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TOM O'MALLEY: All right. Welcome back to the Barclays tech conference. I'm Tom O'Malley, semiconductor and semicap equipment analyst here at Barclays. Pleased to have Jean Hu CFO and treasurer of AMD. Thank you for being here. And thank you for being a staple here for the last couple of years as well. We really appreciate it.

JEAN HU: Yeah. Thank you for having us.

TOM O'MALLEY: So speaking of last year, we sat here a year ago and chatted on market share. And how you have come from a place both on the PC side and the server side, where it was really a second source story coming from the bottom moving to parity and in some instances to leadership. So can you talk about that journey. And really from here, where are the aspirations focused on across those businesses.

JEAN HU: Yeah. Yeah, I appreciate the question. We are very pleased with our performance in both the server side and also on the PC side. As you know, in the server CPU market, starting from very low single digit market share a few years ago to now last Q3, we reported earnings-- we got to 34% market share. So it has been tremendous.

I think when you look at that success, first thing is AMD is always focused on product-- innovative product, generation by generation. So when you look at the server side from first generation Naples until each generation now at the Genoa and the Bergamo, fourth generation family, we got tremendous TCO Performance. Not only performance per watt, but performance per dollar.

And now we launched the gen 5, which is the Turin family product will continue to drive the leadership performance. So technology-wise, it's about leadership, not only architecture, process technology, chiplet, and also packaging technology. But also, if you look at the team's history, it's always about consistent execution.

So each generation of roadmap, we delivered on time with leading performance. Third thing I would say is our team is really good to work with the customer closely. So not only we got feedback from prior generations, but also from customers. So our product is not just about the leadership performance, but also, it's what exactly customer needs. When you look at that, is that really help us. On the server side, we are powering the most critical workload across both enterprise and cloud, from enterprise scale up and cloud scale out everywhere, the major applications across all different market. So it's very exciting.

On the PC side, it's also exciting, is we actually made tremendous progress. When we look at currently our product portfolio line up, we actually have the strongest product portfolio in PC market in both the desktop side and also in the mobile side. In the desktop side, in Q3, our market share got to 27%. On the client mobile side, we got to 19% market share. Again, it is about technology, leadership, how we can provide the customers performance and efficiency across the board. So exciting journey, but the momentum will continue. And we'll continue to drive the leadership, technology and product.

TOM O'MALLEY: Super helpful. And all of these good things are happening. And of course I'm going to zone in on one area where you're a little under indexed, which is on the enterprise side in terms of server. So I guess the question there is, why hasn't the success translated as quickly? I know enterprises are more slow moving. And what kind of steps can you take to further penetrate that market?

JEAN HU: Yeah. We absolutely are in the cloud market. We're fairly represented. And in enterprise, we're still very much underrepresented. When you look at the technology-wise, the TCO performance from AMD is both in enterprise and in cloud. So we absolutely can not only address the cloud native applications. But in enterprise, there are more diverse applications, from virtualization, to database, to all different kind of ERP. We actually can provide the best performance.

However, enterprise side is a little bit different on the go to market approach. As you can imagine, in cloud market, it's all about the TCO. And once they switch, it's volume production-- adoption is very quick. But on the enterprise side, you really need to convince each CIO with thousands of enterprise customers that they have the TCO Performance. So you do need to have a lot of feet on the street to address each CIO to give them a proof of concept so they can see the TCO Performance.

What we have seen is over the last couple of years, we made tremendous effort to increase our FAE to support each enterprise customers. Now, we're seeing the benefit of that. I think the last five quarters, each quarter, our enterprise business has grown double digit. And that accumulation of effort, you're going to see more momentum going forward.

So the combination of focusing on the go to market, at the same time, continue to provide the best TCOs. We are also seeing enterprise customers start to upgrade. Because in today's data center, we all know power, space, those are very limited. So modernizing the data center, upgrade data center, AMD's solution can actually provide the best TCO from a power perspective and from performance per dollar perspective. So it is why we feel pretty good about continue the progress, especially with the Turin launching in Q4 right now, we're going to see momentum into next year.

TOM O'MALLEY: And a question that I think I've heard a lot this week, and I had the co-CEOs of Intel here this morning is obviously, you don't wish ill upon your customers. But when there are changes, customers are going to change their preferences and profiles and conversations. So you mentioned, the enterprise game is really a ground game. Like, you go CIO, CIO, CIO. And it's those conversations that when you market share over time. Have you seen any change in the very recent history, as in two weeks, in those conversations? And how would you think about your business there given the change?

JEAN HU: I think what AMD has always been doing is assuming our competition is going to do very well. So our job is to make sure that's the assumption, and that we stay competitive and drive the leadership performance. And also make sure our customer gets the best economics. I think to a certain degree, when you look at the enterprise market, the porting process actually is not that difficult because x86 for both of the companies, it's the same instruction set. And it's really about convincing people, we can provide a better TCO, which we do.

