

# **EXHIBIT 11**

26-Jun-2024

# Micron Technology, Inc. (MU)

Q3 2024 Earnings Call - Post Earnings

## CORPORATE PARTICIPANTS

### Satya Kumar

Corporate Vice President, Investor Relations & Treasury, Micron Technology, Inc.

### Manish Bhatia

Executive Vice President-Global Operations, Micron Technology, Inc.

### Mark Joseph Murphy

Chief Financial Officer & Executive Vice President, Micron Technology, Inc.

### Sumit Sadana

Chief Business Officer & Executive Vice President, Micron Technology, Inc.

## OTHER PARTICIPANTS

### C.J. Muse

Analyst, Cantor Fitzgerald & Co.

### Aaron Rakers

Analyst, Wells Fargo Securities LLC

### Srini Pajjuri

Analyst, Raymond James & Associates, Inc.

### Brian Edward Chin

Analyst, Stifel, Nicolaus & Co., Inc.

### Harsh V. Kumar

Analyst, Piper Sandler & Co.

### Quinn Bolton

Analyst, Needham & Co. LLC

### Vivek Arya

Analyst, BofA Securities, Inc.

## MANAGEMENT DISCUSSION SECTION

**Operator:** Thank you for standing by, and welcome to Micron Technology's Post Earnings Analyst Call. At this time, all participants are in listen-only mode. After the speakers' prepared remarks, there will be a question-and-answer session. [Operator Instructions] As a reminder, today's program is being recorded.

And now I'd like to hand the program over to Satya Kumar, Investor Relations.

### Satya Kumar

Corporate Vice President, Investor Relations & Treasury, Micron Technology, Inc.

Thank you, and welcome to Micron Technology's fiscal third quarter 2024 post earnings analyst call. On the call with me today are Sumit Sadana, Micron's Chief Business Officer; Manish Bhatia, EVP of Global Operations; and Mark Murphy, our CFO.

As a reminder, the matters we're discussing today include forward-looking statements regarding market demand and supply, market trends and drivers, and our expected results and guidance and other matters. These forward-looking statements are subject to risks and uncertainties that may cause actual results to differ materially from statements made today. We refer you to documents we have filed with the SEC including our most recent Form 10-Q and upcoming 10-Q for a discussion of risks that may affect our results. Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results,

levels of activity, performance, and achievements. We are under no duty to update any of the forward-looking statements to conform these statements to actual results.

We can now open the call up for Q&A.

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## QUESTION AND ANSWER SECTION

**Operator:** Certainly. One moment for our first question. And our first question comes from the line of C.J. Muse from Cantor Fitzgerald. Your question, please.

**C.J. Muse**

*Analyst, Cantor Fitzgerald & Co.*

Q

Yeah. Good afternoon. Thanks for taking the question. First question. You're ramping CapEx significantly here in fiscal 2025, but it certainly sounds like greenfield is only coming fiscal 2027 at the earliest. So, I guess, how do we think about you getting to your DRAM market share for HBM in 2025? Is that all just conversions from DDR5? And then, I guess, with DDR5 supply, it would appear that, that will be significantly undersupplied by you guys if that's kind of the plan into 2025 for you guys.

**Manish Bhatia**

*Executive Vice President-Global Operations, Micron Technology, Inc.*

A

Hi, C.J. It's Manish. I'll take that and then Mark can add some comments. But, yes, the new US projects, both will provide DRAM bit growth only towards the latter half of the decade. We said Idaho starting in meaningful supply in 2027 and New York 2028 or later.

So our bit growth in the near term in DRAM is going to come from the technology transitions that we have in both Taiwan and Japan. And we're still ramping our 1-beta, which is the industry's best node right now, and we expect to begin production ramp of our 1-gamma and actually implement that both in Taiwan and then eventually in Japan as well. We announced last year that we're going to be enabling EUV in Japan so that we can ramp the 1-gamma node there as well. So our bit growth in the sort of intervening period before we get to the new US manufacturing sites will be driven by technology transitions in our existing footprint, and we have space and everything lined up to be able to do that.

