Advanced Semiconductor Engineering, Inc.
4th Quarter 2016 Earnings Conference & Conference Call
January 26, 2017
3:00p.m. Taiwan Time

Kenneth Hsiang, Head of IR of ASE Group: Hello. I am Ken Hsiang, the Head of Investor Relations for ASE. Welcome to ASE Group's fourth quarter 2016 earnings release. All participants consent to having their voice and questions broadcast via participation of this event. Please refer page 1 of our presentation, which contains...Sorry, please refer to our safe harbor notice here. I would like to remind everyone on this call that the presentation that follows may contain forward-looking statements. These forward-looking statements are subject to a high degree of risk and our actual results may differ materially from these forward-looking statements.

For the purposes of this presentation, dollar figures are generally stated in New Taiwan Dollars unless otherwise indicated. For this earnings release, Dr. Tien Wu, our COO, will start by giving a Group update. After which, I will be going over the financial results. Joseph Tung, our CFO and Dr. Wu will be answering questions during our Q&A session. Following the event, our VP in charge of public relations, Eddie Chang, will be addressing the media in Mandarin Chinese. We will distribute our fourth quarter handouts following Dr. Wu's presentation.

Ladies and Gentlemen: Our COO, Dr. Tien Wu.

Dr. Tien Wu, Chief Operating Officer of ASE Group: Happy new year to everyone. First of all, welcome to our earning release. I would like to provide a few pieces of information in the following suit. First of all, I would like to give you an update on the SPIL transaction. I will give you a quick status update. Then I will give you the 2016 ASE Group recap, in terms of the major improvements, also the accomplishments. The third piece of information I would like to offer to you is our CSR accomplishments in 2016. 2016 had been a very eventful year, I would like to give you a few highlights in terms of our Group's accomplishments in the CSR arena. And lastly, I would like to give you a brief summary of the 2017 focus.

First of all, let me start with the update on joint share exchange agreement with SPIL. As we have reported, the Taiwan TFTC has approved the proposed transaction. Right now, the China MOFCOM has formally accepted our application on December 14 of 2016. We are going through the proposed transaction under the phase-two review. On the US side, on January 17 this year, ASE and SPIL each certified that we have responded to the FTC's request for information. Both parties continue to cooperate with the FTC's investigation. The transaction is expected to be closed in the year 2017, with a more specific timeline pending and subject to approvals by ASE and SPIL's shareholders, as well as relevant authorities. As of today, we continue the work on the regulatory front actively, and we do not see any negative comment. So the process continues.

The second piece of information I would like to offer to you is the 2016 recap. At the Group level, IC ATM revenue up 3.9% year-on-year, double the semi industry growth rate. The growth is primarily driven by the increase in backend outsourcing, as well as our improved capabilities. We have seen broad-based business strength in all market segments. A good news report: our design-in pipeline in bumping, flip chip, and wafer-level packaging was up 13.7% year-on-year in 2016. We see the momentum continues into 2017. We do believe that in this bumping, flip chip, wafer-level packaging arena, 2017 will have a substantial higher growth rate.

The EMS gross margin was up from 7.5% from 2015, improved to 9.8% in 2016, contributing to ASE Group's profit increase. Our technology building block portfolio continued to expand, including fanout, copper pillar, bumping, embedded substrates, etc., and the CSR achievements, which I will talk about later.

Let us turn to page four. Here, we have provided a bar chart and a line chart on the ASE profit and margin rebound in 2016. As you can see, ASE Group gross profit has gone up 4.6%, gross margin has improved from 17.7% to 19.4%. The next, page five, the ASE profit and margin also rebounded in 2016, it went up from 604 million in 2015 to 676 million, which is about 12% year-on-year. Our net margin has improved from 6.8% to 7.9%.

Next page, I would like to give you a few highlights about the ASE CSR achievements. In 2016, we have received the Asia Responsible Entrepreneur Award. We have also received the CDP A List, the only company in Taiwan that won the A List. We also won the Dow Jones Sustainability Indices in two categories, including the Leadership in the Manufacturing Segment. We have received Taiwan TCSA Award. Also, on the green building, at the end of 2016, we have 11 Taiwan green building certified and 6 US LEED certifications, including three buildings receiving the platinum level. In Taiwan, grand total of four, ASE has three. Right now ASE has the highest density of the green buildings in Taiwan. This marks the accomplishment attributing to the endeavor of ASE Group in the past few years. I would like to present this to everyone as a milestone.

