard him testify who it was and it was not Rambus.

And, so, February '99 we have the first Camino delay. And then it's at that time that Swope swoops, you know, Swope comes in to resolve this, these issues with Rambus.

And if we can do slide 244.

You remember Mr. Swope worked directly with Paul Otellini, who was the executive vice president and became the CEO of Rambus, that when he retired recently, he was one of the top 15 people at Rambus -- I'm sorry, at Intel; thank you for saying that -- and his job was Intel's long-term and near-term strategy. I mean, his job was structuring these road maps.

And, by the way, Mr. Swope, while this case was going on, he still worked at Intel and both Rambus and Micron went and talked to him. He said he would talk to anyone. Rambus, he said, came in and said, "Look at this pricing stuff." He wasn't interested in that. He'll talk to you about what Intel did. He didn't want to see the pricing stuff. It didn't matter to him because he knew what happened at Rambus.

And, so, we got him to come here and to testify, and Rambus wanted nothing to do with Mr. Swope and that's why he was called in our case.

So he comes in and you remember that was in the -- in March of 1999 where he had this meeting about the road map and this meeting, by the way, was a huge deal. This was not something that happened all the time. And this delay was a huge deal.

And Mr. Swope says, talking about the delay, "You know, why was this happening? Why were you asked to do this?" And he says: (reading)

"A slip is a big deal. So when you slip a product, that ends up -- that would be in parlance a red flag that there's problems; right? So by that time, they believed that there were both technical issues and then the actual product delay. As I dug

into it, I understood better and better why I was asked to do something."

Now, Rambus has said, "Oh, you know, there have been delays in DDR and other products." This isn't a delay by Micron or a delay by HP. This is a delay on a product that had been in research and had been trying to develop for, you know, almost three years. It was Intel, 80 percent of the market processors, and they were having trouble on this. This was a big deal.

And you saw briefly, I think it's Exhibit 5853, and I think Mr. Nissly showed you, there was this desktop memory road map strategic discussion and he showed you the place where, you know, the equipment manufacturers didn't look like they wanted it. I mean, they were only going to sell a little more than half of what Intel thought.

And Mr. Swope explained to you this was a huge deal.

And that's, if we can go to slide 77, Ken, I'll get back to that.

He says: (reading)

"You know, what this says is Intel is expecting we're going to be able to sell in the neighborhood of 160 million units and the OEMs only thought they were going to be purchasing 85 million."

He goes on to say: (reading)

"This is a very, very big deal because if they don't buy the chipset, then they might also start thinking about whether or not they wanted to buy the processor," which Intel made.

So this ends up being a very, very important -- I mean, this

is a big deal. This would be financially material to the company.

And looking at this, I mean, this is not a waterfall. This is a -- this is a water fountain you're seeing here with what the OEMs want. And this has nothing to do, again, with any conspiracy, any manufacturers. In fact, they were -- they were looking and assuming, trying to project what price premiums would be.

And, actually, let's start with slide 71, Ken. This is in the same exhibit. I'm sorry, it was slide 73. I apologize.

And the current issues were Direct RDRAM wasn't robust. I mean, working. Direct RDRAM cost price higher than original projection.

And you see they're linking the two. There's an inherent cost adder and at this point Intel is linking that to whether there's going to be a price premium.

He also talks about performance isn't up to expectation.

PC133 exists. That's the SDRAM. Server OEMs do not like

Direct RDRAM.

And, as I said, Rambus has it backwards. You want to choose a product that can waterfall. You don't want to try to force a waterfall down people's floats.

So one of the criteria is: Is this something that actually will actually waterfall? Not that we're going to force it on you, Hewlett-Packard, IBM, and everybody else because we can.

And this is all -- this cost price is while they're assuming certain price premiums.

And that's slide 255.

And remember you saw Mr. Halbert's analysis of what the cost was going to be initially, the cost premium of 70 percent? That included die costs and everything else; right?

Eventually, you know, a lot of those things would decrease. Your yields would get better. You would already have the equipment you know. So eventually it would get down to the cost premium of probably the die size and a few other things.

And, so, they're looking, you know, just at the cost premiums associated with price premiums associated with cost.

And they've got a worst case scenario of 80 percent where there's a 70 percent cost premium. It ends up by third quarter 2000 they're talking about a 15 percent cost adder being typical. Okay?

So when Intel's making this decision, it's not considering, you know, high prices of RDRAM beyond cost. It's considering the product and it's considering Rambus. And the conclusion was: You can't rely on RDRAM for the current generation.

And Mr. Swope wrote an email the day after this, that's Exhibit 5854, where he says: (reading)

"Most aspects of the Rambus transition have been more difficult than we anticipated. To that end, we believe that a strategy that puts our chipset and our value processor line dependent solely on Rambus is no longer viable."

What they concluded was, and Mr. Swope testified, that they realized was that Rambus -- that's at slide 85 -- wasn't what you wanted for that increasing value market.

