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HIMX - Q1 2019 Himax Technologies Inc Earnings Call

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PRESENTATION

Operator

Good morning, ladies and gentlemen, and welcome to the Himax Technologies First Quarter 2019 Earnings Conference Call. At this time, all participants are in a listen-only mode. Later, we will conduct a question-and-answer session and instructions will follow at that time. (Operator Instructions) As a reminder, this conference call is being recorded.

I would now like to turn the conference over to your host, Mr. John Mattio, US Investor Relations. Sir, you may begin.

John Mattio

Thank you, operator. Welcome everyone to Himax's first quarter 2019 earnings call. Joining us from the company are Mr. Jordan Wu, President and Chief Executive Officer; and Ms. Jackie Chang, Chief Financial Officer.

After the company's prepared comments, we've allocated time for questions in the Q&A session. If you have not yet received a copy of today's results release, please email jmattio@lamniaintl.com or access the press release on financial portals or you can download a copy from Himax's website at www.himax.com.tw.

Before we begin the formal remarks, I would like to remind everyone that some of the statements in this conference call, including statements regarding expected future financial results and industry growth, are forward-looking statements that involve a number of risks and uncertainties that could cause actual events or results to differ materially from those described in this call.

Factors that could cause actual events or results to differ materially from those described in this call include, but are not limited to, general business and economic conditions, the state of the semiconductor industry, market acceptance and competitiveness of the driver and non-driver products developed by Himax, demand for end-use application products, the uncertainty of continued success in technological innovations, as well as other operational and market challenges and other risks described from time to time in the company's SEC filings, including those risks identified in the section entitled Risk Factors in its Form 20-F for the year ended December 31, 2018, filed with the SEC in March 2019.

Except for the company's full year of 2017 financials, which were provided in the company's 20-F and filed with the SEC on March 28, 2019, the financial information included in this conference call is unaudited and consolidated and prepared in accordance with IFRS accounting. Such financial information is generated internally and has not yet been subjected to the same review and scrutiny, including internal auditing procedures and external audits by an independent auditor, to which the company subjects its annual consolidated financial statements and may vary materially from the audited consolidated financial information for the same period. The company undertakes no obligation to publicly update or revise any forward-looking statements whether as a result of new information, future events or otherwise.

Now, I'd like to turn the call over to Ms. Jackie Chang, Jackie, the floor is yours.

Jacqueline Chang - *Himax Technologies, Inc. - CFO*

Thank you, John, and thank you, everybody for joining us. Our outline for today's call is first to review Himax's consolidated financial performance for the first quarter, followed by the second quarter 2019 outlook. Jordan will then give us an update status of our business, after which we will take questions. We will review our financials on both IFRS and non-IFRS basis. The non-IFRS financials exclude share-based compensation and acquisition related charges.

Our fourth quarter 2019 revenues, gross margin and EPS all met our guidance issued on February 19. For the first quarter we recorded net revenues of $163.3 million, a decrease of 14.5% sequentially and an increase of 0.3% year-over-year.

The first quarter is traditionally the bottom of the year in terms of sales because it has fewer working days due to the Lunar New Year holidays. Customers' inventory correction on smartphone and the worldwide sluggish automotive sales also negatively impacted our first quarter revenue.

Gross margin was 22.6%, down 170 basis points sequentially due to less favorable product mix. IFRS loss per diluted ADS were $0.013, in line with the guidance range of $0.01 to $0.03. Non-IFRS loss per diluted ADS were $0.011, in line with the guidance range of $0.008 to $0.028.

Revenue from large display drivers was $70 million, down 5.7% sequentially, and up 18% year-over-year. The sequential decline reflected the impact of seasonality, while the year-over-year increases was driven by higher ASP and more 4K TV shipment. Large panel driver ICs accounted for 42.9% of our total revenues for the first quarter, compared to 38.9% in the fourth quarter of 2018 and 36.4% a year ago.

Revenue for small and medium-sized display drivers came in at $67.6 million, down 15.4% sequentially and down 5.8% year-over-year. The driver ICs for the segment accounted for 41.4% of total sales for the first quarter, as compared to 41.8% in the fourth quarter of 2018 and 44% a year ago.

Revenues for this segment in the first quarter declined by mid-teens as anticipated due to seasonality, declining cars sales across all major markets, and most importantly, the lackluster demand of the global smartphone market.

Sales into smartphones were down 25.5% sequentially and down 4.1% year-over-year. The sequential decline was mainly caused by lower TDDI shipment and ASP reflecting weak smartphone market and a major TDDI customer's inventory correction. The year-over-year decline was due to the much decreased shipment in traditional driver IC for smartphone, down close to 50%, as the traditional driver IC is being quickly replaced by TDDI and AMOLED but offset by higher TDDI sales. Display drivers for tablet and other consumer products were down 4.2% sequentially and 27.8% year-over-year due to weak overall market demand.

Our driver IC revenue for automotive applications reached $28.5 million, down 13.4% sequentially but up 14.5% year-over-year, accounting for 20.7% of our total driver IC revenue. The sequential decline partially reflected seasonality but was largely driven by the weak car sales momentum across all major markets.

Another attributing factor is the new European Union Emissions Regulations effective September last year, which has since caused car sales to slump for several major European automakers.

