Advanced Semiconductor Engineering, Inc.
2nd Quarter 2017 Earnings Conference & Conference Call
July 28, 2017
3:00 p.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 second quarter 2017 earnings release. All participants consent to having their voices and questions broadcast via participation of this event.

Please refer to page 1 of our presentation, which contains our safe harbor notice. 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 be providing a recap of the quarter and I will be going over the financial results. Joseph Tung, our CFO, and Tien Wu will be answering questions during our Q&A session. Following the event, our VP in charge of public relations, Eddie Chang, will be available to address the media in Mandarin Chinese.

Without further delay, our Chief Operating Officer, Dr. Tien Wu.

Dr. Tien Wu, Chief Operating Officer of ASE Group: Good afternoon. What I would like to do is to give you a recap for the second-quarter performance, as well as the first-half recap. Also, I would like to give you an indication for the second-half outlook. As you can see, on the chart, our Q2 revenue came in US Dollar 2.189 billion, 3% quarter-on-quarter, and 13% year-over-year. As you all know, second quarter of 2017 has been a challenging quarter. We have seen some inventory adjustment, also mild. We have also seen some demand. Regardless, ASE Group has performed above our expectations. The Q2 net earning came in US Dollar 260 million. Ken Hsiang will give you a more detailed breakdown for the composition of the 260 million US Dollar's net earning.

To recap the first half, revenue for the Group came in US Dollar 4.32 billion, year-over-year represents 13% growth. The first half industry environment, we all know that we've seen some mild inventory adjustment, as well as some slowdown in particular segments. Our observation based on customer input is the inventory status right now for the second half would be in check. It's purely a demand-driven. We do have some healthy products cycles, so right now, for the second half from the ASE Group perspective, we maintain our view of quarter-to-quarter growth. We are optimistic about the demand. We have seen healthy demand in the industrial, automotive. PC is also in check. We believe the wireless would have some new product cycle, and should be healthy to the ASE growth.

Let me give you a recap for the ASE-SPIL transaction update. I'm sure many of you have questions. I would like-to give you a summary. On this page, we have reported all major events through the announcement. Just to give you a recap, November 16 last year, Taiwan has offered approval; May 16 this year, United States have offered approval. We have filing showing the August 25, 2016, we file with the Chinese

MOFCOM. On June 6 of this year, we withdrew and re-filed the same case. And right now, we have no new additional information to report. The only thing we can tell you is, all parties are aggressively going through the process, and hopefully we can get this done as soon as we can. Thank you.

Kenneth Hsiang, Head of IR of ASE Group: Thank you, Dr. Wu.

As Dr. Wu stated in his opening remarks, we expected a soft seasonal environment due to the communications sector and we got it. We even properly foresaw the amount of NTD appreciation impact to our earnings, ah...to our results and margins. We also were able to unlock value within our balance sheet. We generated a sizable gain for our shareholders and as a direct result of that gain, we are required to accrue bonuses within the company. That is the picture our financial results will show.

So before we get into the detail of the financial presentation, we've prepared 2 slides here to go over the impact of NT Dollar appreciation and the investment gain in our second-quarter results. I apologize for not being able to make the cut-off time to the printer for these. I would recommend that you take a picture of the slides as it isn't included in your packet. This slide will also be available from our website.

We've prepared an estimated summary of the impact of NT Dollar appreciation on the Group and our IC ATM and EMS business units. There are 3 tables here. The top table shows the various average US Dollar to NT Dollar exchange rates used for this earnings release—quarter-over-quarter, year-over-year and first-half comparisons. The table on the bottom left shows the impact NT Dollar appreciation had to the Group, IC ATM and EMS gross margins for quarter-over-quarter and year-over-year. And, finally, the table on the bottom right shows our revenue growth rate in US Dollar and NT Dollar formats.

Addendum 2. During the quarter, we entered a transaction to introduce a local partner to help co-develop our Kunshan site's living zone. The gain associated with this transaction was 5.6 billion NT dollars with associated taxes of 1.4 billion recorded in the tax provision. Further, as required by our corporate policy, we accrue bonuses based upon the net income of the company. As such, this resulted in incremental bonus accrual at the Group and IC ATM levels of 0.1 billion in cost of goods sold and 0.3 billion in operating expense. Group and IC ATM had impacts of 0.2 and 0.3 percentage points to gross margin and 0.6 and 1.0 percentage point impacts to operating margin. Payout of the bonuses accrued are still subject to the approval of our board of directors. Once you adjust for tax impact and bonus and the bonus' tax impact, the gain has a 3.9 billion dollar impact to our earnings, or 48 cents per share.