He said: (reading)

"We realize looking at the degree of difficulty, there are other issues associated with this as well, we came to the conclusion that we just could not do it for this value segment for the market and we needed to offer both. We just thought it was too much business was at risk."

By the way, this is, according to Rambus, part of the downward spiral with Intel. Why? Intel's now talking as they were in '97 about choice. That's not what Rambus wants.

You know, there is an instruction, which I'll get to, about, you know, assuming there was a conspiracy, assuming that there was this conspiracy to make Rambus a niche, it didn't happen for all the happens that you've seen, would that be better or worse? Because in Rambus's world, there is no choice. It is them.

The problem Intel had was that here they are in March '99.

They don't have a chipset that's going to work with PC133.

Remember, it takes awhile to develop these things.

And, so, if we put up slide 81 here.

This is part of Exhibit 5853. They're talking about PC133: (reading)

"Intel chipset support is not possible before the second half of 2000."

You know, Intel's like a huge boat. I'm going from buses to boats. You know, that when it turns, it's got to do it way ahead of time because these products are long in development. You know, so if it wants to -- if it doesn't want to be the *Titanic*, it's got to start making these changes way ahead of time when it sees those glaciers.

So at this point we're in April '99. April '99 there is this delay. Intel, by the way, announces finally in the summer that, "We are going to have a chipset. Tell the market we're going to have a chipset, Pentium 3, that works with PC133," which was news to everyone, "Hmm, they're not supporting Rambus alone."

And then what happens with that delay is the delay has a delay. And in September of '99 there's that second delay, which is at the time announced to be indefinite. And you'll recall Mr. Fahey testified that by that time he knew, and I think we -- he knew that this was not going to be mainstream memory: (reading)

"On this second slip, did you have a belief as to how that would impact Rambus DRAM becoming the mainstream memory chip in the marketplace?"

He says: (reading)

"My belief was we're already in a really bad position with that big slip being more than one quarter," when they lost the back-to-school sales.

And yet this other slip again, the September slip again just confirmed in everybody's mind that RDRAM was just not going to work. It was not going to be a mainstream technology.

And, by the way, if you remember Professor Horowitz being examined. You know, people had to throw away the motherboards. They had to throw away, you know, 64-megabit chips they were working on. I mean, this cost the industry a lot of money and Rambus's reputation was really kind of destroyed here.

So we then go to after that September delay, Intel

announced, you know, the SDRAM chipset. I'll get to the life after Intel later.

But in October they convene -- Intel convenes a corporate strategic direction meeting. This is a rare, rare event at Intel and that's what -- slide 94 -- that's what, I believe, Mr. Bhandarkar testified to. He was involved in that meeting: (reading)

"Those meetings were a big deal. It took a crisis situation for us to pull a CSD; and when a CSD was organized, that became top priority for senior people in the company to address some pretty difficult issues, come up with a recommendation."

Now, I'm going to go, when I have time, I'm just going to go through all of this. This was -- the presentation at this meeting was fairly voluminous and it was all cards on the table. What's great about RDRAM? What's great about DDR? What's great about SDR? What are the pros and the cons? Everyone had their say, putting in the best stuff, you know, for each technology.

The bottom line, the bottom line was they decided that they're going to remove their dependency on Rambus -- and that was Exhibit 8207B, slide 96; I think you saw that with Mr. Nissly -- on any single technology provider, that's talking about Rambus, and that they were going to -- they were going to transition away from Rambus.

And Mr. Bhandarkar testified. He was asked, "What did this mean?" And if we can see his testimony: (reading)

"Pursuant to the decisions that were made in that October 1999 CSD, was there any plan to use RDRAM on

a long-term basis after 2002?"

And the answer was, "No."

The problem is that Rambus was not in play going forward but its contract had not played out. It still had the "Make Us King" deal. And, so, part of this presentation -- if we can go to slide 101 -- part of this presentation, there was a business part, contract analysis: (reading)

"If we do not use best efforts to promote RDRAM as," quote, "primary DRAM for PC main memory apps through '02 or communicate to DRAM industry or Rambus that we do not plan to support RDRAM as primary DRAM, Rambus could terminate our license immediately.

Injunctive relief possible."

And here's what that meant: It meant that if Intel didn't tell not just the world but Rambus, Intel had to say, "We're still going to support you for main memory up through 2002." They had to tell the world that. They had to promote it as that; and if they didn't, Rambus could shut them down with an injunction.

And what that means, you know, Intel had these P3 processors that had been developed for years. It had the P4 processors that were dependent just on RDRAM development. And, so, now they're in a pickle.

They've lived with Rambus. They've lived with this product technology. But what can they do? And, so, what they do is they decide, "You know, this is going to cost us billions of dollars to make this transition, by the way." I mean, Intel is saying, "By doing this, we put all of our chips on Rambus,

switching over is going to cost us millions."

There were people who thought, oh, the performance is going to be affected because they were basing it on the simulations, not on what actually happened in the real world. And for Intel this was a financial disaster.

