

FINAL TRANSCRIPT

Thomson StreetEventsSM

TSM - Q4 2009 TSMC Earnings Conference Call

Event Date/Time: Jan. 28, 2010 / 1:00PM GMT



Jan. 28. 2010 / 1:00PM, TSM - Q4 2009 TSMC Earnings Conference Call

CORPORATE PARTICIPANTS

Elizabeth Sun
TSMC - Head, IR

Lora Ho
TSMC - CFO

Morris Chang
TSMC - Chairman and CEO

CONFERENCE CALL PARTICIPANTS

Mehdi Hosseini
Friedman, Billings, Ramsey Group, Inc. - Analyst

Shailesh Jaitly
Nomura Securities International - Analyst

Pranab Sarmah
Daiwa Institute of Research - Analyst

Satya Kumar
Credit Suisse - Analyst

J.J. Park
JPMorgan - Analyst

Steven Pelayo
HSBC - Analyst

Donald Lu
Goldman Sachs - Analyst

Michael Chou
Deutsche Bank - Analyst

PRESENTATION

Operator

Welcome to TSMC's fourth quarter '09 results webcast conference call. This conference call is being webcast live via the TSMC website at www.tsmc.com, and only in audio mode. (Operator Instructions). I would now like to turn the conference over to Dr. Elizabeth Sun, TSMC's Head of Investor Relations.

Elizabeth Sun - TSMC - Head, IR

Thank you, Latree. Good morning and good evening everyone. Welcome to TSMC's fourth quarter 2009 conference call. Joining us on the call are Dr. Morris Chang, our Chairman and Chief Executive Officer and, Ms. Lora Ho, our Vice President and Chief Financial Officer. The format of today's conference call will be as follows. First, Lora will summarize our operations in the fourth quarter and give you our guidance for the first quarter of 2010. Then TSMC's Chairman, Dr. Chang, will provide his general remarks on the business outlook and a couple of key messages. Then we will open the floor to questions.

For those participants who do not yet have a copy of the press release, you may download it from TSMC's website at www.tsmc.com. Please also download the summary slides in relation to today's quarterly review presentation. I would like to remind all listeners that following discussions may contain forward-looking statements that subject to significant risks and uncertainties which could cause actual results to differ materially from those contained in the forward-looking statements.



Jan. 28. 2010 / 1:00PM, TSM - Q4 2009 TSMC Earnings Conference Call

Information as to those factors that could cause actual results to differ materially from TSMC's forward-looking statements may be found in TSMC's Annual Report on Form 20-F filed with the United States Securities and Exchange Commission on April 17, 2009, and such other documents as TSMC may file with, or submit to, the SEC from time to time. Except as required by law, we undertake no obligation to update any forward-looking statement, whether as a result of new information, future events, or otherwise. And now I would like to turn the call over to Lora.

Lora Ho - TSMC - CFO

Thank you, Elizabeth. Good morning and good evening. Welcome to our fourth quarter 2009 earnings conference call. First, I will go over the highlights of our fourth quarter, followed by a recap of 2009. Then I will give you the outlook for the first quarter in 2010. Please refer to the quarterly financial summary slides on our website. All dollar figures are in TWD dollars unless otherwise stated.

In the fourth quarter our top line continued to grow, mainly due to the strong demand for computer-related applications. With a higher utilization rate and an enhanced cost structure our profits and the profit margins again improved sequentially in the quarter. Net sales of TWD92.1b were up 2.4% compared with the third quarter and up 42.6% year over year. Wafer shipments were TWD2.43m eight-inch equivalent Wafer, slightly down 0.6% sequentially and up 58.6% compared with the same period a year ago.

Gross margin was 48.5%, 0.8 percentage point increase from the prior quarter and a 17.2 percentage points' increase year over year. Operating margin of 36.5% was up 0.9 percentage points sequentially and up 17.9 percentage points compared with fourth quarter '08. EPS for the fourth quarter '09 reached TWD1.26 and ROE stayed flat at 27.3% compared with the prior quarter.

Let's now take a look at the income statement. Our gross profit margin was 48.5%, representing a 0.8 percentage point increase from the last quarter, as a result of increased utilization rate and continued cost improvement, partially offset by an unfavorable exchange rate. Operating expense increased TWD180m from the prior quarter, reflecting increased research activities in our 28nm and 22nm technologies.

Non-operating income was up TWD900m sequentially primarily due to the inflow of litigation compensation. Net investment gain was TWD300m, down TWD100m from the prior quarter, reflecting declined profit in certain invested companies. Net margin was 35.5%, up 1.5 percentage points sequentially and up 16.2 percentage points year over year.

