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OVERVIEW:

Co. reported 4Q14 revenue of TWD222.5b and EPS of TWD3.08. Expects 1Q15 revenues to be TWD221-224b.

CORPORATE PARTICIPANTS

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Morris Chang *Taiwan Semiconductor Manufacturing Company Ltd - Chairman*

CONFERENCE CALL PARTICIPANTS

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Randy Abrams *Credit Suisse - Analyst*

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Bill Lu *Morgan Stanley - Analyst*

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Rick Hsu *Daiwa Capital - Analyst*

PRESENTATION

Elizabeth Sun - *Taiwan Semiconductor Manufacturing Company Ltd - Director of Corporate Communications*

Welcome to TSMC's fourth-quarter 2014 earnings conference and conference call. This is Elizabeth Sun, TSMC's Director of Corporate Communications and your host for today.

Before we begin, let me wish you a very happy and prosperous New Year. Today's event is webcast live via TSMC's website at www.tsmc.com. If you are joining us through the conference call, your dial-in lines are in listen-only mode. As this conference is being viewed by investors around the world, we will conduct this event in English only.

The format for today's event will be as follows. First, TSMC's Senior Vice President and CFO, Miss Lora Ho, will summarize our operations in the fourth quarter and full year 2014, followed by our guidance for the current quarter. Afterwards, CFO Lora and TSMC's two Co-CEOs, Dr. Mark Liu and Dr. C.C. Wei, will jointly provide our key messages. After that, TSMC's Chairman, Dr. Morris Chang, will host the Q&A session.

For those participants on the call, if you do not yet have a copy of the press release, you may download it from TSMC's website, www.tsmc.com. Please also download the summary slides in relation to today's earnings conference presentation.

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 could cause actual results to differ materially from those contained in the forward-looking statements. Please refer to the Safe Harbor notice as this appears on our press release.

And now I would like to turn the podium to TSMC's CFO, Miss Lora Ho, for a summary of operations and current quarter guidance.

Lora Ho - *Taiwan Semiconductor Manufacturing Company Ltd - SVP and CFO*

Thank you, Elizabeth. Good afternoon and happy New Year to everyone. Thank you for joining us today. My presentation will start with the financial highlights for the fourth quarter and a recap of our 2014 performance, followed by the guidance for the current quarter.

Fourth quarter was another record-breaking quarter for TSMC, with revenue, earnings per share and the cash balance all reached historical high levels. Despite a moderate impact from supply chain inventory correction, our revenue increased 6.4% sequentially to reach TWD222.5b. This was mainly due to the strong demand for our 20-nanometer technology.

On the profitability side, gross margin was 49.7%, down 0.8 percentage point from third quarter. This was attributed to 20-nanometer margin dilution and the lower capacity utilization, while cost improvements and favorable foreign exchange rate offset some of the decline.

Operating margin was 39.6%, also down 0.6 -- 0.8 percentage point from the third quarter.

Overall, our fourth-quarter EPS was TWD3.08, increased 4.8% sequentially and 78.5% year over year.

Let's take a look at revenue by application. During the fourth quarter, the strong 20-nanometer ramp was mainly driven by communication-related applications. As a result, communication grew 18% sequentially and the revenue contribution increased from 59% in the third quarter to 65% in the fourth quarter. As for other applications, computer grew 7%, while consumer and industrial declined 21% and 11% respectively.

On a full-year basis, communication increased 39% and represented 59% of our revenue. The major contributing segments included baseband, application processors, image processors and display drivers. Another fast-growing application in 2014 was industrial and standard, which grew 30% year over year. The growth was mainly driven by increasing usage of power management ICs, near-field communications and audio codec within the mobile devices.

By technology, 20-nanometer revenue contribution started with a very small number in the second quarter, jumped to 9% in the third quarter and reached 21% in the fourth quarter. Such unprecedented ramp cannot be achieved without seamless teamwork with our customer, the R&D and operational people in TSMC.

On a full-year basis, 20 nanometer accounted for about 9% of our full-year wafer revenue. Looking forward, we are confident that 20 nanometer will continue its momentum to contribute 20% of the revenue for the whole year 2015.

Meanwhile, customer demand for our 28-nanometer wafers remained strong. Accordingly, these two advanced technologies, 20 nanometer plus 28 nanometer, represented 51% of our fourth-quarter total wafer revenue, a big increase from 43% in the third quarter.

Now let me move on to the balance sheet. On the asset side, cash and marketable securities increased TWD147b to reach TWD437b at the end of the fourth quarter, mainly due to higher free cash flow generated from the fourth quarter and the receipt of a TWD30b guarantee deposit.

Total liabilities increased by TWD56b, mainly due to increase in guarantee deposit, increase in tax payable and employee profit sharing.

On financial ratios, accounts receivable turnover days was 47 days. Days of inventory increased by 2 days to 58 days, reflecting longer production cycle time for leading nodes.

Now let me make a few comments on cash flow and CapEx. During the fourth quarter, we generated about TWD153b cash from operations and invested TWD52b in capital expenditure. As a result, we generated free cash flow of TWD101b in this quarter. Overall, our cash balance increased TWD132b to reach TWD358b at the end of the quarter.

In US dollar terms, our fourth-quarter capital expenditure was $1.7b. This adds to the total of $9.5b of capital expenditure for 2014.

Now I would like to give you a recap of our total performance in 2014. TSMC set a record in terms of revenue and earnings in 2014. Our revenue grew 27.8% year over year to reach TWD763b or $25b in US dollar terms.

On profitability, although the rising depreciation and fast ramp of 20 nanometer has indeed put pressure on our margins, our gross margin actually improved 2.4 percentage points to reach 49.5%. This is because the capacity we invested were fully utilized. And we continued the productivity and cost improvement and, to a lesser degree, a favorable foreign exchange rate environment.

Our operating margin increased 3.7 percentage points to reach 38.8%. This demonstrated our ability to drive higher operating efficiency.

The operating expenses as a percentage of revenue decreased from 12% in 2013 to 10.6% in 2014. As a result, our full-year earnings per share increased by 40% to reach the historical high level of TWD10.18 per share.

On cash flow, we spent TWD289b in capital expenditure, which is about the same level as 2013. Meanwhile, our operating cash flow increased 21% to reach TWD422b. Accordingly our free cash flow more than doubled in 2014.

Overall, our ROE increased by 3.9 percentage point from last year to reach 27.9% in 2014. We exceeded our long-term financial goal of equal or bigger than 20%.

I have finished my report on the financial part. Now let me turn to the first-quarter outlook.

We expect a slightly weaker demand in the first quarter due to seasonality. However, we also anticipate that the more favorable foreign exchange rate will moderate the seasonal weakness. Based on current business expectations and a forecast exchange rate of TWD31.80, we expect our first-quarter revenue to be between TWD221b and TWD224b, representing a flattish quarter.

In terms of margins, we expect the first-quarter gross margin to be between 48.5% and 50.5%. And we expect operating margin to be between 38.5% and 40.5%.

This concludes my remarks. Thank you very much.

Elizabeth Sun - *Taiwan Semiconductor Manufacturing Company Ltd - Director of Corporate Communications*

Now our executives will deliver the key messages. The messages will be offered by our CFO as well as by the two Presidents and Co-CEOs. We will start with Lora.

Lora Ho - *Taiwan Semiconductor Manufacturing Company Ltd - SVP and CFO*

I will make a few comments. I will start with the capital expenditure for this year.

As we continue to expand our business in advanced technologies, we estimate our 2015 capital expenditure to be between $11.5b to $12b, which is about a 20% to 25% year-over-year increase.

In addition to the investments for 16-nanometer capacity, we also spend for 10-nanometer tools and facilities to be ready for customer product tape-out by end of this year.

More than 80% of the planned CapEx is budgeted for advanced technologies, while 8-inch capacity, tools for specialty technologies and back-end capacity investment constitute the rest of the 20% of 2015 budget.

I'd also like to make some comments on the solid-state lighting selling. As you know, last Friday, January 9, upon TSMC's Board of Directors' approval, we have signed a contract with Epistar to sell TSMC's entire holding shares, which is 94%, of TSMC Solid-State Lighting to Epistar and we will exit the LED industry.

Despite several years of dedication and hard work, as a late entrant to the LED industry, TSMC Solid-State Lighting faced difficulties overcoming patent obstacles and sales channels. Not seeing how the company will be able to reach profitability due to the oversupply exacerbated by massive expansions of LED companies worldwide, we have decided to transfer the ownership to Epistar, which is the world's largest manufacturer of LED epitaxial wafers and dies.

The share transfer is valued at TWD1.46 per share, with the total proceeds of TWD825m to TSMC. We have taken TWD740m in impairment loss in the fourth quarter last year, with a minimal impact of EPS by about TWD0.03.

The most important part of this deal is that no Solid-State Lighting employee loses his job. Everybody has a job.

My last comment is about the ASML stock sale. As you know, in August 2012 we acquired about 21m shares of ASML under its customer co-investment program. The purchase price was EUR39.91 per share for a total of EUR838m. There was a lock-up period of 2.5 years.

In the last two years, TSMC has entered several hedging contracts that fully covered our position, with an average hedge price of EUR62.59 per share, resulting in a lock-in profit of EUR483.5m. As the lock-up period is to be expired in April this year, we will be able to book a total profit of about TWD21b in 2015. This one-time non-op gain is expected to increase our EPS by TWD0.61 in second quarter and TWD0.13 in third quarter, and for the full year will be about TWD0.75.