TOM O'MALLEY: So I guess, broadly speaking, about the market versus the competitive dynamic, there's this view that dollars are being sucked out of the traditional server market and into the AI ecosystem of which you've had benefit. And we'll move to AI after. But just on the traditional server market, when you look out at next year, is this a year where you see some recovery or is it similar to what we've seen over the past couple of years with maintained, muted spend?

JEAN HU: Yeah, great question. Maybe let's take a step back. Our view has been, is that we are in a supercomputer investment cycle. And of course, Gen AI has been driving quite significant investment and also adoption of Gen AI. You can see a significant increase of accelerated market. Very fast expansion.

At the same time, when you really think about general compute, what the CPU is really powering is actually foundational, critical workload. From enterprise virtualization, your database, your ERP system, even including your storage, it's powered by general CPUs. And then in the cloud, the same thing. When you look at the cloud native workload from shopping Amazon, social media, Facebook, WhatsApp to video streaming Netflix or Zoom, all those things are powered by general compute. That's CPU.

So we do see, OK, AI is going to growing much faster. But the demand for fundamental applications when everybody increasing engagement in their platform, it's going to continue to grow. And of course, the innovation we have been pushing out is we can have more core count. We can provide more performance. So we have been supporting the continued demand increase. But overall, it is a very large market. We continue to see strong demand in cloud. We see modernization. We see the limitation on space and the power. So customers actually need to upgrade. They also see their platform engagement is increasing. They need more CPUs.

In enterprise, we also start to see the early signs of refreshing cycle. It's the same logic. You need more compute to support your applications. But you have a database, data center, and the power limitation. So you want to get the best TCO from your suppliers. That's why we do think this CPU market not only it's going to grow, but also, we're going to continue to be able to gain share because of the performance.

TOM O'MALLEY: OK. Regardless of how that traditional market continues to grow or at the rate at which it grows, you have seen some really impressive growth in the MI series this year. I think if we sat here a year ago, and you had confirmed to the crowd that you'd do more than 5 billion this year, people would have been shocked. It's a really, really strong ramp. So can you talk about how that is going in terms of the total ramp today? You're going to see a transition in product for really the first time in that series. So when is that transition occurring? And then just any kind of change in your outlook versus the last time we kind of spoke.

JEAN HU: Yeah. Thank you. Last year when I was here, our MI300X revenue was 0. And so it's amazing during this 2024, what we have done as a company from 0 to going above $5 billion for this 2024. That's a great success. I think when you look ahead 2025, first, at the high level, the backdrop is we continue to see the continued investment in AI infrastructure build out. That has been ongoing with all our customers, and you guys can see the third party data also.

Secondly, user cases have been increasing dramatically. It's every week, we see some new use cases in AI, which definitely-- when you do the inferencing, when you have those use cases, you drive a return on investment. So the backdrop of the market continue to be very strong. And for us, the team has been executing extremely well. MI300X ramping successfully. And now, MI325, we launched literally this quarter. We'll start to see revenue in first quarter next year. And then MI350, second half next year.

So when you look into 2025, we actually have a much stronger product portfolio versus the 2024. And at the same time, the market backdrop continued to be really good. More importantly, when you look at the 2025, it's just a multi-year journey we are-- the way we think about each product we are addressing, it's always multi-generational.

Not only deliver the product execution each by each generation, but also engage customers in AI case. We also continue to invest in software. We are acquiring ZT system to also build our system expertise and time to market. So overall, 2025, we feel really good about the opportunities ahead of us. And more importantly, we'll be able to continue to drive the trajectory and the momentum of our business.

TOM O'MALLEY: So first, I want to talk about the cadence of product transitions and then about customer diversity. But in terms of upgrade cycles with different chip families, generally, there's is digestion and then there's a ramp up period of time. And you guys have done a really good job of masking that, even with your first transition at the end of last year in December. Can you talk about how you manage that, how you manage through that? Is that a conversation with customers? Do you naturally see a wind down quicker than you see a wind up? Anything that you can give just to talk about the cadence of those ramps.

JEAN HU: So what we're seeing in the AI market is, you are seeing many different models and the different diversified need. So it's not like OK, the most advanced model, they are large clusters of training, inferencing. You need the most advanced model the technology and the GPUs.

But at the same time, increasingly, we see so many models across different inferencing. So different customer actually have different needs. And our engagement with our existing customers have always been multi-generational. So you don't just sell them one product. The engagement tend to be really deep. It's not only MI300 we're selling, but MI325, MI350, even MI400.

And then we have been broadening our customer base. We talk about over 100 customer engagement. Then different customers really have a different need. So we do think you will see MI300, MI325, MI350, they may coexist for a while because it's just a different customer-- you are meeting different customers need.