With that, let's start the financial overview.

On a fully consolidated basis, for the second quarter, the company delivered fully diluted EPS of 89 cents and basic EPS of 97 cents. Our packaging and direct materials businesses were up 2 and 4%, respectively, our test business was flat and our EMS business was down 4%. Total revenues for the consolidated Group declined by 1% to $66 billion. However, on a US Dollar basis, revenues grew by 3%. Gross profit increased from 12 billion to 12.1 billion, with consolidated gross profit margin increasing 18.4%. As presented earlier, Taiwan Dollar appreciation had a 1 percentage point impact to consolidated gross margin. Operating expenses increased slightly, by 0.1 billion to 6.9 billion. Our operating expenses, as a percentage of sales, increased from 10.1% to 10.4%. Bonus accrual related to investment gain accounted for 0.3 billion of operating expense. Operating profit and margin for the second quarter were flat, with the first quarter at 5.2 billion and 7.9%. Bonus accrual had a 0.6 percentage point impact to operating margin. During the second quarter, we had a net non-operating gain of 6.2 billion as versus a net non-operating loss of 1.4 billion the previous quarter.

The current quarter's non-operating gain includes the following: net gain related to foreign exchange and hedging activities of 0.6 billion dollars. Net interest expense of 0.4 billion dollars, Gain from investment of

5.6 billion dollars. Income from SPIL, net of purchase price accounting, of 0.4 billion. Stock movement was neutral for this quarter; thus, our ECB had no material non-operating impact during the quarter.

Pretax profit for the second quarter was 11.4 billion, up from 3.8 billion, in the first quarter. Income tax expense was 3.2 billion in the second quarter. This amount includes tax related to the investment gain of 1.4 billion in addition to undistributed earnings tax expense of 0.8 billion. Net income for the second quarter was 7.8 billion.

Group quarterly results on a year-over-year basis. Comparing the current quarter's results versus the same quarter last year, our packaging, direct materials and EMS businesses grew by 1, 22 and 14%, while our test business was down 2%. On a year-over-year basis, our consolidated net revenues increased by 5% and in US Dollar terms, revenues increased by 13%. Our gross profit was down 1% to 12.1 billion. Our gross profit margin declined 1.2 percentage points to 18.4% from the previous year, principally as a result of NT Dollar appreciation. Despite higher EMS product mix paired with seasonally soft IC ATM revenue, our gross profit margin would have actually improved significantly outside of NT Dollar appreciation impact of 2.1 percentage points and investment gain bonus accrual of 0.2 percentage points.

Operating profit was down, with our operating margin declining 1.5 percentage points. This decline was primarily caused by NT Dollar appreciation that flowed through from gross profit, revenue mix shift from a soft communications sector and bonus accrual related to investment gain.

Page 4, IC ATM P&L. During the second quarter, our IC ATM net revenues increased by 2% to 39 billion dollars. IC ATM revenues on a US Dollar basis grew by 5%. Revenues for our IC packaging and direct materials businesses increased 2 and 3% respectively while our test business stayed flat. Gross profit improved to 9 billion dollars from 8.8 billion dollars. Despite NT Dollar having a negative 1.4 and investment gain bonus accrual have a negative 0.3 percentage point impact to gross profit margin, we were still able to improve gross profit margin slightly to 23.1%. Operating expenses inched up to 4.9 billion from 4.8 billion, with our operating expense percentage staying flat at 12.6%. The increase in operating expense is primarily attributable to incremental bonus related to our investment gain. Operating profit improved to 4.1 billion dollars. Operating margin for the second quarter was up slightly to 10.5%. Bonus accrual for investment gain had a 1.0 percentage point impact to IC ATM operating margins.

Page 5, IC ATM year-over-year. Our packaging business and direct materials businesses were up 2% and 20%, respectively; while our test business was down 2% on a year-over-year basis. Total IC ATM revenues inched up 1%. While on a US Dollar basis, IC ATM revenue grew by 9% year-over-year. Gross profit was down 6%, with our gross margin declining 1.7 percentage points. NT Dollar appreciation negatively impacted year-over-year gross margins by 2.9 percentage points. Operating income was down 0.8 billion, with operating margin down 2.3 percentage points. Our operating margin decline was again attributable to NT Dollar appreciation and bonus accrual related to investment gain.