And Mr. Swope said Intel did not kill Rambus. I mean, they made the decision but it was Rambus that killed Rambus, but they didn't want anyone to know. They wanted a gag order on that.

And that's -- if you look at Exhibit 6254, this is Mr. Swope the next day talking about "Today's CSD Effort and Result" sent to the executives within Rambus:

Very nice job, guys. We got what we wanted. Right decision for Intel and for the industry. Not much kick in having to go in and explain the strategy was wrong. We want to increase costs -- it was going to cost Intel a lot of money -- increase capital expense, lower performance, slip a few products, open us up for an injunction. Not fair but the law ain't always fair.

He says: (reading)

"Multiple people have come up to me explaining to me what a good job we did killing Rambus. Nothing could be further from what we wanted, from the desired result. Intel benefits by billions of dollars if we get the RDRAM technology successful and a business model from Rambus that's good for the industry."

The reason for that is, Intel had a sweetheart deal on

Rambus. They had like a one lump-sum payment and some small

quarterly payments. Its competitor AMD had to pay 5 percent per

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chip, per megabit per chip, but it was a large royalty. So
 1
     Intel had a huge advantage. They were going to have to give
 2
               They didn't want to give it up.
 3
     that up.
 4
         So he says:
                     (reading)
             "So gag order. One voice. Don't start telling
 5
 6
         just your good friends. We'll really hurt ourselves
         and give Rambus a real complaint."
 7
         And then he wanted to personally review any spin on that.
 8
         And when Mr. Swope was on the stand, he was questioned by
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10
     Mr. Williams and said, "Ah, but price. Price was a factor in
11
     this; right?" And here's what Mr. Swope said, slide 116:
12
     (reading)
13
             "During the time period you were working on the
14
         RDRAM project that you were assigned to, was it the
         case that the price for DRAM, or specifically RDRAM,
15
         in the marketplace was a substantial factor in
16
         affecting your analysis of the RDRAM road map?
17
             "No."
18
19
         Mr. Williams:
                        (reading)
20
             "Price is never -- is not -- I thought you said a
         minute ago that price is a factor.
21
22
             "I said price was a matter for the OEMs but it
23
         was not a matter in the 1999 time frame."
         And then Mr. Williams said:
                                       (reading)
24
             "Oh, yeah, in 1999 it hadn't been launched yet;
25
         right?
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                  Correct."
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             ΠA.
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         This is Intel's decision to did dethrone Rambus, not based
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on anything the Defendants did and not based on price. And the result of that is that you got different internal and external road maps.

Now, internal to Intel you had things like Exhibit 8410A.

You had these Intel secret road maps. This was -- go to the next -- this was reviewing changes after that

And if we can go to slide....

October 7th meeting.

This is where they say, "Added Tulloch D." Now, that means it's a DDR memory chip that's going to work with their -- with their low-cost Pentium 4. "We're going to add that in the fourth quarter of '01 but our external plan of record hasn't changed. We're still showing RDRAM and '01 is the earliest we believe we can enable DDR based on a fourth quarter '99 start."

Remember, they're starting late. That ship, the *Titanic*, is moving pretty slowly here.

They also talk about the Almador changing from RDRAM to SDRAM and DDR. Again, "That's not what our plan of record is going to be."

If you go to slide 123, this is Page 26, they talk about the road maps, they talk about changing the DDR, they talk about marketing RDRAM and SDRAM products at this point with no disclosure of DDR.

And Mr. Bhandarkar explained to you why, and that was what that meant. And he was asked: (reading)

"Is that what you described earlier where Intel would sometimes have a different communication externally than internally?"

And he said: (reading)

"That's correct. The only chips sets we had at that point were RDRAM and we were in the process of developing DDR SDRAM and that would take 18 months, 24 months."

So this would refer to when do we tell our OEM customers and when do we tell the world at large about that change? And, so, you don't disclose. This is Intel's strategy.

If we can go to 990.

He was asked whether or not his experience was there would be decisions had been made but something wasn't being communicated externally. He said: (reading)

"It happened all the time. For the reason that you don't want to give people any more information than they need to do their piece; and if you disclose too early, it's bad for your business. So in general you show them what they can buy from you and things that are further out you don't disclose to them primarily there's -- you know, it affects how they do business with you in the shorter term and your plans could leak out."

Micron was doing what it could, busting -- spending weekends, hours and hours trying to make sure it was ready for RDRAM, and this is why: Because Intel didn't change its public road map at the time. The decision had been made but Micron didn't know. It suspected. Then some newspaper articles, but -- so Micron goes on.

And after this, did Rambus try to shore this relationship

up? Well, you remember there was the Gelsinger letter. That's Exhibit 6296 where Mr. Gelsinger writes in October of '99 that, you know, how they are being forced to rearchitect their chipset. And, by the way, here's the key language because of the contract, "While remaining committed to RDRAM as a primary PC main memory," and then they go on saying, "We're changing our architecture. We're changing our road map." And they use the magical words they have to use under the contract.