That concludes my remark. Let me turn the podium to C.C. -- to Mark.

Mark Liu - *Taiwan Semiconductor Manufacturing Company Ltd - President and Co-CEO*

Okay. I will follow to give you key messages on the near-term demand. We just -- we have just concluded a strong 2014, with a 27.8% revenue growth. In particular, the strong demand of our 20 SoC overcome the normal inventory adjustment pattern and enable a 6.4% quarter-to-quarter growth in the fourth quarter 2014.

The fabless company exited 2014, based on our estimates, with the days of inventory 2 days below seasonal. That is from a 4 days above in the third quarter. Now we see such inventory adjustment should come to a close. We estimate the days of inventory at the end of the first quarter 2015 should be 1 day below seasonal level.

So we see our near-term demand is quite healthy. Since our fourth quarter last year set a high base, we guide a good quarter for the first quarter 2015, with substantially flat from fourth quarter 2014, and clearly better than our seasonal again.

Looking forward to 2015, it should be another upbeat year. We forecast the semiconductor industry revenue growth to be 5%. The foundry revenue growth is 12%. For TSMC, we are confident we can outperform the foundry revenue growth by several percentage points in 2015.

Now I'll give you a few words on 10-nanometer development update. Our 10-nanometer technology development is progressing and our qualification schedule at the end of 2015, end of this year, remains the same. We are now working with customers for their product tape-outs. We expect its volume production in 2017.

On the new technology development in TSMC, I'll begin with beyond 10 nanometer I just talked about. We are now working on our future-generation platform technology development, with separate dedicated R&D development teams. These technologies will be offered in the 2017-to-2019 period. We are committed to push forward our technology envelope along the silicon scaling path.

In addition to the silicon device scaling, we are also working on the system scaling through advanced packaging to increase system bandwidth, to decrease power consumption and device form factors. Our first-generation InFO technology has been qualified. Currently we are qualifying customer InFO products with 16-nanometer technology. And it will be ready for volume ramp next year, 2016. We are now working on our second-generation InFO technology to supplement the silicon scaling of 10-nanometer generation.

On the other side, in addition to the recently announced 55ULP ultra-low power technology, 40ULP, 28ULP technologies for ultra-low power application, such as wearable and IoT, we are also working on 16ULP technology development. This 16ULP design kit will be available in June this year. It will be just suitable for both high-performance and ultra-low power or ultra-low voltage, less than 0.6-volt applications.

Now I'll turn the microphone to C.C.

C.C. Wei - *Taiwan Semiconductor Manufacturing Company Ltd - President and Co-CEO*

Thank you, Mark. Good afternoon, ladies and gentlemen. I'll update you on 28, 20, 16-nanometer status and the InFO business.

First on 28 nanometer. Since year 2011, we started to ramp up 28-nanometer production. Up to now we have enjoyed a big success in terms of a good manufacturing result and, most importantly, the strong demand from our customers. This year we expect the success will continue.

Let me give a little bit more detail, first on the demand side. The demand continues to grow, which are driven by the strong growth of mid- and low-end 4G smartphones, as well as the technology migration from some second-wave segments, such as the radio frequency, hard disk drive, flash controller, connectivity and digital consumers.

Second, on the technology improvement, we continue our effort to enhance 28-nanometer technology by improving the speed performance while reducing the power consumption. 28HPC, 28 ultra-low power technology are some examples.

So to conclude the 28-nanometer status, we believe we can defend our segment share well because of excellent performance and performance/cost ratio and our superior defect density results.

Let's talk about the 20 SoC business status. After successfully ramp up in high volume last year, we expect to grow 20-nanometer business more than double this year due to high-end mobile device demand, which were generated by our customers' very competitive products. Our forecast of the 20-nanometer business, as Lora just pointed out, will contribute 20% of the total wafer revenue. That remains unchanged.

Now on 16-nanometer ramp-up. We expect to have more than 50 product tape-outs this year on 16-nanometer. High-volume production will start in third quarter, with meaningful revenue contribution starting in fourth quarter this year. In order to stress again what our Chairman already mentioned, that combining 20 nanometer and 16 nanometer we expect to enjoy overwhelming market segment share.

Last, I will update on the InFO business. The traction on InFO is strong. We have engaged with many customers. And a few of these customers are expected to ramp up in second quarter next year. Right now we are building a small pilot line in a new site to prepare for high-volume production next year. Also we expect this InFO technology will contribute sizeable revenue in 2016.

Thank you for your attention.

QUESTIONS AND ANSWERS

Elizabeth Sun - *Taiwan Semiconductor Manufacturing Company Ltd - Director of Corporate Communications*

Okay. This concludes our prepared statements. Before we begin the Q&A session, I would like to remind everybody to limit your questions to two at a time to allow all participants an opportunity to ask questions. Questions will be taken both from the floor and from the call. Should you wish to raise your questions in Chinese, I will translate it to English before our management answers your questions.

(Conference Instructions). Now let's begin the Q&A session. First we will invite Bank of America-Merrill Lynch, Dan Heyler.

Dan Heyler - *BofA Merrill Lynch - Analyst*

Thank you. Good afternoon and congratulations on a fantastic 2014 and guidance. I had two questions. First I wanted to talk a bit about the ASP situation. You did talk about blended ASP. You did talk about growth in semis being 5% this year, foundry being 12% and TSMC growing several percentage points beyond that. Should we expect that your blended ASP should rise again this year and continue to rise in future years? Thank you.

Lora Ho - *Taiwan Semiconductor Manufacturing Company Ltd - SVP and CFO*

Dan, the answer is yes. We do expect the blended ASP will continue to grow in 2015.

Dan Heyler - *BofA Merrill Lynch - Analyst*

In order of magnitude relative to last couple of years?

Lora Ho - *Taiwan Semiconductor Manufacturing Company Ltd - SVP and CFO*

We expect that trend will continue to the year after next year as well.

Dan Heyler - *BofA Merrill Lynch - Analyst*

Okay.

Morris Chang - *Taiwan Semiconductor Manufacturing Company Ltd - Chairman*

Order of magnitude, he said.

Lora Ho - *Taiwan Semiconductor Manufacturing Company Ltd - SVP and CFO*

In low single-digit range year over year. In that range.

Dan Heyler - *BofA Merrill Lynch - Analyst*

And the specific drivers of that? I know you're going to say mix, but could we talk in a little bit more detail on the drivers of ASP improvement as my follow-up?

Morris Chang - *Taiwan Semiconductor Manufacturing Company Ltd - Chairman*

I think it's just 20 will be bigger this year percentage-wise than last year. And 16 will start, and 16 will be much bigger next year than this year, etc. And 10. You know in the past several years our ASP has been increasing because the mix, the advanced technologies keep coming up. So that's the driving force.

Dan Heyler - *BofA Merrill Lynch - Analyst*

Thank you. And the second part, I guess as we look at your pie chart on your slide with communications and computer being amazingly only 9% of your revenue, and, say, 10 years ago that chart was much, much different, with computer being the biggest. As we look at computer opportunities going forward, I think to some extent there's maybe a sense of a little bit of disappointment in that we don't see ARM necessarily in PCs yet. We haven't really necessarily seen that ecosystem come through in the server business. And big data being such an important trend going forward, with compute growing about 15% per year, I'm wondering what TSMC is doing or what your view of that opportunity will be in the future as a potential growth driver. Thank you.

Morris Chang - *Taiwan Semiconductor Manufacturing Company Ltd - Chairman*

Server is one of them, Mark. Well there's IoT actually also, and just don't forget that mobile actually we think has a few more years to run yet. Really the TSMC silicon content in the average phone is actually increasing, which is something that is not recognized by a lot of people, because everybody says that the weight, the gravity is shifting to the middle level, lower-level priced phones. But according to our data, and we have kept track of it for quite a long time, the average of TSMC silicon content in the average phone is actually increasing.

So -- and look, we still look for over -- I think the number we have is that by 2019 there'll be 2b phones manufactured. It is -- I think last year it was, what, 1.3b? I think, yes, 1.3b. 1.3b to 2b. And, well, and the average TSMC silicon content per phone is increasing. And the number of phones is going up. So that's by no means a -- it's still there. It's still a growth engine.

And then IoT, I think we talked about IoT before, and now we are certainly not oblivious to the server possibility. So why don't I ask Mark to talk about the server and maybe C.C. will talk a little about the IoT.

Mark Liu - *Taiwan Semiconductor Manufacturing Company Ltd - President and Co-CEO*

Okay, Dan. I'll just respond to you on the server part. Chairman talked about the area we're mostly focused on, phone, today. And that would drive -- give us growth momentum in the next several years.

On server, we work with the product innovators around the world. And such a field definitely we'll not lose in our radar screen and theirs. And TSMC has been, over the years, developed our technology to suit for high-power computing. And from 65, 40, 28 to 16 nanometer, we continuously improve our transistor performance. And today we believe our 16 FinFET Plus transistor performance probably is the top of -- is one of the top of the world. It's well suitable, well capable of doing the computing tasks.

And actually before server, and there are several supercomputers around the world, in US and in Japan, already powered by our technology, doing the weather forecasting, whether the geo exploration applications today. And on the server, on ARM in particular, we have very close partnership with ARM in recent years. And ARM is a very innovative company. They produce CPU core and new architecture every year. And we reached our leading-edge technology very early with ARM and to design their leading-edge CPU cores. And that will continue and several of our customers are taking advantage of that.