Revenues from our non-driver businesses were $25.7 million, down 30.2% sequentially and down 19% from last year. Non-driver products accounted for 15.7% of our total revenues, as compared to 19.3% in the fourth quarter of 2018 and 19.6% a year ago. Lower shipments of timing controllers have attributed to both the sequential and year-over-year decline. The WLO anchor customer's lower seasonal demand also contributed negatively to the sequential decline, but on a year-over-year basis WLO shipment almost doubled.

Our IFRS gross margin for the first quarter was 22.6%, down 170 basis points sequentially and up 10 basis points from the same period last year, both a result of product mix.

Our IFRS operating expenses were $40.2 million in the first quarter, down 2% from the preceding quarter and up 1% from a year ago. The slight year-over-year increase was primarily a result of increased depreciation expense, mainly from the new building and equipment needed to support the 3D sensing business. However, salary expense came down from last year due to NT dollar depreciation against US dollar as we pay the bulk of our employee salaries in NT dollars. Likewise, on a sequential basis, salary and R&D expenses also came down while depreciation charge also went up for the same reason.

IFRS operating margin for the first quarter was minus 2.1%, little change from minus 2% in the same period last year, but down from 2.8% in the prior quarter. The sequential decrease was primarily a result of lower sales and gross margin, offset by lower operating expenses. The year-over-year decline was a result of higher operating expenses.

First quarter non-IFRS operating loss was $2.9 million, or minus 1.8% of sales, versus non-IFRS operating loss of $2.9 million, or minus 1.8% of sales for the same period last year and down from 3% a quarter ago. IFRS loss for the first quarter was $2.3 million, or $0.013 per diluted ADS, compared to profit of $8.5 million, or $0.049 per diluted ADS, in the previous quarter and IFRS loss of $2.8 million, or $0.016 per diluted ADS a year ago. Part of the sequential profit decrease was a result of lower sales and lower gross margin, offset by lower operating expenses. Another factor causing the profit decline is the last quarter's revaluation gain on investment of $2.9 million, accounting for $0.017 per diluted ADS, coming from an AI startup investment made in November 2017 that we reported during the fourth quarter 2018 earnings call. Excluding the investment gain, IFRS profit for Q4 2018 would be $5.6 million or $0.032 per diluted ADS.

First quarter non-IFRS loss was $2 million, or $0.011 per diluted ADS, compared to non-IFRS profit of $8.7 million, or $0.05 per diluted ADS last quarter and non-IFRS loss of $2.6 million or $0.015 per diluted ADS the same period last year. Excluding the above-mentioned investment gain, non-IFRS profit for fourth quarter 2018 would be $5.8 million or $0.033 per diluted ADS.

Turning to the balance sheet. We had $108.2 million of cash, cash equivalent and other financial assets as of the end of March 2019, compared to $151.9 million at the same time last year and $117.7 million a quarter ago.

On top of the cash position, restricted cash was $164.3 million at the end of the quarter, same to the preceding quarter and up from $147 million a year ago. The restricted cash is mainly used to guarantee the company's secured short-term borrowing for the same amount. We have $40 million unsecured short-term loan at end of Q1 2019. We expect the loan balance to rise further next quarter primarily due to land payments, which will be explained a bit later in the CapEx discussion.

Our inventories as of March 31, 2019 were $189.3 million, up from $162.6 million a quarter ago and up from $148 million at the same time last year. Accounts receivable at the end of March 2019 were $176.2 million, as compared to $166.6 million a year ago and $189.3 million last quarter.

Days sales outstanding was 97 days at the end of March 2019, as compared to 92 days a year ago and 95 days at end of the last quarter. As highlighted in the last earnings call, in response to capacity shortage of foundry and certain packaging material, we had to keep the inventory level higher than usual. Looking forward, given the prevailing uncertain market conditions we have started to control our inventory level, targeting to bring it down to a more normal level.

Net cash outflow from operating activities for the first quarter was $22.1 million as compared to an inflow of $2.3 million for the same period last year and an inflow of $2.3 million last quarter. Net cash outflow from additional inventory buildup, mainly for driver ICs including TDDI, amounted to $31.5 million during the quarter. As highlighted above, in response to capacity shortage of foundry and certain packaging material, we had to keep the inventory level higher than usual.

First quarter capital expenditures were $6.3 million, versus $18.6 million a year ago and $5.2 million last quarter. The investment in CapEx design tools and R&D related equipment for our traditional IC design business amounted to $2.4 million in the quarter. The remaining $3.9 million was for the ongoing payments for the new buildings construction, WLO capacity expansion and installation of active alignment capacity to support our 3D sensing business.

The second quarter CapEx for our expansion project will reach the peak, budgeted to be $33 million, including $27.7 million for the land purchase. By then, we will have concluded substantially all the CapEx payment for the expansion project with just $3 million left to be made.

As of March 31, 2019, Himax had 172.1 million ADS outstanding, unchanged from last quarter. On a fully diluted basis, the total ADS outstanding are 172.6 million.

For the second quarter, we expect revenue to increase around 2% to 7% sequentially. Gross margin is expected to be around 19.5% to 20%, depending on our final product mix.