Page 6, Packaging Operations. During the second quarter, our packaging revenue improved 2% sequentially and year-over-year to 31.7 billion dollars. On a US Dollar basis, packaging revenue improved 6% sequentially and 9% year-over-year.

Our packaging gross margin declined 0.1 percentage points, sequentially, and 0.9 percentage points year-over-year. Both of these margin declines were driven by NT Dollar appreciation of 1.4 percentage points sequentially and 2.9 percentage points year-over-year. NT Dollar appreciation and bonus accrual were offset in part by better factory efficiency.

During the quarter, capital expenditures were 161 million US dollars, composed of: wafer bump, fanout and copper pillar equipment, at 78 million US dollars, and common, SiP and wirebond equipment, at 83 million US Dollars.

We exited the quarter with a total of 16,118 wirebonders in operation. Eight-inch wafer processing capacity increased slightly to 98,000 wafers per month and 12-inch wafer processing capacity including bumping, fanout and copper pillar remained increased - increased 12,000 units to 128,000 wafers per month.

Page 7, Test. Test revenues were sequentially flat at 6.4 billion. On a year-over-year basis, test revenues were down 2%. Gross profit margin of 34.2% was up 0.8 percentage points sequentially and down 2.6 percentage points year-over-year. Margins were up sequentially as a result of product mix, offset in part by NT Dollar appreciation of 1.6 percentage points. Margins year-over-year declined primarily as a result of the seasonally soft quarter and NT Dollar appreciation. NT Dollar appreciation had a 3.2 percentage point impact on year-over-year test gross margins. Overall, cost of services for test stayed relatively flat at 4.2 billion dollars sequentially and increasing 0.1 billion dollars year-over-year. Our test utilization rate on a percentage basis remained in the low to mid 70s. CAPEX for the test business was at 47 million US dollars in the first quarter—second quarter, sorry.

Page 8, Materials. Revenues of 2.1 billion were sequentially up 3% and down 13% year-over-year. During the quarter, 928 million was from sales to external customers. This amount is a 4% increase as compared to the first quarter. Our internal self-sufficiency rate remained at 27%. Gross margins were sequentially up by 2.4 percentage points to 14.4%.

Page 9, IC ATM revenue by application. Here is an interesting trend which furthers illustrates the seasonally soft communications segment. The communications market segment declined by 2 percentage points to 48%, and our automotive, consumer & other segment increased 2 percentage points. Our computing segment stayed flat at 11%.

Page 10, EMS. Here you can see the results from our EMS business. During the second quarter, revenues for our EMS business unit was at 28.2 billion, sequentially down 4% but up 14% year-over-year. On a US Dollar basis, revenues were flat quarter-over-quarter and up 22% year-over-year. In the same timeframe, despite the revenue decline, our gross profit was flat with the previous quarter at 3.1 billion dollars and up 22% year-over-year. Our EMS gross margin increased to 11.1% from 10.6% sequentially, up half a percentage point, based on higher margin product mix. Gross margin was up 0.8 percentage points year-over-year. Our EMS business' gross margin should begin to subside as lower margin, higher volume products begin their seasonal climb during the last half of the year.

Page 11. Don't have much commentary here. View it as you wish.

Page 12, ASE Group balance sheet. At the end of the quarter, we had cash, cash equivalents and current financial assets of 48 billion dollars, increasing from 46.2 billion the previous quarter. Our interest-bearing debt decreased from 97.9 billion to 91.6 billion at the end of the quarter. Total unused credit lines amounted to 175.7 billion dollars. Our EBITDA increased by 62% to 19.1 billion. EBITDA per share was two dollars and thirty-five cents. This was helped out significantly by our investment gain recognized.

It should be noted that on Wednesday, July 26, we delivered notice of our intent to redeem our zero-coupon convertible bond due 2018. These bonds will be redeemed on September 6, 2017, at 100% of the principal amount. The last day for bondholders to request conversion will be August 30, 2017. As of July 15, 24% of these bonds have been converted to common shares; 313 million shares remain to be converted.

Page 13, Capital expenditures. Machinery and equipment capital expenditures for the second quarter totaled 213 million US dollars, of which 161 million were used for packaging operations, 47 million in testing operations, 4 million in EMS and 1 million for internet - interconnect materials. In US Dollar terms, EBITDA for the quarter was 633 million US dollars. We continue to be committed to our capital expenditure discipline. We continue to see our capital expenditures for the year to be below our depreciation and amortization expenses.