Yes, in the past it's been getting into slower as expected. That's because the software ecosystem is slower to come. And -- but actually a lot of the server companies, system company is continuing investing in this ecosystem. Linux-based ecosystem is coming very strong too. So I think the trend will continue. And we will, with our customers, get into these segments in the next -- in the near future. Yes.

Morris Chang - *Taiwan Semiconductor Manufacturing Company Ltd - Chairman*

Okay. Can you say a few words about IoT?

C.C. Wei - *Taiwan Semiconductor Manufacturing Company Ltd - President and Co-CEO*

Okay. For the IoT, that would be a big topic right now in the whole industry. All I want to say is that we are happy to share with you that, a long time ago, we already focused on our specialty technology, which are the CMOS image sensor, MEMs, embedded Flash, all those kind of things. Today we add another new technology, ultra-low power, into it. And that will be the basis for the IoT technology necessary in the future. We believe that when the time comes and IoT business becomes big, TSMC will be in a very good position to capture most of the business. That's what I share with you. Thank you.

Dan Heyler - *BofA Merrill Lynch - Analyst*

Thank you very much.

Elizabeth Sun - *Taiwan Semiconductor Manufacturing Company Ltd - Director of Corporate Communications*

Next we will invite Credit Suisse, Randy Abrams.

Randy Abrams - *Credit Suisse - Analyst*

Thank you. The first question, actually I wanted to ask about the CapEx increase, where it's moving up this year. Could you talk about the allocation? How much you plan for the 10 nanometer? How much for the 16? And then also if you still see growth out of 28 and the 8 inch, if there's plans to expand to 8 inch. So if you could give more flavor on the CapEx.

Lora Ho - *Taiwan Semiconductor Manufacturing Company Ltd - SVP and CFO*

Yes, Randy, in my remarks I was talking about 80% of the CapEx goes to leading-edge technology. That actually covers a very big part of 16 FinFET capacity and also the 10 nanometer for the engineering line and R&D expenditure. But altogether leading-edge technology will be 80%. We are also increasing our investment in the backend, also in 8 inch. These two things together will be about 10% and the rest are the smaller items.

Randy Abrams - *Credit Suisse - Analyst*

How big is the 10 nanometer?

Elizabeth Sun - *Taiwan Semiconductor Manufacturing Company Ltd - Director of Corporate Communications*

We do not disclose specific numbers.

Randy Abrams - *Credit Suisse - Analyst*

Okay. Sorry. Okay. And the follow-up question on profitability. If you could give a flavor on structural profitability for 2015 and some of the flavor for 20, how quick that may get to corporate margins, and for 16, because it's an extension, whether that could be near corporate margins as that comes up. And if you could give a comment on the inventory at current levels, if there's any -- if that will stay at these higher levels from the WIP you've been building or if that may come back down to a different level.

Lora Ho - *Taiwan Semiconductor Manufacturing Company Ltd - SVP and CFO*

Okay. Randy, you have multiple questions. I recall you asked for the structural profitability. That's you first question, right? From what we can see now, we are quite confident we can maintain equal or slightly better structural profitability, standard gross margin versus 2014.

For the 20-nanometer and 16-nanometer ramping, how would that affect corporate margin? I have said in last July it usually takes seven or eight quarters for any new leading-edge technology to get close to the corporate average. So for 20 nanometer, it will take eight quarters. So we believe -- so 20 nanometer start to sell in second quarter 2014, and we expect by first quarter 2016, that's eight quarters, it will be at corporate average level.

For 16, we are going to mass produce this product. It will follow the similar trend. 16 nanometer will be based on the feature of 20 nanometer, so the margin will start to be higher. But it will also follow the similar trend. It takes seven quarters to reach to corporate average. So say we plan to mass produce 16 FinFET in third quarter 2015, so by first quarter 2017 you will get close to corporate average.

So there will -- before that there will be still small dilutions. For this year, the dilution will be 2 to 3 percentage points. And the last year, the second half will be 3 to 4 percentage points and very low in 2016.

Randy Abrams - *Credit Suisse - Analyst*

Okay. And then is there -- just the one follow-up on inventory. Is there any impact from the inventory at these current higher levels? Do you expect, because of the longer cycle time, inventory would stay at these inventory day levels or that would come back down to the historical levels or closer to history?

Lora Ho - *Taiwan Semiconductor Manufacturing Company Ltd - SVP and CFO*

I think Mark has talked about the inventory level. We have went through the inventory depletion period. Now we see inventory was four days above seasonal in third quarter last year.

Randy Abrams - *Credit Suisse - Analyst*

For TSMC's own inventory?

Elizabeth Sun - *Taiwan Semiconductor Manufacturing Company Ltd - Director of Corporate Communications*

Yes, TSMC's inventory level.

Lora Ho - *Taiwan Semiconductor Manufacturing Company Ltd - SVP and CFO*

TSMC, you're talking about 50 days I was talking about. Okay. Normally in the past we have seen around 45 to 50 days, maybe 45 being average. This increase of inventory is mainly because of 20-nanometer ramp. It has much longer cycle time, both in the wafer fab, also in the backend. So that's the main reason our inventory is going up.

So it will not continue to go up further. It will probably stay at the similar level, but it will not go down either.

Randy Abrams - *Credit Suisse - Analyst*

Thank you.

Elizabeth Sun - *Taiwan Semiconductor Manufacturing Company Ltd - Director of Corporate Communications*

All right. Next we invite Citibank's Roland Shu.

Roland Shu - *Citigroup - Analyst*

Hi. Good afternoon, Chairman, Mark, C.C. and Lora. The first question I would like to learn from Chairman, your view about the effective capacity of 14-nanometer. Since I think back to 40-nanometer days, you precisely foreseen the effective 40-nanometer definitely would be much smaller, like the capacity -- 40-nanometer capacity would be much smaller than the build -- building 40-nanometer capacity. So what's your view for 14 nanometer this time? Thank you.

Elizabeth Sun - *Taiwan Semiconductor Manufacturing Company Ltd - Director of Corporate Communications*

Yes. So, Roland, your question is with respect to effective capacity, where Chairman has defined the capacity to be effective when you have a useful technology. So your question is wanting to hear from Chairman about the situation of 14/16 nanometer, what kind of effective capacity scenario we are facing today.

Morris Chang - *Taiwan Semiconductor Manufacturing Company Ltd - Chairman*

And I defined effective capacity as what?

Elizabeth Sun - *Taiwan Semiconductor Manufacturing Company Ltd - Director of Corporate Communications*

A capacity with a useful technology.

Roland Shu - *Citigroup - Analyst*

Yes. I think that back to 40-nanometer days, Chairman guided as the effective 40-nanometer capacity, that is it's going to be much smaller than the overall build capacity. So I just want to really learn from you what's your view for 14-nanometer effective capacity these days.

Morris Chang - *Taiwan Semiconductor Manufacturing Company Ltd - Chairman*

Yes. That is capacity that is going to be used, right?

Roland Shu - *Citigroup - Analyst*

Used also.

Morris Chang - *Taiwan Semiconductor Manufacturing Company Ltd - Chairman*

That is going to make a profit for us, right? We are just in the middle of building up our 16-nanometer effective capacity strongly.

Elizabeth Sun - *Taiwan Semiconductor Manufacturing Company Ltd - Director of Corporate Communications*

I think Roland's question, you probably are asking us about --

Roland Shu - *Citigroup - Analyst*

About overall, yes.

Elizabeth Sun - *Taiwan Semiconductor Manufacturing Company Ltd - Director of Corporate Communications*

Overall industry, whether or not other players are building effective capacity as well.

Morris Chang - *Taiwan Semiconductor Manufacturing Company Ltd - Chairman*

Well I think I have pointed out many times in the past that some companies, some foundries build capacity on speculation, just like builders build houses or condos on speculation. They haven't sold them yet. Their speculation is that after they build the apartments or houses, they will be sold. But that doesn't always happen, of course.

Now we, however, are different. We build capacity when we know that it's already sold.

Roland Shu - *Citigroup - Analyst*

Maybe I ask in other way. So compared to 40-nanometer days, and now we're looking for the 14 capacity, do you think the effective capacity for 14-nanometer industry will be bigger or smaller than the effective capacity when you see at the 40-nanometer days?

Morris Chang - *Taiwan Semiconductor Manufacturing Company Ltd - Chairman*

Can you understand the question?

Elizabeth Sun - *Taiwan Semiconductor Manufacturing Company Ltd - Director of Corporate Communications*

Sort of.

Morris Chang - *Taiwan Semiconductor Manufacturing Company Ltd - Chairman*

40. He's talking about 40. Well tell me. Tell me.

Elizabeth Sun - *Taiwan Semiconductor Manufacturing Company Ltd - Director of Corporate Communications*

Right. He's asking Chairman to compare 14 nanometer today versus 40 nanometer a few years ago in terms of the capacity.

Morris Chang - *Taiwan Semiconductor Manufacturing Company Ltd - Chairman*

What today?

Elizabeth Sun - *Taiwan Semiconductor Manufacturing Company Ltd - Director of Corporate Communications*

14/16. We should use 16. 16 nanometer versus 40 nanometer a few years ago.

