

LSEG STREETEVENTS

EDITED TRANSCRIPT

2330.TW - Q1 2026 Taiwan Semiconductor Manufacturing Co Ltd
Earnings Call (Chinese, English)

EVENT DATE/TIME: APRIL 16, 2026 / 6:00AM GMT

CORPORATE PARTICIPANTS

Jeff Su *Taiwan Semiconductor Manufacturing Co Ltd - Director - Investor Relations*

Wendell Huang *Taiwan Semiconductor Manufacturing Co Ltd - Senior Vice President and Chief Financial Officer / Spokesperson*

C.C. Wei *Taiwan Semiconductor Manufacturing Co Ltd - Chairman & Chief Executive Officer*

CONFERENCE CALL PARTICIPANTS

Haas Liu *BofA Securities - Analyst*

Gokul Hariharan *JPMorgan Securities - Analyst*

Charlie Chan *Morgan Stanley - Analyst*

Sunny Lin *UBS Securities - Analyst*

Jim Fontanelli *Arete Research LLC - Analyst*

Bruce Lu *Goldman Sachs - Analyst*

Laura Chen *Citigroup - Analyst*

Charles Shi *Needham & Company LLC - Analyst*

PRESENTATION

Jeff Su - *Taiwan Semiconductor Manufacturing Co Ltd - Director - Investor Relations*

(spoken in foreign language)

Good afternoon, everyone, and welcome to TSMC's first quarter 2026 earnings conference call. This is Jeff Su, TSMC's Director of Investor Relations and your host for today. TSMC is hosting our earnings conference call via live audio webcast through the company's website at www.tsmc.com, where you can also download the earnings release materials.

If you're joining us through the conference call, your dial-in lines are in listen-only mode. The format for today's event will be as follows. First, TSMC's Senior Vice President and CFO, Mr. Wendell Huang will summarize our operations in the first quarter 2026, followed by our guidance for the second quarter 2026.

Afterwards Mr. Huang, and TSMC's Chairman and CEO, Dr. C.C. Wei will jointly provide the company's key messages. Then we will open the line for the Q&A session.

As usual, I would like to remind everybody that today's discussions may contain forward-looking statements that are subject to significant risks and uncertainties, which will cause actual results to differ materially from those contained in the forward-looking statements. So please refer to the Safe Harbor Notice that appears in our press release.

And now, I would like to turn the call over to TSMC's CFO, Mr. Wendell Huang, for the summary of operations and the current quarter guidance.

Wendell Huang - *Taiwan Semiconductor Manufacturing Co Ltd - Senior Vice President and Chief Financial Officer / Spokesperson*

Thank you, Jeff. Good afternoon, everyone. Thank you for joining us today. My presentation will start with financial highlights for the first quarter 2026. After that, I will provide the guidance for the second quarter 2026.

First quarter revenue increased 8.4% sequentially in NT, supported by strong demand for our leading-edge process technologies. In US Dollar terms, revenue increased 6.4% sequentially to \$35.9 billion, slightly ahead of our first-quarter guidance. Gross margin increased 3.9 percentage points sequentially to 66.2%, primarily due to cost improvement efforts, a higher capacity utilization rate, and a more favorable foreign exchange rate.

Operating margin improved 4.1 percentage points sequentially to 58.1% due to operating leverage. Overall, our first quarter EPS was TWD22.08 and ROE was 40.5%.

Now let's move on to revenue by technology. 3-nanometer process technology contributed 25% of wafer revenue in the first quarter, while 5-nanometer and 7-nanometer accounted for 36% and 13% respectively. Advanced technologies, defined as 7-nanometer and below, accounted for 74% of wafer revenue.

Moving on to revenue contribution by platform. HPC increased 20% quarter-over-quarter to account for 61% of our first quarter revenue. Smartphone decreased 11% to account for 26%. IoT increased 12% to account for 6%. Automotive decreased 7% and accounted for 4%, and DCE increased 28% to account for 1%.

Moving on to the balance sheet, we ended the first quarter with cash and marketable securities of TWD3.4 trillion or USD106 billion. On the liabilities side, current liabilities increased by TWD256 billion quarter-over-quarter, mainly due to the increase of TWD129 billion in accrued liabilities and others, and the increase of TWD82 billion in accounts payable.

On financial ratios, accounts receivable turnover days was flat at 26 days. Days of inventory increased 6 days to 80 days, reflecting the ramp-up of our 2-nanometer technology and strong demand for our 3-nanometer technology. Regarding cash flow and CapEx. During the first quarter, we generated about TWD699 billion in cash from operations, spent TWD351 billion in CapEx, and distributed TWD130 billion for second quarter 2025 cash dividend.

Overall, our cash balance increased TWD268 billion to TWD3 trillion at the end of the quarter. In US dollar terms, our first quarter capital expenditures totaled \$11.1 billion.

I have finished my financial summary. Now let's turn to our current quarter guidance. Based on the current business outlook, we expect our second quarter revenue to be between USD39.0 billion and USD40.2 billion, which represents a 10% sequential increase or a 32% year-over-year increase at the midpoint. Based on the exchange rate assumption of USD1 to TWD31.7, gross margin is expected to be between 65.5% and 67.5%.

Operating margin between 56.5% and 58.5%. Also, in the second quarter, we will need to accrue the tax on the undistributed retained earnings. As a result, our second quarter tax rate will be around 20%. We continue to expect the full year tax rate to be between 17% and 18%. This concludes my financial presentation.

Now, let me turn to our key messages. I will start by talking about our first quarter 2026 and second quarter 2026 profitability. Compared to fourth quarter, our first quarter gross margin increased by 390 basis points sequentially to 66.2%, primarily due to cost improvement efforts, a higher overall capacity utilization rate, and a more favorable foreign exchange rate.

Compared to our first quarter guidance, our actual gross margin exceeded the high end of the range provided three months ago by 120 basis points, mainly due to a higher-than-expected overall capacity utilization rate and better cost improvement efforts. We have just guided our second quarter gross margin to increase by 30 basis points to 66.5% at the midpoint, primarily driven by a higher overall utilization rate and continued cost improvement efforts, including productivity gains, partially offset by dilution from our overseas fabs.