And Rambus's response is to go to Intel and make a presentation that is totally disingenuous. And you see Intel's response in Exhibit 6382, and this is to Mr. Tate and Mr. Mooring, December 20th: (reading)

"As we discussed at the meeting, we were very disappointed in the presentation you prepared for the ops review which Dave circulated to us beforehand and, unfortunately, feel compelled to respond in writing to what we believe are significant misrepresentations and self-serving commentary in that presentation."

And then it ends after giving a lot of examples: (reading)

"These are examples from what we perceive to be an entirely one-sided view of the relationship.

Perhaps most disappointing from out perspective is the fact that nowhere in the presentation is there mention of the two most fundamental reasons why the ramp of RDRAM technology has proceeded more slowly than we anticipated in 1996. Specifically, one, the fact at the end of 1999," this is even after it's in

the market in November, "we still don't have sufficiently robust RDRAM channel technology; and, two, that we are nowhere near the cost targets for RDRAM that we set four years ago."

By this time, by the way, Intel had realized they would never get those cost targets because of the inherent die size adder and that RDRAM was not going to be mainstream because of that.

In fact, Mr. Fahey testified: (reading)

"Did you and your colleagues believe at the end of '99 that, given the cost difference in manufacturing, that RDRAM could ever make it as the mainstream memory product?

"A. No. My colleagues and I believed it was a huge barrier. It just cost so much for the memory die to make, it just seemed really hard to believe that is could replace the existing SDRAM and DDR that was in play."

And, by the way, you saw Mr. Nissly showed you the post-mortem, December 29, 1999. If we can go just to -- that's Exhibit 6391. It was all the top people on the email. There are a number of -- they've got post-mortems at Intel on various departments. This was at the highest level. It wasn't like a little department's post-mortems. And one of the things they talked about in slide 764 is this cost, that: (reading)

"Our 5 percent target was unrealistic due to fundamental architectural costs and due to overall business dynamics in the memory ecosystem from 1996

to 1999 and the unknowns that Rambus had kept from us."

Look at 763. He talks about, you know, Direct RDRAM being unproven and it was all the unknowns we had yet to uncover that put the risks in the schedules that ultimately made the timeline impossible to achieve. They hadn't uncovered those when they had the contract with Rambus because Rambus kept it from them.

So what did Rambus do at this point? Well, they implemented plan B.

Now, you heard -- Mr. Nissly showed you the testimony from Mr. Swope. He showed you the testimony about how RDRAM was doomed because Rambus kept the guillotine over Intel's head.

And he showed you Mr. Fahey's reaction about learning that Rambus was going to sue the DRAM companies not for RDRAM but for the other technologies, and sued Hitachi; and went to other companies like Hynix, you know, trying to schedule a meeting with Micron to demand they be paid. And you heard that Micron and Hynix did what Mr. Karp and his attorney told them they would probably do if they learned about that, which is to file a declaratory relief action saying, "They're saying we owe them and we don't." It's called a -- when you file an action saying, "These guys are saying they're going to sue us. They've sued Hitachi. They're sueding Toshiba," and basically it gives you the right to go to court first and say they're wrong.

And you heard and you probably remember Mr. Fahey's response. Most of it was read to you. If you remember him on the stand and the emotion. Well, I hope you remember.

So after 2000, because of the contract and because of the

economics, Intel had to try to sell its processors. You will see road maps, like Exhibit 2626. This was the one that Mr. MacWilliams did in 2001 where they're saying, "Hey, Rambus, you know, it's in our road map."

Although even in this, if you look at Page 4, they talk about, you know, the servers transition to DDR. And when they say they're going to continue with RDRAM, when Mr. MacWilliams does his presentation, he talks about competitive pricing at Page 14, that's 955, competitive RDRAM pricing minimizes the role of DDR, that was based on the belief there had been a fundamental rearchitecture of the Rambus product to something called 4i.

And actually if you look at Page 10 of this document, slide 994, he talks about the hinge factor. RDRAM memory cost can be competitive with this new 4i bank design, which was rejected by both Rambus and Intel because its performance was so poor.

The reality was the decisions had been made. The reality was Mr. MacWilliams wasn't responsible for the road map.

Mr. Bhandarkar testified about that and Mr. Swope as well.

I think you remember, this is slide 219, Mr. Swope was asked whether Mr. MacWilliams was responsible for the strategic road map and said that was the CSD.

And Mr. Bhandarkar explained the situation Mr. MacWilliams was in. He was the one who made this decision years ago to go with RDRAM. Remember the get away from management by hope? And Mr. Bhandarkar talks about when he did the original analysis, he tied is reputation on RDRAM and he kept clinging onto the hope that some miracle would happen, and that's what he's referring

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And Rambus knew. Rambus knew. It had one of its employees responsible for the Intel relationship go and try to get some information about Intel. And the email was written, this is Exhibit 6956, this was written to Mr. Tate -- to all the executives of Rambus by Chris Slocum about a meeting with Intel and trying to get feedback from Intel. This is in 2000. management is upset. Thinks Rambus is greedy and ungrateful. Difficult to find champions that will stick their necks out for Rambus again. All the people who were adversely affected pushed out. Remaining people left were hurt in the pocketbook. Rambus is the kiss of death. Many think Abid should be fired. promised a 5 percent price adder for RDRAM. Some are joking that Rambus will be run by a bunch of lawyers with no future desire, you know, to innovate. Wow.