Next page, page seven. I would like to provide you a quick outlook and also the focus in 2017. We do see market conditions continue to improve into 2017. Our CFO will give you more detailed descriptions about the first-quarter seasonality, as well as the quarter-to-quarter improvement over the next year. We do expect higher top-line growth year-on-year, and higher CAPEX compared to 2016 levels. Our focus continues to be on profitability and also the capability improvement. We will execute the bumping, flip chip, wafer-level packaging momentum, including fanout. We have been tracking the design-in pipeline for the last few years. We believe 2017 is going to be a strong year, based on the pipeline that we are seeing today. The SiP pipeline, which has a lot of people's interest, we continue to develop multiple customers and different volume in different market segments. And hopefully, sometime this year, we will report some more details to all of you. Of course, our primary focus this year is to seek completion of SPIL transaction. Thank you.

Kenneth Hsiang, Head of IR of ASE Group: Thank you, Dr. Wu. We now distribute the fourth-quarter handouts.

Okay. We can now begin the financial section here. We were pleasantly surprised by how well business orders held up during our seasonally down quarter. Within communications, some customers declined in line with typical seasonality; while many others remained strong. Consumer-related products seemed particularly strong during the quarter.

On page two, here, our Group quarter-over-quarter consolidated P&L. On a fully consolidated basis, the fourth quarter, the company delivered fully diluted EPS of 86 cents and basic EPS of a dollar and four cents. Our packaging and testing businesses were both up 1%. Our direct materials business was flat. Our EMS business grew 11%. Our other revenues shown here are related to real estate sales. Total revenues for the consolidated Group increased 6% from the third quarter to 77.1 billion.

Gross profit increased 9% from 14.1 billion to 15.4 billion. Despite having more EMS revenue mix, we were still able to improve our consolidated gross profit margin by 0.5 percentage points, from 19.4% to 19.9%. Operating expenses edged up by 0.6 billion. Our operating expenses, as a percentage of sales, increased slightly from 9.2% to 9.4%. Professional fees incurred in conjunction with our transaction with SPIL were the primary cause for this increase. Operating profit for the fourth quarter was 8.1 billion, up 0.7 billion from 7.4 billion in the third quarter. Our operating margin increased 0.3 percentage points from 10.2% to 10.5%. During the fourth quarter, we had a net non-operating gain of 1.6 billion dollars as versus a net non-operating loss of 0.6 billion dollars the previous quarter. The current quarter's non-operating gain includes the following: ECB-related gain from our stock movement of 1.2 billion dollars; net foreign exchange and hedging activities of 0.6 billion dollars; contribution from SPIL net of purchase price accounting of 368 million dollars; and net interest expense of 0.5 billion dollars.

Pretax profit for the fourth quarter was 9.7 billion dollars, up 41%, from 6.9 billion in the third quarter. Income tax expense for the fourth quarter was 1.3 billion dollars, up from 1 billion dollars in the third quarter. Net income for the fourth quarter was 8 billion dollars, up 45% from 5.5 billion in the third quarter. Finally, net margin improved to 10.3% from 7.6% in Q3.

Group quarterly results on a year-over-year basis. Comparing the current quarter's results versus the same quarter last year, our packaging, test and direct materials businesses grew by 16%, 15% and 1% while our EMS business declined by 12%. On a year-over-year basis, our consolidated net revenues increased 2%. With our product mix being more heavily weighted towards IC ATM and after significant efforts rebalancing our SiP portfolio, our gross profit was up 16% with gross profit margin improving 2.3 percentage points from the previous year. Operating profit was up 20% with our operating margin improving 1.5 percentage points from 9% to 10.5%.