Looking ahead to the second half of the year, given the six factors that determine our profitability, there are a few puts and takes I would like to share. As we have said before, the initial ramp-up of our 2-nanometer technology will start to dilute our gross margin in the second half of this year, and we expect between 2% and 3% dilution for the full year of 2026.

Furthermore, as the scale of our overseas expansion grows, we continue to forecast the gross margin dilution from the ramp-up of overseas fabs in the next several years to be 2% to 3% in the early stages and widen to 3% to 4% in the latter stages.

In addition, given the recent situation in the Middle East, prices for certain chemicals and gases are likely to increase. Based on our current assessment, there may be impact to our profitability, but it is too early to quantify the impact. On the other hand, we will continue to leverage our manufacturing excellence to generate more wafer output and drive greater across-node capacity optimization in our fab operations to support our profitability.

Also, N3 gross margin is expected to cross over to the corporate average in second half 2026. Finally, we have no control over the foreign exchange rate, but that may be another factor.

Next, let me talk about the materials and energy supply update, given the recent situation in the Middle East. TSMC operates a well-established enterprise risk management system to identify and assess all relevant risks and proactively implement risk mitigation strategies. In terms of materials supply, TSMC's strategy is to continuously develop multi-source supply solutions to build a well-diversified global supplier base and to improve the local supply chain.

For specialty chemicals and gases, including helium and hydrogen, we source from multiple suppliers in different regions, and we have prepared safety stock inventory on hand. We are also working closely with our suppliers to further strengthen the resiliency and sustainability of our supply chain. Thus, we do not expect any near-term impact on our operations from material supply.

In terms of energy, TSMC worked closely with TaiPower and the Taiwan government to ensure a stable and sufficient energy supply. With the recent situation in the Middle East, the Taiwan government has announced, it has secured sufficient LNG supply through at least May. The government has also said it is actively working on securing further LNG supply, diversifying sourcing to other regions, and other power backup plans. Therefore, we do not expect any near-term disruption or impact to our operations.

Finally, let me talk about our 2026 capital budget.

At TSMC. A higher level of capital expenditures is always correlated with higher growth opportunities in the following years. With our strong technology leadership and differentiation, we are well positioned to capture the multi-year structural demand from the industry megatrends of 5G, AI and HPC. We now expect our 2026 capital budget to be towards the high end of our range of between USD52 billion and USD56 billion as we continue to invest heavily to support our customers' growth.

Even as we invest for the future growth with this level of CapEx spending in 2026, we remain committed to delivering profitable growth to our shareholders. We also remain committed to a sustainable and steadily increasing cash dividend per share on both annual and quarterly basis.

Now, let me turn the microphone over to C.C.

C.C. Wei - Taiwan Semiconductor Manufacturing Co Ltd - Chairman & Chief Executive Officer

Thank you, Wendell. Good afternoon, everyone. First, let me start with our near-term demand outlook. We concluded our first quarter with revenue of USD35.9 billion, slightly above our guidance in US Dollar terms, driven by strong demand for our leading-edge process technologies.

Moving into second quarter 2026, we expect our business to be supported by continued strong demand for our leading-edge process technologies. Looking ahead, we are very mindful of the impact of rising component prices, especially in consumer and price-sensitive end market segment.

In addition, the recent situation in the Middle East also brings further macroeconomic uncertainties. As such, we are being prudent in our business planning, while focusing on the fundamentals of our business to further strengthen our competitive position.

Having said that, AI-related demand continues to be extremely robust. The shift from generative AI and the query mode to agentic AI and the command and action mode is leading to another step up in the amount of tokens being consumed. This is driving the need for more and more computation, which supports the robust demand for leading edge silicon.

Our customers and customers' customers, who are mainly the cloud service providers, continue to provide us with their very strong signal and positive outlook. Thus, our conviction in the multi-year AI megatrend remain high, and we believe the demand for semiconductors will continue to be very fundamental. Supported by our robust technology differentiation and broader customer base, we maintain strong confidence for our full-year 2026 revenue to now grow by above 30% in US Dollar terms.

Next, let me talk about our N2 capacity expansion plan. Our practice is to prioritize the land in Taiwan to support the fast ramp of our newest node due to the need for tight integration with R&D operations. Today, our new node, N2, has already entered high-volume manufacturing in the fourth quarter of 2025 with good yield. N2 is ramping successfully in multiple phases at both Hsinchu and Kaohsiung site, supported by strong demand from both smartphone and HPC/AI applications.

With our strategy of continuous enhancement, such as N2P and A16, we expect our N2 family to be another large and long-lasting node for TSMC.

Now let me talk about TSMC's global N3 capacity expansion plan. Historically, we do not add additional capacity to a node once it reaches its targeted capacity. However, as a foundry, our first responsibility is to provide our customers with the most advanced technologies and necessary capacity to unleash their innovations.

Based on our assessment, to meet the strong demand in AI applications, we are stepping up our CapEx investment to increase our N3 capacity. Thus, we are now executing a global capacity plan to support the robust multiyear pipeline of demand for 3-nanometer technologies, which are used by smartphone, HPC/AI, including HBM base dies, automotive and IoT customers.

In Taiwan, we are adding a new 3-nanometer fab to our GIGAFAB cluster in Tainan Science Park. Volume production is scheduled for the first half of 2027. In Arizona, our second fab will also utilize 3-nanometer technologies. Construction is already complete and volume production will begin in the second half of 2027. In Japan, we now plan to utilize 3-nanometer technology in our second fab and volume production is scheduled in 2028.

In addition to all the new fabs, we continue to convert 5-nanometer tools to support 3-nanometer capacity in Tainan. We are also leveraging our manufacturing excellence to drive greater productivity across our fab in all locations to generate more wafer output. We are also focusing on capacity optimization across nodes, which includes flexible capacity support among the N7, N5 and N3 nodes. Thus, we are using multiple levers to do everything we can, wherever we can, however we can to maximize the support to all our customers across all platforms. Also, let me emphasize that while the capacity is tight, we do not pick-and-choose or play favorites among our customers.

Next, let me talk about our mature-node strategies. TSMC's strategy at mature node has not changed. Our focus is to build a high yield capacity for specialized technologies rather than just nominal capacity. For example, we are increasing our mature node capacity such as in JASM Fab 1 in Japan for CMOS image sensor application and ESMC in Germany for automotive and industrial applications.