On an application basis the sequential growth of our fourth quarter revenue is mostly driven by the strength in the Computer segment, which grew 22% sequentially. Communication Applications declined 8% from the prior quarter after two strong quarters of growth, while Consumer decreased 15% quarter over quarter, in line with the normal seasonality. Overall, revenue from Communications, Computer and Consumer Applications (sic) accounted for 39%, 33% and 13% of our Wafer sales in fourth quarter '09 respectively.

On page seven, by technology, total Wafer sales from 0.13 microns and below accounted for 70% of our total Wafer sales, representing a three percentage point increase from last quarter. For 40nm revenue were more than doubled compared with the third quarter, accounting for 9% of our total Wafer sales, from 4% in the prior quarter. For 65nm, revenue contribution was 30%, meanwhile, 90nm and 0.13nm represented 16% and 15% of our total Wafer sales respectively.

Now let's move on to the balance sheet and cash flow statement. We ended the fourth quarter with TWD196b in cash and short-term investments, compared with TWD180b in the prior quarter, primarily due to the free cash flow generated in the quarter. On the other hand, total current liabilities increased TWD24b as a result of increased accounts payable to suppliers and accrual for employee profit sharing during the quarter.



Jan. 28. 2010 / 1:00PM, TSM - Q4 2009 TSMC Earnings Conference Call

Accounts receivable days and inventory turnover days were 36 days and 42 days respectively. Net fixed asset turnover was 1.4 times. Cash flow generated by operating activities reached TWD62b, with an increase of TWD15b from the third quarter due to higher net income, the advance of cash payments of employee profit sharing and a decrease in net working capital.

In investment activities capital expenditure was TWD42.7b. Meanwhile, net purchase of short-term marketable securities and others were roughly TWD5b. In sum, the ending cash balance was TWD171b, up TWD14b sequentially. Free cash flow was TWD19.3b, up by TWD4.7b compared with the last quarter.

Let's turn to CapEx in capital expenditures. Total installed capacity was about 2.53m eight-inch equivalent Wafers in the fourth quarter, representing a 3.6% increase from the prior quarter. In the first quarter of 2010 we expect overall capacity to increase by 1%. 12-inch capacity will expand by around 8% quarter over quarter, while eight-inch capacity will be lowered due to an annual maintenance and the capacity migration to higher nodes. For 2009 overall capacity was 9.95m eight-inch equivalent Wafers, up 6% from 2008. 12-inch capacity increased by 11% year over year, accounting for 42% of total capacity.

In terms of capital expenditure we spent \$1.3b during the quarter. Capital expenditure for 2009 was \$2.67b in aggregate, compared with \$1.89b spent in 2008.

Now let me give you a short recap of 2009. In a rapidly changing year as 2009 TSMC was able to maintain profitable at the bottom of the downturn, and then was able to quickly ramp up capacity with demand fast recovered. From the financial performance perspective, although 2009 revenues dropped 11% compared with 2008, the growth and operating profit margins were kept at similar level compared with 2008. As a result, we should be able to maintain the dividend per share that we had been paying our shareholders in the past few years. We ended the year with a sound performance in our balance sheet and cash flow. With a strong balance sheet and an [end-core] flow cash position, I believe TSMC is well positioned to invest for the future.

Now let me turn to the outlook for the first quarter of 2010. Based on our current business expectations and a forecast exchange rate of TWD31.6 we expect our consolidated revenue in the first quarter to come in between TWD89b and TWD91b. In terms of margins we expect our first quarter gross margin to be between 46.5% and 48.5%, operating margin to be between 35% and 37%. Lastly, due to a strong demand outlook for our advanced technologies 2010 capital expenditure will be around \$4.8b.

This concludes my remarks today. Now let me turn the call over to Dr. Morris Chang, our Chairman and CEO, for his remarks.

Morris Chang - TSMC - Chairman and CEO

Hi, this is Morris Chang. Good morning and good evening. We had a good quarter and a year much better than imagined a year ago. Furthermore, TSMC outlook for 2010 is very good. For the end market we forecast PCs to grow by 14% this year, we forecast handsets to grow by 12% this year and we forecast digital consumer electronics to grow by 7% this year. Worldwide Semiconductor market last year contracted by about 9%. This year we expect it to grow by about 18%, with large contribution from memory, which will grow more than 30%. In the first quarter, however, the worldwide Semiconductor market will decline seasonally in low single digit. The first quarter declines that we are forecasting for the worldwide Semiconductor market is actually a little better than the historical seasonal average.

On TSMC's supply chain inventory, as you probably know, we keep track of all of our major customers' inventory, and at this point we have good data as of the end of third quarter. And that data showed us, by and large, our major customers' inventory have been declining in the first three quarters of last year. We have now partial data available for their fourth quarter, and that partial data show us that the inventory -- their inventory has stabilized from the third quarter-end level, but it's still below historical seasonal level.