Full year-over-year comparison. Within this full-year set of numbers, you are better able to see the impact of our rebalancing efforts. For the full-year 2016, the company made basic EPS of 2 dollars 83 cents versus 2 dollars 51 cents the previous year. We were able to grow our packaging and test businesses each by 7%. Our direct materials business was flat, while our EMS business was actively managed down 17% via our rebalancing efforts. And, thus, despite total revenues being down 3% year-over-year, we were able to improve gross profit by 6% from 50.1 billion to 53.2 billion. It bears repeating at this point that we believe our SiP technologies provide significant value to our customers. We believe we should receive a reasonable return on such services. And, that, in essence, is what our rebalancing effort is about. Our 2016 gross margin also improved 1.7 percentage points to 19.4% from 17.7%. 2016 operating income improved 7% from 24.9 billion to 26.7 billion with operating margin improving 0.9 percentage points.

Our IC ATM P&L. Please note the intercompany revenues including the SiP technology business—performed by our IC packaging business unit on behalf of our EMS business unit—are eliminated during consolidations. Our IC ATM group performed better than expected this quarter. We were able to deliver a small net revenue increase during our seasonably down quarter. The revenue uptick wasn't isolated to any one customer or any one segment. It was broad-based across multiple end markets. Given that it is broad-based, it gives us greater comfort that the fourth quarter uptick was not just pulled in manufacturing. With that said, our IC ATM net revenues improved 0.5 billion, or by 1%, during the fourth quarter to 43.5 billion dollars. Revenues for our IC packaging and testing businesses each increased 1%, while our direct materials businesses declined by 2%. NT Dollar appreciation had a 0.34% unfavorable impact on revenue. Gross profit was up 6% to 11.6 billion. Gross profit margin was up 1.3 percentage points from 25.5% to 26.8%. Gross profit margin was up primarily as a result of lower winter utility rates, lower raw material consumption and D&A and rental efficiencies. These were offset in part by NT Dollar appreciation. Operating expenses increased from 4.8 billion dollars to 5.3 billion dollars, while operating expense percentage increased 1.0 percentage points to 12.1% from 11.1%. This increase was primarily the result of increased professional fees related to the SPIL transaction and higher labor costs. Operating margin for the fourth quarter was up 0.3 percentage points to 14.7% from 14.4% in the third quarter. Operating profit was up 3%, or 0.2 billion, to 6.4 billion.

IC ATM year-over-year. Here you can see our year-over-year comparison with our IC ATM business. You can see why we believe business during this fourth quarter was exceptionally good as far as near-term fourth quarters go. Our packaging and testing businesses were up 13% and 15%, respectively. Our direct materials business was down 1%. Total IC ATM revenues improved 13% versus the same period last year. The fourth quarter significantly outpaced our total year growth of 4%. Gross profit was up 17% with our gross margin improving 0.8 percentage points. Operating income was up 20% from 5.3 billion to 6.4 billion.

For the full year, our packaging business grew by 3% and our test business grew by 7%. Our materials business was flat. Total net revenues were up 4%. Gross profit was flattish with gross margin being down 1.1%. The cause for this margin decline was within our packaging business. As you will see in the next slide, our packaging margins were impacted during 2016. This was the result of the 2015 industry downturn, with the overall ASP environment becoming more aggressive, coming into 2016. We spend much of 2016 recovering from that impact; and, going into 2017, assuming a sustained positive business environment, we believe we can keep that recovery going. Operating expense percentage was steady at 12%, so, the gross profit decline passed through to operating income, with operating margin also declining by 1.1 percentage points.

Our packaging operations. In Q4, our packaging revenue increased 1% sequentially and 13% year-over-year to 35.2 billion dollars. Our packaging gross margin of 24.1% increased 1.9 percentage points sequentially and up 0.6 percentage points year-over-year. The sequential margin improvement was primarily caused by higher loading as compared to the third quarter. Also, various financial impacts from typhoons also generated some anomalies in our margins last quarter.

During the quarter, capital expenditures were 87 million USD, composed of wafer bump, fanout and copper pillar equipment at 49million USD. Common and SiP equipment at US 34 million dollars and wire bond-related equipment at 4 million USD.

Capacity, during the quarter, we added 70 and retired 78 wire bonders. We exited the quarter with a total of 15,897 wire bonders in operation. 8-inch bumping capacity remained unchanged at 95 thousand wafers per month. 12-inch bumping capacity, including fanout and copper pillar, increased 5 thousand wafers to 116 thousand wafers per month.

