

## Himax Technologies Inc. Q2 2024 Earnings Call Edited Transcript

Event Date: Aug. 08, 2024

### CORPORATE PARTICIPANTS

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

Eric Li Himax Technologies, Inc. - Chief IR/PR Officer & Spokesperson

### CONFERENCE CALL PARTICIPANTS

Donnie Teng - Nomura

### PRESENTATION

#### Operator

Hello, ladies and gentlemen. Welcome to the Himax Technologies Inc. Second Quarter 2024 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. As a reminder, this conference call is being recorded. I would now like to turn the conference over to Mr. Eric Li, Chief IR/PR Officer at Himax.

---

#### **Eric Li - Himax Technologies, Inc. - Chief of IR/PR Officer & Spokesperson**

Welcome everyone to the Himax Second Quarter 2024 Earnings Call. My name is Eric Li, Chief IR/PR Officer at Himax. Joining me today are Jordan Wu, President and Chief Executive Officer, Jessica Pan, Chief Financial Officer. After the Company's prepared comments, we have allocated time for questions in a Q&A session. If you have not yet received a copy of today's results release, please email [HIMX@mzgroup.us](mailto:HIMX@mzgroup.us) or [hx\\_ir@himax.com.tw](mailto:hx_ir@himax.com.tw), access the press release on financial portals or download a copy from Himax's website at [www.himax.com.tw](http://www.himax.com.tw).

Before we begin the formal remarks, I'd 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 conference call. A list of risk factors can be found in the Company's SEC filings, form 20-F for the year ended December 31, 2023 in the section entitled "Risk Factors", as may be amended.

Except for the Company's full year of 2023 financials, which were provided in the Company's 20-F and filed with the SEC on April 2, 2024, 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 been subjected to the same review and scrutiny, including internal auditing procedures and external audits by an independent auditor, to which we subject our 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.

On today's call, I will first review the Himax consolidated financial performance for the second quarter 2024, followed by our third quarter outlook. Jordan will then give an update on the status of our business, after which we will take questions. You can submit your questions online through the webcast or by phone. We will review our financials on an IFRS basis.

We are delighted to announce that Q2 revenues surpassed guidance, while gross margin and profits were in line with the guidance range issued on May 9, 2024, despite the prevailing economic headwinds. The better-than-expected financial result primarily stemmed from resumed order momentum across most of our product lines.

Second quarter revenues registered \$239.6 million, an increase of 15.5% sequentially, exceeding our guidance range of an 8% to 13% increase. Gross margin came in at 32.0%, in line with our guidance range of 31.5% to 33.5%, up from 29.3% of the previous quarter and 21.7% same period last year. The sequential growth was driven by cost improvements and a favorable product mix, along with increased sales in the automotive IC and Tcon product lines, both of which have higher than corporate average gross margins. The substantial improvement in gross margin from the same period last year was primarily due to the one-time early termination expense paid to foundry partners which eliminated minimum fulfillment requirement constraints and high wafer costs set during the severe industry capacity shortage. Consequently, our new wafer starts are no longer bound by these restrictive terms. Additionally, we can now leverage diverse foundry sources for optimal operational efficiency and a significantly improved cost structure, thereby maintaining our product competitiveness. Q2 profit per diluted ADS was 16.9 cents, at the top end of the guidance range of 13.0 cents to 17.0 cents.

Revenue from large display drivers came in at \$39.0 million, reflecting a sequential increase of 24.7%. The increase was predominantly driven by customer restocking in TV and monitor ICs after several quarters of muted demand, as well as increased orders in preparation for shopping festivals. Both TV and monitor ICs sales posted substantial double-digit increases quarter over quarter. In contrast, Q2 notebook IC sales declined slightly following strong restocking in the previous quarter. Sales of large panel driver ICs accounted for 16.3% of total revenues for the quarter, compared to 15.1% last quarter and 19.3% a year ago.

Small and medium-sized display driver segment revenue reached \$158.8 million, marking a sequential increase of 10.1% and surpassing the guidance due to stronger-than-anticipated sales in the TDDI products for automotive, smartphone and tablet. In Q2, automotive driver sales, encompassing both traditional DDIC and TDDI, increased by a decent high-teens sequentially and more than 50% year-over-year. Despite expectations of weakening electric vehicle demand, both automotive DDIC and TDDI sales experienced sequential growth in Q2 thanks to our robust design-win pipeline in TDDI and customers' continuous restocking momentum in DDIC since end of Q1. Our automotive business, comprising drivers, Tcon, and OLED sales, remained the largest revenue contributor in the second quarter, representing over 47% of total sales. Meanwhile, Q2 tablet IC sales slightly increased sequentially, surpassing guidance of a decline, fueled by leading customers' new model ramp-ups. Conversely, smartphone driver sales declined as expected during a subdued festival season characterized by sluggish demand. The small and medium-sized driver IC segment accounted for 66.3% of total sales for the quarter, compared to 69.5% in the previous quarter and 63.9% a year ago.