Meanwhile, we have a plan to wind down our Fab 2, which is a 6-inch fab, and Fab 5, which is 8-inch fab focusing on Gallium Nitride, and use available space to optimize the support for leading-edge applications. Even without fab 2 and fab 5, we still have enough capacity to fully support our existing customers. In summary, our strategy will be to continue to optimize our capacity mix within mature nodes and focus on the higher value-added and strategic segments by ensuring we have the necessary capacity to support our customers' growth.

Finally, let me talk about our A14 status. Featuring our second-generation nanosheet transistor structure, A14 will deliver another full-node stride from N2, with performance and power benefit to address the insatiable need for high performance and energy efficient computing. Compared with N2, A14 will provide 10% to 15% speed improvement at the same power for 25% to 30% power improvement at the same speed and close to 20% chip density gain.

Our A14 technology development is on track and progressing well. We are observing a high level of customer interest and engagement from both smartphone and HPC applications. Volume production is scheduled for 2028. Our A14 technology and its derivatives will further extend our technology leadership position and enable TSMC to capture the growth opportunities well into the future.

This concludes our key message and thank you for your attention.

Jeff Su - Taiwan Semiconductor Manufacturing Co Ltd - Director - Investor Relations

Thank you, C.C. This concludes our prepared statements.

QUESTIONS AND ANSWERS

Jeff Su - Taiwan Semiconductor Manufacturing Co Ltd - Director - Investor Relations

(Event Instructions)

Now let's begin the Q&A session. Operator, can we proceed with the first participant on the line, please? Thank you.

Operator

Haas Liu, Bank of America.

Haas Liu - BofA Securities - Analyst

Yes, good afternoon, C.C, Wendell and Jeff. Congrats on the solid results and guidance. I would like to start with your 3-nanometer gross margin outlook. You just mentioned the node is going to across the corporate average gross margin in second half of this year, which is now at mid-60 percentage levels. And we understand the technology is in severe undersupply backed by strong AI demand, and you already forecasted the capacity expansion through conversion in greenfield through 2028.

Would you be able to discuss more in detail on what kind of applications are driving such strong business for you and convince you to extend more? And the other thing on 3-nanometer as well is just the node started to ramp from fourth quarter 2022, which means some of your equipment will be fully depreciated by 2027, should we expect the node margins to be trending even higher with very solid utilization and also pricing trend?

Jeff Su - Taiwan Semiconductor Manufacturing Co Ltd - Director - Investor Relations

Thank you. Okay. So the first question from Haas Liu of Bank of America. It's two parts on 3 nanometer. First, as C.C. described, we are executing a plan for expanding 3-nanometer capacity. So he wants to understand what are the applications to drive such a strong multiyear looking ahead pipeline of demand for 3 nanometers, since it's already been around in volume production since late '22? That's the first part of this question.

C.C. Wei - *Taiwan Semiconductor Manufacturing Co Ltd - Chairman & Chief Executive Officer*

Well, let me answer that. I think the application is simple. It's still the HPC AI applications. Did that answer your question?

Haas Liu - *BofA Securities - Analyst*

Okay. Yes. That is the first part. And the second part is probably.

Jeff Su - *Taiwan Semiconductor Manufacturing Co Ltd - Director - Investor Relations*

And the second part of this question is on the gross margin for 3-nanometer. His question is really, what is the gross margin outlook for 3-nanometer? Will it crossover in the second half of this year to what level? And then once it becomes fully depreciated, what happens to the margin?

Wendell Huang - *Taiwan Semiconductor Manufacturing Co Ltd - Senior Vice President and Chief Financial Officer / Spokesperson*

Okay. This is Wendell. We expect the N3 gross margin to reach and cross the corporate gross margin level in the second half of this year. And we don't have a number to share with you, but after the full depreciation as our previous nodes, the gross margins are generally very high.

Jeff Su - *Taiwan Semiconductor Manufacturing Co Ltd - Director - Investor Relations*

Okay. Haas, that's -- I'll take that as a 1.5 question. So if you have a quick follow-up for your second question.

Haas Liu - *BofA Securities - Analyst*

Yes, thanks so much, Jeff. And the other, I think, just a 0.5 follow-up is probably just on the CapEx. You revised up to the high end of your guidance for USD 52 billion to USD 56 billion for this year. Compared to three months ago, what gives you the incremental confidence when you discuss with your customers and also customers' customers regarding the demand outlook to support your stronger or the upper half of your guidance for the CapEx this year?

Jeff Su - *Taiwan Semiconductor Manufacturing Co Ltd - Director - Investor Relations*

Okay. Thank you, Haas. So his second question is he notes that indeed, we have this time guided to the high end of our CapEx range versus January. So what incrementally is driving this revision to the CapEx, what gives us the confidence to go to the high end of the \$52 billion to \$56 billion range? Thank you.

C.C. Wei - *Taiwan Semiconductor Manufacturing Co Ltd - Chairman & Chief Executive Officer*

Well, again, this is C.C. Wei, let me answer this question. A simple, a very simple answer is, the demand are very robust, especially from the HPC and AI applications. And also, we try very hard to speed it up and pull in all the equipment as we can. Still our supply is very tight. Demand continues to increase. And so we continue to work with our suppliers to speed it up. And that's why we are toward our high end of CapEx forecast.

Jeff Su - *Taiwan Semiconductor Manufacturing Co Ltd - Director - Investor Relations*

Okay, Haas, does that answer your question?

Haas Liu - *BofA Securities - Analyst*

Yes, thank you so much. I'll be back in the queue.

Jeff Su - *Taiwan Semiconductor Manufacturing Co Ltd - Director - Investor Relations*

Sure, thank you. Operator, can we move on to the next participant, please?

Operator

Gokul Hariharan, JP Morgan.

Gokul Hariharan - *JPMorgan Securities - Analyst*

Hi, good afternoon, C.C, Wendell and Jeff. My first question on your comments on demand. Clearly, demand is even better than what you predicted back in January, C.C, and you also raised the CapEx. Now all your customers seem to be telling everybody they can tell that wafers still remain the biggest constraint. So given your expanded 3-nanometer capacity plan and faster CapEx, C.C, what is your expectation that how long the supply constraint is likely to last?