**Mark Joseph Murphy**

*Chief Financial Officer & Executive Vice President, Micron Technology, Inc.*

A

And, C.J., I would only add that we did say that through 2025, and we would expect that to continue into 2026, that we would be at approaching our target levels of inventory by end of 2025. We'll be lean on inventories as we see it in 2026. We are already sort of prioritizing bits to higher value markets now which is driving interest in customers for longer term agreement discussions earlier than they typically would and behavior like that.

**Manish Bhatia**

*Executive Vice President-Global Operations, Micron Technology, Inc.*

A

And I think it goes without saying, but we are saying that. Our goal is to maintain our market share to grow our HBM share, and sometime in calendar year 2025, we'll get our HBM share to match our DRAM overall bit share and then maintain our market share from there on.

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**C.J. Muse**

*Analyst, Cantor Fitzgerald & Co.*

Q

Very helpful. Just quick follow-up on HBM3E, obviously, not mature product from a yield perspective. When you're setting your pricing early in a yield ramp, how does that work? Do you set higher pricing knowing that you're going to have worse yields, and as that improves, you share that benefit with your customers, or is that something that you hold yourselves? How should we think about that?

**Sumit Sadana**

*Chief Business Officer & Executive Vice President, Micron Technology, Inc.*

A

This is Sumit here. We have these pricing agreements done for 2024 as well as most of 2025 pricing is also all done. We are sold out for 2025 from a volume perspective. Pricing almost done for all of 2025 as well. And the pricing is set at a level where we expect the overall gross margin to be at robust levels, consistent with the value this product provides to our customers and the end customers.

And it is obviously the most complex product that the industry has ever done, so the pricing also contemplates that. And, the pricing is done in a fairly consistent way across time. And obviously as the product ramps, the costs come down, the yields improve, then the gross margin improves over time. That's typically how it works for pretty much all the products. And the early level of gross margin is lower than what the mature yield gross margin ends up being. Despite that and us being very early in the yield ramp of HBM, we have said that our first full quarter of production with over \$100 million of revenue already achieved HBM margins that were accretive to the company margins as well as to the company's DRAM margins.

**C.J. Muse**

*Analyst, Cantor Fitzgerald & Co.*

Q

Thank you very much.

**Operator:** Thank you. And our next question comes from the line of Aaron Rakers from Wells Fargo. Your question, please.

**Aaron Rakers**

*Analyst, Wells Fargo Securities LLC*

Q

Thanks for doing the after call and letting me ask a question. Going on the HBM discussion a little bit further, I guess, two quarters ago, I think you guys recorded some prepayments. Given the agreements that you're establishing on HBM, I'm curious is there any update to the prepayments? I think it was \$600 million previously these last two quarters.

And then, I guess, as part of that, how do I think about the capacity footprint of HBM, how that's evolved over the course of this last quarter? And is there any flexibility to move that higher, or are you just pretty much completely set for fiscal 2025 at this point?

**Sumit Sadana**

*Chief Business Officer & Executive Vice President, Micron Technology, Inc.*

A

I'll take the prepayment question, and then I'll turn it over to Manish to talk about the HBM manufacturing footprint. In terms of prepayments, we have had, like you said, some level of prepayments, and we continue to have these discussions with customers about their goals and desires to enter into these agreements with us and use

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prepayments as appropriate as part of the discussion and value from both sides in terms of the puts and takes on the various terms in the agreement. And so we'll continue to evaluate these sort of opportunities.

Of course, as you know, in 2023, we have had a tough downturn in the industry. So as we were coming out of it, we were definitely open to some of these discussions. We remain open to some of these discussions. However, as Mark and Sanjay have provided to you in the earlier call and in the prepared remarks, our expectation is that we will fund a lot of the capital investments for next year and the growth in those capital investments for next year through our operating cash flow and still have robust growth in our free cash flow for next year.