IFRS loss attributable to shareholders are expected to be in the range of around $0.02 to $0.035 per diluted ADS, based on 172.6 million outstanding ADSs. Non-IFRS loss attributable to shareholders are expected to be in the range of $0.018 to $0.033 per diluted ADS based on $172.6 million outstanding ADSs.

I will now turn the call over to Jordan.

Jordan Wu - *Himax Technologies, Inc. - Founder, CEO, President & Director*

Thank you, Jackie. As Jackie just mentioned in the guidance, we expect the second quarter gross margin to decline around 3% with slightly increasing revenues from the previous quarter. We fully realize that this quarter will mark a second consecutive quarter that we will make a bottom line loss, the first in our corporate history.

While we remain committed to our big picture strategy, we are actively taking measures to get back to steady profitability. I will talk touch on a few of those areas as I go through the outlook discussion below.

The second quarter gross margin will decline for three major reasons. Firstly, the higher material cost of the large panel driver IC resulting from an industry-wide material shortage will lead to lower gross margin.

Our large-size panel customers are going through a difficult period of increasing supply and lackluster demand right now. We thought it was prudent not to pass on the rising material cost to our customers during this quarter as we used to for the consideration of long-term relationship. Secondly, the gross margin of the WLO business would also fall because of reduced shipment per our end customer's demand, which will lead to lower capacity utilization. We do expect the gross margin of WLO to return to a much-improved level in the second half when the orders are expected to come back strongly, reflecting the anchor customer's demand seasonality. I will elaborate on this a bit later in the WLO [ph] business discussion.

Finally, smartphone segment gross margin would likely shrink a little for product mix change. We anticipate significant sequential increase in the second quarter shipment of TDDI for lower-end market and certain traditional discrete driver IC for smartphones. Both will generate gross margins lower than the corporate average. Again, I will provide more detail later.

Based on our Q1 results and Q2 outlook, our first half '19 revenue would experience a year-over-year decline as the current market conditions have not shown signs of improvement. The uncertain market conditions, including global economy, oversupply of TV panel markets, weak global smartphone demand and automotive sales, have led to pricing and cost pressure for us.

Customers' ongoing downward inventory adjustment in smartphone TDDI was also outside of our expectation. However, looking ahead into the second half, among our major product segments, we expect TDDI and WLO shipments to increase significantly, offset by shipment decline of the traditional discrete driver IC for smartphones and automotive display drivers. Automotive display drivers are expected to stay relatively weak following several years' strong and continuous growth. I will talk more about this product line later.

Last but not least, we continue to tighten our cost and expense controls. As Jackie mentioned, we are in the process of bringing inventory down from an unusually high level, which was built up in response to material shortage.

We will begin to see a reduction in inventory days and in absolute value in Q2. We are also putting close control in R&D expenses, targeting to continuing R&D activities across our strategic areas without raising R&D expenses from the last year.

These include next generation display driver technology for 8K TV and AMOLED, 3D sensing for both mobile phone and non-mobile phone applications and AI-based ultra-low power smart sensing solutions.

Total OpEx for 2019 is budgeted to be at around the same level as that of the last year excluding the anticipated increase of $4.9 million in depreciation arising primarily from the construction of the new fab.

Now let me give you further insights behind our Q2 guidance and trends that we see developing in our businesses. As usual, let us start with the last panel driver IC business update. I just explained the background behind the second quarter margin pressure for a large panel driver IC business namely a panel market which is in over-supply and COF, the material needed to make large panel driver IC, which is in shortage. Q2 revenue in this segment is expected to decrease by mid-teens sequentially with lower gross margin, as mentioned earlier.

While the large display market is still clouded with concerns of oversupply and waning demand, our current forecast for the second half is showing signs of revenue rebound, thanks to certain of our product upgrades and early design wins and, most importantly, our efforts to secure additional COF capacity, which is leading to more allocation from our panel customers and even more design wins. The margin for large panel driver will likely still be under pressure during the second half but we are working on ways to improve the costs and margin.

On technology development, I am pleased to report that we have started shipping 8K TV related ICs to one of our industry leading panel customers and expect a few more to come during the second half when more TV brands are scheduled to launch new 8K TV models

Having said that, 8K TVs are still expected to hold a small share in the TV market because 8K content and transmission technology have not yet matured. But 8K TV is a strategic area for Himax as it will boost demands for higher LCD driver ICs and timing controller contents over the next few years.

Now let's turn to the small and medium sized display driver IC business. Declining sales into the smartphone market has been the key factor causing our P&L pressure over the last few quarters, especially considering that smartphone market had been the number one contributor to our top and bottom lines for many years in the past.

We are determined to take back market share by securing more Tier 1 customers with the existing TDDI products and advancing our technology to win the next generation TDDI market.

With that, now let me start the small and medium sized display driver IC business update from a quick review on the first quarter's smartphone business. Reflecting weak smartphone demand and a bigger-than-expected inventory correction by a major Chinese end customer, our first quarter TDDI shipment declined more than 30% sequentially. The fluctuation is high due to our rather concentrated customer base for the time being. Despite the unsatisfactory Q1 result, we made good progress in diversifying into other leading end customers, winning more strategic projects and starting to make production shipment of lower-end HD+ TDDI chips, primarily for a leading Korean smartphone end customer.