Morris Chang - *Taiwan Semiconductor Manufacturing Company Ltd - Chairman*

In what respect?

Elizabeth Sun - *Taiwan Semiconductor Manufacturing Company Ltd - Director of Corporate Communications*

Whether the industry has oversupply in capacity. Whether the oversupply capacity is effective.

Morris Chang - *Taiwan Semiconductor Manufacturing Company Ltd - Chairman*

I don't know yet because, from the data we have now, I don't think -- you're talking about 14 right? 14, right? From the data we have now, I don't think that they're building too much 14 capacity. Am I correct? No? Everybody together. I don't think that everybody together is building -- from the data we have now, I don't think they are building too much capacity yet.

But you want me to compare with 40. 40, yes, I think at about the same point in time in the 40-nanometer cycle, we -- well, my memory is a little hazy now. That was five, six years ago.

Elizabeth Sun - *Taiwan Semiconductor Manufacturing Company Ltd - Director of Corporate Communications*

Too long ago. Yes.

Roland Shu - *Citigroup - Analyst*

Okay. Thank you very much. I think my second question is most investors are very happy to hear, Chairman, you have ranked return of shareholder as the top priority when you are running TSMC. But I think some of the customers probably are very upset to hear about the TSMC put the customer at much lower priority when you are running your business.

Morris Chang - *Taiwan Semiconductor Manufacturing Company Ltd - Chairman*

No. Customers have a very high priority in our Company. In fact very, very high. As I think we have said many times that we really have three major strengths. One is technology. Second is manufacturing. And third is customers' trust. And this has been our model ever since we started the Company almost 30 years ago. So no.

Now if you are talking about we do, of course, place shareholders also in a very high priority, very high position. But I think that's quite common. And I think that's the way it should be.

But obviously you need very good customers. You need customers that trust us. We need customers that trust us, that work with us in order to satisfy our shareholders. It's part of the same equation.

Roland Shu - *Citigroup - Analyst*

Yes. I think maybe I should rephrase my question again. I think in the past TSMC, because your technology --.

Morris Chang - *Taiwan Semiconductor Manufacturing Company Ltd - Chairman*

Why do you rephrase your question all the time? Okay. Go ahead. Go ahead. Yes.

Roland Shu - *Citigroup - Analyst*

Okay. My question is simple. It's just for the profitability and also customer relationship. I think most of that, I think this is conflict. I think in the past you do very good profitability for TSMC. Probably some of the customers actually were not happy. So going forward, how TSMC to balance its profitability and the customer relationship?

Elizabeth Sun - *Taiwan Semiconductor Manufacturing Company Ltd - Director of Corporate Communications*

So Roland, your point is that because we have very high profitability, therefore our customers are unhappy. That is not the right logic.

Morris Chang - *Taiwan Semiconductor Manufacturing Company Ltd - Chairman*

Well, we think we earn our profit. We think everyone has to earn his profit. We think our customer has to earn his profit too. And I think they do think, our customers do think they earn their profit just as we think we earn our profit. But there are always people who think that you are making too much profit. Some of our customers' customers think that our customers are making too much profit too.

Roland Shu - *Citigroup - Analyst*

Okay. Thank you.

Morris Chang - *Taiwan Semiconductor Manufacturing Company Ltd - Chairman*

But we think we earn our profit. And if any customer is unhappy with us, he sees me. He comes to see me. He comes to see us. Okay? And we try to correct the situation. We try to improve the situation.

Elizabeth Sun - *Taiwan Semiconductor Manufacturing Company Ltd - Director of Corporate Communications*

Okay. Good. Next we invite Goldman Sachs' Donald Lu.

Donald Lu - *Goldman Sachs - Analyst*

Congratulations on very good 2014 results and also very strong 2015 CapEx guidance. I think this year maybe TSMC will top the world in logic.

Morris Chang - *Taiwan Semiconductor Manufacturing Company Ltd - Chairman*

Really?

Donald Lu - *Goldman Sachs - Analyst*

Maybe. Okay. So now I have two questions. One is, Chairman, about six months ago you gave us a comment on your estimate on TSMC's market share in FinFET in 2015, 2016, 2017. So has that changed?

Second question is, Lora, you commented that someone paid you TWD30b capacity guarantee. Is this something new? I don't remember that TSMC takes --.

Morris Chang - *Taiwan Semiconductor Manufacturing Company Ltd - Chairman*

What did you say? I didn't hear the last one.

Donald Lu - *Goldman Sachs - Analyst*

The second question is about capacity guarantee of TWD30b.

Elizabeth Sun - *Taiwan Semiconductor Manufacturing Company Ltd - Director of Corporate Communications*

Yes, customer deposit.

Donald Lu - *Goldman Sachs - Analyst*

Deposit. Customer deposit.

Lora Ho - *Taiwan Semiconductor Manufacturing Company Ltd - SVP and CFO*

It was a guarantee deposit. You're asking this is something new?

Donald Lu - *Goldman Sachs - Analyst*

Yes.

Lora Ho - *Taiwan Semiconductor Manufacturing Company Ltd - SVP and CFO*

Actually, I think more than 10 years ago, maybe 15 years ago, TSMC have done this with several customers. So it's not something really new.

Donald Lu - *Goldman Sachs - Analyst*

15 years ago.

Morris Chang - *Taiwan Semiconductor Manufacturing Company Ltd - Chairman*

Late 1990s.

Donald Lu - *Goldman Sachs - Analyst*

Forgive me. That wasn't very --.

Morris Chang - *Taiwan Semiconductor Manufacturing Company Ltd - Chairman*

But I think that -- but after that, I guess we didn't have them. Yes. I thought it was pretty good in the late 1990s, so we started again. Okay. The customer likes it too. Yes.

Donald Lu - *Goldman Sachs - Analyst*

So maybe you can explain a little bit like what it guarantees, TSMC's obligation on that and how long it will be looking into.

Morris Chang - *Taiwan Semiconductor Manufacturing Company Ltd - Chairman*

Are we still answering the second question or are we -- I want to answer the first question. Donald's question was I said -- actually I looked up my statement at that time, July 16 of last year. I said on the subject of 16 and 20, 16-nanometer and 20-nanometer technology, I said that -- I actually made three statements.

The first statement was that because we started 16 a little late, our market share in 2015, our 16-nanometer market share in 2015 will be smaller than our major largest competitor's.

The second statement I made was that we started 16 late because we wanted to do 20. And so if you combine 20 and 16, our major competitor, who will be slightly ahead of us this year on the 16, he has very little 20. Almost no 20 at all. And if we combine 20 and 16, our combined share in this year will be much higher than that competitor's.

The third statement I made is that in 2016 we will have much larger share in just 16 nanometer than that competitor.

All right. First I want to say that I, at this time, stand on those statements. In fact, I now will add a couple of statements. The statements I will add are -- that's fourth statement now. Okay? When we have a larger share of just 16 alone in 2016, the 16 market will also be much larger than this year, 2015. So, yes, we're slightly behind. We have a smaller market share in 2015 in a smaller market. Next year we will have a larger share, in fact much larger share, in a much larger market, 16.

So -- and another statement I want to make is that I'm, at this point, very, very comfortable with all those statements that I have made on July 16 last year and the statements that I have added today. I'm very comfortable. I don't know whether I answered your question or not, Donald.

Donald Lu - *Goldman Sachs - Analyst*

Yes. How about 2017, if --?

Morris Chang - *Taiwan Semiconductor Manufacturing Company Ltd - Chairman*

What?

Elizabeth Sun - *Taiwan Semiconductor Manufacturing Company Ltd - Director of Corporate Communications*

2017.

Donald Lu - *Goldman Sachs - Analyst*

2017.

Morris Chang - *Taiwan Semiconductor Manufacturing Company Ltd - Chairman*

What? Well, 2017, the share is going to continue. We're not going to lose the leadership on 16 market share once we recapture that in 2016. It's going to continue 2017, 2018. And also both 20 and 16 are going to live longer than you might think now. Well 28, for that matter, will also live longer than you'd think.

Elizabeth Sun - *Taiwan Semiconductor Manufacturing Company Ltd - Director of Corporate Communications*

Okay. Next we will invite Deutsche Bank's Michael Chou.

Michael Chou - *Deutsche Bank - Analyst*

Thank you. Chairman, do you see 16-nanometer FinFET Plus PPA is better than tier-two foundries' 14-nanometer at this moment? Given that you mentioned you expect TSMC's 16-nanometer market share should be higher than your major competitor in 2016, but based --.

Morris Chang - *Taiwan Semiconductor Manufacturing Company Ltd - Chairman*

What?

Elizabeth Sun - *Taiwan Semiconductor Manufacturing Company Ltd - Director of Corporate Communications*

Yes.

Michael Chou - *Deutsche Bank - Analyst*

Based on current R&D progress or any product design progress, do you think that your PPA of 16-nanometer FinFET Plus is better than your competitors' PPA 14 nanometer?

Elizabeth Sun - *Taiwan Semiconductor Manufacturing Company Ltd - Director of Corporate Communications*

PPK?

Michael Chou - *Deutsche Bank - Analyst*

PPA. Power, performance.

Elizabeth Sun - *Taiwan Semiconductor Manufacturing Company Ltd - Director of Corporate Communications*

PPA. All right. Okay. So Michael's question is if we look at the definition of the technology in terms of performance, power and area, is our 16 nanometer better than our competitors?