Jan. 28. 2010 / 1:00PM, TSM - Q4 2009 TSMC Earnings Conference Call

Now let's address the world Foundry market. We forecast that the world Foundry market will grow by 29% this year after having contracted 17% last year. This really is not surprising, because if you combine the '09 contraction with the 2010 growth for the Semiconductor market and the Foundry market you find that the Semiconductor market contracted by 9% last year and will grow by 18% this year, for a two-year growth of 9%.

For the Foundry market it contracted by about 17% last year and we are forecasting it to grow by 29% this year. If you combine the two, you have a net growth of 12% for the Foundry market. So the net two-year growth of the Semiconductor market is 9% and the net two year growth of the Foundry market is 12%, which is well within what we normally see. That is, the Foundry market grows somewhat faster than the Semiconductor market.

Now, in technology and manufacturing, on 28nm our development of the 28nm technology is progressing well. More than two dozen customers are working with us on wireless communication, computer and networking-related applications. Product [tape-outs] are expected around the middle of this year. On 45nm and 40nm yields continue to improve even at a faster pace in the last three months. Gross margins, however, on the 40nm and 45nm is still not up to the corporate gross margin. Of course, one has to remember that this is a pretty high target. Further improvements, however, are expected all through this year.

I would, therefore, expect that before the end of this year the 45nm, 40nm gross margin will be up to the corporate gross margin level. All other technologies, by that, I mean everything 65nm and above, are humming along very well on our manufacturing sites. Utilization is expected to be near to, or above, 100% across the board. By that, I mean all technologies, even the 0.5 micron technology in our six-inch Fab, which is 15 years old. Utilization is expected to be near to, or above, 100% across the board in all technologies in all TSMC Fabs. We do have a shortage of capacity, particularly in advanced nodes.

On capital expenditures and the capacity, because of the high anticipated demand we accelerated our capital spending in the second half of last year and, as the CFO pointed out earlier, we are forecasting a capital expenditure of \$4.8b this year. In the \$4.8b the advanced nodes accounted for 94%. New businesses account for 2% and the [morse] technology, which is practically all in the mainstream technologies, accounts for 3%. Other items account for 1%.

Now I would like to address briefly the concerns that some have expressed on the risks of too much capacity, therefore, erosion of price, etc. On the 28nm and the 40nm, 45nm technologies we are pioneering the technologies. We have pioneered the 40nm, 45nm Foundry technology and we expect to pioneer the 28nm Foundry technology. We are by far the leader in those two technologies and we expect, at least in the next two years, to be by far the leading supplier that combines technology availability, yields and physical capacity. Being such a supplier on 28nm and 45nm, 40nm I see minimal risk in over capacity in the next two years. And, indeed, most of our capital spending this year, as well as most of the accelerated capital spending last year, was directed at those nodes.

Now on the other nodes, 65nm and above, there is a slight risk of overcapacity, but we believe it is an exceptional one compared to the risk of not investing, which is a loss of market share and a loss of customer partners' confidence that we painstakingly built up. I also want to point out that should overcapacity happen in 65nm and above we will win business on yields, delivery, reliability, service and customer partnership and, certainly, not just on price.

That is a battle we have fought often and won often. In fact, many times in the past the periods when other people's, our competitors', utilization is low and our utilization is high exceed the time when everybody is full. We are a veteran in fighting that kind of battle should it have to be fought again.

In summary, I see almost no risk in capacity exceeding demand in 28nm, 40nm, 45nm, at least in the next two years. And on the other nodes, 65nm and above, if an overcapacity situation occurs I believe we know how to fight that kind of battles.

We forecast the end market -- in summary, we forecast the end market to be strong this year. We forecast the world Semiconductor market to grow by 18% and the Foundry market to grow by 29%. Our technology progress is good, our manufacturing is good,



Jan. 28. 2010 / 1:00PM, TSM - Q4 2009 TSMC Earnings Conference Call

we do have a capacity shortage situation but we are trying to catch up with that, and I believe that there is minimal risk in the most advanced nodes of overcapacity and, for the rest of the nodes, I believe we are going to win if the battle comes.

These are the remarks that I have prepared and I believe now we are open to questions.

QUESTIONS AND ANSWERS

Elizabeth Sun - *TSMC - Head, IR*

This concludes our prepared statements. Operator, please open the floor to questions.

Operator

(Operator Instructions). Our first question comes from the line of Mehdi Hosseini with FBR. Please proceed.

Mehdi Hosseini - *Friedman, Billings, Ramsey Group, Inc. - Analyst*

Thank you. Dr Chang, going back to your comments about the leading-edge capacity at TSM, the industry leader, so, to that extent, how should we think about the ASP mix? And as gross margin for 40nm improves where would you see the gross margin trending towards end of this year? And how would it compare to the prior peaks? And I have a follow-up question.