Testing operations. Test revenues of 7.3 billion were up 1% sequentially and 15% year-over-year. Test gross profit margin of 38.4% was down 0.5 percentage points sequentially but up 0.8 percentage points year-over-year. The decline in gross margin was due to higher depreciation and amortization from faster capacity expansion during the recent quarter. Overall, cost of services for test increased 0.1 billion to 4.5 billion dollars. Our testing utilization rate continued to stay around 80%. CAPEX for the test business was US 30 million dollars in Q4. We added 93 and retired 79 testers during the quarter. At the end of Q4, our total tester count stood at 3,739 testers.

Materials business. In the seasonally down quarter for the materials business, revenues were sequentially down 7.4% and up 9.6% year-over-year. During the quarter, 806 million dollars was from sales to external customers. This amount is flat as compared to third quarter. Our internal self-sufficiency rate declined slightly to 26% from 27%. Gross margins were sequentially down by 1.0 percentage point to 13.8%. This is primarily due to seasonal loading patterns within the materials business.

IC ATM revenue by application. During the 4th quarter, our communications market segment share percentage stayed relatively flat at 53%. Our computing market segment declined 2% to 10%, driven by specific customer issues. Our automotive, consumer and others increased 2% to 37%. This increase gives a bit more credence that the near term pick-ups are potentially driven by holiday electronics.

Page 12, EMS business unit. Here you can see the result of our efforts in righting the SiP business model. During the fourth quarter, revenues for our EMS business were sequentially up 11% to 34.6 billion dollars from 31.2 billion dollars. Even though our fourth quarter revenues were down 12% year-over-year, we were able to improve our gross profits by 15% to 3.6 billion dollars. We've also been somewhat conservative guiding our gross margins this year as exemplified by our sequential margins increasing 0.4 percentage point to 10.4% at this point. Gross profit margins were stronger than anticipated primarily as a result of product mix and rebalanced SiP-related business. We believe that going into 2017, we still have opportunities to continue improving our SiP portfolio performance. CAPEX for our EMS business unit was 6 million USD during the fourth quarter.

EMS business segment mix. During the fourth quarter, our communications product segment increased their segment share by 2 percentage points, while our computing segment lost 2 percentage segment share points. Our other segments shares stayed relatively unchanged. This is mostly in line with the seasonality of the underlying business products.

Page 14, key balance sheet items. At the end of the quarter, we had cash and cash equivalents and current financial assets of 42.3 billion dollars increasing from 39.6 billion the previous quarter. We also had interest-bearing debt decrease from 119.9 billion in third quarter to 111.7 billion in the fourth quarter. Our investment in SPIL of 45.9 billion dollars is recorded in investments-equity method. At the end of 2016, total unused credit lines amounted to 176.2 billion dollars. EBITDA improved to 17.4 billion dollars from 14.7 billion dollars during the quarter. Using the share count in basic EPS, EBITDA per share was 2 dollars and 27 cents for the quarter, and 7 dollars and 73 cents for the year.

CAPEX. Machinery and equipment capital expenditures for the fourth quarter totaled 127 million USD, of which, 87 million USD was used for packaging, 30 million USD for testing, 6 million USD for EMS and 4 million USD for interconnect materials. For the full year of 2016, we spent 683 million USD for capital expenditures, including 397 million dollars for packaging, 241 million dollars for testing, and 22 million dollars in our EMS, and finally, 23 million dollars in our interconnect materials. EBITDA on an USD basis was 552 million USD for the fourth quarter and 1.8 billion USD for the year.

As Dr. Wu mentioned in his opening remarks, we believe the industry is healthy. Outside of the current geopolitical uncertainties, we believe the business climate for ASE in 2017 is positive. Everything looks incrementally better. Within our IC ATM business, the overall pricing environment looks reasonable with planned capacities well utilized. We believe that 2017 should allow us the opportunity to resume gaining share via our, once again, healthy new product introduction pipelines. In 2017, we also believe we will be able to make significant inroads into developing the next generation of cost-effective packaging.