Morris Chang - *Taiwan Semiconductor Manufacturing Company Ltd - Chairman*

[Obviously], yes.

Michael Chou - *Deutsche Bank - Analyst*

As a follow-up, do you think that your most customers will stay in your 16 nanometer rather than shift to tier-two foundries? For over the next 18 months, will stay in your 16-nanometer FinFET Plus rather than move to your competitors' 14 nanometer?

Elizabeth Sun - *Taiwan Semiconductor Manufacturing Company Ltd - Director of Corporate Communications*

You mean after we have ramped 16 FinFET Plus, will our customers shift to our competition's offer?

Michael Chou - *Deutsche Bank - Analyst*

Yes.

C.C. Wei - *Taiwan Semiconductor Manufacturing Company Ltd - President and Co-CEO*

Well, I thought the question has been answered already. Once we capture that larger share, we stay here for many years.

Michael Chou - *Deutsche Bank - Analyst*

Okay. Let me put it another way. Can we say your 16-nanometer market share in 2016 will be quite similar to your dominance in 28 nanometer, given that your 20 nanometer is the only provider? So the apple-to-apple comparison should be 28 to 16 nanometer.

Elizabeth Sun - *Taiwan Semiconductor Manufacturing Company Ltd - Director of Corporate Communications*

So market share in 16 nanometer in 2016, will that be the same as our market share at 28 nanometer, I would say, back in 2013, 2014?

Michael Chou - *Deutsche Bank - Analyst*

Yes.

Morris Chang - *Taiwan Semiconductor Manufacturing Company Ltd - Chairman*

Well, no, I don't think so, because 28, of course we were virtually sole source. And 16, we already know we're not. There's at least one major competitor and then there's another one that's just eager to get in. I don't mean that first competitor's accessory, I mean another one.

Michael Chou - *Deutsche Bank - Analyst*

Second question is regarding the InFO. Do you expect the gross margin of InFO will have a negative impact to your overall gross margin 2016 or beyond, given that you mentioned it could be sizeable revenue in 2016?

Elizabeth Sun - *Taiwan Semiconductor Manufacturing Company Ltd - Director of Corporate Communications*

So your question is whether or not InFO business in 2016 will impact our margins?

Michael Chou - *Deutsche Bank - Analyst*

Yes.

Elizabeth Sun - *Taiwan Semiconductor Manufacturing Company Ltd - Director of Corporate Communications*

Whether InFO will impact our margins.

C.C. Wei - *Taiwan Semiconductor Manufacturing Company Ltd - President and Co-CEO*

No, probably not. The back-end business actually is a lower margin, but the turnover is faster. So put two together, it's comparable.

Morris Chang - *Taiwan Semiconductor Manufacturing Company Ltd - Chairman*

InFO will have lower margin than our wafers business, but it will actually have higher return on invested capital than our wafer business.

Elizabeth Sun - *Taiwan Semiconductor Manufacturing Company Ltd - Director of Corporate Communications*

Okay. I think we really should go to the line and invite questions there. Operator, could you please invite the first caller on the line?

Operator

Brett Simpson, Arete.

Brett Simpson - *Arete Research - Analyst*

Thank you very much. My question is around 28 nanometer. You're running a large capacity at 28 nanometer at the moment. So can you share with us what your capacity plan is for 28? As you migrate more business to 20 nanometer and below over the next couple of years, do you intend to convert 28-nanometer capacity to lower nodes, or do you think you can keep the existing 28-nanometer capacity running full going forward.

Elizabeth Sun - *Taiwan Semiconductor Manufacturing Company Ltd - Director of Corporate Communications*

All right. Let me repeat Brett's question so that people here can hear it better. Brett's question is TSMC's 28-nanometer capacity is very large. As our technology migrates to more advanced nodes, such as 20 and 16, in the next few years, what will be our plan on capacity of the 28 nanometer? Will we still have large demand to utilize those capacities or we need to do some changes?

Morris Chang - *Taiwan Semiconductor Manufacturing Company Ltd - Chairman*

Every -- in every generation we worry a lot about the conversion loss we will suffer when we convert the equipment of that -- the existing capacity of that generation to the capacity of the next generation. Now, so we do two things. First, we try to minimize that conversion loss. And since we've been living with the problem for so long now, I think we're getting to be pretty good at it. So the conversion loss from one generation to another is normally in the low single digit, low middle single digit.

Now the second thing we try to do is, and I think we actually have been doing it perhaps even more successfully than the first thing. The first thing was to try to minimize the conversion loss. The second thing we try to do is we try to prolong the life of each generation. And I was saying just five minutes ago that I think that the life of 28 nanometer may be longer than a lot of people think. And I mean it. Actually we're still making half-micron stuff. And we try to prolong the life of every generation as we continue to migrate to advanced technologies. And 28 is certainly a generation that we want to prolong the life of.

Elizabeth Sun - *Taiwan Semiconductor Manufacturing Company Ltd - Director of Corporate Communications*

All right. Brett, do you have a second question?

Brett Simpson - *Arete Research - Analyst*

Yes. My follow-up question is around China. And maybe you can share with us your plan for 28-nanometer production in China. Would you expect this to happen over the next 12/24 months? And what's the size of the potential production capacity you might be looking at in China?

Morris Chang - *Taiwan Semiconductor Manufacturing Company Ltd - Chairman*

The question is --?

Elizabeth Sun - *Taiwan Semiconductor Manufacturing Company Ltd - Director of Corporate Communications*

Whether or not we will build a 28-nanometer capacity in China in the next 12 to 24 months and how large will that be.

Morris Chang - *Taiwan Semiconductor Manufacturing Company Ltd - Chairman*

We are seriously considering the possibility. And in fact we are gathering data and making contacts, etc. There are obviously both pluses and minuses. And we're seriously considering the proposition of making, well, 28 nanometer in China. And there are also barriers. But, as I said, at this stage we're exploring. We're seriously considering. We're exploring. We're gathering data and making contacts.

Brett Simpson - *Arete Research - Analyst*

Thank you.

Elizabeth Sun - *Taiwan Semiconductor Manufacturing Company Ltd - Director of Corporate Communications*

All right. Let's go back to the floor. Now it will be from Barclays' Andrew Lu.

Andrew Lu - *Barclays Capital - Analyst*

Dr. Chang, Dr. Liu and Dr. C.C. Wei and CFO. (Spoken in foreign language). The first one is regarding the revenue outlook for the next few quarters. Are you expecting any single quarter, for the next few quarters, Q2, Q3, Q4, revenue below first quarter?

Elizabeth Sun - *Taiwan Semiconductor Manufacturing Company Ltd - Director of Corporate Communications*

Andrew is asking us to give him a guidance whether or not our Q2, Q3, Q4 revenue will be lower than Q1 level.

Morris Chang - *Taiwan Semiconductor Manufacturing Company Ltd - Chairman*

Will Q2, Q3, Q4 be lower than Q1?

Andrew Lu - *Barclays Capital - Analyst*

Any single quarter in your internal forecast saying will be lower than the first quarter?

Morris Chang - *Taiwan Semiconductor Manufacturing Company Ltd - Chairman*

What is Q1 times four?

Andrew Lu - *Barclays Capital - Analyst*

Not what the --.

Morris Chang - *Taiwan Semiconductor Manufacturing Company Ltd - Chairman*

I will work out the answer here, right here.

Andrew Lu - *Barclays Capital - Analyst*

Because that's the following what I am going to calculate, because, based on the estimates, Q1 is quite similar to Q4 from the revenue, from the EPS point of view, from OP margin guidance, gross margin guidance. If we times four, revenue is up 16% year over year and the EPS up 20% year over year.

Morris Chang - *Taiwan Semiconductor Manufacturing Company Ltd - Chairman*

That would be consistent with what Mark said. He said that we will outperform the foundry growth, which is, what, 12%? He said we would outperform it by several points.

Andrew Lu - *Barclays Capital - Analyst*

Yes. But this is based on flattish environment. We've got no growth for the next few quarters. That's why I ask for any downside result.

Morris Chang - *Taiwan Semiconductor Manufacturing Company Ltd - Chairman*

All right. Let me just tell you what I think. I think we have upside. Okay?

Andrew Lu - *Barclays Capital - Analyst*

Okay. That's now?

Morris Chang - *Taiwan Semiconductor Manufacturing Company Ltd - Chairman*

In this year. Yes.

Elizabeth Sun - *Taiwan Semiconductor Manufacturing Company Ltd - Director of Corporate Communications*

And Andrew, I also have to remind you, the foundry numbers are based in US dollars, but the fourth-quarter or the first-quarter revenues are based in NT dollars.

Andrew Lu - *Barclays Capital - Analyst*

Yes. Yes. Second question is are we still planning to raise our cash dividend?

Morris Chang - *Taiwan Semiconductor Manufacturing Company Ltd - Chairman*

Well, look, yes, we are seriously considering it. But obviously I can't answer the question because the Board has to approve it. And then of course the shareholders' meeting has to approve it. And -- but --.

Andrew Lu - *Barclays Capital - Analyst*

What's in Dr. Chang's mind? What number in your mind?

Morris Chang - *Taiwan Semiconductor Manufacturing Company Ltd - Chairman*

I'm not going to go there. I'm not going to go there. Yes.

Andrew Lu - *Barclays Capital - Analyst*

Thank you.