As we said in the last earnings call, because of capacity constraint, we chose to limit our TDDI shipment to only higher end full HD+ projects previously as they yield higher revenue and better margin. We are particularly pleased with the expanded partnership with the leading Korean smartphone customer, which has been a partner of ours for long time. We expect more shipments for other leading smartphone makers to begin in the second half and possibly expand our end product coverage of TDDI shipments to tablet market. Such new design-wins, new end customers and new markets will contribute to our TDDI sales in Q2 and a strong growth for the remainder of 2019.

Looking ahead, we are in the forefront of offering new generation TDDIs, which will further enable narrow bezel panel design without the usage of COF packaging. As I just described earlier, COF material not only is costly, but also suffers from serious supply constraint. This will provide a new option for smartphone design going forward. We are working on several design-in projects with our new generation TDDI with more customers in evaluation stage right now.

I just mentioned that we could potentially start shipping TDDI chips for tablet market within this year. In fact, it won't take long to also see the adoption of TDDI in automotive display, tablet with active stylus and even 2-in-1 notebooks. We are in the frontier in terms of exploring these opportunities and engagement with customers.

Our TDDI for automotive display has started production shipment in Q1 to a leading panel customer for the use of a prominent car maker. The initial volume started small but the pipeline for next year's mass production looks promising. This could potentially resume the growth of our automotive segment and strengthen its gross margin amidst the stagnant car market worldwide.

On tablet, our TDDI chips are under verification by panel makers. We expect revenue contribution to start from Q4 this year with a number of leading end customers. Furthermore, we are leading the industry in TDDI with active stylus by partnering with the world's leading brands for pen tablets and interactive pen displays. While both segments are smaller than smartphone in terms of volume, they do represent growth areas for our TDDI solutions in the near future. In addition to TDDI, we've also seen a stronger second quarter for traditional discrete driver ICs in smartphone segment. Our design-win with a major Chinese smartphone maker went into production in March and there shipment is set to expand strongly in Q2 per the customer's forecast. Notwithstanding this rebound, the trend of the traditional discrete driver addressable market is being quickly replaced by TDDI and AMOLED in smartphone will continue. We expect the traditional discrete driver for smartphone to decline substantially in the second half of 2019. Combining significantly more shipment of low-end TDDI and discrete smartphone driver, our Q2 sales into the smartphone market is expected to increase by close to 50% sequentially. However, such growth in revenue will lead to lower overall corporate gross margin as both products generate lower gross margin than the corporate average.

On AMOLED product line, we have been collaborating closely with leading panel makers across China for product development. We believe AMOLED driver IC will be one of the long-term growth engines for our small panel driver IC business.

In automotive display market or in automotive display segment, as Jackie you reported earlier, our panel customers were greatly affected by the weakened worldwide automotive market demand during the first quarter. Many were forced to reduce shipment to major European makers due to the new and tightened European Union emission testing rules. Suffering from high inventory, our panel customers are foreseeing a sequential decline of shipments in the second quarter for automotive segment. As Himax commands more than 30% of the global automotive display driver IC market, such wide range inventory correction has had a significant impact on our business. Q2 sales into this segment is likely to decrease by mid-single digit sequentially. Looking forward, on the backdrop of a feeble car market, the penetration of displays into vehicles is also maturing. Therefore, we may not be able to see the same kind of growth that it enjoyed in the past several years from automotive segment.

However, we are still the leader in this space and we are leading the market in the introduction of new technologies including TDDI, AMOLED and local dimming timing controller. We believe such new technologies will rejuvenate the industry and bring our automotive sales back to a growth trajectory. Our tablet and consumer electronics businesses represented around 10% of our total sales in the first quarter. Although the overall market remain weak, we expect tablet business to rebound during Q2 for additional shipment to a leading end customer and the white box market, as well as improved foundry support for this segment.

As mentioned earlier, we also started to provide OEMs with samples for our world leading in-cell TDDI that supports the use of active stylus for tablet in the first quarter. We will report progress in due course. Combining tablet and consumer electronics businesses, we expect a sales increase of around 20% sequentially in the second quarter. For second quarter small and medium-sized driver business, we expect revenue to increase by more than 20% sequentially.

Now let me share some of the progress we've made on the non-driver IC businesses in the last quarter. First on 3D Sensing business update. We continue to participate in most of the smartphone OEMs' ongoing 3D sensing projects covering structured light and time-of-flight or ToF. At present, Android smartphone's front facing 3D sensing adoption is still hindered by the high hardware cost, long development lead time, and the lack of killer applications. Instead of 3D sensing, most of the Android phone makers have chosen the fingerprint technology, which can achieve similar phone unlock and online payment functions with a much lower cost.

Reacting to their lukewarm response, we started to work on the next generation SLiM 3D sensing total solution, aiming to leapfrog the market by providing high performance, easy to adopt and yet cost friendly total solutions, targeting the majority of Android smartphone players. Currently

we have completed the feasibility study for our Gen 2 SLiM solutions covering detailed specifications, performance and cost. Our next step is to seek feedback from Android smartphone OEMs. With that, we will then determine the way forward for our 3D sensing total solution strategy. For the avoidance of doubt, we remain and are committed to be the leader in the optics for structured light 3D sensing where we are currently engaged in multiple development projects from multiple customers.