Second quarter non-driver sales reached \$41.8 million, up 30.6% from the previous quarter, due to a resurgence in orders for our Tcon products for TV, monitor, automotive as well as OLED tablet. Our automotive local dimming Tcon, where we dominate the market, has been swiftly adopted by major panel makers, Tier 1 suppliers, and car manufacturers worldwide, boasting well over one hundred design-win projects with only a small number of design awards having commenced mass production. This momentum is further fueled by the rapid expansion of project awards across continents, positioning us for strong growth, mirroring the success we have achieved in automotive TDDI. Tcon business represented over 10% of our total sales in the second quarter. Non-driver products accounted for 17.4% of total revenues, as compared to 15.4% in the previous quarter and 16.8% a year ago.

Second quarter operating expenses were \$47.3 million, a decrease of 6.7% from the previous quarter and a decline of 11.1% from a year ago. The sequential decrease was primarily driven by decreases in tape-out expenses. The year-over-year decrease was primarily due to reduced tape-out expenses and a decline in the annual bonuses for the amortized tranches of the previous years' bonuses. Amid ongoing macroeconomic challenges, we are strictly enforcing budget and expense controls to manage these conditions.

Second quarter operating income was \$29.3 million or 12.2% of sales, compared to -0.9% of sales for the same period last year and 4.8% of sales last quarter. Both the sequential and year-over-year increases were primarily due to higher sales and an improved gross margin. Second-quarter after-tax profit was \$29.6 million, or 16.9 cents per diluted ADS, compared to \$12.5 million, or 7.1 cents per diluted ADS last quarter, and \$0.9 million, or 0.5 cents in the same period last year. The after-tax profit for the first half was \$42.1 million, or 24.1 cents per diluted ADS, a significant increase from \$15.8 million, or 9.1 cents, for the same period last year.

Turning to the balance sheet, we had \$253.8 million of cash, cash equivalents and other financial assets at the end of June 2024, compared to \$277.4 million a quarter ago and \$219.5 million at the same time last year. The sequential decrease in cash balance was primarily due to customer refunds for their deposits made during the industry-wide capacity shortage, along with a strategic investment of approximately \$16 million in FOCI through private placement. The cash balance reduction was partially offset by an operating cash inflow of \$26.9 million during the quarter. Compared to the operating cash inflow of \$56.7 million in Q1, the sequential decrease was mainly attributable to reduced sales over the preceding two quarters, leading to lower receivables. Additionally, the increase in accounts payable in Q2 was a result of higher Q1 wafer orders, as we anticipated larger shipment volumes in Q2. Other significant operating cash outflows in Q2 included annual income tax payments. Looking ahead to Q3, we anticipate a decline in cash, cash equivalents, and other financial assets, primarily due to a payment of \$50.7 million for annual dividends to shareholders. We also expect to distribute a total of approximately \$30.7 million for employee bonus awards at the end of this quarter, which includes around \$11.3 million for the immediately vested portion of this year's awards, with the actual amount subject to the final Board decision, and \$19.4 million for vested awards granted over the past three years.

Our quarter-end inventories as of June 30, 2024 were \$203.7 million, similar to \$201.9 million last quarter, indicating a well-managed and balanced inventory level. Accounts receivable at the end of June 2024 was \$242.4 million, up from \$212.3 million last quarter and \$239.0 million a year ago. DSO was 99 days at the quarter end, as compared to 93 days last quarter and 90 days a year ago. Second quarter capital expenditures were \$4.6 million, versus \$2.7 million last quarter and \$2.9 million a year ago. The second quarter capex was mainly for R&D related equipment and in-house tester for our IC design business.

As of June 30, 2024, Himax had 174.7 million ADS outstanding, unchanged from last quarter. On a fully diluted basis, the total number of ADS outstanding for the second quarter was 175.1 million.

Now, turning to our third quarter 2024 guidance. We expect third quarter revenues to decrease 12.0% to 17.0% sequentially. Gross margin is expected to be around 30%, depending on product mix. The third quarter profit attributable to shareholders is estimated to be in the range of 1.5 to 4.5 cents per fully diluted ADS.