Morris Chang - *Taiwan Semiconductor Manufacturing Company Ltd - Chairman*

Yes.

Elizabeth Sun - *Taiwan Semiconductor Manufacturing Company Ltd - Director of Corporate Communications*

Okay. Now we will invite HSBC's Steven Pelayo.

Steven Pelayo - *HSBC - Analyst*

Thank you. It seems like, especially in the last week, there's been two or three key concerns people are talking about relative to TSMC. The first one's smartphone growth slowing down. I think your guidance for foundry market growing 12%, you growing several points faster, kind of answers that growth.

The next two concerns are really about competition, customer concentration. So I wonder if I just ask, you look at your top-three customers in 2015, do you expect them each to grow year on year and do they grow that several points above 12% foundry market?

Elizabeth Sun - *Taiwan Semiconductor Manufacturing Company Ltd - Director of Corporate Communications*

Okay. Steven's question is regarding our top-three customers, whether or not their business with TSMC year-over-year growth rate will be at least in line with the foundries' 12% rate of growth.

Morris Chang - *Taiwan Semiconductor Manufacturing Company Ltd - Chairman*

If we would just limit it to three, it's getting too specific because you almost know who the three are. And if I tell you anything, you will -- so let's say, let's say 20. Okay? Our top-20 customers. I expect the vast, vast majority of them to grow every year.

Steven Pelayo - *HSBC - Analyst*

Okay. Well then maybe as a follow-up, I think we're all dancing around the same general questions. I asked this of you, I think, last quarter. At the 20-nanometer node, you have seven quarters of sequential growth, absolute dollars. 20 nanometer has ramped up so significantly because you've had some significant customer wins there. When you look at it on a quarterly basis, do you expect every quarter of 20 nanometer to be higher than the prior quarter in dollars as you go through 2015?

Elizabeth Sun - *Taiwan Semiconductor Manufacturing Company Ltd - Director of Corporate Communications*

You're asking 20 or 28?

Steven Pelayo - *HSBC - Analyst*

20 now.

Elizabeth Sun - *Taiwan Semiconductor Manufacturing Company Ltd - Director of Corporate Communications*

20. Okay. 20 nanometer, every quarter in the following quarters, whether they will be higher than the prior quarter. 20 nanometer, every quarter, whether it will be higher than the prior quarter.

Morris Chang - *Taiwan Semiconductor Manufacturing Company Ltd - Chairman*

This year?

Elizabeth Sun - *Taiwan Semiconductor Manufacturing Company Ltd - Director of Corporate Communications*

This year.

Morris Chang - *Taiwan Semiconductor Manufacturing Company Ltd - Chairman*

I think the answer is yes. The answer is yes. And, by the way, going back to the last question, were you just asking about this year or every year from now on?

Steven Pelayo - *HSBC - Analyst*

I think the customer concentration concerns are primarily for this year, trying to offset such huge gains last year. And it appears as though you are absorbing this.

Morris Chang - *Taiwan Semiconductor Manufacturing Company Ltd - Chairman*

Well, my answer is still the same. Of the top 20, I expect the vast, vast majority of them will grow. Each will grow this year. Yes.

Steven Pelayo - *HSBC - Analyst*

Thank you very much.

Elizabeth Sun - *Taiwan Semiconductor Manufacturing Company Ltd - Director of Corporate Communications*

All right. Next questions will be coming from Morgan Stanley's Bill Lu.

Bill Lu - *Morgan Stanley - Analyst*

Hi there. Thanks very much. And also let me add my congratulations on a spectacular 2014.

Morris Chang - *Taiwan Semiconductor Manufacturing Company Ltd - Chairman*

Thank you.

Bill Lu - *Morgan Stanley - Analyst*

My first question is on 28 nanometers. If I look at your capacity this year versus 2014, how much is the increase in capacity?

Morris Chang - *Taiwan Semiconductor Manufacturing Company Ltd - Chairman*

28?

Bill Lu - *Morgan Stanley - Analyst*

28, yes.

Morris Chang - *Taiwan Semiconductor Manufacturing Company Ltd - Chairman*

C.C., do you want to answer the question?

C.C. Wei - *Taiwan Semiconductor Manufacturing Company Ltd - President and Co-CEO*

High double digit.

Morris Chang - *Taiwan Semiconductor Manufacturing Company Ltd - Chairman*

High double digit.

Bill Lu - *Morgan Stanley - Analyst*

You mean high teens or high double digit?

Morris Chang - *Taiwan Semiconductor Manufacturing Company Ltd - Chairman*

High teens. High teens actually.

C.C. Wei - *Taiwan Semiconductor Manufacturing Company Ltd - President and Co-CEO*

High teens. I'm sorry.

Bill Lu - *Morgan Stanley - Analyst*

Okay. Great. Do you think revenue can grow? In other words, do you think ASP decline should be less than that unit growth?

Lora Ho - *Taiwan Semiconductor Manufacturing Company Ltd - SVP and CFO*

We are not supposed to comment on a single node's price. I'm sorry. Our legal advice is not to comment on a single node's price.

Bill Lu - *Morgan Stanley - Analyst*

Okay. Great. My second question is on your China strategy. I think you talked about potentially looking at 28 nanometers. Correct me if I'm wrong, but my understanding was that Taiwanese companies cannot do 28 in China. Can you talk a little bit more about that?

Morris Chang - *Taiwan Semiconductor Manufacturing Company Ltd - Chairman*

What?

Elizabeth Sun - *Taiwan Semiconductor Manufacturing Company Ltd - Director of Corporate Communications*

28 nanometer --.

Bill Lu - *Morgan Stanley - Analyst*

I'm sorry -- yes, yes.

Elizabeth Sun - *Taiwan Semiconductor Manufacturing Company Ltd - Director of Corporate Communications*

28-nanometer manufacturing in China. So your question is most of the players cannot do 28 nanometer properly in China right now.

Bill Lu - *Morgan Stanley - Analyst*

I thought, by law, Taiwanese companies cannot do 28.

Elizabeth Sun - *Taiwan Semiconductor Manufacturing Company Ltd - Director of Corporate Communications*

Taiwan.

Morris Chang - *Taiwan Semiconductor Manufacturing Company Ltd - Chairman*

Taiwan, no. Actually Taiwan, I think there's a rule now that says you still have to apply in every instance. But the general rule is that N minus 1 technology is allowed. That's Taiwan. But you still have to apply in each case.

Elizabeth Sun - *Taiwan Semiconductor Manufacturing Company Ltd - Director of Corporate Communications*

Okay. Next we will be having questions from UBS' Eric Chen.

Eric Chen - *UBS - Analyst*

Hi. Very quick, my first question regarding to your China investment. So I would like to know why you pick the 28-nanometer process. And we know your China client already and do very good business with your TSMC and in Taiwan. So what's the point for you to build out the 28-nanometer process in China? And what is the trigger and what's the benefit? My first question.

Elizabeth Sun - *Taiwan Semiconductor Manufacturing Company Ltd - Director of Corporate Communications*

Yes. So Eric's question is since most of our Chinese customers already do 28 nanometer with us in Taiwan, why do we need to go to China to capture the 28 nanometers there? What's the plus and the minus?

Morris Chang - *Taiwan Semiconductor Manufacturing Company Ltd - Chairman*

Well, because they're telling us that, yes, they will continue to do 28 with us, but it would be better if they do 28 with us if we're in China.

Eric Chen - *UBS - Analyst*

Okay. So in this --.

Morris Chang - *Taiwan Semiconductor Manufacturing Company Ltd - Chairman*

And you have to realize that there are companies, there are foundries in China that are also going to do 28 nanometer. And so they may prefer to buy from -- our customers may prefer to buy from the Chinese foundries when their 28 becomes available.

Eric Chen - *UBS - Analyst*

Okay. Can we assume from the profitability point of view, there's no big change, no big difference between the manufacturing in Taiwan and the manufacturing in China, right?

Morris Chang - *Taiwan Semiconductor Manufacturing Company Ltd - Chairman*

What's that?

Elizabeth Sun - *Taiwan Semiconductor Manufacturing Company Ltd - Director of Corporate Communications*

Whether or not the profitability -- in fact you are actually talking about cost.

Eric Chen - *UBS - Analyst*

Yes, and efficiency.

Morris Chang - *Taiwan Semiconductor Manufacturing Company Ltd - Chairman*

Well there are pluses and minuses. Basically I think the cost that we have had the experience of, well, for more than 10 years now of operating an 8-inch factory in China, okay, cost seems to be -- the cost is higher. All right? That's a minus. But if you lose business, then it's even worse. All right?

Eric Chen - *UBS - Analyst*

Okay. My second question regarding to the CapEx. With raise on the CapEx, I would say the CapEx is higher in the market expectation, so can we expect, can we assume all the equipment or capacity for the 16-nano FinFET probably will move ahead of all the earlier schedule? In terms of the 16-nano FinFET, the equipment schedule will now move ahead?

Elizabeth Sun - *Taiwan Semiconductor Manufacturing Company Ltd - Director of Corporate Communications*

So, Eric, your question is since our CapEx guidance is higher than market expectation, whether or not we are moving the equipment earlier or ahead of our original schedule?

Eric Chen - *UBS - Analyst*

Yes, for the 16.

Elizabeth Sun - *Taiwan Semiconductor Manufacturing Company Ltd - Director of Corporate Communications*

For 16 nanometer?