Being a leading provider of 3D sensing technology, we are also an active participant in smartphone OEMs' design projects for new devices involving ToF technology. We see ToF building momentum in such use cases as advanced photography, distance or dimension measurement and 3D depth information generation for AR. Unlike structured light 3D sensing, where we provides total solution or just projector module or optics depending on customers' needs, with ToF, we will only focus on transmitter module by leveraging our WLO related expertise. I had mentioned previously that 3D sensing can have a wide range of applications beyond smartphone. We have started to explore business opportunities in various industries that are typically less sensitive to cost and always require a total solution. Among such projects is a collaboration effort with Kneron, an industry leader in edge-based artificial intelligence in which we have made an equity investment, to develop an AI-enabled 3D sensing solution targeting security and surveillance markets. We are also working with partners/customers on new applications covering home appliances and the manufacturing.

As to our CapEx investment for 3D sensing production capacity, while we still need to absorb the associated cost in the short term, the capacity is a strategic investment necessary to substantiate engagement with customers. The production capacity, which is primarily WLO fab, can be used not only to support our own SLiM total solution, it is essential for us to provide optics products to customers for their structured light or ToF 3D sensing projects. Furthermore, the WLO capacity can be used for various other product areas including, but not limited to, waveguide for AR goggle devices; where it is still getting frequent enquiries from top tech companies.

As a matter of fact, having some readily available production capacity has become a competitive advantage to participate in leading customers' new design projects at a time when the smartphone product cycle, and therefore the design lead time is getting shorter. With the capacity, coupled with our unique know-how in sophisticated diffractive optics design, we are often the partner of choice when customers are exploring advanced optical challenges

Next is some discussion on our WLO business. As anticipated, the first quarter WLO revenue declined substantially due to an anchor customer's lower seasonal demand. We expect further reduction for the second quarter. The much-reduced shipment will lead to lower capacity utilization and therefore negatively impact our Q2 gross margin.

Himax WLO business has been largely dependent on one anchor customer for the past couple of years, despite good design-in pipelines and collaboration projects with multiple customers. We were informed of a product replacement decision by the anchor customer after our last earnings call on February 19, 2019. Foreseeing that WLO shipment volume in 2019 will decline significantly starting from the third quarter, we disclosed the information in our 20-F filing in March. The filing also warned of the additional negative impact the anticipated volume fall-off would cause to our 2019 margin and profitability as the substantial cut-back of WLO fab capacity utilization would lead to higher equipment depreciation and fab overhead on a per unit basis.

As it turns out, we have very recently been notified by the anchor customer of their new decision. Contrary to our earlier warning, we now expect the second half WLO shipment to increase significantly to a scale comparable to that of the same period last year with therefore similar amount of equipment depreciation and fab overhead charges on a per unit basis.

As a semiconductor company, we are not immune to a customer's supplier decision, which can work in or against our favor. We believe the customer's earlier replacement decision was a normal occurrence in the semiconductor industry and are pleased that its new decision has removed the concerns on the short-term impact of the revenue and profitability of our WLO business. Regardless, we believe such incidents would not affect our long-term partnership with the anchor customer. In fact, we are very optimistic about the growth opportunities we have with the customer. We have many ongoing development projects for their future generation products centering around our exceptional design know-how and mass production expertise in WLO and related technologies.

On the CMOS image sensor business update. We continue to make great progress with our machine vision sensor product lines. Himax and Emza unveiled the second generation WiseEye AIoT intelligent vision solution at the ISC West 2019 in early April. The solution is consisted of Himax

industry leading ultra-low power sensor and ASIC designs with Emza's unique AI-based, ultra low power computer vision algorithm. The solution is uniquely positioned for AIoT markets featuring battery-powered human detection sensor, AI-based machine learning and always-on visual sensor, all operating at the edge device. Furthermore, it brings an enhanced user experience and better-informed decision-making running on minimal power and much better cost compared to similar solutions consuming much higher power.

We are pleased with the status of engagement with leading players in areas such as connected home, smart building and security. In parallel, we are actively participating in the rapidly growing AIoT eco-system, which we believe will open up further future opportunities for Himax. For traditional human vision segment, we see strong demands in laptop and increasing shipment for multimedia applications such as car recorders, surveillance, drones, home appliances, and consumer electronics, among others.

Finally, I will now give an update on the LCOS business, where our main focus areas are AI goggle devices and head-up display for automotive. In 2018, many AR goggle devices were launched, targeting primarily niche industrial or business applications, with top name multinationals continuing to invest heavily to develop the ecosystem, applications, software, operating system, system electronics, and optics. While AR goggles will take a few more years to fully realize its market potential, we believe LCOS remains the mainstream technology in this space. Our technology leadership and proven manufacturing expertise are evidenced by the growing list of AR goggle device customers and ongoing engineering projects.

In addition, we continues to make great progress in developing high-end holographic head-up displays and high-end automotive. LCOS for both goggle device and HUD enjoy much higher ASP and better gross margin for us and represents a long-term growth driver for us. For non-driver business, we expect revenue to increase by mid-single digit sequentially in the second quarter.