We will also continue to follow through with the successes of righting our SiP business model. We believe our technology and our capability to scale provides material value and differentiation to our customers' products. We plan to continue to improve our profitability in this area during 2017. For the fourth quarter, the fourth quarter showed signs of stronger overall industry growth. Potentially, more or even—there were more or even new products that were made for the holiday season. With that said, we don't necessarily believe that such sales would carry into our seasonally down first quarter.

With that said, we view our first quarter as follows: our first quarter 2017, IC ATM business should get close to our second quarter 2016 levels. Our first quarter 2017 IC ATM gross margin should be similar to our first half 2016 levels. Our EMS revenues and margins should be similar with 2016 average levels.

We can start the Q & A session. Name and company, please.

Bill Lu of UBS Securities: Hi, Bill Lu from UBS. First of all, happy new year. First question is for Dr. Wu. Dr. Wu, you talked about 2017 being better growth and higher CAPEX. On the "better growth" comment, can you talk a little bit more about how that breaks out by segment? Is it, you know, IC ATM, EMS, and also some of the new, newer technologies, like SiP, like, maybe fanout? Yeah, what's the outlook by segment?

Dr. Tien Wu: The comment on the better growth rate in 2017 is a broad-based. And I think I've already made that statement—all sectors, all business units look incrementally better. Right? So I cannot give you a specific item in terms of which sector would outgrow the other sectors. We do see quite a uniformed growth in all market segments across the IC ATM, as well as EMS.

Bill Lu of UBS Securities: So it does mean that EMS would be up year-on-year?

Dr. Tien Wu: This is the implication, yes.

Bill Lu of UBS Securities: Okay, great. Thanks. You know, I don't know a whole lot about the legal stuff. MOFCOM, you said we're now in phase two? That's two out of how many phases?

Joseph Tung, Chief Financial Officer of ASE Group: It's normally three phases.

Bill Lu of UBS Securities: I see. Looking at the—

Joseph Tung, Chief Financial Officer of ASE Group: Most of the decisions were made in the second phase.

Bill Lu of UBS Securities: Okay. Looking out into 2017. It does look like some of the big fabless companies, like Qualcomm, maybe even NVIDIA, will move some production, a little bit more production to Samsung? Is that going to have any impact on your business?

Joseph Tung: If anything goes to Samsung, of course it tends to stay within Samsung, so that's another sign of IDM being one of our competitors as well.

Bill Lu of UBS Securities: Okay. Last question, if I look at 2016, just your IC ATM business, your growth rate is pretty close to what I think is the industry average. But Amkor did grow quite a bit more than ASE did. I think probably they had some nice niche markets, like maybe fingerprint, that they did well in 2016. I wonder if you agree with that statement? And number two is that in 2017, can you capture some of these opportunities?

Dr. Tien Wu: I think the growth rate is within the operational tolerance because when one fab is fuller than the other, chances are the customers, you know, they do move business around. And one of the things I would like to give a little more clarity is if you recall that for the first half of 2014, ASE's bumping fab was partially shut down...very painful for ASE. So in 2014, our pipeline actually was affected. If you look at the growth rate on some of the flip chip, wafer load, packaging as well as bumping business, the growth rate—I'm giving historical number now—the growth rate in 2014 to 2015, that was about 5%. And that was below the industry average, in that particular sector. If you look at 2016-2014, we have recovered to 13% out of a lower base. I'm happy to report that in the last few years, all of the conditions have improved. So, right now we do see a very, very strong pipeline, per the recovery from 2014. So, I believe that in 2017 we will see market share gain. In terms of the CAPEX, also reflects some of the customer demand in some of the specific sectors, which we will not comment.

Bill Lu of UBS Securities: Can you comment on how much CAPEX is gonna be up this year?

Dr. Tien Wu: I think last year we spent 683, close to 700?

Joseph Tung: This year the CAPEX, overall CAPEX will be higher than last year, although it will still be lower than our depreciation and amortization put together.

Bill Lu of UBS Securities: Thank you.