As we've done historically, we will grant employees' annual bonus, including RSUs and cash awards, on or around September 30 this year. The third quarter guidance for profit per diluted ADS has taken into account the expected 2024 annual bonus, which, subject to Board approval, is now assumed to be around \$12.5 million, out of which \$11.3 million will be vested and expensed immediately on the grant date. As a reminder, the total annual bonus amount and the immediately vested portion are our current best estimates only and the actual amounts could vary materially depending on, among other things, our Q4 profit and the final Board decision for the total bonus amount and its vesting scheme. As is the case for previous years, we expect the annual bonus grant in 2024 to lead to higher third quarter operating expenses compared to the other quarters of the year. In comparison, the annual bonus for 2023 and 2022 were \$10.4 million and \$39.6 million respectively, of which \$9.7 million and \$18.5 million vested immediately.

In providing our Q3 financial guidance, the Q3 expense related to employee bonus is estimated to be \$14.2 million, comprised of \$11.3 million, the immediately vested portion of this year's bonus as stated above, and \$2.9 million, the amortized portion of the previous years' unvested bonuses. For the sake of completeness, employee bonus expense in each of the last three quarters was also around \$2.9 million.

I will now turn the call over to Jordan to discuss our Q3 outlook. Jordan, the floor is yours.

---

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

Thank you, Eric. Given the prevailing macroeconomic uncertainty, end customers remain conservative causing panel makers to take a cautious stance and strictly control production to maintain low inventory levels. This is adversely impacting IC demand, leading to our conservative third quarter forecast.

During the second quarter in the automotive market, car makers initially anticipated a sales boost due to promotional activities and government subsidies especially in China. Consequently, we saw a major uptick in the second quarter IC sales along with the aggressive discount campaigns of car makers. However, these intense campaigns did not generate the anticipated sales growth and may have even triggered consumers to hesitate in purchasing new cars, leading to disappointing car sales in China for the second quarter and resulting in excessive inventories throughout the supply chain. As a result, our panel customers have begun to scale back their IC procurement in Q3 to manage inventory levels. In comparison, the automotive markets in Europe and the U.S. have remained relatively stable since last year, without experiencing the dramatic fluctuations seen in China. As the leader of the automotive display ICs, we serve a diverse range of brands worldwide, with sales evenly distributed across all major markets. However, since China is the world's largest automotive market, commanding over 30% of the global sales, fluctuations in China do have a substantial impact on our business. Moving forward, we will navigate the current challenging business environment through close collaborations with panel makers and Tier 1 suppliers, meticulously managing our wafer starts and closely monitoring customer demands. The automotive IC business is Himax's largest revenue contributor, accounting for over 47% of our total revenues in Q2, significantly higher than our peers.

Despite the recent challenges, we remain optimistic about our automotive IC business and are committed to the long-term innovation and development of our automotive products. The automotive display market remains on solid footing with a positive growth trajectory driven by versatile innovations and technology advancements. Advanced and fancier displays are increasingly becoming a major selling point for car makers, driving the automotive display market towards a megatrend of expanding quantities, sizes, and sophistication. As the leading player in

the automotive display IC market, Himax is well-positioned to be the key beneficiary of the trend. We command a 40% global market share in traditional automotive DDIC and hold an even larger share in both the automotive TDDI and local dimming Tcon markets. In addition to offering the most comprehensive range of automotive IC products for LCD panels, we are actively expanding into the automotive OLED panel market, forming strategic partnerships with major leading panel makers in Korea, China and Japan to develop comprehensive solutions encompassing DDIC, Tcon, and touch controller ICs. This proactive approach positions us to navigate industry shifts and capitalize on the anticipated wide-spread adoption of OLED displays in the high-end vehicles, further solidifying our market leadership.

During the quarter, we announced two substantial strategic investments. First, in an effort to strengthen the long-term partnership with FOCl, we, as a strategic investor, acquired a 5.3% equity stake through private placement. The partnership integrates Himax's Wafer Level Optics ("WLO") expertise and FOCl's optical fiber know-how to create innovative, world-leading Linear-drive Pluggable Optics ("LPO") and Co-Packaged Optics ("CPO") solutions for advanced Multi-Chip Modules ("MCMs") required for the fast-growing cloud AI and high-speed computing markets. This collaboration not only highlights the application versatility of the WLO technology and Himax's market leadership but also underscores the significant potential of our WLO in advancing LPO/CPO technology, which is vital for the advancement of cloud AI and high-speed computing. Separately, we invested in the U.S.-based Obsidian Sensors, whose revolutionary high-resolution thermal imaging sensors meet the growing demand of thermal imaging across various industries, including automotive, security, surveillance, drones, and military. This investment broadens our portfolio of imaging sensors, which, when meshed with our ultralow power WiseEye AI, enable enhanced sensor fusion possibilities for endpoint AI applications. The Obsidian investment positions us at the forefront of machine vision AI applications, delivering high effectiveness particularly in harsh environments and completely dark scenarios.