And there was, by the way, another secret internal road map which, I think, Mr. Nissly showed you briefly. This is Exhibit 8154. This was in the summer of 2000. MacWilliams is on it, Mr. Gelsinger, Mr. Ahmad. And, again, this is Intel secret. This is internal.

And at 199 they talk about that permanent cost disadvantage.

70 percent going down to 20 percent. Permanent cost disadvantage. It's not going to be mainstream. It's becoming offensive, taking extreme positions.

And then if we go to slide 201, the hinge factors, don't communicate to the industry about this.

And then they have their prediction. This is summer 2000. This is the expected memory mix going forward. You see RDRAM

going to zero, DDR increasing, and all because of the permanent cost disadvantage.

And, so, when you look at why did RDRAM not become mainstream memory, think of -- you know, look at the evidence. And we've done a thing here, a slide of scales. And you've got -- Pete MacWilliams, you know, did that presentation in 2001 that assumed the 4i architecture. He was the one who was clinging to hope. But Mr. MacWilliams said -- nonetheless testified, this is slide 93, that Intel began to consider other memories in its product line, you know, in '99 and he wasn't part really of the CSD. So even he understood what was happening with Rambus.

And, so, if we go back to the scales, what you really have is Mr. MacWilliams also gives you testimony about Intel is going to go elsewhere.

And then you had the testimony of Mr. Leddiger (phonetic), I think it was -- Leddige, I'm sorry, about how impossible this was to make.

And then if we can go to the next slide, you had Mr. Fahey tell you that this was not going to be mainstream memory.

You had Mr. Halbert tell you that there was a permanent cost disadvantage; and he also testified, by the way, that as a result of that cost disadvantage, Rambus would only be high end.

If we can show slide 530, if you can. Can you do that? (reading)

"The goal changed to a more realistic 15 percent.

Did you yourself believe that would be okay to
satisfy the requirements for main memory?

"So 15 percent was going to be difficult to drive 1 it down into the mainstream and value segments. 2 that cost adder, it's probably relegated to the high 3 4 end." So if we can go back to our scales. You had Mr. Halbert and 5 6 then, of course, you had Mr. Swope testify and Mr. Bhandarkar. Why did RDRAM not become mainstream memory? 7 Now, you've seen some evidence about complaints about the 8 price and availability of RDRAM in 2000. That's price and 9 10 availability for RDRAM to go into that high-end niche market, 11 the Pentium 3, the Pentium 4. 12 Now, Mr. Bhandarkar testifying about the Pentium 4 said, this is slide 210: (reading) 13 14 "You know, the Willamette was the Pentium 4 that was coming out and was not intended to be high 15 volume? 16 17 "We hoped it would be but as we finished the design, the die size got pretty big and it was sort 18 of not economical to position it any way except for 19 20 the high end." So we're talking about the high-end market. Mr. Swope 21 22 testified, and this is 169, that: (reading) "Yeah, we got the Camino chipset out." 23 And he was asked by Mr. Williams: (reading) 24 "But by then the product was clean? 25 "Well, if it was able to be built in small 26 quantities, that's true. They were talking at the 27 28 time about the yields for the DRAM manufacturers.

1 Samsung was way ahead and getting pretty good yields but the others were getting very, very poor yields. 2 "But it was able to be built you say in small 3 4 quantities?" He says: (reading) 5 6 "Sure, because that was just the top end. there was that market. I would say it was 1 to 7 2 percent of the market at that time." 8 9 They're talking about that market. And Mr. Bhandarkar testified, you know, in the summer of 2000 when they had that 10 11 secret Intel road map, he was asked: (reading) 12 "Well," by Mr. Williams, "Well, March 2001 here, price and availability of RDRAM were a factor in 13 14 determining whether or not RDRAM was going to move down or SDRAM and DDR would move up; right?" 15 He said: (reading) 16 "No, because we -- in July of 2000, we'd removed 17 Tulloch R from the ramp." And that was their value 18 segment chipset. "No, they were removed from the 19 20 ramp." So here's the problem you had: Remember the Dell testimony? 21 22 Dell had a contract with Samsung in November 1999. Do you remember that? That's Exhibit 6340. Look at where Dell is now 23 24 at the end of '99. They've got this contract where they committed to purchasing volumes of RDRAM at these prices. 25 26 120-megabit was the part that really mattered. And you see the 27 prices going through April. They had made that commitment. And at that time, you know, everyone's thinking because of 28