Joseph Tung: I think another comment on, just a little bit on the growth comparison between us and Amkor, I think it's also...We need to look at the composition of the revenue a little bit. As we went through a rebalancing period for our SiP business in the year, and that caused the revenue from the SiP business, particularly in the IC ATM level, to be much lower than the previous year. And that has an impact on the overall growth rate. If you look at, strictly on the legacy, the traditional assembly and test, I think the growth rate is pretty similar.

Rick Hsu from Daiwa Securities: Hi, happy new year. This is Rick from Daiwa Securities. Just some housekeeping questions. I missed the utilization rates when Ken was talking about. The rate for your wire bonding, and testing and bumping for Q4. Can I have the number again?

Joseph Tung: In Q4, the wire bonding utilization is low-to-mid-80%. For non-wire bonding, it's mid-80s. For testing, it's around 80%. Substrate is at mid-70s level. Going into quarter one, I think the wire bonding will be in mid-70s; non-wire bonding also at mid-70s. Testing will be somewhat at low-70s, whereas substrate will also be at the mid-70 level.

Rick Hsu from Daiwa Securities: Okay. Thank you. That's very clear. For your Q1 outlook, are you going to add any capacity, or just stay basically flattish quarter-on-quarter?

Dr. Tien Wu: Q1, we will add capacity at the specific sectors.

Rick Hsu from Daiwa Securities: Okay. Can you give us some more color about your EMS progress this year? Apart from the three major projects, SiP projects, you had any new development which is more material?

Dr. Tien Wu: No comment on that one.

Rick Hsu from Daiwa Securities: Alright, thank you so much. Happy new year.

Dr. Tien Wu: Happy new year.

Kenneth Hsiang: Our next question will be coming from a caller. Hello, Randy?

Operator: Thank you. The next question comes from Mr. Randy Abrams from Credit Suisse. Go ahead.

Randy Abrams of Credit Suisse: Okay, yes, thank you. The first question, I wanted to, just to get perspective on your outlook. You sound more positive than TSMC, which kicked off with a bit more conservative tone about the first half, and a low...slowdown continuing into second quarter. Could you maybe talk about something happening that's driving more optimism for your business? And if you're also seeing at least better seasonality or normal rebound in the second quarter, as they seemed to be implying a bit of decline continuing.

Joseph Tung: I think in the first quarter, we're entering a normal seasonality, although there may be a bit of an excess in terms of the decline in revenue because we are coming off a very strong fourth quarter last year. Without commenting on other companies' own situation, I think what we're looking at is our own forecast. And also I think the rebalancing of our SiP business showed some very good results. Including that, because of the changes of business terms and business model, we have been able to make this business more linear, i.e. to reduce some of the quality fluctuations in terms of business volume in that particular segment. So, if put everything together, I think we are, I think the business is at normal stage, and as Dr. Wu said, we do see things improving incrementally in all fronts.

Randy Abrams of Credit Suisse: If I can try to ask a follow-up on the SiP business. I know there is a no-comment earlier, but I'm curious if that rebalancing effort is complete, or any risk of one of your projects...like if you still see some risks for some rebalancing (indiscernible) to decline, or do you think we've reached a point of stabilization in SiP where the projects you have now can continue.

Dr. Tien Wu: In terms of rebalancing, I think it's an ongoing effort. From the business result, I think we can see we have made good improvement, good progress, in terms of how do we change the business terms and how do we try to do the loading versus utilization and resources that we invested. Part of the rebalancing effort also includes the new pipeline development. We will not comment specifically on customers, but the SiP business pipeline has been quite strong. We have many customers approaching us in terms of the SiP development. The issues right now is when can we materialize and realize the volume tied to the potential of all of those customers. And this has been the issues that the whole industry is working on. We will not comment on specific customer or specific segments, but the SiP rebalancing effort includes the pipeline development, includes the investment, includes the utilization and resource that we manage seasonality as well as the business terms for the profitability for the longer-term sustainability.

Randy Abrams of Credit Suisse: The final question I wanna to ask, a follow-up on the CAPEX, is if you can go through the priorities for where that higher CAPEX is going across the different segments, and then comment on the developments on fanout? If you see any meaningful projects of volumes this year…into what application, or you think more 2018 events?