Do you have any visibility of when you can kind of bring some kind of balance here. Based on what you hear from customer? And as a strategy, do you also plan to build out a more clean room space because that seems to be a little bit of a constraint right now to bring on the capacity quickly. That's my first question.

Jeff Su - *Taiwan Semiconductor Manufacturing Co Ltd - Director - Investor Relations*

Okay, Gokul. Please allow me to summarize your first question. So his question is directed for C.C. He notes that the demand seems to be even stronger than our forecast in January. We have also raised the CapEx and customers continue to say they need more chip supply. So with our capacity plan, do we have a forecast, or expectations of how long the constraint can last? And will we have a strategy to build up clean room space first? Is that correct, Gokul?

Gokul Hariharan - *JPMorgan Securities - Analyst*

That's right. Yes.

C.C. Wei - *Taiwan Semiconductor Manufacturing Co Ltd - Chairman & Chief Executive Officer*

Okay. Gokul, let me answer the question. Again, it's very simple because of demand continues to be robust and the number continues to be increased, and we double check with our customers, customers' customers or those are CSPs. They gave us a very positive outlook, right?

And so we have to speed it up with our buildup of clean room and buying the tools. So we are working with construction, and we are working with our equipment supplier, and so we want the pulling forward of our forecasted schedule. That's a simple answer because of the AI is so strong.

Gokul Hariharan - *JPMorgan Securities - Analyst*

Any read, C.C., on when we can kind of meet this demand? Or you think the next couple of years is still going to be very challenging to meet -- that supply is still will be running below demand, let's say, into '27 also?

Jeff Su - *Taiwan Semiconductor Manufacturing Co Ltd - Director - Investor Relations*

So Gokul would like to know when supply can meet the demand? Do we have a forecast or time frame?

C.C. Wei - *Taiwan Semiconductor Manufacturing Co Ltd - Chairman & Chief Executive Officer*

Gokul, you know it takes two to three years to build a new fab. And with the current schedule, we believe that '27, we will announce it anyway when we enter '27, but let me say that. It takes time to build a new fab, it takes time to ramp it up. And so we expect this to continue to be very tight. So that's why we just announced that we try to build 3 new N3 fabs to meet the demand.

Gokul Hariharan - *JPMorgan Securities - Analyst*

Okay. That's very clear. So '27 is also very tight. My second question on competition. So obviously, you have the traditional competitors Samsung, Intel, but one of your customers, Elon Musk, also announced Terafab initiative recently.

What is TSMC's perspective on with initiative. They have also been a customer of yours and they recently signed deals with Samsung a few months back. So what is TSMC response here now that they are also trying to kind of build chips on their own. How are you trying to bring back the customer, like C.C. what is your perspective here?

Jeff Su - *Taiwan Semiconductor Manufacturing Co Ltd - Director - Investor Relations*

Okay. So Gokul's second question is on competition. He notes that we have competition and then recently a competitor or he notes that this Terafab. So he wants to know what is our perspective on this initiative. This customer has also been a customer of TSMC, but has also signed a deal with one of our other competitors, Samsung. So Gokul would also like to know what is our perspective on the Terafab and what is our view on winning back this customer's business?

C.C. Wei - *Taiwan Semiconductor Manufacturing Co Ltd - Chairman & Chief Executive Officer*

Well, Gokul, actually, both Intel and Tesla, they are TSMC's customer. So -- but again, they are our competitors and we view Intel as a formidable competitors and do not underestimate them. But having said that, there are no shortcuts, the fundamental rule of the foundry game never change. They need a technology leadership, manufacturing excellence and customer trust and most of all, the service, which has been mentioned by Jensen. Well, thank you for his wording.

Again, let me say that it takes two to three years to build a new fab. No shortcuts. And it takes another one to two years to ramp it up. Again, that's a fundamental of foundry industry. And whether we try to win them back, actually, they are still our customers and we are very confident in our technology position. And we work very hard to capture every piece of business possible.

Gokul, did I answer your question?

Gokul Hariharan - *JPMorgan Securities - Analyst*

Okay. That is pretty clear. So do you think your positive ramp-up of capacity can kind of win some of these customers back? Because the reason seems to be mostly about capacity tightness rather than any other kind of big reasons, right? So is that your evaluation that this is probably the most important thing to win some of these customers back?

Jeff Su - *Taiwan Semiconductor Manufacturing Co Ltd - Director - Investor Relations*

Okay. So Gokul's final question is then in winning customers back, his concern is because our capacity is tight. Is that the reason we're losing customers, and so can we win customers back?

C.C. Wei - *Taiwan Semiconductor Manufacturing Co Ltd - Chairman & Chief Executive Officer*

Well, again, let me emphasize, it takes two to three years to build a new fab. So in this time, we are also building a new fab to meet our customers' strong demand, no shortcut. So anyway, the capacity is very tight, as I said, but we're working hard to make sure that we can meet customers' demand.

Gokul Hariharan - *JPMorgan Securities - Analyst*

Got it. Thanks, C.C. No shortcuts. Got it.

Jeff Su - *Taiwan Semiconductor Manufacturing Co Ltd - Director - Investor Relations*

All right. Thank you. Operator, can we move on to the next participant, please?

Operator

Charlie Chan, Morgan Stanley.

Charlie Chan - *Morgan Stanley - Analyst*

Hi. Good afternoon, C.C, Wendell and Jeff. Thanks for taking my question and also, congratulations for the very, very strong results, again. So I think I would also address the competition topic from a little bit different angle. So as you can see that those AI customers they are developing much larger reticle size chips, right? And some customers are considering to use EMIB, because it's kind of substrate-based, more suitable for circular larger size chip design.

So I'm not sure what the TSMC's strategy to address this competition. And more strategically, is TSMC comfortable to open up your compute die to your competitors, for example, Intel to do the package, what is the kind of thought process behind? Thank you.

Jeff Su - *Taiwan Semiconductor Manufacturing Co Ltd - Director - Investor Relations*

All right, Charlie. Thank you. So Charlie's first question is also related to competition. He notes that our AI customers are seeking for larger and larger reticle sizes. So he wants to know what is our assessment of the competitive threat from solutions such as EMIB and what's our strategy to address this competition? Will we be willing to open up our front-end wafer and let someone else do the packaging, basically?