all the advertising, this RDRAM is going to knock your socks 1 off. Huge performance. And, of course, people, some people, 2 will pay for huge performance. Part of the market. 3 4 In February of 2000, Dell is telling Micron, "We've got lots of demand at these prices. Lots of demand." And that's 5 6 Exhibit 2025. This is part of the email exchange of Mr. Appleton, 7 February 20, 2000, where, you know, Mr. Appleton says, "Well 8 aren't you paying a lot more for these?" And he wasn't giving 9 any price projections from Micron. He was saying, "Aren't you 10 11 paying a lot more than SDRAM?" He says: (reading) 12 "Steve, not sure your pricing is correct." Of course, he knew what the pricing was. He had a 13 14 contract. "But I know we are seeing huge demand from our customers for our RDRAM-based systems. Our 15 customers are paying for RDRAM systems and demand 16 exceeds supply for those super high prices." 17 It turned out the performance was not good at all. And, so, 18 Dell was in a situation that it got an oversupply. People 19 20 weren't buying. Because when it was actually in the market, it wasn't that 21 22 good. Remember Laura Fleming at Rambus, she wrote an email, this is Exhibit 10428, she wrote an email in '97 where she was 23 told by the folks at Rambus: (reading) 24 "We have to have the most compelling product 25 possible at launch. We only get one shot to set the 26

direct perception correctly the first time."

And Mr. Mooring said the same thing. First impressions,

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that matters. The first impressions you saw were that it did not perform better than the old product.

Remember Mr. Woo, I asked him about this and showed him this email that he wrote in July of 2000. He had been forwarded the article that said the old stuff works as well as RDRAM, the P3. And he says: (reading)

"I saw that article and even went to Intel's
Web site to look over the configurations. Normally
when Intel introduces a new product, they make sure
to benchmark it in an environment that does not allow
it to be compared to previous products. They use
different processor speeds, different amounts of
memory, et cetera. However, this time they used
exactly the same hardware, drivers, and CPU speeds
allowing direct comparisons to be made. Heaven
forbid.

"My take is that the results show what we already knew. They use" --

He talks about the PC133, which has a core CAS latency that is 25 percent faster than PC800. That's the RDRAM part. (reading)

"So based on this, the SDRAM part results should beat the RDRAM 820 results. Of course, I'm not so sure that we can say this in public."

Just another example of Rambus being Rambus. The first impression was horrible. They couldn't sell these things, and they were going to have in inherent cost disadvantage no matter what agreements there were on pricing.

In fact, Intel at the end of 1999 was trying to find some application that RDRAM would be better on. Something. And they -- this is Exhibit 6293. There was this email with Intel marketing about, you know: (reading)

"I'm looking for information showing RDRAM bandwidth versus SDRAM. The desire would be to show some application, Photoshop or some common app, that would perform so much better as processor speeds hit a certain point in relation to SDRAM and that SDRAM hits a wall and apps crawl at X speeds."

And the response to that was: (reading)

"There is no real app or benchmark today that would show the need for RDRAM."

He goes on to say: (reading)

"We spent almost a year running different OS
benchmark combinations at various CPU FSB
frequencies, memory sizes, hard disk drivers, memory
timings, on both 820 and BX," "BX" is PC100,

"searching for such app benchmark. Bottom line is,
SDRAM does not hit the wall and overclocked BX,"
which is the same as PC133, "keeps up with 820 RDRAM
or vice versa since BX performance is better on some
benchmarks."

So here you have Dell, they got -- they bought the stuff at what Rambus is now saying was ridiculously high prices.

Conspiracy. They thought they could sell all this because of performance.

And the performance, it turned out, was really kind of a

fraud on the public when you think about it. They come out with a Pentium 3. They advertise how much better it's going to be with RDRAM. They put this in the market and it's not. And that created a big black eye.

On the cost, by the way, I just want to refer you to Rambus knew there were larger costs, inherent costs, at the end of '99 -- or, I'm sorry, it was predicting the costs, a best-known methods kind of analysis, Exhibit 8097. This was estimating first quarter 2000 and fourth quarter 2000 costs in making this stuff.

And their conclusion was that Rambus estimate with industry BKM's, what this means, you go to -- and Mr. Hampel denied this but "BKM" stands for best-known method and what this means is you go and you take what's Samsung doing that's great, what is Toshiba doing that's great, what's Elpida doing that's great, let's combine them and just create the ideal manufacturer, which you couldn't do in real life because they all have different proprietary methods of making this stuff.

And if you do the ideal manufacturer, by the end of 2000, the inherent cost adder is still going to be 29 percent. And there's also the 2 percent of growth of course.

And Mr. Halbert, his analysis, Exhibit 8118. If we can go to that.