Unidentified Speaker

(Technical difficulty), I'm sorry.

Mehdi Hosseini - *Friedman, Billings, Ramsey Group, Inc. - Analyst*

How would the total overall --?

Morris Chang - *TSMC - Chairman and CEO*

The total ASP trend, we do not pay too much attention to the corporate ASP trend, simply because we have so many technologies available and then the mix of these technologies is --- will -- they will influence the corporate average price very greatly. Now, we do monitor the ASP in each node very carefully.

And, now, another thing that I want to point out is that we make approximately the same gross margin in almost every node. So that is why we control the average price, we monitor the average price in each node very carefully and don't pay that much attention to the corporate average price. And we make about the same gross margin in every node.

So, where you say that by year end where will our gross margin be, well, I think it's premature to predict right now. I will say that our long-term objective, as far as profitability is concerned, is above 20% ROE and we are well above that right now. And I do see that by the end -- well, actually, not just by the end of the year, but for a long time, I think that we will not consider anything below 20% to be acceptable -- 20% ROE to be acceptable.

Jan. 28. 2010 / 1:00PM, TSM - Q4 2009 TSMC Earnings Conference Call

Mehdi Hosseini - *Friedman, Billings, Ramsey Group, Inc. - Analyst*

Sure. And just one follow-up question regarding the CapEx \$4.8b. How shall we think about the spending pattern? Would it be fair to say that this is going to be mostly front-end loaded; first half more CapEx spending than second half?

Morris Chang - *TSMC - Chairman and CEO*

Yes, it will be front-end loaded because we are catching up in capacity.

Mehdi Hosseini - *Friedman, Billings, Ramsey Group, Inc. - Analyst*

Okay. Thank you.

Operator

And our next question comes from the line of Shailesh Jaitly with Nomura. Please proceed.

Shailesh Jaitly - *Nomura Securities International - Analyst*

Yes, hi. Thanks for taking my question. Dr. Chang, just one clarification on your comments about possibly no overcapacities in Foundry industry for the next two years. When you think about the industry and capacity growth, what kind of numbers are you imputing for the supply growth in 2010 and 2011?

Morris Chang - *TSMC - Chairman and CEO*

Well, I said that I don't see any -- I see very minimal risk in overcapacity situation on the 28 -- on the most advanced nodes, 28nm, 40nm and 45nm in the next two years. As far as what the industrial capacity am I imputing, well, actually I get a lot of the intelligence from just the analysts' reports and from the media publications etc.

Shailesh Jaitly - *Nomura Securities International - Analyst*

Okay. And because there have been so many capacity closures that were announced over the past 18 months, can we get some assessment from you as to what is the capacity contraction of the supply contraction that you are seeing from your IBM customers -- or the Foundry industry is seeing from the IBM customers?

Morris Chang - *TSMC - Chairman and CEO*

I think the contraction is almost entirely in the advanced nodes and it's a reasonably gradual one. And now that is of course why I think that the Foundry market will outgrow the Semiconductor market for quite a while. I think that I would impute our growth -- our fast growth on the advanced nodes, at least our forecast fast growth on the advanced nodes, 40nm, 45nm, and then 28nm. I would attribute our fast growth to a very significant extent to the outsourcing that's happening by the IBMs.

Shailesh Jaitly - *Nomura Securities International - Analyst*

Thanks. And, finally, if I could, in your -- this \$4.8b CapEx estimate, is it primarily going to be spent for advanced technologies or is there some capacity expansion also for 65nm or 90nm nodes?



Jan. 28. 2010 / 1:00PM, TSM - Q4 2009 TSMC Earnings Conference Call

Morris Chang - TSMC - Chairman and CEO

There is some for the --- most of the --- I said that 94% is for advanced technologies and we include everything below 0.13 in advanced technologies but, however, most of the spending is on 40nm, 45nm and 28nm. But there is some that will be spent on 65nm and below.

Shailesh Jaitly - Nomura Securities International - Analyst

Sure. Thank you very much.

Operator

And our next question comes from the line of Pranab Sarmah with Daiwa. Please proceed.

Pranab Sarmah - Daiwa Institute of Research - Analyst

Yes, thank you for taking my question. Dr. Chang, my question is could you give us a rough estimate what type of -- how many percentages of [shortage] on advanced capacity you're looking at, rather, how much percentage of your customer really has to push out their orders because you do not have enough capacity? And how you are managing those customers so that they don't go to the competitor?

Morris Chang - TSMC - Chairman and CEO

Well, right now I think it's very, very difficult, if not impossible, for them to go to another supplier because we are -- as I said, we are really by far the leading effective supplier that combines technological technology availability, yields and physical capacity.