So we are going to continue to rely on that, but there can be opportunities to enter into certain unique types of arrangements with customers. And we continue to evaluate those on a case-by-case basis. And I'll turn it over to Manish to talk about the footprint.

**Manish Bhatia***Executive Vice President-Global Operations, Micron Technology, Inc.*

A

Aaron, you know that we're coming from a very low base installed capacity for HBM given our decision to skip HBM3 and really focus on our HBM3E where we thought we would have product differentiation capability, which our technology and product team have really delivered and our customers are really appreciating but – our goal and as we set the target to intercept our normal DRAM market share with our HBM share to match our overall DRAM market share in calendar year 2025 and that's what we're marching towards. Our investments in the unique HBM equipment, our investments in cleanroom space, are all marching towards that. And we're on that ramp trajectory and confident in achieving that.

Just keep in mind a couple of things. The cleanroom space that we're enabling for this HBM ramp is more complex than standard assembly cleanroom space, so that's one element of what we're working towards to be able to reach that goal. But the ramp is significant given where we're starting from, but we're confident we're going to be able to achieve that goal and do so with world-class quality, world-class yield and excellent cost structure.

**Aaron Rakers***Analyst, Wells Fargo Securities LLC*

Q

Thank you. And, Mark, just a quick follow up. How do you think about operating expenses as the fundamentals improve from here? I know you gave this quarter's guidance, but just curious of how you would think about the glide path beyond this quarter.

**Mark Joseph Murphy***Chief Financial Officer & Executive Vice President, Micron Technology, Inc.*

A

We did well in the quarter on OpEx demonstrating control, again we are at the lower end of the guide on our OpEx. It's up in fourth quarter as we said and that's driven primarily R&D program expenses. But we also had in the third quarter, which was built into our guidance, a land sale that would be responsible for about third of the increase from third to fourth quarter.

In November quarter, we do see OpEx ticking up again, again driven principally by R&D program expenses, great work on the NAND front, also a number of DRAM-related activities including HBM development. So we would expect OpEx to be up sort of mid-single digits 4Q to 1Q over \$1.1 billion and then some modest increase sequentially through the year in 2025.

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**Aaron Rakers**

*Analyst, Wells Fargo Securities LLC*



Thank you, Mark.

**Operator:** Thank you. And our next question comes from the line of Srin Pajjuri from Raymond James. Your question, please.

**Srin Pajjuri**

*Analyst, Raymond James & Associates, Inc.*



Thank you, guys. My question is on inventories at your customers, maybe just looking at your PC and smartphone customers. There is some talk that some of the customers prebuilt some inventory ahead of the price increases. If you can talk about what's your view based on your visibility as to how much inventory they are holding.

And then on the data center, looks like the inventory correction is mostly done, and I'm just curious you talked about some optimism about even standard server demand picking up a bit, so I was wondering if you can comment on that as well.

**Sumit Sadana**

*Chief Business Officer & Executive Vice President, Micron Technology, Inc.*



I'll comment on the data center first and then we'll go to PCs and smartphones. On the data center side, we have been saying for some time that we expect the data center demand to start returning in the first half of calendar 2024, and that has been pretty much on target. And as the second calendar quarter or third fiscal quarter continued, we saw a strengthening of that demand in the data center, and that strong trend has continued, mainly driven by AI.

It started with a lot of the demand coming from AI. And then we are starting to see and we had mentioned this earlier, we have started to see some early signs of improvement in demand in traditional servers, and that kind of demand improvement is continuing, so that's a positive sign overall in the data center beyond just the AI servers as well. And the inventory is pretty normalized in the data center, and a lot of the demand comes with a level of urgency. And we have been trying to chase that supply because the leading-edge nodes are tight.

Now, we had mentioned in terms of the shape of the recovery of the industry for certain end markets that coming out of the 2023 downturn that PCs and smartphones would pick up in terms of volume before data center, and that has been exactly how it transpired. We started seeing strength in those segments late in calendar 2024 (sic) [2023] and then that strength continued into calendar Q1, et cetera. And so, yes, those customers have purchased and built some inventory because of three important factors.