As we look ahead, our focus remains on enhancing profitability, strengthening operational resilience, and improving adaptability to the evolving market. We continue to optimize our cost structure and reinforce our supplier diversification strategies for foundries as well as backend packaging and testing. At the same time, we remain committed to stringent expense control, set to further reduce operating expenses compared to last year. For reference, we achieved a 4% year-over-year reduction in operating expenses in 2023.

With that, I'll now begin with an update on the large panel driver IC business. In Q3, we anticipate a double-digit sequential revenue decrease for large display driver ICs, primarily due to subdued monitor and TV IC sales, set to decline double digit and single digit respectively, following substantial order replenishment in preparation for shopping festivals in the previous quarter. Procurements from our leading panel customers have become more conservative due to sluggish market conditions driven by worse-than-expected shopping festival sales. However, notebook IC sales are poised for a decent increase, bolstered by robust order replenishment from our leading panel customers.

Looking ahead in the notebook sector, we have made a strategic effort to position ourselves to capitalize on the anticipated rising demands for two new market areas, namely LCD displays equipped with touch features and OLED displays, both expected to enjoy decent penetration in premium notebook and the upcoming AI PC markets. Leveraging our industry leadership in TDDI solutions for tablet market, we are working closely with LCD panel customers in the development of in-cell TDDI and new generation Tcon solutions for LCD displays. Concurrently, we have made significant strides in OLED technology for notebook in strategic partnerships with leading panel manufacturers in Korea and China, developing state-of-the-art touch controllers, DDIC and Tcon solutions. Some of the projects above, including in-cell TDDI for mainstream LCD notebooks and Tcon and DDIC for OLED notebooks, are slated for mass production in the second half of this year with leading panel customers. We are optimistic that the notebook segment will act as a strong growth catalyst for Himax as we move into 2025.

Turning to the small and medium-sized display driver IC business, we anticipate third quarter revenue to decline low-teens sequentially. Impacted by customers' destocking measures, especially for the Chinese market as I mentioned just now, automotive revenue in Q3 is expected to decrease high teens sequentially, following high-teens growth of both DDIC and TDDI in Q2. That being said, through the first 9 months of the year, our automotive driver IC sales are still set to grow mid-teens year-over-year, driven by continued expansion of TDDI adoption across all major end customers. We have secured over 450 TDDI design-win projects, with only approximately 30% currently in mass production, indicating significant growth potential going forward. Meanwhile, a trend is emerging where more customers are opting for Himax's TDDI or LTDI, along with our local dimming Tcon, as their standard development platform for creating new automotive displays of various sizes. This growing adoption of more of our automotive IC offerings also signifies an increase in



content value for Himax on a per-panel basis. Himax is widely recognized as the leader in the automotive display IC market, offering the industry's broadest range of products, from traditional DDIC and TDDI to advanced technologies such as local dimming Tcon, LTDI, and OLED. We are committed to continuously enhancing our product portfolio to meet customers diverse and evolving needs. Our newly introduced TDDI incorporating local dimming Tcon in one chip exemplifies this commitment to providing customers with more options, as the new solution is ideal for smaller panels that usually require only 1 to 2 ICs for cost considerations while still equipped with advanced touch and local dimming features.

Turning to smartphone IC sales, we expect a decent double-digit increase sequentially thanks to new product launches by key customers during the quarter. In contrast to the positive outlook in smartphone business, Q3 tablet sales are projected to decline sequentially, as end customers prolong their replacement cycles in response to challenging economic conditions.

Next for an update on our OLED business. For the automotive OLED market, we have formed strategic alliances with leading panel manufacturers in Korea, China and Japan. Leveraging our leadership in automotive LCD technology and OLED design expertise, these partnerships further strengthen our presence in the market. We offer a comprehensive suite of OLED solutions for automotive, including DDIC, Tcon, and on-cell touch controllers, ensuring complete coverage of customer requirements. Notably, our meticulously engineered OLED on-cell touch controllers set a new standard, boasting an industry-leading touch signal-to-noise ratio of over 45 dB, greatly enhancing sensitivity. This allows automotive displays to maintain proper functionality under challenging conditions, such as glove-wearing and wet finger operations. We are pleased to share that our OLED on-cell touch controller for automotive has entered production this quarter. With additional projects set for mass production soon, we anticipate sales of our OLED on-cell touch controller to further bolster our revenues starting 2025.