That concludes my report for this quarter. Thank you. We appreciate you joining today's call and we are now ready to take questions.

QUESTIONS AND ANSWERS

Operator

Thank you. (Operator Instructions) Our first question is going to be from the line of Tim Savageaux with Northland Capital. Your line is open.

Timothy Paul Savageaux - *Northland Capital Markets, Research Division - MD & Senior Research Analyst*

Hello. Question on the WLO. Wonder if you could provide any color on the kind of nature of the change, whether this was kind of a competitive situation that you're able to recoup or any change on the customer's part, in terms of their technology direction? And then with WLO coming back into the model, I wonder if you have any comments on the trajectory of overall gross margins and toward the second half of the year, I imagine that would provide an uplift to margins relative. Thanks.

Jordan Wu - *Himax Technologies, Inc. - Founder, CEO, President & Director*

Thank you, Tim Yes, WLO business now very concentrated on one single end customer's business. Obviously, we are working very hard to try to diversify into more projects within the customer and also process from other customers. That's something we are working now. Now, with the transition of one single customer, in fact one single product, the fluctuation does have a major impact on our gross margin because the whole production line is the depreciation and overhead charge or per unit basis, with the fluctuation of one single product, certainly it can be very easily get impacted. So you are right in saying that the second half with WLO volume is expected to increase substantially from the first half, there will be a gross margin uplift in this regard. As to why and how the customer changes direction or change decision, we are very much bound by the MDA [ph], so I'm afraid we cannot comment much further, other than what I just described in the prepared remarks.

Timothy Paul Savageaux - *Northland Capital Markets, Research Division - MD & Senior Research Analyst*

Okay. And if I could follow up briefly. As you look and I guess you're sizing that opportunity similar to what you saw last year, but ostensibly that have the 3D sensing, the larger number of units this year. I wonder if you can comment on any pricing pressure or other dynamics in the WLO market? Thanks.

Jordan Wu - *Himax Technologies, Inc. - Founder, CEO, President & Director*

Again, the pricing is ongoing subject with the customer, right. So I think we've been treated fairly and we have been making a reasonable profit from the production over the last couple of years and we anticipate the same going forward for the next product cycle. And again, certainly we cannot predict precisely the volume. But when we say, we expect our comparable volume compared to last year, I think what we indicated is that we are in the same position in the product ecosystem or we are in the same position as a vendor this year and next year or we were up last year. I hope that's more than answers your question Tim.

Timothy Paul Savageaux - *Northland Capital Markets, Research Division - MD & Senior Research Analyst*

It sure does. Thank you very much.

Jordan Wu - *Himax Technologies, Inc. - Founder, CEO, President & Director*

Thank you.

Operator

Next question comes from the line of Jaeson Schmidt with Lake Street. Your line is open.

Jaeson Allen Min Schmidt - *Lake Street Capital Markets, LLC, Research Division - Senior Research Analyst*

Hey, thanks for taking my questions. Jordan, just wondering if you could comment on what you're seeing from a pricing standpoint in the TDDI market?

Jordan Wu - *Himax Technologies, Inc. - Founder, CEO, President & Director*

Certainly the volume shot up very fast and very quickly. And also on the other hand, by saying volume, I mean, penetration, market penetration on TDDI technology to smartphone. It shot up probably faster than anybody thought. And also the current market condition of smartphone being really rather sluggish. So yes, there are pricing competition and there are price pressure for everybody. And so we are not immune to that. We are certainly hoping that -- I mean, admittedly, we are playing catch up, right. So we certainly have to be -- we cannot be too conservative on pricing. We have to go up there and compete, luckily, certainly, this is last year and probably the both business I suppose for every major participant, so are set for us. But yes, there are pricing pressure.

Jaeson Allen Min Schmidt - *Lake Street Capital Markets, LLC, Research Division - Senior Research Analyst*

Okay and then as a follow-up, I think last call you mentioned the target of reaching 10 million units per month as far as TDDI capacity goes in the back half of this year. Just curious if you could update us on what you're thinking from a capacity standpoint within the TDDI business?

Jordan Wu - *Himax Technologies, Inc. - Founder, CEO, President & Director*

We no longer have concern on capacity, the capacity constraint, ever since we successfully switch into a new foundry which offers abundant supply of capacity. So that is off our list already. So now the concern is the demand and unfortunately, we all know how the smart market is going right now. So despite the market uncertainty, I think both the macro level and also on a more micro level, people are changing, they are replacing their smartphones slower than what used to be and so on. So despite all this market uncertainty, we still anticipate significant sequential growth in second quarter and also the second half for TDDI. Note that we are still playing catch up against the current market leader. So in addition to winning more projects from major customers, we are working towards bringing our next-generation solutions into mass production ASAP. So I think smartphone market is not going anywhere, right. So it's a marathon, it's not a 100 meter dash. So we have learned a lesson from the crucial[ph] mistakes this time and that is why we are fully behind compared to the market leader at the moment. So we are trying to win back our market share and we said before that our target is to reach our 10 million ICs of shipment towards the end of the year. We are still holding that target unchanged. Having said that, I have to be cautious about -- again the smartphone market being rather sluggish and also the additional macro uncertainty, but again that is still our target. We just have to see how it goes. Thank you, Jaeson. I think how quickly we can be successful in bringing the next generation TDDI technology to mass production with a number of major projects -- major customers I think is the key that is going to detect how quickly we can reach the 10 million IC shipment -- monthly shipment mark. I think that is going to be the key. Thank you, Jaeson.