Pranab Sarmah - Daiwa Institute of Research - Analyst

Okay. Could you give us rough idea, like what percentage of customers has to really push out the order, basically, or book-to-bill ratio on the advanced technology nodes?

Morris Chang - TSMC - Chairman and CEO

We have a term -- internal term that's called non-supported demand and it is -- right now, on the advanced nodes, it is a huge number.

Pranab Sarmah - Daiwa Institute of Research - Analyst

Okay, got it. Thank you very much.

Operator

And our next question comes from the line of Satya Kumar of Credit Suisse. Please proceed.

Jan. 28. 2010 / 1:00PM, TSM - Q4 2009 TSMC Earnings Conference Call

Satya Kumar - *Credit Suisse - Analyst*

Yes, hi, can you hear me?

Lora Ho - *TSMC - CFO*

Yes.

Satya Kumar - *Credit Suisse - Analyst*

Yes. I have a question on your capital intensity. I think in the afternoon conference call, Dr. Chang, you mentioned that 300mm capacity would grow 34% year over year. If I look at the incremental 300mm capacity that you're adding over the last several years, and I look at the CapEx that you're spending, in 2007 and 2008 you were spending roughly about TWD70m of CapEx for every 1,000 Wafer starts of 300mm capacity. In 2009 and 2010 I calculate the number to be closer to TWD120m. I was wondering if you could add some commentary on why the CapEx required for every 1,000 Wafers starts of 300mm is going up, if at all.

And, secondly, if it is increasing, I was wondering if you'd be able to provide some color on any particular type of process technology, whether it's lithography or something else that's taking a bigger share, that's causing that trend.

Morris Chang - *TSMC - Chairman and CEO*

I didn't get the second question.

Satya Kumar - *Credit Suisse - Analyst*

The second question is, is there any particular process technology within this, like lithography or etch or something else, that's causing that trend of increasing capital intensity?

Morris Chang - *TSMC - Chairman and CEO*

Well, first, yes, the capital intensity has increased with each node. The capital intensity of the 40nm, 45nm node is greater than the 65nm node. However, it's not so much greater as what your numbers indicated. Because when you said that the capital intensity in '07 and '08 was such and such, remember in those years the advanced node was 65nm and those years were already the later years of ramp up of 65nm. The capital intensity declines as we go down the learning curve on each node and, therefore, yes, the capital intensity of 45nm, 40nm is greater than the 65nm but not by so much as you said, as your numbers indicated.

And, by the same token, we expect that the initial capital intensity of 28nm will be quite high, but we expect the capital intensity to decline as the scale becomes larger. The first increment of capital in each node is always very, very expensive and then, by the time when we reach, for instance, 20,000 or 30,000 Wafers per month, and we add incremental capacity, that capital intensity becomes cheaper. And so we expect -- we have seen the same thing happening in the past and we expect it to be happening again.

And, now, as far as the source of equipment, well, litho I think -- it's really pretty much across the board, but I have to say that litho I think is probably the main contributor. Well, it's a greater contributor in increasing capital intensity than the rest of the tools.



Jan. 28. 2010 / 1:00PM, TSM - Q4 2009 TSMC Earnings Conference Call

Satya Kumar - *Credit Suisse - Analyst*

Okay, thank you. One quick follow up, if I may? I was wondering if you'd be able to quantify what the spend might be in the first half versus second half in 2010 for CapEx.

And, secondly, you mentioned that inventories are reasonable for your customers. You mentioned that overcapacity is not an issue and you sound optimistic on growth. How should we think about your 2011 capital spending plans? Is this level that we're seeing in 2010 unusually high, or is that the type of level that we should think of as we look into next year? Thank you.

Morris Chang - *TSMC - Chairman and CEO*

I would let the CFO answer the front-end loading or back-loading question.

On the 2011, I think that it's far too early to talk about that. I think that -- well, a lot of things where we're -- while we think we know approximately what's going to happen in the next two years, but there is a lot of variables there, so I think it's much too early to talk about 2011 capital spending now.

Lora Ho - *TSMC - CFO*

Okay, your first question regarding the front-end loaded, our current forecast for the NTD4.8b it will be roughly 60% in first half and around 40% in second half.

Satya Kumar - *Credit Suisse - Analyst*

Thank you very much.

Operator

And our next question comes from the line of J. J. Park with JPMorgan. Please proceed.

J.J. Park - *JPMorgan - Analyst*

Good evening. Thanks for taking my question. Based on your guidance it seems to me that you have the very strong confidence for the 2010 outlook. Is it safe to assume that the current order visibility is much longer than what you experienced in the past?

Morris Chang - *TSMC - Chairman and CEO*

Well, our orders are always just have about three or four months' visibility, but our forecasts -- the customers' forecasts to us -- and, remember, these are customers -- most of these customers we consider to be partners and they consider us to be partners too. Their forecast visibility is considerably longer than the three months.