Beyond the automotive sector, we have made notable advances in the tablet and notebook sectors with top OLED panel manufacturers in Korea and China. Our comprehensive OLED product offerings, encompassing DDIC, Tcon, and touch controllers, have led to several new projects that are on track to enter mass production later in the year. Regarding smartphone OLED, the current market drawdown of our customers has prompted us to revise our production timeline to next year. Despite these challenges, we are actively collaborating with customers in

Korea and China and have several verification and partnership projects currently in progress.

I'd like to now turn to our non-driver IC business update.

First for an update on our Tcon business. We anticipate a double-digit sequential decline in Q3 Tcon sales as customers pulled forward their inventory purchases during the prior quarter particularly for monitor application. However, our automotive Tcon business is expected to achieve a decent double-digit growth in Q3, despite the current headwinds in the automotive market, fueled by the shipment of new projects from previously secured design-wins. Since only a small portion of the secured design-wins are currently in mass production, we anticipate significant growth potential for our automotive Tcon business in the coming years.

While ongoing weak macroeconomic conditions continue to subdue demand in consumer electronics, some of our newly developed Tcon ICs for OLED tablets and ePaper displays are starting to show promising results. In the tablet segment, we are expanding our product lineup and strengthening our position in the high-value-added OLED market, building on our early success in the tablet OLED market. For the rapidly growing ePaper market, we recently made a joint announcement with E Ink, the global leader in ePaper market, to unveil T2000, a state-of-the-art, next-generation color ePaper Tcon. ePaper stands out for its energy efficiency, consuming power only during screen updates. Leveraging Himax's decades of expertise in image display processing and Tcon design, the T2000 Tcon accelerates screen updates for a better viewing experience while greatly reducing power consumption of the ePaper display. Additionally, the T2000 features an exclusive handwriting processing accelerator, enabling seamless, nearly lag-free handwriting while boosting prompt display responsiveness on ePaper displays without requiring a SoC. It also enables richer and more vibrant colors, enhancing the display's visual appeal across a broad spectrum of E Ink's color ePaper platforms. The collaboration opens new possibilities for color ePaper applications in eReaders, ePaper, digital signages, and more.

Switching gears to the WiseEye™ Ultralow Power AI Sensing solution, a cutting-edge endpoint AI integration featuring industry-leading ultralow power AI processor, always-on CMOS image sensor, and advanced CNN-based AI algorithm. In the fast-changing AI landscape, WiseEye AI technology stands out for its expertise in on-device tinyML microcontroller solutions, characterized by remarkably low power consumption, operating at just single-digit milliwatts, making it possible to add AI

functionalities to battery-powered endpoint devices. Our WiseEye technology is creating new opportunities for companies such as DESMAN, China's leading high-end smart door lock vendor, who introduced the world's first smart door locks with 24/7 sentry monitoring and real-time event recording with the fancy AI features achieved while still maintaining over six months of battery operation. Our collaboration with DESMAN has sparked increased interests from other door lock vendors across various continents to develop innovative value-added AI features such as parcel recognition, smart anti-pinch protection and biometric access. Notably, some of our customers are currently evaluating our newly introduced WiseEye PalmVein solution which offers effortless, keyless and highly secure biometric access for entry control.

WiseEye PalmVein is part of our WiseEye AI module business, integrating Himax WiseEye2 AI processor, AoS CMOS sensor, and our proprietary palm vein authentication algorithm. We see growing traction and extensive engineering activities for this contactless biometric authentication solution that can authenticate an individual's identity in under 100 milliseconds while consuming just a few milliwatts of power. This represents a significant breakthrough in security technology by enabling biometric authentication in battery-powered devices. With outstanding accuracy and robust liveness check capabilities, palm vein authentication significantly reduces the risk of duplication or spoofing compared to conventional fingerprint or face recognition, making it an ideal choice for indoor security, login authentication, and other access control applications. WiseEye PalmVein upholds robust security standards while offering best-in-class power efficiency, making it the only solution suitable for battery-powered devices. We are collaborating with vendors across various sectors globally, including door lock, access control, notebook and automotive. While just launched at the beginning of the year, WiseEye PalmVein has already been successfully adopted by a U.S. customer for smart security and is set to commence mass production starting the end of this year. We believe WiseEye PalmVein will profoundly impact the security industry and unlock new opportunities for battery-powered devices across various use cases.