Remember you were shown this, Mr. Fahey and Mr. Halbert did this. This was sometime around the Camino launch. I mean, they were on this. Mr. Halbert actually did the analysis. He went in and looked at the fabs, the fabrication. He didn't take anybody's word on this. And his conclusion was this point cost

of 70 percent. 1 But then if we go to slide 537, this is 8118, Page 7, 2 Exhibit 8118: (reading) 3 4 "With the existing architecture, RDRAM die overhead for 128-megabit RDRAM die size overhead is 5 6 stuck at 15 to 20 percent." And they talk about the 4i, which would get you to 10 to 15, 7 which was never done. And his testimony was, "That's not going 8 9 to get you to the mainstream market." 10 And, finally, before we conclude for tomorrow, I want to 11 talk about another problem and that was the latency problem and 12 I think Mr. Nissly covered this. What he didn't cover was Mr. Hampel's analysis on that. Mr. Hampel was one of the chief 13 14 engineers at Rambus. I think he's a Rambus fellow. Now, he had younger -- there were younger engineers there. 15 Mr. Tsern, you know, Mr. Ching, Mr. Woo, but Hampel was the quy. 16 He sent lots of emails and he wrote this in 1997, it's 17 Exhibit 5209, and this is the lower part of the email from 18 Mr. Hampel to executives and this is "Failure and the L word." 19 20 This is in '97 before they launched and they talk about their latency. 21 22 If you go to the second page, he says: (reading) "When the first RDRAM shipped, it will show lower 23 real performance than 100 megahertz SDRAMs. 24 will, of course, blacken our eye. This will leave 25 the door wide open for DDR and SyncLink for a full 26 year. If our yield of 800 megahertz is low and Intel 27 is forced to position Camino at 600, our latency gets 28

substantially worse at the device level and the gear 1 rationing to 100 megahertz will add another clock. 2 This may not be a competitive product on the merit of 3 4 latency." And he talks about how Intel led them down the rosy path 5 6 because it's, you know, always somebody else's fault. Craig, don't shoot the messenger, Hampel. 7 And in the same exhibit is the one where it has the response 8 9 from Mr. Ware: (reading) "You left out the part of the scenario after DDR 10 11 and SyncLink steal our sockets, we fire all our 12 engineers, hire lawyers, and file a series of lawsuits which five years later results in a massive 13 14 award to Rambus." So this is their own engineer predicting the future because 15 of a after product problem. 16 In 2001 Mr. Hampel recirculated this and this was after all 17 these issues with Intel. It was after Intel dropped the value 18 mainstream memory chip with RDRAM. It was after -- Rambus was 19 20 looking at the prices throughout, of course, looking at the RDRAM prices, the DDR prices, the SDRAM prices. 21 22 But Mr. Hampel looking back on it, thinking about failure, "Why fail," which means not mainstream probably, he wrote the 23 This is Exhibit 7476. He recirculated an 24 following. August 2001 and wrote, "Ouch." By that he didn't mean, "I was 25 26 way off on this." He didn't mean, "This is because prices are so high." He meant because of the performance. 27

And then you had Mr. Tsern's response: (reading)

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That's the Johnny Carson character ""Carnac." 1 for some of you who might remember him who would 2 predict the future. "The words I was searching for 3 4 in my earlier email, " which, by the way does not exist any longer and was probably a little longer 5 6 than this response, "but just thought of was frighteningly prophetic." 7 So if I could, Your Honor, I think I' get my fat hour 8 9 tomorrow. If we can stop now. If I can get, you know, we talked about doing time tomorrow and I'm switching to another 10 11 topic so if we could --12 THE COURT: How much time have you got left? MR. PRICE: Whatever I'm allowed. I think it's an hour 20. 13 14 THE COURT: Okay. We'll be in recess until 8:30 tomorrow 15 morning. 8:30 tomorrow morning. Remember don't talk about the case. Don't let anyone talk 16 17 to you. Don't do any research. Do not make up your minds. 18 not talk with another juror about the case. 8:30. 19 20 (The following proceedings were heard out of the presence of the jury:) 21 22 **THE COURT:** Okay. So what do we need? 23 MR. PERRY: I don't think we need anything this afternoon. We've agreed on which exhibits should be admitted, are admitted, 24 25 which exhibits should go back. We've agreed upon a format, 26 subject to Your Honor's approval, a binder set and another set 27 that's loose in manila folders so that if one juror wants to use a particular binder, another juror can look at an individual 28

exhibit that's in that binder. So there would be two sets in the jury room.

And those are -- there's a meeting going on now, it's been

And those are -- there's a meeting going on now, it's been going on for a while, where each side looks at each of the exhibits to make sure they're righteous before they go back to the jury.

THE COURT: Okay.

MR. PERRY: There's a small dispute about which demonstratives will end up in that little binder of demonstratives.

THE COURT: Okay.

MR. PERRY: But we don't need to do that this afternoon because it's a small binder ultimately. And I don't know of anything else.

MR. ALLAN: I think the remaining argument on the directed verdict motions.

THE COURT: Right. We've got to get that done. Why don't we do that tomorrow?

MR. ALLAN: Okay.

MR. SHIELDS: One other thing we wanted to do on the record and we talked about it Friday off the record, was Micron wanted to move in the sales data for the record.