If you look at the whole picture, the company delivered improved quarter-over-quarter results in a slow-moving, inventory-chewing environment. Nearly everything was marginally better—revenues, gross margins and operating margins. But, as we expected, NT Dollar appreciation clouded those results. And, making our second-quarter performance even less obvious, our investment gain triggered gross and operating margin charges related to bonus.

For what ASE does, we can afford to be neutral in our view of which end product does well or does poorly. As the worldwide leader in outsourced assembly and test, we know that products will become more complicated. We know that transistor densities within a defined set of space will increase. We know that the connections from the transistor level out into the real world will increasingly become more complicated. Complexity, density, technological advancement are ASE's friends.

Whether it be the new-new smartphone, artificial intelligence, self-driving vehicles or the third, fourth or even fifth coming of IoT, there are commonalities in the types of packaging necessary to deliver these products. We choose to focus on the broad packaging and testing technologies that service these product trends in the future—SiP, copper pillar, fanout, along with plain old wirebonding, are part of the necessary array of solutions available for our customers to provide the next new thing.

Looking into the third quarter, there are exciting products on the horizon. Here is an interesting fact, actually: from an analysis of sales numbers, there is no difference between a consumer eagerly waiting to buy something versus a consumer not interested in buying anything at all. Both of these individuals have not purchased anything. But, one will and one will not. And, yet, they look the same. And, when we and the industry look at the composition of potential consumers in places like the US and China, it is difficult to figure out one from the other.

With that said, we believe there to be a pick-up coming up. However, we believe our simulations show a wider range of potential results. This is where we generally say things lack a lot of clarity. We do expect for the soft communications environment to subside. We also don't expect NT Dollar appreciation to make a major impact to our results, but of course that is not within our control. We are cautiously optimistic our third quarter should be good.

So, that said, our third quarter 2017 IC ATM business should be a notch or two below third quarter 2016 levels. Our third quarter 2017 IC ATM gross margin should be similar to second quarter 2016 levels. Our third quarter 2017 EMS business should be similar to the average of the third and fourth quarter 2016. Our third quarter 2017 EMS gross margin should be similar with the average of the first and second quarter of 2016.

Before we start our Q&A, I would like everyone to note that we can not provide any further details in regards to our discussion, if any, with regulatory entities as it relates to our ongoing transaction with SPIL. The company appreciates if we do not have further questions related to such. Alright? Thanks.

Randy Abrams of Credit Suisse: Yes, thank you. It's Randy Abrams, Credit Suisse. The first question, I wanna ask if you're seeing changes in seasonality for second half? The guidance implied kind of mid-to-high single-digit growth for IC ATM. Also, I think EMS looks a bit more flattish than the prior couple of years. So, if you're seeing a shift in seasonality? And, maybe you can elaborate on the wider range of outcomes, just some of the volatility you're seeing?

Dr. Tien Wu: We're not seeing different seasonality, if you're asking between this year versus the previous few years. So I think the third quarter, I think we have provided some implied guidance that you can probably crunch out the numbers.

Randy Abrams of Credit Suisse: I guess what I've asked was - are you seeing maybe then a bit softer than prior year? Like last year, I think we were some over 10%. In the past couple years, EMS - it looked like it had a sharper ramp in third quarter. So is it either softer, or do you see potentially, say, a bit more shifting in the fourth quarter than normal?

Dr. Tien Wu: I think the industry has experienced the first half, where we do have some slower demand. In other words, if the second half is mainly product-driven, then we need to be careful. We can only speculate it to a certain extent. Right now, based on the customer forecast, based on internal simulation, and this is the set of implied guidance that we can come up with. In terms of the overall demand for any segment, I think it's fair to use the whole-year number instead of using the first-half number.

Joseph Tung, CFO of ASE Group: I think, as Tien mentioned, we don't see any significant changes in terms of seasonality. We are seeing some ramp-up in both IC ATM as well as EMS. In terms of magnitude, I think we're coming off with a slower first half, and we are seeing some softness in some segment, market. Therefore, the overall momentum seems to be impacted a little bit, but more so on the EMS. But I think EMS is really not change of seasonality, but more toward the, our effort in rebalancing our SiP business, which have, we have been more selective in terms of what business we wanna get into, and that has an impact on the overall growth momentum.