One relates to obviously the price strength that was being discussed with customers in terms of the trajectory of pricing. We have also articulated that we expect pricing to continue to increase throughout calendar 2024, and so that has been an incentive for some customers to purchase some of the volume ahead.

The second factor relates to customers' own expectations of demand growth in their business as they launch AI PCs and AI smartphones. These obviously come with higher average capacities. We have spoken about that quite a bit in our prepared remarks.

And if you look at the expectations of replacement cycle driven unit volume increases, we have fairly modest assumptions in terms of unit volume growth this year, only low-single-digit percentage in PCs, mid-single-digit

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percentage in smartphones. And even next year, our expectations are fairly modest, but there could be upsides. Some of our customers are expecting higher levels of unit volume growth next year than what we are modeling, and so there could be upsides. And that could be driven by stronger replacement cycle driven by these AI capabilities in smartphones and PCs.

So that brings us to the third portion of their drive to build some buffer, which is that some of these customers are getting concerned about their ability to get their hands on supply next year. And this is part of what is driving some of these earlier than usual discussions on LTAs, these long-term agreements, for 2025 calendar year supply because the growth in the data center continues at a pretty robust pace.

The HBM growth, as we have said earlier, with that 3-to-1 trade ratio displaces a lot of wafers and between HBM, high-cap DIMMs, et cetera, on the DRAM side, AI server growth, return of traditional server growth. And if you get any of this growth in the PC and smartphone space, pretty soon you get to a scenario where the supply growth in the industry is unable to keep up with the demand growth, and that is causing customers to pull in some of these discussions about supply. And they're carrying some extra inventory to guard against that. That's sort of the high-level perspective on that.

**Srini Pajjuri***Analyst, Raymond James & Associates, Inc.*

Q

Sumit, maybe one quick follow-up on that, you mentioned the high-cap DIMMs as one of the strong areas in the quarter. Just curious, how does high-cap DIMM, compare versus HBM in terms of the proprietary nature of the product and the complexity? And also given that it's higher margin, seems like, than in DDR, is it as good a margin as HBM? And also, do you think that sustains? And also, if you could put that into some context as to how big the SAM is, what the applications are for this particular product? Thank you.

**Sumit Sadana***Chief Business Officer & Executive Vice President, Micron Technology, Inc.*

A

I think first I'll just mention that – and this is an important clarification – we define high-cap DIMMs as anything that is more than 64 gigabyte of DIMM capacity, so 96 gigabytes, 128 gigabytes and higher. Right? So anything that is 96 gigabytes or higher, we classify that as high-cap DIMMs.

Now when it comes to high-cap DIMMs, we were one of the first ones to introduce 96 gigabyte DIMMs in the industry, and when you look at 128 gigabyte DIMMs, Micron was the first company to introduce monolithic 32 gigabit die-based 128 gigabyte DIMM. So I know that's a mouthful, but essentially, it's a DIMM hit without use of TSV. It is an extraordinarily cost-efficient product, and we were able to demonstrate that this product actually has lower latency than TSV-based DIMMs and higher performance. And so it's very, very good world-class product, and Micron is really one of the first ones in the market with this. And we have a very compelling cost structure on this.

Now, these products go into AI servers. As mentioned before, this AI server growth has been very robust, and the demand has been strong for these high-cap DIMMs. And we have definitely very accretive margins on these products compared to the company margins, and both HBM and high-cap DIMM have some of the stronger margin profiles in the DRAM portfolio, very accretive to the overall company level.

But I'll also mention that obviously the rest of the company product pricing is increasing quarter-on-quarter, and that rest of the company portfolio pricing keeps improving the margins of the rest of the company portfolio. So that's a positive, too, but these two products are very robust margins.

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**Srini Pajjuri**

*Analyst, Raymond James & Associates, Inc.*

Thank you.