Operator

Our next question comes from the line of Jerry Su with Credit Suisse.

Jerry Su - *Crédit Suisse AG, Research Division - Director*

So on driver IC side, could you elaborate a little bit the reason for the second quarter large-size driver IC business to decline sequentially because I think your peers or the panel makers are expecting volume to grow? And then for the TDDI, I think in the prepared remarks you mentioned that the gross margin is below corporate average. It seems like -- it sounded that way, but I think for your peers their TDDI margin seems to be above corporate average which is around 30% plus. Can you also give a little bit color on that as well? Thank you.

Jordan Wu - *Himax Technologies, Inc. - Founder, CEO, President & Director*

Firstly, on second quarter large panel guidance -- of decline [ph] guidance, I think we are one of the market share leaders worldwide in large display market with some 20% some ph market share, I suppose. So we are not immune to market weakness overall and I think second quarter compared to first quarter, we all know the large panel market is going through oversupply and sluggish demand right now and I think at the same time we mentioned repeatedly in the last few earnings calls, starting from foundry shortage and thereafter COF material shortage. So I think a few of our major customers seen the shortage situation, they probably prepare their inventory a bit early in Q1 or arguably end of Q4. So I think that explains how our anticipated revenue declined, slight revenue decline during Q2. Having said that, I think quite a few of our major customers and us together we all feel that there's a reasonable likelihood of the market rebounding in the second half and that is why I think we are working probably harder than anyone in terms of getting ourselves prepared in securing those necessary materials, in particular COF and we have actually been requested by a number of our customers to also secure capacity for them and even in the second half to prepare some inventory for them in sight of the potential market rebound in the second half, meaning prepare inventory slightly higher than normal during Q2 in preparation for the second half potential rebound. As for TDDI margin, I want to emphasize, yes, we said the additional shipment of TDDI in Q1 resulted in margin pressure because its margin is lower than corporate average. We are referring to HD+ low-end TDDI products. For full HD+, certainly the margin is higher and I would say if you have a more like a balanced portfolio in between HD and full HD, you will have a breakdown similar to the market breakdown that your TDDI business gross margin will certainly be higher than our corporate average for sure, but it just happens that in Q1 we depend on largely one end customer ph because of capacity constraints that we said right. So we signed ph the customer we shipped basically only the high-end full HD TDDI, but that end customer has a major inventory correction and then we had the second major end customer coming in for which we are shipping lower HD+ TDDI. So low-end is lower margin and that explains our second quarter lower margin for TDDI compared to corporate average. I hope that explains your -- that answers your question.

Jerry Su - *Crédit Suisse AG, Research Division - Director*

And then a follow up, if I may. On the SliM, second generation of SLiM. Can you give a little bit color on what's the -- what's the improvement you're expecting for this product?

Jordan Wu - *Himax Technologies, Inc. - Founder, CEO, President & Director*

As I said, we learning from the lessons, right of the first generation, we are now a lot more cautious than before. I think in the first generation we were looking back, we were probably a bit too enthusiastic or optimistic, right. So we put together the solution and then we tried to provide the solution thinking that Apple, the market leader, is already doing 3D sensing Socialite and Android market would have to follow. And certainly you know for the little reasons we explained in the past and this time in our prepared remarks, there are reasons why Android market turn out to be a lot more cautious than we anticipated. So I think we realized the cost will be much lower, but certainly regardless of how much we do, our cost is still higher than other display fingerprint, there is no doubt, right. So if display unlock and facial recognition and online payment remains to be the only application of front-facing Socialite 3D sensing, then I can tell you the customer will still be challenging our costs and comparing our costs to the still much lower costs of the other display fingerprint. So that is one thing. Although we have been able to substantially bring down the cost compared to Gen 1, we are still not certain whether this is sufficient especially if underlying assumption that unlocking still the main function that 3D sensing can do. We are aware our customers and others are looking on new applications, but what we don't know is how quickly this new application will materialize and whether this applications or which one will become the true killer application that is still remain unknown, right. So that is one area. So we have been able to bring down the cost substantially with much improved performance meaning power assumption, the accuracy and even the packaging. The package becomes smaller and we still have better precision, better power consumption, better IC [ph] protection and so on and so forth, even much better cost, but what we don't know is whether that is enough. And again, the 3D sensing Socialite total solution, I emphasize total solution, meaning a projector, receiver and a processor because they're all together, that's why we call total solution. Total solution market is for Android market other than the top few customers who do have their own total solution. So if you like, if you breakdown and join market to two segments, one is the top tier segment where the customers do have their own total solutions, in which case our strategy is to supply them with our optics or a projector, but then you have the second segment, which is still as of today remains unserved, which is a market where people or somebody needs to bring in total solution for them to -- a better solution to their smartphones, but then that market certainly is arguably more, even more cost sensitive compared to the former category. So again we are taking a very cautious approach. We are very, very keen you know, the cost benefits and timing and so on and certainly we are also taking on smartphone application into consideration as well, but again, we haven't made any final decision. We are exploring the market situation and getting promptly market feedback, if anything I think most likely than are not, we will make adjustments. What kind of adjustment we will make? I think I don't want to talk about it right now because it's probably too early, but we will certainly report in due course, but I don't think it's highly unlikely that we'll stay in the same course last time because we know we have to adjust and we know it will do better this time.