TOM O'MALLEY: And then there's the aspect of customer diversification as well, obviously reinvent was very recently. You have one large customer that's well known today. But in terms of customer diversification, could you talk to where you're seeing green shoots maybe with other large customers and your ability to expand. Is that a function of just seeing more inferencing in the market or is that just really customers taking more time to come to your platform?

JEAN HU: Yeah. Of course, we talk about our large customers like Microsoft, Meta, Oracle, and not only MI300 and our software, Rakeim are powering the most demanding workload and the model with our key customers. But also we are engaging with other customers. AWS, we have been engaging with AWS. And of course for third party workloads, you have to work with the enterprise customers also. So that engagement continues.

We are also engaging with other hyperscale customers. So you should expect us not only with existing customers, we're going to broadening application both inferencing. In Meta's case, we're also doing training with Meta. The model application are going to broadening. But we're also engaging with new customers addressing new applications. That is how we think about building a business for the long term.

TOM O'MALLEY: So customer diversification is going well, it seems. That's check mark number one. Two is, I think that increasingly, you've seen the diversification and the differentiation in the market between NVIDIA and other players is their ability to scale to system-based solutions. They have their own protocol. They're scaling up and scaling out their clustering.

I think what's been more difficult for non NVIDIA players, just broadly, has been the fact that you need a bunch of different players to come together in order to get that scaling architecture to work. So you obviously acquired ZT. That's part one. But how is it going in terms of your ability to replicate that sort of systems based architecture? Are you running into any walls in terms of that process? And how are you thinking about scaling that architecture over time?

JEAN HU: Yeah, that's a great question. You are absolutely right. When we think about Gen AI market, when we look at the opportunities $500 billion Lisa talked about, we strongly believe that the majority of the market is going to be addressed by general purpose GPU, including system level software solution, the cluster level. You really need to have a system expertise, have a strong software base to support that future market because that's what provides the best TCOs.

So if you look at our journey, not only we have the annual cadence on the GPU side, we are increasingly investing in networking, in buying ZT system. That will give us system expertise to build rack level and class level solutions. And also, our team continue to push forward about software investment. So that is what we think majority of the market will be.

There are some ASIC opportunity, ASIC market also. But for us to build that overall solution to be a major player in this market, ZT system is one of the example. We expect to close the transaction early next year, and our MI350 will get some benefit, but MI400, which is 2026, will get the full benefit of ZT system. So it's an exciting time.

TOM O'MALLEY: OK. And then I think that you've been very prescriptive, which has been helpful on the gross margin ramp of the MI series. And then there's also be the layer on of a more systems based architecture. So you said over time, moving more towards corporate average than perhaps surpassing that. Could you give us an update of how that margin structure is progressing, when you see that crossover point, anything that varies in terms of your initial expectations.

JEAN HU: Yeah. I think first thing is the growth margin is a very important metrics to AMD. With all the R&D investment that we're making, the gross margin really a reflection of your IP and your engineering excellence. So when you look at the 2024 versus the '23, I think '23-- the fiscal year, our gross margin was 50%. And 2024, we really have been improving gross margin. We're expecting 2024 is a 53%, quite significant expansion. Going forward, that continue to be our objective to expand gross margin.

On the data center GPU side, we did talk about that it's below corporate average. I think, given the larger opportunities in front of us and especially how fast this market is expanding, of course, our priority number one is to meet customers need to address the large market opportunity.

So as the CFO, you always think about the gross margin dollars. Percentage is super important. But when a market is expanding so quickly, you can get more gross margin dollars. That is our priority. But over time, when we look at how complicated the technology for data center GPU, it's absolutely is the segment that you should expect us to continue to improve gross margin over time. It will be accretive to corporate average.

TOM O'MALLEY: Helpful. Using gross margin as a bridge here, I want to go to the PC side and talk about AIPC. So we've heard a whole bunch of different things about what the AIPC market is. It's updated pretty frequently. What is your view of the AIPC market moving into 25? And we've heard it's a gross margin headwind. It's a margin tailwind. It's been all over the place. What is it for AMD? Is this something that should help ASPs?

JEAN HU: Yeah. Our view has not changed. Lisa always said, even at the very beginning, we think AIPC adoption in 2024 is going to be moderate. It's really in 2025, because you do need all the AIPC applications for customers who want to buy AIPC. And when you look into 2025, we do think there are going to be more applications.

We do think with Windows 10 end of life, you will see refreshing cycle. When people upgrade their PCs. If you have an AIPC, if you have applications, you would expect people will upgrade to New AIPCs. And also, you are going to see more offering of AIPCs. So we do think 2025-- Of course, the overall PC market, in our view, is going to grow maybe low to mid single digit. The seasonality is always-- the first half is lower, and the second half is higher. That is going to be the case. But the AIPC, we do think the momentum, will be much more significant in 2025.