Randy Abrams of Credit Suisse: Okay. A follow-up on the EMS rebalancing, the first half, and actually gross margins have done very well, to pick up your guiding. It looks like sales have been mild, but more of gross margin impact. Is it just more of the mixed profile that second half you'll have more SiP and less of the traditional EMS' higher margin?

Joseph Tung: That's correct. I think going into the second half, I think particularly the EMS business - the SiP business will start to pick up, and it has an impact on the margin.

Randy Abrams of Credit Suisse: Okay. The other question I wanted to ask is just your take, I guess, in SPIL in the market. It looks like their sales have been a bit slower, like sales are probably down slightly year-on-year, and gross margins they reported are down about 4 or 5 points from where they were, say, a year or two ago. Are you seeing change, just, with this deal kind of going on for a while, changes in just how it's behaving in the market, just from a competitive position?

Joseph Tung: I don't think we can speak for SPIL. I think you really need to ask them those questions.

Randy Abrams of Credit Suisse: Okay. And the final question, I just wanna ask, when you mentioned softness in the market, I think there's some softness in Android in the first half. If maybe you can point to any areas you're seeing softness continue as you go toward second half?

Dr. Tien Wu: We're not gonna comment on the product, alright? Thank you.

Randy Abrams of Credit Suisse: Thanks a lot.

Kenneth Hsiang: Name and company.

Rick Hsu of Daiwa Securities: Yeah, hi, my name is Rick Hsu, from Daiwa Securities. Good afternoon. So, my first question, again, is a house-keeping question. So, among your wirebonding testing and bumping, what capacity was new-add and retired for each segment in second quarter?

Joseph Tung: Let me dig out the numbers. I think for bonders, we added 205. We retired 50 or so?

Kenneth Hsiang: Yes. 50**.**

Joseph Tung: Alright. And testers?

Kenneth Hsiang: Added 104, deleted 90, ended the quarter at 3,796, with 1,184 consigned.

Rick Hsu of Daiwa Securities: Okay.

Joseph Tung: Okay. Your next question is utilization, right? (**Ken Hsiang:** Bumping.)

Rick Hsu of Daiwa Securities: That's right, that's right. Thank you.

Joseph Tung: Bumping. Eight-inch, we were at 98.

Kenneth Hsiang: 97.8. And then 12-inch, at 128, a hundred twenty-eight thousand.

Rick Hsu of Daiwa Securities: Yeah, and utilizations?

Joseph Tung: Okay. In terms of packaging, we were at above mid-70s, and for test, we were at low-70s. Substrate, we were at mid-70s, in second quarter.

Rick Hsu of Daiwa Securities: Alright, thank you. So, what about the utilization rate, utilization rate for second qua - sorry, sorry, for Q3?

Joseph Tung: Q3, we're expecting packaging to be at low-80s, testing at high-70s to low-80s, whereas substrate, it will be inching up to low-to-mid 80s.

Rick Hsu of Daiwa Securities: Alright. Thank you so much. The second question is, if I look at the guidance from TSMC, it looks like the foundries will likely see an above-seasonal demand for Q4, and, although Q3 is kind of so-so. Will you guys see the same trend for your Q4 business outlook - above seasonality?

Dr. Tien Wu: We do believe we'll see a quarter-to-quarter growth in Q4, compared to Q3. At this point in time, we do not see a strong deviation from the normal seasonality. But that could be due to the product timing.

Rick Hsu of Daiwa Securities: Alright. Thank you so much.

Joseph Tung: We do have a different customer base and also product mix with foundry upstream TSMC, in particular. So I think the percentage doesn't really represent the true picture if you make the apple-to-apple comparison.

Rick Hsu of Daiwa Securities: Alright, thank you, no further questions from me.

Ken Hsiang: Any more questions? Charlie. Name and company.

Charlie Chan of Morgan Stanley: So my first question is on your fanout business. Can you give us some guidance about your current capacity? What kind of semiconductor projects that you are doing for fanout now? And for next year, what kind of growth you are expecting from this business? Thanks.

Dr. Tien Wu: The current fanout capacity on 12-inch right now is about 15,000. We will continue to grow the fanout capacity throughout the year. At this point of time, I will not give you the precise number. It really depends on the utilization as well as the customer adoption rate. I will not be able to comment on the specific customers, but we do have a good portfolio of customers. In other words, we do have more than five customers signing up for those capacity. And right now if you're asking the utilization, the utilization rate is quite healthy.