C.C. Wei - Taiwan Semiconductor Manufacturing Co Ltd - Chairman & Chief Executive Officer

Well, Charlie, today, TSMC is supplying the largest reticle size packaging. And yes, we understand that our competitors also offer very attractive technology. But we work on that. So our customers can have more choices and then we can do more business with our customers. That's our attitude.

And -- but saying that, we don't leave any business on the table. We are working very hard to meet all our customers' demand. We also are developing a very large reticle size packaging technologies. And we are working with all the customers. And so far, so good.

Charlie Chan - Morgan Stanley - Analyst

Thanks, C.C. A follow-up on this, when you mentioned about larger size technology, are you referring to CoPoS, or CoWoS-L 2.5D, or do you think 3D can resolve this kind of planar extension problem?

Jeff Su - Taiwan Semiconductor Manufacturing Co Ltd - Director - Investor Relations

So Charlie is asking a follow-up. So he wants us to comment on for larger reticle size? Is it CoWoS-L? Is it panel level? What exact detailed solutions are we doing?

C.C. Wei - Taiwan Semiconductor Manufacturing Co Ltd - Chairman & Chief Executive Officer

Charlie, so far today, we have a very large reticle size CoWoS. Of course, we are also working on CoPoS. And together, we try to make sure that we give enough capacity to support our customer with a reasonable cost. So that's why we build a pilot line right now and expect production a couple of years later. But today, the main approach or the main supply is still a large-sized CoWoS. And together with system and wafer technology, we think TSMC gives our customers the best options for their product in the market.

Charlie Chan - Morgan Stanley - Analyst

Got it. So yes, I would take -- we don't need to worry too much about this competition. So my second question is actually about your long-term CapEx plan. C.C., as you said, you take the two, three years to build a new fab. So you definitely have that visibility, right?

So when we're back in 2021, management of the about three-year CapEx guidance as USD 100 billion given very strong demand. I'm not sure if the TSMC can provide a little bit longer-term CapEx guidance because as you said, right, there's the equipment supply is also pretty tight. Yesterday, ASML reported very, very strong results. So you said the EUV supply is an issue? And secondly, with the management provider kind of long-term CapEx guidance to investors.

Jeff Su - Taiwan Semiconductor Manufacturing Co Ltd - Director - Investor Relations

All right, Charlie, that's a lot of questions. But the second one then on CapEx and building capacity. Again, Charlie notes C.C.'s comment capacity is not born overnight, it takes time. So he would like to know, besides this year's CapEx, which we have already said at the high end, can we provide a guidance for the next three years CapEx like we did back in 2021 in terms of the dollar amount?

Wendell Huang - Taiwan Semiconductor Manufacturing Co Ltd - Senior Vice President and Chief Financial Officer / Spokesperson

Okay, Charlie, we don't have a number to share with you. But look at it this way: In the past three years, our total CapEx was \$101 billion. This year, we're already seeing is towards the high end, which is \$56 billion, which is already over 50% of the past three years in total. So

we have a strong conviction in the AI megatrend. So we expect the CapEx in the next few years, in the next three years will be significantly higher than the past few years.

Jeff Su - *Taiwan Semiconductor Manufacturing Co Ltd - Director - Investor Relations*

And then the final part of Charlie's question, with such a long lead time, do we -- are we concerned about dual securing tools or bottlenecks and such?

C.C. Wei - *Taiwan Semiconductor Manufacturing Co Ltd - Chairman & Chief Executive Officer*

Well, Charlie, we always -- TSMC's culture, we're always working with our supplier because we view them as partners. So we continue to work with them, especially for those material then research, et cetera. So, so far, we are very happy with their support. That's all I can tell you.

Jeff Su - *Taiwan Semiconductor Manufacturing Co Ltd - Director - Investor Relations*

Okay.

Charlie Chan - *Morgan Stanley - Analyst*

Thank you, Wendell.

Jeff Su - *Taiwan Semiconductor Manufacturing Co Ltd - Director - Investor Relations*

All right. Thank you, Charlie. Operator, can we move on to the next participant, please?

Operator

Sunny Lin, UBS.

Sunny Lin - *UBS Securities - Analyst*

Good afternoon. Thank you very much for taking my questions and congrats on the steady results. So my first question is again to follow up on CapEx. So if you look at from 2024 to 2026, so in this cycle, TSMC has been able to keep capital intensity at a healthy level of 30%-plus, given very strong technology leadership and operating leverage. Other than the company doesn't really have a specific target on capital intensity.

But for the coming few years, given the very strong revenue ramp of leading edge, how should we think about the revenue growth compared with CapEx growth? Should we think top line remain steady and therefore, CapEx could grow in line or even below? What's the best way for us to think about it?

Jeff Su - Taiwan Semiconductor Manufacturing Co Ltd - Director - Investor Relations

Okay. Sunny, thank you for your questions. So please allow me to summarize. Sunny's first question is on well, I think, CapEx and really capital intensity. She notes in the past few years, we've been able to keep capital intensity around the 30-plus -- 30-something percent level.

She notes that we don't have a specific capital intensity target per se, but her specific question, looking ahead the next several years, how do we see revenue growth versus CapEx growth? Is there likely to be higher, flat, lower and therefore, what type of intensity does that imply? Is that correct, Sunny?

Sunny Lin - UBS Securities - Analyst

Yeah. Thank you very much, Jeff.

Wendell Huang - Taiwan Semiconductor Manufacturing Co Ltd - Senior Vice President and Chief Financial Officer / Spokesperson

Okay, Sunny. So in the past few years, as you correctly pointed out, the revenue growth outpaced the CapEx growth. That's because if we do our job right, then we will continue to see that happen in the next several years. The revenue growth outpaced the CapEx growth. Okay? Now therefore, we do not expect in the next several years, a sudden surge in capital intensity.

Sunny Lin - UBS Securities - Analyst

I see. Maybe a very quick follow-up, several questions on competition already. But also on a competition point of view, even a very tight supply at TSMC side in recent years, would TSMC actually consider maybe spending CapEx so that clients will need to diversify, given tight supply?