Eric Chen - *UBS - Analyst*

Yes. Thank you.

Morris Chang - *Taiwan Semiconductor Manufacturing Company Ltd - Chairman*

I don't know what the market expectations are. We don't benchmark ourselves against market expectations. We benchmark ourselves against needs.

Eric Chen - *UBS - Analyst*

Yes. Right. Yes. Thank you. But, Dr. Chang, I remember the -- probably the six months ago, you talked about the -- or probably three months ago, six months ago, and in conference probably Lora mentioned the CapEx for this year probably slightly higher than year 2014. And so I assume we'd get more aggressive with the CapEx. Am I right?

Morris Chang - *Taiwan Semiconductor Manufacturing Company Ltd - Chairman*

Well I think we have always been reasonably aggressive in CapEx, without speculating at all. So that's our standard. All right. So I don't know what your question is anyway. Are you asking whether we're moving in -- how soon we are buying the -- we're setting up the capacity? Is that what he says?

Elizabeth Sun - *Taiwan Semiconductor Manufacturing Company Ltd - Director of Corporate Communications*

Well, I think, Eric, you are really trying to see if we are becoming more confident and convinced of the demand so we are putting in the equipment sooner, right?

Eric Chen - *UBS - Analyst*

Yes.

Morris Chang - *Taiwan Semiconductor Manufacturing Company Ltd - Chairman*

I said earlier that we don't build capacity on speculation.

Eric Chen - *UBS - Analyst*

So that's what we mean?

Elizabeth Sun - *Taiwan Semiconductor Manufacturing Company Ltd - Director of Corporate Communications*

Yes. Thank you. Okay. All right. So then next I think we will -- because JP Morgan's Gokul was already waving his hands and hence we'll give the microphone to him. Thank you.

Gokul Hariharan - *JPMorgan - Analyst*

Congrats on a good 2014. And thanks for taking my questions. First, I had a question on there's been a lot of controversy about cost per transistor, whether Moore's law -- the economics of Moore's law are slowing down. Your competitor Intel has put out a very emphatic statement saying that until 7 nanometer they're seeing that continuing at the same pace as before. But there has been a lot of noise from the fabless community in the last couple of years that at 20 nanometer or at 16 nanometer there is a potential slowdown.

Could we have TSMC's version now that you're pretty much ready to start 10 nanometer and thinking already about 7? That's my first question.

Elizabeth Sun - *Taiwan Semiconductor Manufacturing Company Ltd - Director of Corporate Communications*

So, all right. Let me repeat. Gokul, your question is mainly on the comments on cost per transistor. Some of the other players, I think you're referring to Intel, who has made comments that they do see the cost per transistor to continue into 7 nanometer and so they can handle the economics of the Moore's law. Whereas, on the other hand, fabless companies begin to complain about not seeing enough economics, starting with 20 nanometer. So what is TSMC's statement regarding this economics issue?

Mark Liu - *Taiwan Semiconductor Manufacturing Company Ltd - President and Co-CEO*

Let me answer this question. The cost of transistor continues to go down. And by scaling mostly is -- everybody knows, nobody I think has refused that statement -- we see the cost of transistor continues going down in a constant rate. And in going forward, the cost of transistor going down probably at slightly slower rate. That's the argument. But it really depends on companies. And for some companies simply do not have the technological capabilities. And today, further going down the Moore's Law technology developments, just a few.

And we -- as far as whether those costs can -- is -- can get enough returns, and of course that has to do with how much that technology brings value to the product where they command the price. And today we see certain segments will continue to need that type of system performance to get enough return. So this is the reason we committed to push the system scaling.

Gokul Hariharan - *JPMorgan - Analyst*

So can we say that for customers who can afford it, it is still going to go down basically? Even at 10 nanometer, for customers who can afford it, afford the development cost and have the volume, the cost is still going to be going down substantially?

Mark Liu - *Taiwan Semiconductor Manufacturing Company Ltd - President and Co-CEO*

Of course. Of course. It will go down very significantly, yes.

Gokul Hariharan - *JPMorgan - Analyst*

I had a second question, just a clarification on the 16-nanometer ramp-up. I think last conference C.C. mentioned that 16-nanometer ramp-up is likely to be at or even faster than the 20-nanometer ramp-up that we saw last year, with a five-quarter delay. So basically meaning that first quarter 2016, 16-nanometer revenues could be even higher than what 20-nanometer revenues were last quarter. Is that still the expectation for the 16-nanometer ramp-up in the next few quarters?

Morris Chang - *Taiwan Semiconductor Manufacturing Company Ltd - Chairman*

What was the question?

Elizabeth Sun - *Taiwan Semiconductor Manufacturing Company Ltd - Director of Corporate Communications*

The question is whether or not the speed of the ramp-up of 16-nanometer will be faster than the speed of the 20-nanometer ramp-up in the first three quarters.

C.C. Wei - *Taiwan Semiconductor Manufacturing Company Ltd - President and Co-CEO*

In the first three quarters, ramping-up speed was similar, but maybe a little bit faster, but very similar. I'm sorry.

Gokul Hariharan - *JPMorgan - Analyst*

Okay. Thank you.

Elizabeth Sun - *Taiwan Semiconductor Manufacturing Company Ltd - Director of Corporate Communications*

All right. Due to --.

Morris Chang - *Taiwan Semiconductor Manufacturing Company Ltd - Chairman*

Don't we have any more questions from the --?

Elizabeth Sun - *Taiwan Semiconductor Manufacturing Company Ltd - Director of Corporate Communications*

There are people raising hands here. Okay. There is Daiwa's Rick Hsu.

Morris Chang - *Taiwan Semiconductor Manufacturing Company Ltd - Chairman*

No, no. I mean overseas calls.

Elizabeth Sun - *Taiwan Semiconductor Manufacturing Company Ltd - Director of Corporate Communications*

Go ahead, Rick. Thank you.

Rick Hsu - *Daiwa Capital - Analyst*

Yes. Hi. Sure. I'll do this quick. Yes. This is Rick from Daiwa. So just got one question here. I remember in the last four years, post the financial crisis, I think TSMC tended to build about two fab shells per year for expansion a year ahead. But if I look at this year, correct me if I'm wrong, if I look at this year, it seems to me that you don't have any new fab shells under construction. So does that mean you guys are turning a bit more conservative in 2016 or 2017?

Elizabeth Sun - *Taiwan Semiconductor Manufacturing Company Ltd - Director of Corporate Communications*

So Rick is asking us whether or not we will be building new fab shells this year at the same speed as we did in the past, which is two shells per year.

C.C. Wei - *Taiwan Semiconductor Manufacturing Company Ltd - President and Co-CEO*

We will. We continue this trend.

Morris Chang - *Taiwan Semiconductor Manufacturing Company Ltd - Chairman*

Two shells a year.

C.C. Wei - *Taiwan Semiconductor Manufacturing Company Ltd - President and Co-CEO*

Two shells almost for one generation.

Rick Hsu - *Daiwa Capital - Analyst*

Thank you.

Elizabeth Sun - *Taiwan Semiconductor Manufacturing Company Ltd - Director of Corporate Communications*

Okay. Randy has a follow-up question.

Randy Abrams - *Credit Suisse - Analyst*

Thank you. My first question on the guidance you gave for first quarter is holding up pretty well flat. And looking at the last four to five years, it's also been much better than it used to be at the beginning of the year in the first quarter. If you could talk about if you're seeing seasonal patterns shifting more, customers getting more aggressive first half, and if you see the same type of scenario where we have second-half slowdown again, so if you see a different pattern of seasonality.

Elizabeth Sun - *Taiwan Semiconductor Manufacturing Company Ltd - Director of Corporate Communications*

Okay. Seasonality. Randy's observation was that in the past he saw our customers to be optimistic in the first half and then going through an inventory correction in the second half. Will we be seeing similar pattern this year?

Mark Liu - *Taiwan Semiconductor Manufacturing Company Ltd - President and Co-CEO*

This year we just guided a strong first quarter because typically this first quarter is a slow quarter for us. So that's -- we being flat is considered as comfortable. For this year, because our -- more recently the smartphone announcement getting to the -- strongly affected the general inventory pattern. The smartphone launch, typically in the April timeframe and in September, and that will depend how much share we gain in each launch will affect our seasonal pattern.

For this year, the first quarter and -- for this year the pattern will be different than next year's. It will also be different than last year's. So that's the comment that has come into play with different share we have. Okay?

Randy Abrams - *Credit Suisse - Analyst*

Another follow-up question I want to ask. On the currency, we finally have NT dollar moving in your favor to support margin improvement. In the past, when you see NT dollar depreciate, can you typically sustain the incremental profitability? Or if NT were to stay at TWD32 or even move higher, do you eventually have to share it with your customers? Or how that typically plays out, if it remains better for the Company.

Morris Chang - *Taiwan Semiconductor Manufacturing Company Ltd - Chairman*

Could you repeat the question?

Elizabeth Sun - *Taiwan Semiconductor Manufacturing Company Ltd - Director of Corporate Communications*

Right. So, Randy, you are asking whether or not we can sustain the advantage coming from the currency -- the favorable exchange rate, right, sustaining beyond, say, the first quarter?

Randy Abrams - *Credit Suisse - Analyst*

Well, yes, if we were to stay at TWD32.