Dr. Tien Wu: I think this year you will see a bigger investment into the fanout, into the bumping. Just to give you some background of the fanout— ASE started the fanout back to year 2009 with Infineon. Back then we started the first generation of fanout in the 8-inch format. Over the years, we've been monitoring the market condition of the industry and also the business volume that demands the particular fanout advantage. So in 2016, we have started the fanout and today we have 10,000 wafer per month fanout in production. We do have a strong pipeline demanding ASE to continue to invest in the fanout. In 2017, we do expect the fanout capacity to move from 10,000 to 25,000. We've also started a number of efforts together with our partner throughout the ecosystem to develop the next-generation fanout, namely in the panel format. We're not ready to disclose the panel format milestone and timeline. However, hopefully sometime this year, we'll disclose more detail. So we do have demand in the fanout, to answer your specific questions.

The CAPEX, not only on the fanout, we'll also invest in the other areas such as copper pillar, and also we have customers are interested in different sector of the memory. So we're also making investment into some of the Mobile DRAM. Thank you.

Randy Abrams of Credit Suisse: If I could just ask one quick follow-up. The memory, if you see that, it's been a number of years since the Power ASE, but do you see that um growing into anything meaningful, or is it still gonna be kind of small and niche at the stage to go back into memory?

Dr. Tien Wu: I think this is tied to the question about rebalancing our portfolio. So we have made a number of investment in the wafer-level packaging, in the SiP, in the materials building blocks such as the TDK, the embedded substrate. Our belief is when the memory and the logic, at some point in time, due to the boundary constraint on the wafer cost as well as the form factor, performance and the power arrangement, they will come to a converging point. So what we're trying to do is now apply the investment, including design rule, capacity and the knowledge base and the material building block from the logic, and when and how can we apply to the memory segment. I think the first effort we have announced is the 2.5D project with the US customer in the graphics arena. That's where we combined the graphics processor with the memory. So going forward, I believe in different kind of application you have different power, form factor, and cost requirement. And that also includes the memory sectors. So our job is to seek out particular application at particular device level where the packaging were offered a nice compensation to the overall system requirement, and those are the pipeline development that we're doing now.

Randy Abrams of Credit Suisse: Okay, thanks a lot.

Kenneth Hsiang: More questions from the floor?

Sebastian Hou from Credit Agricole Securities: Hi, happy new year. I'm Sebastian from CLSA. So I have a couple of questions. So the first one is…I wonder, can you give us some hints or implications in terms of what's your outlook for the semiconductor growth and OSAT industry growth for this year. And how does that compare to ASE IC ATM business growth? First question.

Dr. Tien Wu: I think the semiconductor growth rate, I think the market has a lot of numbers flowing around. So right now we have seen a range between 3 to 7%. And we do see the market condition continue to improve so I think the numbers in those category, in those range, sounds reasonable. For the OSAT, if you look at the overall packaging and test, the packaging-test growth rate has always been moving in tandem with the semiconductor, at least for the last fifteen years. In the packaging and test, segregated by the IDMs vs. the OSAT, which is the outsourcing vs. the in-house, and the OSAT growth rate, at least for the last fifteen years, has consistently outgrown the IDM, mainly because the investment and also the product technology migration per the requirement of the semiconductor. So I believe the OSAT growth rate, based on the last fifteen years' track record, will outgrow the semiconductor, even though the overall packaging and test will be identical to the semiconductor. And in terms of the ASE growth rate, I do not believe we can give specific number per comparing to those and the…but our aspiration's there.

Sebastian Hou from Credit Agricole Securities: So, based on your prepared remarks, it seems that ASE is quite confident in growing at least in line with the overall OSAT industry, and Tien only mentioned about your grow…you expect you to gain some market share back for this year. So minimum at least, in line with the OSAT industry growth—which also outgrow the semiconductor industry growth. Is that a fair comment?

Joseph Tung: I think, I don't think Tien is saying about gaining share back. I think we will resume gaining shares, gaining additional shares 'cause we have been gaining shares since the copper wiring (**Dr. Tien Wu:** 2010) effort. That momentum was disrupted for a while when we had the K7 event. And that actually put…delayed or postponed a lot of our NPI, or New Product Introduction, process. I think after two or three years, I think Tien was referring to that all the NPIs are getting back to a normal track. And therefore, it will bring us new efforts and new business going forward, back to a much more normal track. So we're expecting that the gain of new market shares should be resuming.