J.J. Park - *JPMorgan - Analyst*

Okay. My second question, you mentioned that you expect the 13% capacity increase this year. Given some time lag between the CapEx increase and the actual capacity increase, it's going to be 2011 capacity growth could be higher than the level this year.



Jan. 28. 2010 / 1:00PM, TSM - Q4 2009 TSMC Earnings Conference Call

Morris Chang - TSMC - Chairman and CEO

The CFO will answer this question.

Lora Ho - TSMC - CFO

It's 13% for this year. Actually, for next year we don't know yet. We have to see how the overall Semiconductor market is going to be in 2011.

J.J. Park - JPMorgan - Analyst

Okay. Now, Lora, also the final question, can you provide us some color on the depreciation expense, given [minimal] CapEx increase this year?

Lora Ho - TSMC - CFO

Okay, with the \$4.8b CapEx this year we expect our depreciation will be increased by around 10% -- close to 10%. And this --

J.J. Park - JPMorgan - Analyst

Okay.

Lora Ho - TSMC - CFO

-- I have one comment to your early question. This year \$4.8b, year-over-year total capacity increase by 13% but, for 12-inch only, it will increase by 34%.

J.J. Park - JPMorgan - Analyst

Okay. Thank you very much.

Operator

And our next question comes from the line of Steven Pelayo with HSBC. Please proceed.

Steven Pelayo - HSBC - Analyst

Yes. Last quarter's investor conference you spoke about your gross margins being governed because of the chamber matching issues in yields. I'm wondering if you can give us an update on that. You talked about it impacting your gross margin by as much as 150 basis points in the third quarter. Are those all fixed now? Can you quantify if there's been any impact in the fourth quarter and thoughts on how yields are potentially impacting your outlook going forward?



Jan. 28. 2010 / 1:00PM, TSM - Q4 2009 TSMC Earnings Conference Call

Morris Chang - TSMC - Chairman and CEO

The bad chamber, the chamber matching problem, has been completely fixed. Now, as I said, the yields actually have improved faster in the last three months, meaning, the fourth quarter. And that's because in the third quarter we did have this chamber matching problem and a couple of others too, but the chamber matching I think was a very serious problem in the third quarter. And that problem has been fixed.

Now, still, the 40nm, 45nm node is the pretty difficult one, and even now the profitability is below the corporate profitability. The gross margin is below the corporate level. But it's highly positive. It's not where that -- the -- it's not a case when we have a very, very bad situation. We just have a situation. Corporate average, you know, 48% in the fourth quarter, and it wasn't quite as high as that. And the first quarter we are guiding corporate average of --

Lora Ho - TSMC - CFO

47.5%

Morris Chang - TSMC - Chairman and CEO

-- 47.5% and we are not -- we don't expect the 40nm 45nm node to be at that level. But basically there has been significant progress on the 40nm, 45nm node and I don't -- I can't identify a single problem that's killing us. I think that it's a general yield improvement program that we are doing.

Steven Pelayo - HSBC - Analyst

Okay. And then maybe just one final question, which is, on the competitive front you really don't sound very worried in any way, but I guess Globalfoundries and Chartered are now completing their integration issues there. Have you see any changes in the competitive landscape? Are customers trying to leverage them off of you more? I know there's been some speculation they've been offering more discounted pricing, free masks, things like that. Have there been any changes in the competitive landscape in light of the combination?

Morris Chang - TSMC - Chairman and CEO

Well, we consider -- we always respect our competitors, but the Globalfoundries and Chartered merger, well, we have competed with Chartered for a long time and, to me, Globalfoundries and Chartered is a case of one plus one equals to two, and not greater than two. And so we just compete with them calmly in our usual, hopefully, effective manner. Is there anything that I missed?

Steven Pelayo - HSBC - Analyst

No, that's fine and all.

If I could just have one quick housekeeping for you, Lora. I noticed that your revenue by applications, it looks like you maybe reclassified some things there, more went into industrial and other. What was the thinking behind that and what changed?

Lora Ho - TSMC - CFO

Well, if you refer to industrial and others, in the past we -- there's some applications it's between those segments, and we used to use [four rate] basis to allocate that revenue to Computer, Communication and Consumer. Now this time we have made it

Jan. 28. 2010 / 1:00PM, TSM - Q4 2009 TSMC Earnings Conference Call

more clear and clearly identified which segment it goes to, so we have some reclassification among the segments. That's why you have seen a greater number of industrial and others.

Steven Pelayo - HSBC - Analyst

Okay. Thank you.

Operator

And our next question comes from the line of Donald Lu with Goldman Sachs. Please proceed.