Charlie Chan of Morgan Stanley: Okay, thanks. So I know it's a little bit sensitive talking about customer, but in general what kind of semiconductors? For example, the industry's talking about power management IC, RFIC, even memory. So what kind of semiconductor products you are doing by this fanout service now?

Dr. Tien Wu: It's a combination of high-performance computing, as well as the wireless. And in terms of the number of chips as was to composition has all variety. I think the beauty of fanout is you can really mix the different node as well as the functionality, and you can really have a concentrated, hydrogenous integration at a low cost. So I think that was the whole premise of fanout.

Charlie Chan of Morgan Stanley: Okay, so on that fanout technology, I know there are some discussion regarding technical issues, for example using the panel-level carrier, you know the yield rate is still quite low. And there is some patent issue—for example, the key IP is owned by Infineon; now it's belonged to Intel, right? So how ASE solve this…all these problem? And what is the key advantage that ASE has now?

Dr. Tien Wu: I think what we are ready to disclose at this point in time is that fanout is not a stand-alone process. In other words, we talk about the capacity for the 12-inch fanout. We are implicitly informing our customers that the fanout will be a platform of solution. In other words, the current stage of the 12-inch, of a particular process node, and that would be scalable, and that would be extended into a finer node, where those IP issues you just mentioned will become a concern. Now, on ASE end, I think we already give a very clear indication: fanout is a major platform solution that ASE is driving. So we're making great strides. We're not ready to disclose any detail, but I'm pretty sure in the next coming year or two, and we will like to disclose the whole portfolio of the fanout solution, including the 12-inch, including the panel, and some of the IP issues, some of the patenting issues, some of the design tool issues. All of these will be part of the overall solution that we're presenting to all of our customers. But it is a major platform that we're driving.

Charlie Chan of Morgan Stanley: Okay, thanks. So since the company is quite well-prepared, well-planned for this fanout trend, right? So, this is my main question to you, Dr. Wu, right? So in the coming years, how ASE's going to outgrow same industry, or the backend industry organically? So what kind of service or product line you think they can make the company to outgrow?

Dr. Tien Wu: Alright, if I look at the last ten years' average, the ASE's growth has been 2X of semiconductor. And that number has been quite steady. I've presented this a few times. And I think the recipe for a continued growth with reasonable marginal return will be based on innovation technology. I think Ken Hsiang already talked about it. We do believe that the transistor, the integration, the power consumption will be an issue. We also understand that from the process…the wafer process perspective, the investment becomes more hefty over time. So the scalability, you know, of the Moore's Law as well as how can packaging augment the Moore's Law, which is the so-called "more than Moore", then ASE is coming up with portfolio solutions, and fanout being one of them. We also have the embedded solution. We also have the 2.5D. So, all of these will become the building block for the innovation, for the readiness of the next wave of application. Mind you, we do not know exactly when the next wave will hit us, and which next wave will be ahead of the other next waves. But right now, IoT, the automotive, the VR, and the new generation of high-performance computing, the new generation of high-bit memory—there's a combination of application that is in the market place.

The good thing about ASE is, you know, if you really look at the whole industry and OSAT, I believe we are the best position from a technology perspective. We're also the best position from a customer portfolio perspective. We also have the more in-depth engineer at the system level as well as the IC level. We also have the widest partnership in all geography with all segments including the foundry, design house, as well as the EDS company. Going forward, this is about global business; this is about technology innovation; this is about partnership. I think in all three matrixes, ASE is very well-positioned. Then the only question is how fast we scale, and during the scalable process, how can we maintain the margin, rebalance, or calibration. And I think this is the primary challenge of ASE Group as well as for the rest of the world. But so far based on the last few years' performance, we have been on track, in terms of partnership, technology development, scalability growth as well as rebalance of our product portfolio to maintain a certain margin at a certain cost curve. Alright? I hope that offers you some outlook.

Charlie Chan of Morgan Stanley: Yeah, it's very helpful. So I will have some follow-up but I will back to the queue first.

Dr. Tien Wu: Thanks.

Ken Hsiang: Do we have any more questions? Thank you very much. I don't have any…I don't know if it's a conference issue, but I don't have any questions online either. Thank you very much for attending the second quarter earnings release.

Dr. Tien Wu: Have a good weekend.

<End of Conference>