Jeff Su - Taiwan Semiconductor Manufacturing Co Ltd - Director - Investor Relations

Right. So Sunny's 1.5 question is, in terms of the CapEx, will we consider accelerating or spending more given the competitive threat from the competitors, if there's not enough capacity then our customers will go to competitors. That's your question, correct?

Sunny Lin - UBS Securities - Analyst

Yeah. Thank you, Jeff.

C.C. Wei - Taiwan Semiconductor Manufacturing Co Ltd - Chairman & Chief Executive Officer

Well, Sunny, we repeatedly saying that we prepare the capacity to meet customers' demand, not because of our competitor were not because of other consideration. The most important one is our customers' demand, and they work with TSMC and so that we plan our capacity and so our capital expense.

Sunny, did I answer your question?

Sunny Lin - UBS Securities - Analyst

Yeah, very clear, thank you. So maybe my 0.5 question. And so if we look at this year, earlier, you just guided a bit higher than 30% growth for top line. But indeed, there is ongoing supply tightness. And so for 2026, how much upside could you realize for top line? And at this point, have you started to see some impact of consumer end demand and therefore, on your demand coming from smartphone and PC?

Jeff Su - Taiwan Semiconductor Manufacturing Co Ltd - Director - Investor Relations

Okay. So Sunny's second question is regarding 2026 full year outlook. She notes now that we have increased the guidance to above 30%. How much more upside can there be? Or maybe the first part also, how much -- how do we see the impact from the memory price hike to the end market? And how do we see with above 30%, is there more upside?

C.C. Wei - Taiwan Semiconductor Manufacturing Co Ltd - Chairman & Chief Executive Officer

Well, Sunny, memory price hike definitely has some impact to price-sensitive end market, especially in PC and smartphone market. But it's -- we did see a little bit softer market. But to share with you all the high-end smartphones continue to do better and this is to TSMC's advantage. And as you're asking about how much higher than above 30% year-over-year growth, we will share with you in July, how about that? That we will have a more accurate towards a more precise number to share with everybody.

Sunny Lin - UBS Securities - Analyst

No problem. Thank you very much, C.C.

Jeff Su - Taiwan Semiconductor Manufacturing Co Ltd - Director - Investor Relations

Thank you, Sunny. Operator, can we move on to the next participant on the line?

Operator

Jim Fontanelli, Arete.

Jim Fontanelli - Arete Research LLC - Analyst

Yes, thank you. Thanks for taking the question. So my first question is to do with demand. So you commented earlier in the call that demand continues to outstrip supply for leading-edge capacity. And obviously, you've just delivered a very strong print in guide for gross margins. So against this backlog, how management's thinking changed about the sustainable margin structure and what appropriate long-term returns might be for the business?

Jeff Su - Taiwan Semiconductor Manufacturing Co Ltd - Director - Investor Relations

Okay. So Jim's first question is looking -- asking on the margin structure. He notes, as we said, that demand continues to be extremely robust and very strong. So how does this change, I think your question is on margin, view on the long-term margin profile and return profile. Is that correct?

Jim Fontanelli - Arete Research LLC - Analyst

That's correct.

Jeff Su - Taiwan Semiconductor Manufacturing Co Ltd - Director - Investor Relations

Okay, Jim. As we said in the last earning calls, we've revised up our long-term margin targets and ROE targets from 2024 to 2029. We're now saying the gross margins will be 56% and higher through the cycle, and we're looking at ROE of high 20% through the cycle. That's what we're currently looking at, and that's already higher than before.

Jim Fontanelli - Arete Research LLC - Analyst

Thank you. And that thinking is not changing against the backdrop where other parts of the AI supply chain are clearly starting to print super normal returns. That doesn't impact how you think about margin structure for the next two or three years?

Wendell Huang - Taiwan Semiconductor Manufacturing Co Ltd - Senior Vice President and Chief Financial Officer / Spokesperson

Yes, Jim, this is a -- the long-term planning is an ongoing and continuous process. So we do that all the time, and we will update you when there is a change.

Jim Fontanelli - Arete Research LLC - Analyst

Okay, thank you. And my second question is, it looks like the Arizona site is becoming more strategic in terms of leading-edge commitment for TSMC, particularly with the recently added second parcel of land. Could you talk about how you see mid- to long-term capacity opportunity? And also how confident you are that the US fab economics will match Taiwanese produced wafers?

Jeff Su - Taiwan Semiconductor Manufacturing Co Ltd - Director - Investor Relations

Okay. So Jim, second question is on our Arizona fab expansion plans. He notes that it is becoming more and more strategic. We have recently, as we said, acquired a second large piece of land. So what is the plan or the purpose behind this? And then what is the profitability or margin outlook as well?

C.C. Wei - Taiwan Semiconductor Manufacturing Co Ltd - Chairman & Chief Executive Officer

Well, Jim, let me answer the question. We acquired the second land because we need it, we want to build more fabs in Arizona. And this is actually to meet the multiyear demand from our leading-edge US customers. And again, let me emphasize again that we are working very hard to speed it up.

We already gained a lot of experience in Arizona. And so now we have much more confidence than last year that we can make good progress and moving aggressively forward and with, we expect we can improve the cost structure, of course.

Jeff Su - Taiwan Semiconductor Manufacturing Co Ltd - Director - Investor Relations

Okay, Jim.

Jim Fontanelli - Arete Research LLC - Analyst

All right, thank you.

Jeff Su - Taiwan Semiconductor Manufacturing Co Ltd - Director - Investor Relations

Operator, can we move on to the next participant, please?

Operator

Bruce Lu, Goldman Sachs.

Bruce Lu - Goldman Sachs - Analyst

Thank you for taking my question. I think I want to follow up on Jim's question for the profitability. I think earlier last year, when I asked why TSMC did not raise the profitability target when TSMC continues to sell the value. I think C.C told me that to focus on the above version of 53% and above. I think last quarter, we raised to 56% and above. So the question is that do you believe the current profitability fully reflect TSMC's value?

So I'm guessing you might ask me to focus on the higher portion of the profitability target again. So the real question is that given the uniqueness of the dominant position for TSMC, it's not easy to find a perfect benchmark for TSMC's profitability. So can you tell us how we should think the profitability benchmark for TSMC? Or what is the best way to see TSMC's value should be fully reflected into the gross margin and operating margins?