Morris Chang - *Taiwan Semiconductor Manufacturing Company Ltd - Chairman*

The ratio, I think we said earlier, a long time ago, by that I mean two, three years ago, that each point -- each percentage point of exchange rate change is equivalent to 0.4 percent point of our margin. I think you're asking whether that still holds true. Is that right?

Randy Abrams - *Credit Suisse - Analyst*

Or whether, if the currency stays at that level, if, over time, like if that's a permanent benefit, if we were to stay at TWD32 or over time you share some with your customers?

Elizabeth Sun - *Taiwan Semiconductor Manufacturing Company Ltd - Director of Corporate Communications*

So you're saying that since -- if NT dollar remained this low, whether or not we will share the exchange rate benefit, at least part of that, with our customers. Whether we will be sharing the exchange rate benefit with our customers, i.e. whether or not we are willing to take a lower US dollar price.

Morris Chang - *Taiwan Semiconductor Manufacturing Company Ltd - Chairman*

Well they didn't share the exchange rate loss with us.

Randy Abrams - *Credit Suisse - Analyst*

Thank you.

Elizabeth Sun - *Taiwan Semiconductor Manufacturing Company Ltd - Director of Corporate Communications*

Okay. All right. Follow-up question from Roland. Citi's Roland Shu.

Roland Shu - *Citigroup - Analyst*

Thanks. Just a 10-nanometer question to C.C. Since, C.C., you said we are expecting to volume production of 10-nanometer in 2017. But I remember in the past two quarters actually our goal was to pulling in 10-nanometer mass production by end of 2016. So are we pushing out the 10-nanometer mass production schedule a little bit on that?

C.C. Wei - *Taiwan Semiconductor Manufacturing Company Ltd - President and Co-CEO*

Let me explain that, because 10 nanometer, the mask layers is about 70 to 80. So you've got to start in 2016 to have output in 2017. So what I'm talking about is 2017 is to start to have revenue.

Roland Shu - *Citigroup - Analyst*

Okay. Thanks. So wafer start schedule definitely does not change.

C.C. Wei - *Taiwan Semiconductor Manufacturing Company Ltd - President and Co-CEO*

I cannot say more than that.

Roland Shu - *Citigroup - Analyst*

Okay. Thank you.

Elizabeth Sun - *Taiwan Semiconductor Manufacturing Company Ltd - Director of Corporate Communications*

Okay. All right. Andrew Lu also has follow-up question.

Andrew Lu - *Barclays Capital - Analyst*

I remember last investor conference, C.C. Wei mentioned 16 FinFET revenue have a high single digit by Q4 this year and maybe few percentage by Q3. Is that number unchanged?

C.C. Wei - *Taiwan Semiconductor Manufacturing Company Ltd - President and Co-CEO*

Unchanged.

Andrew Lu - *Barclays Capital - Analyst*

It sounds less confident.

C.C. Wei - *Taiwan Semiconductor Manufacturing Company Ltd - President and Co-CEO*

The more I say, the more that the information from the customer will be released.

Roland Shu - *Citigroup - Analyst*

Okay. Understood.

Elizabeth Sun - *Taiwan Semiconductor Manufacturing Company Ltd - Director of Corporate Communications*

All right. And, Andrew, you're done, right?

Andrew Lu - *Barclays Capital - Analyst*

Yes. Yes.

Elizabeth Sun - *Taiwan Semiconductor Manufacturing Company Ltd - Director of Corporate Communications*

Okay. Now we're going to Dan Heyler.

Dan Heyler - *BofA Merrill Lynch - Analyst*

Yes. Thanks. I had a question on the -- more the mature nodes situation. Saw a nice chunk of revenue there on the mature 12-inch nodes. As we move into IoT, there's a lot of interesting products that are coming up, ultra-low power for one. I'm wondering, as you look at the 40, 65 nodes, what's happening on device complexity? Is device complexity there increasing, because we hear about device complexity may be -- on the mature node may be increasing. I wonder if you have a view on that? Sorry, it's more design-related. What I'm getting at there is the ASP trends. I think there's a traditional view of mature technologies as being low-margin business.

Morris Chang - *Taiwan Semiconductor Manufacturing Company Ltd - Chairman*

C.C., why don't you answer the question? Generally, yes, the device complexity on mature nodes is increasing. That's how we're prolonging the life of the mature nodes.

C.C. Wei - *Taiwan Semiconductor Manufacturing Company Ltd - President and Co-CEO*

Yes. Usually we develop the pure logic technology into the derivative technologies, which is more complex, complicated. One good example is from the logic to embedded Flash, when you add quite a few steps. When we come to CMOS image sensor or those kind of things, all, that's more complex. Yes.

Dan Heyler - *BofA Merrill Lynch - Analyst*

So implications there for -- I would presume pricing and market share then would be, I guess, quite favorable. Does -- do you -- when device complexity goes up, does that hold blended ASPs flat or does it increase ASP in general terms?

Morris Chang - *Taiwan Semiconductor Manufacturing Company Ltd - Chairman*

What was the question again?

Elizabeth Sun - *Taiwan Semiconductor Manufacturing Company Ltd - Director of Corporate Communications*

Because of the complexity of the mature technology is increasing, whether we will benefit from ASP because of the --.

Morris Chang - *Taiwan Semiconductor Manufacturing Company Ltd - Chairman*

Whether we will what?

Elizabeth Sun - *Taiwan Semiconductor Manufacturing Company Ltd - Director of Corporate Communications*

Our ASP will benefit.

Morris Chang - *Taiwan Semiconductor Manufacturing Company Ltd - Chairman*

Will benefit?

Dan Heyler - *BofA Merrill Lynch - Analyst*

Does market ASP?

Morris Chang - *Taiwan Semiconductor Manufacturing Company Ltd - Chairman*

Well, actually I would say that our profitability has remained pretty constant over -- well, in the early stage, the profitability of a node is often low. As Lora pointed out, it takes about eight quarters for the margin to get to the corporate level. But after that, it stays pretty constant. Well it increases a little bit in fact. It increases.

Particularly in the last few years I think we have pushed up the structural profitability. And, yes, I think that the added complexity or the -- actually, a lot of new things are happening on the mature nodes. We -- so the mature nodes today are nothing like -- well, not nothing like, but only about 50%, 60% like what they were when they were first introduced. That's about right? Yes.

Dan Heyler - *BofA Merrill Lynch - Analyst*

Thank you. Great. And the second question is on the -- do you think 28 revenue will grow this year? You expect it will? Okay.

And then if that's the case, does the mature technology overall -- everything else, say 40 to 90, is that able to stay flat or does that go down, because there's still some -- a lot of migration taking place to 28. 28's a very attractive node. I'm just wondering what's happening on the 40, 65 and 90. Can that hold flat or does that decline?

Elizabeth Sun - *Taiwan Semiconductor Manufacturing Company Ltd - Director of Corporate Communications*

I think it depends on nodes. Yes. So Dan's question is if we are growing our 20-nanometer revenue, we're growing our 28-nanometer revenue, whether or not our 40, 65, etc., those older nodes' revenue will be growing as well.

Lora Ho - *Taiwan Semiconductor Manufacturing Company Ltd - SVP and CFO*

If I can make some comment on your questions. Actually we have very strong demand on those specialty technologies. As you know that the 0.15, 0.18, there's very high demand. And we are also increasing the technology offering for 40 nanometer and 65. From what I can see now, I believe the 2015, those mature technologies revenue will be bigger than 2014.

Dan Heyler - *BofA Merrill Lynch - Analyst*

Excellent. Thank you.

Elizabeth Sun - *Taiwan Semiconductor Manufacturing Company Ltd - Director of Corporate Communications*

All right. So I think really we will just allow two hands. Okay? It will first go to Michael and then it will be Steven. And then that will be the end.

Michael Chou - *Deutsche Bank - Analyst*

So sorry. Just the capacity increase this year, so what will be your forecast?

Lora Ho - *Taiwan Semiconductor Manufacturing Company Ltd - SVP and CFO*

Okay. With the $11.5b to $12b CapEx, we expect to increase our capacity by about 11% to 12%.

Elizabeth Sun - *Taiwan Semiconductor Manufacturing Company Ltd - Director of Corporate Communications*

Thank you. Steven?

Steven Pelayo - *HSBC - Analyst*

The guidance for the first quarter is very, very impressive. And of course we're all going to try to reconcile that with the full year, Andrew's question, with the full-year guidance. I guess could we talk just a little bit about the second quarter, but talk about it relative to -- I think you mentioned last quarter and I think you did it last year, you had some -- you do some pre-building in the first quarter ahead of the second quarter. How much of that is impacting your first-quarter guidance?

Morris Chang - *Taiwan Semiconductor Manufacturing Company Ltd - Chairman*

Lora?

Lora Ho - *Taiwan Semiconductor Manufacturing Company Ltd - SVP and CFO*

Very minimal. As we are going through the inventory depletions and this pre-build gets less and less, I think you know the purpose, trying to utilize the capacity without any waste. So it does help a little bit for the utilization. But it's getting lower and lower now.

Steven Pelayo - *HSBC - Analyst*

Okay. Thank you.

Elizabeth Sun - *Taiwan Semiconductor Manufacturing Company Ltd - Director of Corporate Communications*

All right. So I think, in the interest of time, we will end our conference here. Thank you for coming. And I hope we will see you next quarter. And good bye. Have a good day.