THE COURT: Why don't you do it now?

MR. SHIELDS: All right. We move in Exhibit 8225A-S.

THE CLERK: What is it?

MR. SHIELDS: 8225A-S. And Your Honor indicated you were going to exclude it but admit it for purposes of a 402 hearing on the admissibility.

THE COURT: The trial included, both in front of the jury and by way of declaration, a motion -- I think declaration, right? Yeah.

Anyway, we conducted a 402 hearing, both with the jury present and with the jury not present, concerning the admissibility of certain underlying data that I found to be not properly summarized in exhibits that were admitted as demonstratives but not permitted to be offered as compilations of voluminous underlying data. There were various reasons differing for different exhibits.

However, the proponents, and they were in all cases the Defendants, moved those in as evidence in the 402 hearing and they were received as part of the 402 hearing. They were moved formally as exhibits before the jury. If the compilations were not adequately founded, I denied that request. They have not been admitted to the jury; however, they will remain in the record.

MR. SHIELDS: Thank you.

THE COURT: Clear enough?

MR. ALLAN: Yes, Your Honor.

Hynix joins in Micron's motion and we'd like an opportunity to verify that all the sales data that we need is included in that exhibit. I think it is. We'll check overnight and if there's an issue, we'll raise it tomorrow.

THE COURT: All the underlying sales data that has been marked is included in this ruling.

MR. ALLAN: Thank you.

THE COURT: Okay.

Thank you. 1 MR. PERRY: THE COURT: Who's going to argue the rebuttal case? 2 MR. WILLIAMS: I am, Your Honor. 3 THE COURT: Do you know how long you're going to need yet? 4 I'd request two hours. MR. WILLIAMS: 5 6 THE COURT: I request two hours. How long are you going to need? 7 MR. WILLIAMS: Two hours. 8 THE COURT: Oh, okay. All right. That would be the 9 10 classic, I knew the answer to the question before I asked it. 11 MR. WILLIAMS: That's right. 12 THE COURT: Okay. All right. See you tomorrow. MR. SHIELDS: Your Honor, one other thing relative to jury 13 deliberations. Your Honor discussed asking if the jury prefer 14 to deliberate four days a week or five. 15 **THE COURT:** You mean I should prepare them for that? 16 17 I should have talked to them about it before tomorrow. 18 MR. SHIELDS: I'll leave it to the Court. MR. PERRY: And also --19 20 THE COURT: Remind me to talk them tomorrow about the schedule. 21 22 MR. PERRY: And also do they want to go into the afternoons. THE COURT: Right. 23 MR. NISSLY: What's your rule, Your Honor, on Counsel during 24 deliberations? Here? Two days away? Five minutes away? 25

Right at the outset, you should be here.

the outset? I mean, they're not going to be squared away for

They're going to have the exhibits for hours.

THE COURT:

hours.

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I would say if they're deliberating Thursday and Friday, somebody should be here then and then you can be within 10 minutes, 15 minutes. MR. NISSLY: Okay. Thank you. MR. ALLAN: Okav. THE COURT: The first couple of days, you've got to be close because I tend to find that's when questions come out. MR. CEDERBERG: One question. We can have this off the record. If the jurors want a playback of any of the videos, I assume the Court's just going to -- you would just give them the Q&A and it has to do with whether we have to have all our media people here throughout deliberations. They're concerned taking stuff down. THE COURT: Well, I don't know if I can remember a time when

a request for a readback of testimony, whether it was deposition testimony or live testimony, has not led to a canonical debate about the meaning of each comma so that we encompass every question on the subject of chip size or whatever.

So it's never that simple. So somebody's going to have to be here in each case to review the note and you have subject matter experts I'm aware of. So, you know, we'll have to deal with that as it comes along.

- MR. CEDERBERG: Okay.
- MR. PERRY: Thank you.
- MR. WILLIAMS: Thank you, Your Honor. 26
- MR. SHIELDS: Thank you. 27

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THE COURT: By the way, I don't remember reading a

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instruction about you can get testimony read back but it doesn't
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     take --
                    It's in the form instructions at the end.
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         MR. PERRY:
         THE COURT: All right.
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                   (Proceedings adjourned at 1:23 p.m.)
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State of California
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     County of San Francisco
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          I, Joseph H. Vickstein, Official Reporter for the Superior
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 6
     Court of California, County of San Francisco, do hereby certify:
          That I was present at the time of the above proceedings;
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          That I took down in machine shorthand notes all proceedings
 8
 9
     had and testimony given;
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          That I thereafter transcribed said shorthand notes with the
11
     aid of a computer;
          That the above and foregoing is a full, true, and correct
12
     transcription of said shorthand notes, and a full, true and
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     correct transcript of all proceedings had and testimony taken;
          That I am not a party to the action or related to a party
15
     or counsel;
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          That I have no financial or other interest in the outcome
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     of the action.
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     Dated:
             September 20, 2011
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                           Joseph H. Vickstein, CSR No. 4780
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