To broaden WiseEye AI's market reach and shorten customer development cycles, we also provide seamlessly integrated plug-and-play WiseEye Modules and no-code/low-code AI development platforms, featuring diverse context-aware AI algorithms that customers can reprogram or fine-tune with minimal effort for real-world use cases. Our recent announcement with NVIDIA TAO exemplifies this approach whereby our WiseEye Module customers targeting AI deployment on resource-constrained endpoint devices can easily optimize and quantize deep learning models with

pretrained enterprise-ready AI models and tools offered by NVIDIA. This facilitates rapid democratization of endpoint AI applications using cost-effective, production-ready AI modules for various use cases.

Additionally, in response to growing AI-driven demand towards machine-vision across various environments, we recently made a strategic investment in Obsidian Sensors, a San Diego-based company renowned for its revolutionary, high-resolution, low-cost thermal sensors, offering unmatched versatility by detecting heat differences even in complete darkness, measuring temperature, and identifying distant objects. This investment expands our image sensor portfolio beyond optical sensors to include thermal sensors, a valuable complement to our product suite which is now widened to cover harsh sensing conditions such as heavy fog or complete darkness. Moreover, this strategic investment promises synergy of the two companies with our WiseEye AI aggregating data from both optical and thermal imaging sensors for a truly holistic view of the environment beyond human vision. In addition, we are engaged in ongoing engineering collaborations that leverage Himax's IC design resources and know-how. We believe by integrating the strength of Himax and Obsidian, we can seize new opportunities in the expanding sensor and AI markets across industrial, defense, security, consumer electronics, and automotive sectors. As an illustration, the U.S. National Highway Traffic Safety Administration (NHTSA) issued a new rule in April 2024, mandating that Automatic Emergency Braking (AEB), including Pedestrian AEB (PAEB), be implemented starting in 2029. This regulation aims to significantly reduce rear-end and pedestrian crashes. Similar rules are increasingly being mandated by regulatory authorities worldwide. The novel ADAS (Advanced Driver Assistance Systems) and AEB system, integrated with Obsidian's thermal sensors, provides clear vision in low-light and adverse weather conditions such as fog, smoke, rain, and snow. This ensures better driving safety and security, underscoring the trend and significant potential demand for thermal imaging sensors.

Last on WLO. During the second quarter, we made a strategic investment in FOCl, a Taiwan-based global leader for silicon photonics connector, through a \$16 million private placement, resulting in a 5.3% equity stake. This collaboration highlights the immense potential of our WLO technology for LPO/CPO which are crucial for further advancing high-speed AI and HPC technologies. Our partnership integrates FOCl's proprietary LPO/CPO connector technology with Himax's nano-scale Wafer Level Optics know-how to create an industry-leading optical transmission solution catered for the most advanced multi-chip modules, which demand enhanced bandwidth,

improved data rate, minimized signal loss, reduced latency, and lower energy consumption, all for accommodating future-generation needs of Generative AI and HPC. Currently, in close collaboration with world leading AI semiconductor players and foundry partner, we are working closely with FOCl on LPO/CPO development for products that meet customers' near-term production goals.

LPO/CPO technology is crucial for furthering Generative AI and HPC and will continue to evolve rapidly to meet the explosive demand in these areas. We are committed to advancing the technology with FOCl, ensuring our solutions stay at the cutting edge and align with the multi-year roadmaps of our AI chip and foundry partners/customers. We believe this will generate new, long-lasting revenue streams for Himax. We will provide further updates as they become available.

As FOCl is a company listed on the Taipei Exchange (TPEX), the stock price and resulting "fair value" reflected on our books change each day. These fluctuations have been, and will continue to be, recognized by way of changes in owners' equity as a balance sheet item, not affecting our profit and loss. As an illustration, based on the close of FOCl's stock price as of the end of June 2024, we made a "gain" of \$9.6 million on our \$16 million FOCl investment. However, the said "gain" was not recorded as an investment profit in our Q2 financial statements and instead was booked as an increase in owners' equity. Likewise, upon disposal, the resulting investment gain or loss will also be recognized as a change of equity, through retained earnings, thus not affecting our profit and loss at the time of the disposal either. The accounting method we chose reflects our long-term commitment to the FOCl investment.