Q

**Operator:** Thank you. And our next question comes from the line of Brian Chin from Stifel. Your question, please.

**Brian Edward Chin**

*Analyst, Stifel, Nicolaus & Co., Inc.*

It's Brian Chin here. Thanks for taking a few questions. Maybe just one kind of nearer term first. I know you gave sort of detailed P&L between DRAM and NAND, but maybe just kind of in terms of a cross-over, was your NAND business profitable in fiscal 3Q, or if not, do you expect it to be in fiscal 4Q? And is that low-single-digit bit shipment growth guidance in NAND reflecting more of the pull forward of smartphone demand, or is that somewhat reflective of your increasing bit shipment constraint as utilization rates there fully recover?

Q

**Mark Joseph Murphy**

*Chief Financial Officer & Executive Vice President, Micron Technology, Inc.*

Yeah, Brian. What we disclose, you'll see the Q tomorrow. I can say that the NAND business overall gross margins improved in the third quarter. And then at the segment level, probably the best proxy for that business is the Storage Business Unit, and that business did deliver operating profit in the quarter, which is substantially improved from the prior quarter.

A

**Brian Edward Chin**

*Analyst, Stifel, Nicolaus & Co., Inc.*

Got it. And then just that part about the forward guidance for bit shipment growth, low-single digits in NAND?

Q

**Sumit Sadana**

*Chief Business Officer & Executive Vice President, Micron Technology, Inc.*

I think in terms of the growth in NAND on quarter-to-quarter basis, there are always all kinds of ebbs and flows between quarters, and the important thing that we are trying to do is to shift our mix towards the data center. And that is obviously a lot of demand that we are chasing at very good prices and margins compared to the rest of the NAND portfolio, so that's what we are doing. And all of the changes that we reported in terms of our revenue, like for example our mobile business, you referred to the smartphone volumes, our mobile business was down 1% in FQ3. That was all planned changes in volume and mix changes happening in our business.

A

The overall trends for 2024 calendar year for the mobile business have been fairly stable and consistent with what we have been mentioning for several quarters now that our expectation has been in that sell-through of mobile phones to be in that mid-single-digit percentage unit volume growth for calendar 2024. If anything, calendar 2024 Q1 numbers that were reported out of the industry in terms of sell-through are better than what the overall full-year expectation would suggest, but we are not changing our outlook at this time.

**Brian Edward Chin**

*Analyst, Stifel, Nicolaus & Co., Inc.*

Okay. Great. And maybe just for follow up, I think other folks have maybe tried to get at this somewhat as well. But at the expected level of CapEx you're currently communicating now for fiscal 2025, understanding that more than half of that increase is for construction CapEx, is it reasonable to expect Micron will be able to increase bit

Q

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supply in that mid-teens for DRAM, maybe high-teens for NAND next year? Or would more investment be needed to grow in line with the market if bit demand is at that level or even stronger next year?

**Manish Bhatia***Executive Vice President-Global Operations, Micron Technology, Inc.*

A

Brian, just trying to parse your question out. Couple of dis-clarification. We said that half or more of the expected increase in CapEx between fiscal 2024 and 2025 will be for the US construction CapEx. And so we do have some other ongoing facilities and work around the rest of our footprint in Asia, as I mentioned on the call earlier, to be able to enable our technology transitions.

And that's really the answer is that our technology transitions for DRAM in Japan and Taiwan, again 1-beta continuing to ramp and then 1-gamma being introduced in calendar year 2025, those are going to be sufficient even with the growing penetration of HBM for us to be able to maintain our market share in that mid-teens range, and we believe we can achieve the long-term CAGR with that.

As technology transitions become less efficient, as demand continues to grow, and HBM penetration grows, we do, as we said, for many years expect greenfield wafer capacity growth to be needed and that's tied with these US projects which will be towards the latter half of the decade.