Donald Lu - Goldman Sachs - Analyst

Yes, Dr. Chang, I would like to say -- ask the progress for high-k/metal-gate and whether that would be a significant technology for TSMC.

Morris Chang - TSMC - Chairman and CEO

in the 28nm node very much so, and the progress is good. As I said, the progress on the 28nm node is good and that definitely includes high-k/metal-gate and, in fact, high-k/metal-gate is very, very important in that node.

Donald Lu - Goldman Sachs - Analyst

Great. Thank you.

Operator

And our next question comes from the line of Mehdi Hosseini. Please proceed.

Mehdi Hosseini - Friedman, Billings, Ramsey Group, Inc. - Analyst

Yes, thanks. Two follow-up questions. Dr. Chang, earlier on you talked about shortages of capacity or maybe rather not -- you don't see any excess capacity over the next two years. I want to better understand this comment. Does your commentary reflect continued improvement in demand or just overall capacity being added in a rational way, or both? I would really appreciate it if you could provide us with more color as to how you come up with this conclusion.

And then my second question has to do with the Foundry growth of 29% this year. And to what extent do you expect TSM to be able to outgrow the Foundry industry growth in 2010?

Morris Chang - TSMC - Chairman and CEO

All right, the first question, I said that I saw minimal risk in overcapacity on the most advanced nodes, which are 28nm, 40nm and 45nm, in the next two years. And now, your question, where do I, how do I and why do I say it, is it because of increase in demand and so on? Well, it is increase in demand as already reflected in my forecasts of the end market and my forecasts of the world Semiconductor market and my forecasts of the world Foundry market. We are forecasting the world Foundry market to grow by 29%, as you already mentioned, and the Semiconductor market to grow by 18%.

Jan. 28. 2010 / 1:00PM, TSM - Q4 2009 TSMC Earnings Conference Call

Now, your second question, how much are we going to outgrow the Foundry market? Our goal is to outgrow it and I'm not prepared to say at this point how much we will outgrow it. Our goal is to outgrow it. I'm not prepared -- I will be guiding this year's revenue to you if I told you and I am not prepared to do that yet.

Mehdi Hosseini - *Friedman, Billings, Ramsey Group, Inc. - Analyst*

Sure, understood. And then maybe another way to ask the same question is how should we think about exiting 2010? In other words, a year from now when you report the Q4 of 2010 should we expect a significant year-over-year growth, or is the majority of this 29% Foundry growth is going to happen because of the better-than-seasonal first half?

Morris Chang - *TSMC - Chairman and CEO*

Well, my present forecast as to how we are going to exit for 2010, my present forecast is that we will have a smooth exit. I'm not forecasting a crash as we exit 2010. I think it will be a smooth exit. Actually, our forecast for 2011 is -- certainly, it's not alarming but I'm not really prepared to quantify that.

Mehdi Hosseini - *Friedman, Billings, Ramsey Group, Inc. - Analyst*

Sure. The reason I ask it this way is if your capacity is growing by 13% this year and --

Morris Chang - *TSMC - Chairman and CEO*

That's total capacity. Remember now, you know, we also have to talk about the 12-inch capacity. 12-inch actually is almost synonymous with advanced nodes.

Mehdi Hosseini - *Friedman, Billings, Ramsey Group, Inc. - Analyst*

Right, right. And the majority of the CapEx is spent in the first half, then I'm just trying to better understand the run rate as we exit the 2010, and a better understanding 2011. That's where it leads to my questions; a better understanding how this capacity, the \$4.8b CapEx, how's it going to impact capacity growth as we exit 2010?

Morris Chang - *TSMC - Chairman and CEO*

Well, I think we will have greater capacity in 2011 than we have in fourth quarter 2010, that's for sure. But the front loading of the capital spending this year means that the residual stuff is not going to be a tail wagging the dog, I think. And, now, we have encompassed the 2011 capacity in our longer-range forecast and, as I said, we have also forecast 2011 to be a reasonably good year, a pretty good year, so I'm not -- at this point I'm not worried at all.

Mehdi Hosseini - *Friedman, Billings, Ramsey Group, Inc. - Analyst*

Okay, great. Thanks so much.

Operator

And our next question comes from the line of Shailesh Jaitly with Nomura. Please proceed.

Jan. 28. 2010 / 1:00PM, TSM - Q4 2009 TSMC Earnings Conference Call

Shailesh Jaitly - *Nomura Securities International - Analyst*

Yes, hi. If you could help provide some color on Japanese customer engagement, as to how the progress is there, particularly keeping the massive restructuring which is going on in Japan in mind.