Sebastian Hou from Credit Agricole Securities: Okay. And my second question is on the SiP business. I understand that you couldn't provide…at this moment couldn't provide too much details right now, but I think Tien and Joseph you early mentioned about your SiP…you expect your SiP business…the profit rebalancing will continue, or profit improvement will continue this year. I wonder, can you give us some clarification on…is it more driven by the contribution from more profitable projects or is driven more by giving up some less profitable projects?

Joseph Tung: I think it's all around, I think. We did discontinue some of the projects that we don't think we can make any justifiable return whatsoever. On the existing projects, there are several things that we've done to rebalance the business, including rationalizing our capacity—that includes the labor and equipment that are required. It requires the streamlining of our overall operation. That involves better renegotiate or try to modify our business terms as well as our business model, with our customers, and better align our revenue with our cost items. So there are a lot of efforts being put into it. And we're seeing pretty good results, and as you can see, from the overall margin improvement, particularly on our EMS side of the business.

Sebastian Hou from Credit Agricole Securities: Okay. And also based on your first-quarter guidance for the EMS business, just follow up on that, it seems like going to imply just down like less than 20% quarter-on-quarter. And this seems, this sequential decline seems to be lower than, or milder than the seasonality we see in the past three years. Is it because our customer concentration has been lowered, or is it anything else we miss?

Dr. Tien Wu: I think we made a comment about how do we manage the loading linearity. Alright? And that was part of the effort that has been ongoing. I think that effort will continue into the Q1.

Sebastian Hou from Credit Agricole Securities: Okay. Thank you.

Joseph Tung: I think part of the rebalancing of our business, kind of reduces the volatility of that business as well.

Sebastian Hou from Credit Agricole Securities: Okay, got it. And a follow-up on your 2016 growth in the IC ATM. Your testing business grew 7% year-on-year. Packaging grew 3% year-on-year. So it seems like testing outgrow the packaging from the revenue perspective—we're not sure about the volume. But is there anything particularly that we need to note here, and how do you expect this kind of growth discrepancy into 2017?

Joseph Tung: I think as I explained to…earlier on. I think if you take the SiP business aside, I think the growth rate is pretty much in line with each other.

Sebastian Hou from Credit Agricole Securities: My last question is on your…I think Tien earlier made comments about investing some in memory. You mentioned about the Mobile DRAM, and also you give us examples about your cooperation with the US customers on the graphics side, which is 2.5D. So it seems like you're investing in the memory packaging technology…I think…more, because of graphic—is that mobile or…just…I wonder, I wonder if we can get some clarification on your…I mean…future, like, plan, in the memory packaging business?

Dr. Tien Wu: I think the best way to look at it is we are treating the…we're not treating the memory-specific segment per se. We're looking at the packaging as an overall offering to all segments. If what so happens to graphics in this memory, if it so happens to the memory segment for particular application that needs the integrated packaging technology, and we'll offer that. So that is the plan right now. And we do sense that the market has that demand—from all sectors, including memory.

Sebastian Hou from Credit Agricole Securities: Okay. So, basically is…you see the…I think you already made comments on the convergence or more integration of the memory and logic.

Dr. Tien Wu: Yes.

Sebastian Hou from Credit Agricole Securities: So basically you're not…you probably will provide more of the integrated packaging, which includes memory, but not the stand-alone memory packaging?

Dr. Tien Wu: Precisely. For example, if you think about the process flow, if ASE needs to do the last step of integration, putting memory onto any of the packaging that we do, and take the full ownership of the last packaging, then it makes sense for ASE to develop the whole thing. Instead of it, we're buying the components, we're developing the logic components, and we're buying the memory components, and we put it together.

Sebastian Hou from Credit Agricole Securities: Okay. Thank you.

Kenneth Hsiang: Questions from the floor? There's no additional questions? I would like to thank you for participating in the fourth-quarter earnings release. Thank you.

Dr. Tien Wu: Happy new year!

<End of Conference>