**Sumit Sadana***Chief Business Officer & Executive Vice President, Micron Technology, Inc.*

A

And just to build on that, the 2025 calendar year and fiscal year for us, we expect to maintain our bit share across both DRAM and NAND. And part of those shipments will come from inventories. So you have heard Mark mention to you that our inventory will normalize by the end of 2025, and part of that inventory is going to be helping us ensure that we can maintain flat bit share next year.

**Brian Edward Chin***Analyst, Stifel, Nicolaus & Co., Inc.*

Q

Okay. Thanks. Very helpful.

**Operator:** Thank you. And our next question comes from the line of Harsh Kumar from Piper Sandler. Your question, please.

**Harsh V. Kumar***Analyst, Piper Sandler & Co.*

Q

Hi, guys. When I look at your long-term model and I look back a little bit, I saw that your peak margins are somewhere in the 61.5% range. Now, you've got contracted pricing for HBM sounds like for 2024 and 2025, but it's hard for me to think that your pricing would call for HBM gross margin to be in that 60% range because that's what logic commands. I was wondering if you could give us an idea of what your aspirational gross margin is and if you can't – for HBM. And if you can't give us a number, maybe help us think about a framework so that we can get an idea of where you might be, what you might be planning for margins for HBM.

**Sumit Sadana***Chief Business Officer & Executive Vice President, Micron Technology, Inc.*

A

I mean, we're obviously not disclosing our HBM margins, but you can imagine that we certainly have this view that the industry is in a tight place today. We expect to have continued price increases in 2024 calendar year. And

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going into fiscal and calendar 2025, we obviously continue to see tight and tightening industry conditions due to the growth of HBM data center growth, all of the other segments going into AI-driven growth mode.

And so, obviously, when we think about fixing pricing for all of calendar 2025 for HBM, we are going to do the pricing with that backdrop in mind that we want to fix pricing at a level that we don't regret later. And of course, the industry is going to continue to strengthen in terms of financial performance and margins, we expect that for Micron for sure. But we are comfortable with our HBM margin profile because of which we have been able to set these prices ahead of time. And this is a super complex product, and the margin profile justifies that level of value that it is creating for the ecosystem.

**Harsh V. Kumar***Analyst, Piper Sandler & Co.*

Q

Understood. And just a quick follow up. You've talked about pricing locked in through 2025 fiscal. Could you talk about your design visibility? How many years? Is that also – 2025 is an indication of design visibility with large GPU vendors, or is your design visibility longer than that?

**Sumit Sadana***Chief Business Officer & Executive Vice President, Micron Technology, Inc.*

A

We have customers that we have logged volumes with and some of those customers are starting purchases for their platforms in 2025. And those platforms are going to continue into 2026 and beyond. So the discussion we have had earlier with you about launching with NVIDIA for 2024 and then multiple customers in 2025, those multiple customers who we work with to launch the products in 2025 are actually going to continue into 2026 and beyond.

Now, keep in mind, these all relate to the HBM3E product. The 3E product launches with 8-high and then through the course of calendar 2025, we'll transition the mix over to 12-high. And then HBM4 comes in, in 2026, and then you have HBM4 going on. And then following that, a while later, you'll get HBM4E. And so HBM4E will ship through the end of the decade, late in the decade and through the end of the decade.

And so, we are already in very deep engagements with customers on designing HBM4 and HBM4E, and so these are long partnerships with customers. They require long cycle time planning for IP. And as we get to HBM4E, there is going to be a very strong possibility of integration of customer IP into the base die, and that will make HBM4E more of a customized product. Won't be the same product going to all customers, more of a customized HBM product. And because of that, it necessitates long-term planning and very deep R&D engagement with customers. And because of our leadership in HBM3E where, as we have mentioned before, 30% lower power consumption, leadership specs on performance, we have really great relationships with multiple HBM customers, and we are formally engaged in their long-term designs.

**Harsh V. Kumar***Analyst, Piper Sandler & Co.*

Q

Congratulations, guys, and super helpful. Thank you.

**Operator:** Thank you. And our next question comes from the line of Quinn Bolton from Needham & Company. Your question, please.