TOM O'MALLEY: And then obviously, the gross margin side of that. I know that you've done a very good job with ASPs driving some growth on the PC side. But does AIPC lend to ASP increases or is that more of a competitive dynamic?

JEAN HU: Yeah. I think AMD actually has-- if you look at our Ryzen AI 300, we probably have the best CPU inside and the best GPU inside. And also, the MPU, which is the AI accelerator. We do think that when you offer more features, you should get higher ASP. That's our view is, because you're providing customers much more. So typically, that is how it's focused on. Higher ASP, gross margin should be at least similar or better.

TOM O'MALLEY: And then I just wanted to conclude the topic on competition. You're hearing more about ARM. There was exclusivity going into the end of this year. You're going to see more engagement with the ARM ecosystem into the beginning of next year. What's your view on what the right level of penetration will ultimately be from an ARM perspective? Is that something that you factor in when you look at the growth of your business in the 25?

JEAN HU: Yeah. I think the first thing is, I don't know about you guys. I never look at what is in my PC is ARM or x86. I think for most of the customers, what they care about is battery life, performance, efficiency. So what you are seeing is AMD now has one of the strongest product portfolio in history. We are offering not only performance, we're continuing to extend the battery life to really make sure we can offer customers both power efficiency and also performance. That's what we're striving for.

And of course, ARM PC this year, the share is low. The ecosystem is especially on the commercial side. You do need to be backward compatible with all your applications. Over time, the way we look at this market is we're trying to innovate and provide the customer best product. And the AMD, we actually really view ourselves as a high performance computing company.

Some part of our business actually work with ARM, Xilinx. They have always been partnering with arm. So for us, it's not about x86 or ARM. It is a high performance compute, how we can provide the customer the best performance. And of course, we have the capabilities. If a customer wants us to do ARM-based PCs, we absolutely have the capability.

TOM O'MALLEY: Perfect segue into your embedded business that's been going through a bit of a longer recovery than I think most of what I would have expected. And you've talked about some growth into the 2025 period, not been super prescriptive there. But two questions. One, are you starting to see some green shoots in that business?

I know that one of the takeaways from the conference for us thus far has been you've seen a little bit better telco. So that's obviously not their wireless business as much, but maybe a little on the wireline side. And then two, you're hearing about a potential spin out of the main competitor to Xilinx. Do you think that changes the competitive dynamic in any way?

JEAN HU: First, our embedded business has been doing really well on design win perspective. If you look at the-- despite of very deep inventory correction cycle, our design wins continue to be quite significant year over year. And then when you look at the business side, it actually bottomed. And the Q3 sequentially, we actually see increase. And the Q4, it's more stabilized.

When we look at the end market we cover, we actually cover very broad end market. When you look at the AMD's embedded business, we actually tend to be on the mid and high end of the FPGA business. So aerospace defense is actually doing reasonably OK. And then testing emulation actually doing good. I think consistent with what you are saying is industrial has continued to be quite a challenging mix, the demand environment.

And our communication, it is stabilized. But it is the headwind. In 2024, communication definitely was one of the sector was challenged. And of course, automotive is small for us, but it seems like it's still struggling. So it's a mixed environment. But we do think going into 2025, overall, you should expect a gradual recovery.

TOM O'MALLEY: So I want to just ask on the broader model into 25 really quickly. So it sounds as though the core server business is doing well. PC, more second half weighted. And you talked about the last earnings call, a little bit stronger end of this year. Maybe a little softer first half of next year. But in terms of the total growth of the business, things sound good in terms of the operating leverage that you can get, how do you think about spend?

And if I look at-- you've grown quite robustly over the past couple of years. If spend is not as if revenue is not as aggressive as those big growth years off the bottom, how do you think that you can move that OpEx lever to get more drop down to the bottom of the model?

JEAN HU: Yeah you're right. When we look back in 2024, our data center business and our client business performance have been tremendous. Data center has literally, with the data center GPU, come to more than 5 billion. We almost doubled our data center business. The headwind is really on the gaming and embedded business, which they are behind us when we look ahead over 2025.

On the operating model perspective, you should expect us to continue to invest in R&D aggressively, because that is how we drive the multi-year generation roadmap to really continue to drive the leadership. But overall, the OpEx increase should be less than top line revenue growth. And then that's how we drive the operating model leverage. If you look at the 2024, it was similar. We want to make sure earnings expansion is much faster than top line revenue growth. That's how we think about it, and that's how we are going to drive it.

TOM O'MALLEY: All right. Well, I really appreciate the time. Thank you for being here. It's a pleasure as always.

JEAN HU: Yeah. Thank you for having us.

TOM O'MALLEY: Yeah.

JEAN HU: Thank you everyone.