Operator

And our next question comes from the line of Donnie Teng with Nomura.

Donnie Teng - *Nomura Securities Co. Ltd., Research Division - Associate*

My first question is regarding to your anchor customers decision to let you back into second half. What kind of reason behind and does that mean we still have a chance to further expand our projects in the future because previously I felt that we are a little bit negative on the future cooperation with the anchor customer, but at current time point, do you feel more opportunities in next year or in the future?

Jordan Wu - *Himax Technologies, Inc. - Founder, CEO, President & Director*

I'm afraid, Donnie, I think your previous thinking is a misconception. Yes, they did inform us about the replacement decision, but even at that point in time, we never ever had any doubt about the future potential and for the active projects that we are working with them extremely closely as we

speak and they actually at the time assured us repeatedly that this does not impact the long-term collaboration opportunity or relationship. And certainly we certainly feel better about the short-term change as far as why they are making such decision and how and that is something again I'm afraid I cannot share and I think in that regard, I've said just about everything I can say in my prepared remarks already, but I want to emphasize, we feel there is a great area of opportunity out there in our WLO [ph] business vis-a-vis (technical difficulty) and certainly others as well going forward in the next few years.

Donnie Teng - *Nomura Securities Co. Ltd., Research Division - Associate*

Got it. And my second question is regarding to TDDI. So do you have any volume forecast in the second half or next year? And what kind of gross margin trend we are thinking right now if we are seeing more TDDI shipment in the second half and next year, should it lead us to have better gross margin on small and medium display driver IC business?

Jordan Wu - *Himax Technologies, Inc. - Founder, CEO, President & Director*

Given the uncertainty in the smartphone market right now and certainly in the macro economy and also the fact that we are in close discussion with a number of major customers on a number of major projects, they are the -- so there are probably greater deal of certainly than usual at this point for us to make a more credible prediction on the shipment volume in the remainder of the year, not to mention next year. So I will reserve -- I will not comment on that other than to say that we are very committed. Q3 will see a substantial growth from Q2 and Q4, another substantial growth from Q3 and that I think we are confident about, but we know losing one or two major projects can change a lot given our current status in terms of volume prediction. So I think we just have to give you updates as we go along. As far as margin is concerned, as I said earlier, once we reach a more balanced portfolio of customers and projects and higher-end and lower-end TDDI solutions, I think the overall margin will be better than corporate average for sure and also once we start production for the next generation TDDI products which involve better functionality so to speak because it does enable a better design for our customers and also it is lower cost for us and therefore hopefully better margin as well. So again TDDI or smartphone market has a long way to go. So we recognize we have a major setback in the first round if you like and we are determined to get it back and I think both in terms of volume and gross margin. And certainly 3DI thin SoC [ph] gross margin is a long-term trend, should be better than a straightforward driver IC for large panel. That's for sure.

Donnie Teng - *Nomura Securities Co. Ltd., Research Division - Associate*

My third question is a housekeeping question, maybe for Jackie. So what's our OpEx guidance in the second quarter and this year and next year according to your current forecast? And also what's our plan on the share buyback? I know previously Chairman announced a share buyback and I'm wondering what kind of a price level that we will engage for? Thank you.

Jacqueline Chang - *Himax Technologies, Inc. - CFO*

Okay. Hi, Donnie. Your first question, okay. In our Q2 guidance, what's in the operating phase is right now we are projecting about $39.4 million okay, around that range and looking forward for this year, we reported in the prepared remarks our total operating expense will not exceed the level from last year with the exception of the depreciation. So now in our net-net we're looking at probably around $158 million [ph] for the year based on the current forecast. And the answer to your second question is, it's really not the corporate share buyback right, it's the Chairman's own share buyback that he announced November of last year and we really cannot comment on the detail because he has a 10B-5 purchase plan that he's currently executing and at the end of the purchase plan we will have to file with the SEC to conclude and announce that the buyback has been completed, but it's ongoing right now.

Jordan Wu - *Himax Technologies, Inc. - Founder, CEO, President & Director*

Yes, the total is set to be $5 million. All we can share is that he is buying shares according to 10B-5 and we certainly cannot -- it will be unfair to him, right, before the program come to conclusion to release further details, but it's all in accordance with the law and regulations and he is buying

it -- he is buying shares for sure. And based on the regulation, he can only buy shares pretty much in line with the market, basically what the -- he cannot have the advantage of the market. So that is pretty much the rule -- the spirit of the rule. Next question?

Operator

Thank you and this does conclude our allocated time for Q&A and I'll now turn the call back over to management for closing remarks.

Jordan Wu - *Himax Technologies, Inc. - Founder, CEO, President & Director*

As a final note, Jackie, our CFO will maintain investor market activities and continue to attend investor conferences. We'll announce the details as they come about. Thank you and have a nice day.

Operator

Ladies and gentlemen, this does conclude the program. You may now disconnect.