**Quinn Bolton***Analyst, Needham & Co. LLC*

Q

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Thanks for taking the question. Just wanted to come back just to the ability to maintain market share with transition to HBM memory with the high-cap DIMM modules and the node transitions. I think in historically node transitions, you typically with the same equipment set see net wafer starts typically decline. And so it feels like you've got a lot of factors that would argue for a continued net reduction in wafer starts. And so just wonder if you could address over the next couple of years what trends should we be thinking about in terms of your DRAM wafer starts over that period.

**Manish Bhatia***Executive Vice President-Global Operations, Micron Technology, Inc.*

A

Good, Quinn. We talked and have given some color on what we think is an industry-wide phenomenon out of the downturn in calendar 2023 and into calendar 2024 now, where we as well as others in the industry, we believe all others in the industry, did take advantage of this phenomenon that you mentioned where as we transitioned to newer technologies, we reduced wafer start capabilities structurally. So that did happen for us and for others.

Having said that, that's not something that is always going to be the case because we, as well as rest of the industry, did it to be able to reduce CapEx in the face of very, very weak demand and still get the benefits in terms of performance and cost reduction from the technology transitions. So, moving forward, obviously, you can imagine if every year you just keep structurally reducing, that's going to have impacts on both your bit supply and your cost. So, I would not be thinking as we head into this upturn that the industry will continue with that structural reduction year-on-year. You'll see investments more in line with a typical pre-downturn where we would maintain our wafer capacity while we make these transition investments.

Now, as we go towards the second half of the decade and beyond, as technology transitions become more challenging, the bit growth capability from the newer technologies is not as great as maybe previous generations. That's where we see the need for – and we've commented before – the need for greenfield wafer capacity growth for the entire DRAM industry. And HBM and this trade ratio that we're talking about is just one aspect of that phenomenon that maybe makes that need for new wafer capacity as we go towards the second half of the decade more important to your core question, we feel good about, as we discussed, being able to maintain our DRAM market share even as we grow our HBM share to be in line with our overall DRAM share.

[indiscernible] (00:35:49)

**Quinn Bolton***Analyst, Needham & Co. LLC*

Q

Got it. So it sounds like you've got the facility space in Japan and Taiwan to increase wafer starts to allow you to maintain share.

**Manish Bhatia***Executive Vice President-Global Operations, Micron Technology, Inc.*

A

Basically to be able to make technology transitions while broadly maintaining our wafer capacity starts.

**Quinn Bolton***Analyst, Needham & Co. LLC*

Q

Thanks. And then just a follow-up on the HBM. Obviously, a lot of this is being driven today by the AI accelerators, but just wondering do you see that proliferating into CPUs? Like, the great CPU obviously in the Blackwell generation had some pretty significant HBM content with it. Do you see FPGAs or network switches, anything

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becoming more meaningful, or do you think this is largely AI accelerator, kind of GPU, AI accelerator driven in terms of the HBM demand drivers?

**Sumit Sadana***Chief Business Officer & Executive Vice President, Micron Technology, Inc.*

A

This is heavily based on the requirements of the system level performance and the type of applications that require that high level of performance. If that performance level really dictates a level of processor memory bandwidth that cannot be met easily with traditional approaches, then of course HBM has to be considered.

Thus far, it is AI servers, but there are other product categories and applications which are starting to investigate HBM. Of course, not with this many placements, as you see around a GPU, because a GPU placements, 6 placements, 8 placements, 8-high, 12-high, et cetera, just a lot of memory, and other applications which may contemplate using HBM may not need that many placements. It is being contemplated in other places, but obviously the bar is high because HBM is a very expensive implementation of memory. But it is also one that is very power efficient compared to doing it in other ways.

And another way that companies are trying to figure out how this architecture evolves over time is to assess the mix of HBM versus DDR5 versus LP5. So LP, low-power memory is starting to make its way into the data center. Didn't used to be the way. Obviously, the vast capabilities of LP, which is reliability, availability and serviceability is not the same as DDR5 and consequently requires a lot of new architectural approaches, but you've seen leaders like NVIDIA show the way in terms of using LPDRAM in their servers. So that trend is also starting as another approach. But, overall, HBM usage will increase over time, but the volumes will be dominated by accelerators.