With over a decade of experience in WLO, Himax has developed diverse designs across a broad spectrum, including 3D sensing, AR/VR devices, biomedical inspection, and optical communication, just to name a few. These technologies have been widely adopted by some of the world's most prominent tech companies, with cumulative shipments reaching more than 600 million units. We anticipate WLO playing an even more decisive role in the next-generation optical technology landscape, thanks to its versatile, high-precision, lightweight and small form factor characteristics that are not feasible with alternative technologies. In addition to the progress made in LPO/CPO, we are seeing an increase in engineering projects with globally recognized leaders who are leveraging our WLO expertise for their upcoming AR/VR devices, underscoring the widespread recognition of our technology.

For non-driver IC businesses, we expect revenue to decline high teens sequentially in the third quarter.

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

---

## **QUESTIONS AND ANSWERS**

### **Operator**

(Operator Instructions). The first one to ask a question is Donnie Teng, Nomura. Go ahead please.

---

### **Donnie Teng – Nomura**

Oh, thank you, Jordan, for taking my question. My first question is regarding to the automotive business. I think we had started seeing some positive signs back in April and I remember we were pretty positive, you know, back in June and even entering into July. For guidance, looks like to be a little bit disappointing and you just mentioned about customers digesting inventories quickly. Just wondering when exactly you are seeing kind of weakness from the customers. And also because in mid of July, there has been the news in China that, you know, Chinese Government asking EV companies to check their localization rate in terms of the component in IC procurement. So, wondering if there is any issue there. You know, whether we will be like retired by the Chinese EV makers or it's not the case. Thank you.

---

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

Thank you, Donnie. You are right in that we were more positive last quarter, when we had our conference call then the present moment. And I think the reason behind it, I've already explained in rather detail in my prepared remarks, ie the fluctuation in Chinese market is the main factor that are causing the difference in our view. And as it turns out, our customers were overly optimistic for their second-half outlook entering into Q2 and they were apparently, sourced too many, too much IC inventory and now they are going through the de-stocking process. And also, we also mentioned in our prepared remarks that the US and the European markets are relatively stable compared to China. Now, if you look at the Q3 prospect and also if we look further into Q4, so the over procurement in Q2 and the and the de-stocking in Q3 kind of explains our changing position in our outlook. Now, the real question is, how is this going to go, going forward. And I think, certainly for the longer term, like

next year, we remain still pretty positive about the outlook, which I will probably cover in a few minutes.

Now, more importantly, what is the near term in Q4 and I'll tell you the truth. Our internal forecast, which was the result of our collective forecast coming from various customers globally, including panel makers and Tier 1s. Q4 as of today, the projection remains pretty positive with actually a decent double-digit growth compared to Q3. However, we are toning down our Q4 automotive prospect right now given the very recent, I'm talking about last week also, the global turmoil in financial markets which might impact the consumer confidence in their major, you know, big tickets spending such as buying new cars. But we are uncertain and given the short period of time because the major financial turmoil across the global financial market really occurred only last week. So there's no time for us to get feedback from our customers and I suspect there's no time for our customers to get good feedback either from the market. So we are like taking a wait and see attitude.

In fact, as of today, our outlook for Q4 based on our forecast book is still pretty positive. And when did the sentiment turn? I would say, probably beginning of this quarter, only very recently, but we did see steady, kind of slight pullback of customers' forecast, you know, almost week by week, slightly but steadily and that is certainly not a very promising sight. Now, on your concerned of China localization, yes, indeed they've made announcements and set targets to further localize their IC supply for China's automotive sectors. But as far as we are concerned, you know I think IC, which is automotive IC, which is display ICs, I wouldn't say that, that would not be the threat because any competition is a threat. But I think our leading edge is now so significant that I can't see any impact of Chinese competition in the near term or in the foreseeable future and compared to consumer electronics, as we all are very aware of, automotive ICs are much harder to replace, and you have to go through a much lengthier ecosystem and let alone with the various requirements, higher standards of safety and other requirements. So Chinese localization certainly does not play any role in our more conservative outlook for Q3 or going forward into Q4. In fact, next year, if anything, we believe, our market share, especially for those new technologies, such as TDDI, Local dimming Tcon or OLED are actually starting next year, we're likely to see some ramping, early ramping. I think, if anything, we believe quite confidently our market share in automotive display ICs will further rise from this year's level. And there's no reason for us to believe next year's automotive market will continue to be very bearish. I mean, I think it's too early for us to form a very solid view for next year. But there's no indication of signs that

people's spending on cars will necessarily decrease given the fact that the economy is going through some troubles. But I think governments, authorities, the Feds of different countries are likely to take measures to encourage consumption and boost their GDP's. Car spending happens to be a major item if the government wants to boost their GDP. So I think, again, I'm not providing a solid outlook for next year. But I just want to say there's no reason for us to believe next year will be a bad year for the automotive market. I hope that addresses your question.