Jeff Su - Taiwan Semiconductor Manufacturing Co Ltd - Director - Investor Relations

Okay. Bruce, his first question is what profitability -- he wants to know what profitability benchmark he should be looking at and whether we believe our current profitability level fully reflects TSMC's true value?

C.C. Wei - Taiwan Semiconductor Manufacturing Co Ltd - Chairman & Chief Executive Officer

Well, Bruce, you -- actually you asked about our pricing strategy. Let me say that we always view our customers as our partners. Of course, we know that our value, of course, we know our position. But we also view that our partner is a very important business partner so that we don't change our pricing dramatically or something like that. We just try to make sure that our customers can be successful in their market.

And at the same time, we grow together, then we also earn our value so that we can continue to expand our capacity to support them. That fundamentally is, number one, our customers got to be successful. That's our consideration, number one, and we grow together. And again, there is a key word, please pay attention to customer is our partners.

Bruce Lu - Goldman Sachs - Analyst

Okay. So if your customer continue to maybe in a couple of quarters, we can see our profitability target again?

Jeff Su - Taiwan Semiconductor Manufacturing Co Ltd - Director - Investor Relations

Bruce, what's your second question?

Bruce Lu - *Goldman Sachs - Analyst*

Okay. My second question is that management has been guiding the AI accelerated revenue to grow like mid- to high 50s CAGRs in 2029. So how does TSMC plan and forecast AI-related demand? I mean does TSMC incorporate metrics such as token consumption growth in your assumption? Because the token consumption in the first quarter is definitely accelerated and faster than earlier expectations. But do we see the changes for the AI-accelerated revenue growth in the coming years?

Jeff Su - *Taiwan Semiconductor Manufacturing Co Ltd - Director - Investor Relations*

Okay. So Bruce's second question is on our AI accelerator long-term CAGR guidance, which, yes, we have guided mid- to high 50s. He notes with the strong token growth and demand for tokens. Do we have any changes to this long-term guidance?

C.C. Wei - *Taiwan Semiconductor Manufacturing Co Ltd - Chairman & Chief Executive Officer*

Bruce, actually, I think I say enough that it's a very strong demand, and we continue to receive the positive signal from our customer and customers' customers. And so what do you say is whether we change our bigger AI accelerator? It's actually, we continue to see strong demand. But again, let me say that is toward higher 50s of the CAGR that we observe.

Jeff Su - *Taiwan Semiconductor Manufacturing Co Ltd - Director - Investor Relations*

Thank you, CC. Thank you, Bruce. Operator, can we move on to the next caller, please?

Operator

Laura Chen, Citi.

Laura Chen - *Citigroup - Analyst*

Hello, hi, good afternoon, C.C, Wendell and Jeff. May I take more details on some TSMC's strategy in advanced packaging? And what will be the business model working with your OSAT partners? We see that there are various different solutions provided by your peers and also the OSAT makers, yet TSMC is also expanding more in the advanced packaging. So how would TSMC work with your customers planning on their advanced node wafer demand, but also aligned with their advanced packaging demand at TSMC?

Jeff Su - *Taiwan Semiconductor Manufacturing Co Ltd - Director - Investor Relations*

Okay. So thank you, Laura. Laura's first question is on advanced packaging. She would like to know, we work with customers, collaborate with customers to plan our front-end wafer capacity. How do we work with the customers to plan the advanced packaging capacity is what she would like to understand and also in the context of working with our OSAT partners on the advanced packaging businesses?

C.C. Wei - *Taiwan Semiconductor Manufacturing Co Ltd - Chairman & Chief Executive Officer*

Well, Laura, our priority actually, again, is to support our customers, right? And whenever we can or wherever we can, we want to make sure that their product can be, their demand of the product can be met by TSMC's front-end and high-end packaging. So we certainly -- let me say that our advanced packaging capacity is very tight also. So we have to work with our OSAT partners. We hope that we can increase the capacity to support our customers.

That's -- again, let me emphasize again, we support our customers. So we try very hard to increase our own capacity also. But certainly, it just have been very tight. And so that's what our situation today.

Laura Chen - Citigroup - Analyst

Sure, sure. Understood. My second question is also about advanced packaging. As C.C highlighted before many times that AI chips are growing into super chips with very large die size and TSMC now working at the biggest reticle in the world.

But at the same time, there's a potential technical challenges such as warpage. So do you think that the following roadmap like SoIC or like CoPoS can solve these kind of technical issue? And based on TSMC's technology road map, do we see any like technology, like SoIC or CoPoS, will be a bigger in a couple of years can solve this problem?

Jeff Su - Taiwan Semiconductor Manufacturing Co Ltd - Director - Investor Relations

Yes, so Laura, the second question is also related to advanced packaging, AI and larger reticle sizes post potential technical challenges such as warpage. So she wouldn't like to know how do we see SoIC or panel level packaging? What's the key to solving these issues? And what is it outlook in the next several years?

Laura Chen - Citigroup - Analyst

Yes, thank you.

C.C. Wei - Taiwan Semiconductor Manufacturing Co Ltd - Chairman & Chief Executive Officer

Well, Laura, you're good. Actually, that's all the challenges that we have in advanced packaging technology. Mechanical stress, which is a very tough challenge to the electrical engineering like IM. However, we accumulated a lot of experience already today because we have supply most of the leading edge and in packaging area. And we continue to increase the die size and continue to meet all the other challenges from the mechanical stress like you said, actually is warpage or thermal limitation.

A good challenge, and we like it, the harder the better, because of TSMC's strength in technical engineering, and we have a confidence that we can work with our customers to solve all the issues and continue to move on.

Laura Chen - Citigroup - Analyst

Yes, so should we expect that SoIC's TSMC may introduce that earlier to solve this kind of a challenge because we already have the learning curve and already have the products in production. So that should be going faster than other technologies, I suggest?

Jeff Su - Taiwan Semiconductor Manufacturing Co Ltd - Director - Investor Relations

So Laura's question is very specific. I don't -- yes, on SoIC, what is -- how do we see that developing, I guess?