Morris Chang - *TSMC - Chairman and CEO*

We are engaging with most of the major customers, most of the major companies that plan to outsource. Outsourcing from Japan has been relatively small, but we are engaging with most of them and I really shouldn't be -- you probably know about Fujitsu which was a new engagement and a pretty important one, and that one has been announced. The others I think we are in pretty active discussions, but I don't want to go into details on those yet.

Shailesh Jaitly - *Nomura Securities International - Analyst*

Has this side of the business become substantial enough that you could possibly help quantify this?

Morris Chang - *TSMC - Chairman and CEO*

That we could what?

Lora Ho - *TSMC - CFO*

Quantify.

Morris Chang - *TSMC - Chairman and CEO*

That business is still smaller than our European business.

Shailesh Jaitly - *Nomura Securities International - Analyst*

And how big is European business?

Lora Ho - *TSMC - CFO*

Well, I think you can check that out on our management -- quarterly management report where we have customer breakdowns by region.

Shailesh Jaitly - *Nomura Securities International - Analyst*

Sure, thanks, Lora. And about this capacity growth, right, because order growth has been very strong, even from memory, guys. I was wondering whether you are seeing any parts of the supply chain there, particularly the critical immersion tools where the lead times are stretching. And if you could help quantify where are the lead times currently.

Jan. 28. 2010 / 1:00PM, TSM - Q4 2009 TSMC Earnings Conference Call

Morris Chang - TSMC - Chairman and CEO

Indeed, the lead time of our equipment suppliers, in particular the litho supplier, indeed, the lead time has been a problem, but I also think that because of the very fact that we are a pretty big customer with them -- we practice this partnership concept upstream and downstream; downstream with our customers and upstream with our major suppliers. And because of the partnership we have built with our leading equipment suppliers, I believe that we have an advantage in getting shortest lead time from them.

Shailesh Jaitly - Nomura Securities International - Analyst

Okay. And just to get some assessment, and that will also help us understand better what previous gentleman was asking, is it in excess of six months now, the lead times for litho tools?

Lora Ho - TSMC - CFO

The lead time for us is three to five months. Litho will be higher. If you talking about immersion, it's even longer.

Shailesh Jaitly - Nomura Securities International - Analyst

Okay, thanks, Lora.

Elizabeth Sun - TSMC - Head, IR

Operator, I think in the interests of time, since this has been running just about over an hour, we will just limit the question to the next caller. Thank you.

Operator

Sure. And our next caller comes from the line of Michael Chou with Deutsche Bank. Please proceed.

Michael Chou - Deutsche Bank - Analyst

Hi, Dr. Chang, I would like to see if you can give some color regarding the 40nm sales portion for this year?

Morris Chang - TSMC - Chairman and CEO

40nm --?

Michael Chou - Deutsche Bank - Analyst

Sales portion for this year.

Lora Ho - TSMC - CFO

Can you say that again, Michael? You mean percent of revenue?

Jan. 28. 2010 / 1:00PM, TSM - Q4 2009 TSMC Earnings Conference Call

Michael Chou - Deutsche Bank - Analyst

Yes, percentage of revenue.

Lora Ho - TSMC - CFO

We had 9% for the fourth quarter '09 and this will be the second year we'll ramp the 40nm, and it will go up quarter by quarter, but I probably cannot give you quantity -- quantify the number at this moment.

Michael Chou - Deutsche Bank - Analyst

Thank you.

Morris Chang - TSMC - Chairman and CEO

(Multiple speakers). It will go up from the 9% that we had in the fourth quarter, [everything].

Michael Chou - Deutsche Bank - Analyst

Okay. In last conference Dr. Chang highlighted it could be maybe mid-teens of the 2010 revenue. Is that still the case, or do you think it will be challenging to reach that kind of number?

Lora Ho - TSMC - CFO

No, it's not a challenging number. Given our capacity build up and our customer engagement, 40nm is pretty strong. We're still with a view it's going to be, well, 15% or higher.

Morris Chang - TSMC - Chairman and CEO

Did you say mid-teens for the whole year?

Michael Chou - Deutsche Bank - Analyst

Yes.

Morris Chang - TSMC - Chairman and CEO

I don't consider that to be very challenging.

Michael Chou - Deutsche Bank - Analyst

Thank you. I have no questions, thank you.

Jan. 28. 2010 / 1:00PM, TSM - Q4 2009 TSMC Earnings Conference Call

Elizabeth Sun - TSMC - Head, IR

All right, I think this concludes our Q&A session. Thank you for your participation. We look forward to talk to you in April. I wish you all a nice day or evening. Bye bye.

Operator

Before we conclude TSMC's fourth quarter '09 results webcast conference call today, please be advised that the replay of the conference call will only be accessible through TSMC's website at www.tsmc.com. Thank you all.

DISCLAIMER

Thomson Reuters 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 THOMSON REUTERS 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.

©2010, Thomson Reuters. All Rights Reserved.