**Quinn Bolton***Analyst, Needham & Co. LLC*

Q

Thank you.

**Operator:** Thank you. And our final question for today comes from the line of Vivek Arya from Bank of America Securities. Your question, please.

**Vivek Arya***Analyst, BofA Securities, Inc.*

Q

Thanks for the follow up. Just a few clarifications on the CapEx side. So the mid-30s CapEx intensity, is that gross or net of any CHIPS funding? And are you assuming any depreciation benefits and gross margin benefits like Intel has been doing?

**Mark Joseph Murphy***Chief Financial Officer & Executive Vice President, Micron Technology, Inc.*

A

That's a net number, Vivek, and so we'll be providing you net numbers based on our latest assessment on when grants come in and also when ITC is received. We will get the depreciation benefits when it's put in service. But the cash reimbursement in the case of ITC, there may be a timing difference. There will be a timing difference on that compared to grants.

**Vivek Arya***Analyst, BofA Securities, Inc.*

Q

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Got it. So the mid-30s is a net number and gross CapEx could be higher than that.

**Mark Joseph Murphy**

*Chief Financial Officer & Executive Vice President, Micron Technology, Inc.*

A

That's correct.

**Vivek Arya**

*Analyst, BofA Securities, Inc.*

Q

Got it. And then on WFE, can you give us a sense, Mark, of what sort of the mix in CapEx in fiscal or what is the mix in fiscal 2024? And how should we conceptually think about the mix in fiscal 2025?

**Mark Joseph Murphy**

*Chief Financial Officer & Executive Vice President, Micron Technology, Inc.*

A

We did say that WFE was down in fiscal 2023, then down again in fiscal 2024. We have said it will be up in fiscal 2025. However, we did say that greenfield construction is a material part of the spend in fiscal 2025. But beyond that, we've not given specific WFE guidance.

**Manish Bhatia**

*Executive Vice President-Global Operations, Micron Technology, Inc.*

A

I'd say, Vivek, one other thing to keep in mind is that we did try to provide more color. This HBM ramp does consume the equipment for the HBM ramp, EUV equipment there does start to make up a bigger portion as we are embarking on this ramp to be able to grow from very little share towards our natural market share next year. So that is – and percentage wise, in terms of equipment categories, HBM's unique equipment is obviously going to be a very high or the highest growth area.

**Vivek Arya**

*Analyst, BofA Securities, Inc.*

Q

Got it. And anything incremental for EUV?

**Manish Bhatia**

*Executive Vice President-Global Operations, Micron Technology, Inc.*

A

We've talked about we've already made some EUV investments, and we've got a pretty efficient EUV implementation plan for 1-gamma. We are going to be implementing EUV in Japan though. That is one thing we've guided. So EUV is in the mix of our WFE plans for ramping 1-gamma and beyond.

**Vivek Arya**

*Analyst, BofA Securities, Inc.*

Q

Got it. Okay. I'll get back in the queue. Thank you.

**Operator:** Thank you. This does conclude the question-and-answer session of today's program. I would now like to hand the program back to Mark Murphy for any further remarks.

**Mark Joseph Murphy**

*Chief Financial Officer & Executive Vice President, Micron Technology, Inc.*

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I just wanted to provide a bit of housekeeping for your models. In the third quarter that we just reported, DRAM bit costs were flattish. NAND was down several percent sequentially. For FY 2025, DRAM all-in costs mid- to high-single digits are down long term, but HBM mix in 2025 will impact cost-downs. And cost-downs in 2025 for DRAM will be down only modestly.

Thank you, all, for joining today's call.

**Operator:** Thank you. And thank you, ladies and gentlemen, for your participation in today's conference. This does conclude the program. You may now disconnect. Good day.

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