C.C. Wei - Taiwan Semiconductor Manufacturing Co Ltd - Chairman & Chief Executive Officer

Well, we work with our customer and we meet their demand. And that's all I can tell you. Speed it up or slow down, no, no, no, we work with our customers to meet their demand.

Laura Chen - Citigroup - Analyst

Okay, Laura. Thank you. Very clear.

Jeff Su - Taiwan Semiconductor Manufacturing Co Ltd - Director - Investor Relations

Yes. Okay. Thank you. Operator, in the interest of time, can we take the questions from the last participant, please?

Operator

Charles Shi, Needham.

Charles Shi - Needham & Company LLC - Analyst

Hi. Thanks for taking my question. TSMC's definition of AI revenue includes GPU, AI accelerator, HBM base die, maybe add a few others, but it does specifically excludes data center CPU, I think you made that the definition very clear for a couple of years now. But with the CPU, there's more and more conversation about CPU now becoming part of the AI infrastructure, especially for agentic workflows.

Any chance for TSMC to maybe provide us revised numbers for AI revenue and maybe the AI revenue growth CAGR projection going 2029, 2030 and maybe hopefully give us some sense about the historical AI revenue numbers would have been if some of the data centers CPU numbers, especially for genetic AI workloads, are included there? That's my first question.

Jeff Su - Taiwan Semiconductor Manufacturing Co Ltd - Director - Investor Relations

Okay. Thank you, Charles. Charles' first question, please let me summarize, is regarding our definition of AI accelerator, which is, of course, we have said GPU, ASIC, and HBM controllers for training and inference in the data center. He notes now with the agentic AI, he wants to know, will we start to include CPUs in this definition? If so, can we provide the historical data with CPU included, and what would be the AI accelerator guidance be if it includes CPU?

C.C. Wei - Taiwan Semiconductor Manufacturing Co Ltd - Chairman & Chief Executive Officer

Charles, certainly, CPUs becomes more and more important in today's AI data center. But actually, let me share with you, this is a good question, by the way. Let me share with you that we are not able to differentiate conventional server CPU vs AI server CPU (corrected by company after the call). So today, we still not include the CPUs in our AI HPC's calculation. Someday later, we might consider.

Jeff Su - Taiwan Semiconductor Manufacturing Co Ltd - Director - Investor Relations

Okay. Charles, do you have a second question?

Charles Shi - Needham & Company LLC - Analyst

Thanks, C.C. Yes, maybe it's kind of also tied to the recent development in overall AI infrastructure, how things have been evolving. So Nvidia, of course, they recently added more CPU content to the overall Vera Rubin SuperPOD, but I think that most people are focusing on that brand-new LPU. They recently added -- we understand I appreciate that the TSMC's very strong in CPU and we'll definitely participate in that upside in CPU. But the LPU business, it's the acquired business, well, for historical reasons, it's still at your competitors Samsung

Foundry. And I think investors are looking at that and the thing that maybe looks like Samsung foundry finally made the first true inroads into AI. So any thoughts from TSMC side, how should we think about whether and how TSMC will win back that LPU business or any future business coming from your customers? And yes, gave us some thoughts there, we appreciate that. Thank you.

Jeff Su - Taiwan Semiconductor Manufacturing Co Ltd - Director - Investor Relations

Okay. Charles second question is a very specific question about a very specific customer and a very specific product, which is we typically do not comment on, but he wants to know for this customer's LPU product, which he notes is made at one of our competitors. How do we see this business going to the competitor do we have plans to win this LPU business back in the future?

C.C. Wei - Taiwan Semiconductor Manufacturing Co Ltd - Chairman & Chief Executive Officer

Charles, I think Jeff already gave me enough warning, said very specific, specific customer, very specific area. Now let me answer your question. We are working with our customers for their next-generation LPU anyway. And we are very confident in our technology position, and we will work hard to capture every piece of business possible. How about that?

Charles Shi - Needham & Company LLC - Analyst

Very good. That's very good color. I appreciate that.

Jeff Su - Taiwan Semiconductor Manufacturing Co Ltd - Director - Investor Relations

Okay. Thank you, Charles. Thank you, C.C. Thank you, Wendell. This concludes our prepared statements -- sorry, I should say this concludes our Q&A session.

Before we conclude today's conference, please be advised that the replay of the conference will be accessible within 30 minutes from now, and the transcript will become available 24 hours from now. Both are going to be available through TSMC's website at www.tsmc.com.

So again, thank you, everyone, for taking the time to join us today. We hope you continue to stay well, and we hope you join us again next quarter. Goodbye, and have a good day.

DISCLAIMER

LSEG reserves the right to make changes to documents, content, or other information on this web site without obligation to notify any person of such changes.

In the conference calls upon which Event Transcripts are based, companies may make projections or other forward-looking statements regarding a variety of items. Such forward-looking statements are based upon current expectations and involve risks and uncertainties. Actual results may differ materially from those stated in any forward-looking statement based on a number of important factors and risks, which are more specifically identified in the companies' most recent SEC filings. Although the companies may indicate and believe that the assumptions underlying the forward-looking statements are reasonable, any of the assumptions could prove inaccurate or incorrect and, therefore, there can be no assurance that the results contemplated in the forward-looking statements will be realized.

THE INFORMATION CONTAINED IN EVENT TRANSCRIPTS IS A TEXTUAL REPRESENTATION OF THE APPLICABLE COMPANY'S CONFERENCE CALL AND WHILE EFFORTS ARE MADE TO PROVIDE AN ACCURATE TRANSCRIPTION, THERE MAY BE MATERIAL ERRORS, OMISSIONS, OR INACCURACIES IN THE REPORTING OF THE SUBSTANCE OF THE CONFERENCE CALLS. IN NO WAY DOES LSEG OR THE APPLICABLE COMPANY ASSUME ANY RESPONSIBILITY FOR ANY INVESTMENT OR OTHER DECISIONS MADE BASED UPON THE INFORMATION PROVIDED ON THIS WEB SITE OR IN ANY EVENT TRANSCRIPT. USERS ARE ADVISED TO REVIEW THE APPLICABLE COMPANY'S CONFERENCE CALL ITSELF AND THE APPLICABLE COMPANY'S SEC FILINGS BEFORE MAKING ANY INVESTMENT OR OTHER DECISIONS.

©2026, LSEG. All Rights Reserved.