---

**Donnie Teng – Nomura**

Thanks Jordan and my second question is regarding to the CPO. So would you maybe elaborate more on, you know, what's the timeline of the CPO product. When should we expect to see some, you know, small volume contribution? And how confident you are to ramp up this business in the mid to long term? Thank you.

---

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

First on precise timeline, I'm bound by NDA of my partner and customer, so I'm afraid I cannot give you very, very specific date or timetable. But I can tell you, what we are working on right now, the design is targeting for mass production. It is certainly not a R&D concept, a R&D project, it is not. Actually, we're way past the stage and certainly we did that before, years before, but we are way past that stage and we are now pushing towards mass production ASAP. That's what I can tell you. In fact, we expect to see some small but very early result hopefully by the end of this year but that's minimal. But the next year, you know, if everything goes as planned, there will be steady ramping. And the confidence level mid to long term, I would say very confident. I think we all know about this hunger for more processing power because of generative AI. Right. And we are we are all very aware of the issues there, you know, the challenge is to further increase your bandwidth, your processing power, your processing speed and but they are all kind of issues including power consumption, heat dissipation, and all that, right? And I would say CPO is a relatively low cost and relatively easy, I'm not say it's easy, I am saying it's relatively easy to fix towards all these issues. And also cost-wise as well, because right now if you analyze the most advanced, you know the HPC ICs or you know, GPU IC's, they have very big processing power, but there bottleneck right now is actually the transmission with the outside, the transmission of the IC. The IC can produce a lot of power, data, you know, high bandwidth, super high bandwidth, very fast and it's still the bandwidth is expanding, is expected to expand exponentially over the next few



years. Now with the advanced packaging is going to the, the expansion is going to be, you know, faster. However, the real bottleneck right now is their transmission capability, their transmission bandwidth which is limited because now they are relying on metal wire to do the transmission. And we all know, there's no secret to really improve, you just need to replace your metal wire with fiber optics. And that is exactly what we are trying to achieve, right, that we're trying to help to resolve. And so, if you can successfully replace your metal wire with fiber optics, right away, you boost bandwidth hugely, and thereby also as a major side benefit, you also reduce your power consumption because the thermal lose will become much less and you'll increase your data accuracy, et cetera, right?

So I would say it's a, you know, everybody in the ecosystem is very keen to making sure that this happens ASAP. And when it happens, because as I mentioned right, it's a relatively cheap and easy fix to their solutions. So I don't see any reason why they should not be adopted across the board, you know, to cover as many of their IC as possible. Now I'm only talking about IC's which demand very high bandwidth. And our goal, our role is to build on the foundation of today to continue to help expand the transmission bandwidth. Right. And we have a roadmap together with partners, our customers, to really pretty dramatically expand the transmission bandwidth very substantially. I'm talking about by multiple times over the next few years. And you know, some of these projects are already in experimental stage in the earlier experimental stage or more mature experimental stage. But what I'm trying to tell you is that the 1st generation, upon mass production, will greatly expand the transmission bandwidth of those IC's, already, with further solutions expected to be available, in rather, you know, short time span with multiple times improvement in our transmission bandwidth. So I think this is really an exciting opportunity for us, for WLO. I mean, it was a surprise when we realized, you know, a long time ago that our WLO can actually be utilized to tackle this issue. But as we dig further and further, we realized this is actually a very, very perfect solution, a very perfect fix for the data transmission bandwidth issue that is now faced by this AI technology advancement. Any further questions from Donnie or others?

---

**Donnie Teng – Nomura**

Right. Thank you, Jordan. Very helpful.

---

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

Thank you.

---

**Operator**

Ladies and gentlemen, we are still in Q&A session. If you would like to ask questions, please. Press \* key. And one on your telephone keypad. Thank you.

---

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

As a final note, Eric Li, our Chief IR/PR Officer, will maintain investor marketing activities and continue to attend investor conferences. We'll announce the details as they come about. Thank you and have a nice day.

---

**Operator**

As a final note Eric Li, our Chief IR Officer will maintain investor marketing activities and continue to attend conferences. We will announce the details as they come about. Thank you and have a nice day.

---