



## Himax Technologies, Inc. Q4 and Full Year 2023 Unaudited Financials and Investor Update Call

<p><b>Conference Details:</b> Conference Topic: Himax Technologies, Inc. Fourth Quarter and Full Year 2023 Earnings Conference Call Date of call: 2/6/2024 Time of call: 08:00 a.m. EST Pre-Record Message: No Moderator: Mark Schwalenberg</p>	<p><b>Participant Conference Call link (for Dial-In or Call Back):</b> <a href="https://register.vevent.com/register/BI639c455dbbe245329577a8199a5ef371">https://register.vevent.com/register/BI639c455dbbe245329577a8199a5ef371</a></p>
<p><b>Himax Speakers:</b> <b>Jordan Wu, President &amp; Chief Executive Officer</b> <b>Eric Li, Chief IR/PR Officer</b></p> <p><b>Direct URL to Webcast Registration:</b> <a href="https://edge.media-server.com/mmc/p/9rgsdrfd/">https://edge.media-server.com/mmc/p/9rgsdrfd/</a></p>	<p><b>Replay Links:</b> <a href="https://edge.media-server.com/mmc/p/9rgsdrfd/">https://edge.media-server.com/mmc/p/9rgsdrfd/</a> From: 2/6/2024 at 11:30 a.m. EST To: 2/6/2025 at 11:30 a.m. EST</p>

**Operator:** Opening and standard introduction.

**Mark Schwalenberg:** Welcome everyone to the Himax Fourth Quarter and Full Year 2023 Earnings Call. Joining us from the Company are Mr. Jordan Wu, President and Chief Executive Officer, Ms. Jessica Pan, Chief Financial Officer and Mr. Eric Li, Chief IR/PR 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), 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, 2022 in the section entitled "Risk Factors", as may be amended.

Except for the Company's full year of 2022 financials, which were provided in the Company's 20-F and filed with the SEC on April 6, 2023, 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. I will now turn the call over to Mr. Eric Li. The floor is yours.

#### **Q4 2023 Results**

Mr. Eric Li: Thank you Mark and thank you everyone for joining us. My name is Eric Li, Chief IR/PR Officer at Himax. On today's call, I will first review the Himax consolidated financial performance for the fourth quarter and full year 2023, followed by our first quarter 2024 outlook. Jordan will then give an update on the status of our business, after which we will take questions. We will review our financials on an IFRS basis.

We are delighted to announce that Q4 2023 revenues and profits both surpassed guidance, while gross margin was in-line with the guidance issued on November 9, 2023. This was primarily attributable to better-than-expected order momentum in major product categories as well as cost improvements.

Fourth quarter revenues registered \$227.7 million, a decrease of 4.5% sequentially, but exceeding our guidance range of a 5.0% to 11.0% decline. Gross margin came in at 30.3%, within our guidance range of around 30%, but down from 31.4% last quarter. Q4 profit per diluted ADS was 13.5 cents, surpassing the guidance range of 9.0 cents to 13.0 cents.

Revenue from large display drivers came in at \$33.6 million, reflecting a sequential decrease of 23.1%. This decline was predominantly driven by the prevailing weak macroeconomic conditions amidst the traditional peak seasonality in the fourth quarter. Our TV IC sales declined mid-teens sequentially due to ongoing strict production and inventory control measures of leading customers. Monitor and notebook IC sales both declined double-digit quarter-over-quarter, caused by a slowdown in order momentum as customers pulled forward their inventory purchases during the prior quarter. Sales of large panel driver ICs accounted for 14.8% of total revenues for the quarter, compared to 18.3% last quarter and 16.6% a year ago.

Exceeding the guidance range, small and medium-sized display driver segment revenue reached \$163.1 million, a sequential increase of 1.2%. This was underpinned by outperforming sales particularly in the TDDI products for automotive and tablet markets. Q4 automotive driver sales, combining both traditional DDIC and TDDI, experienced a slight decline following robust order restocking in both during the third quarter. However, Q4 automotive TDDI sales still increased high teens sequentially, bucking the industry downturn thanks to our solid pipeline of design-win projects.

Meanwhile, our industry leading, cutting-edge automotive LTDI product started mass production for Geely Auto's NEVs in the third quarter of 2023. Taken together, this not only solidifies our leadership in next-generation automotive displays, but also reflects the robust market demand for advanced display technology. Jordan will elaborate in a few minutes. Fourth quarter automotive business, encompassing drivers, automotive Tcon and OLED sales, continued to be our largest revenue contributor at over 45% of total sales. For tablet, Q4 sales grew high teens sequentially, exceeding our guidance, driven by successful new product launches by our customers during the quarter. Conversely, smartphone driver sales declined as expected amidst a subdued festival season characterized by sluggish demand. The small and medium-sized driver IC segment accounted for 71.6% of total sales for the quarter, compared to 67.6% in the previous quarter and a year ago.

Fourth quarter non-driver sales also exceeded guidance with revenue of \$31.0 million but declined 8.2% from a quarter ago. The better-than-expected performance is attributable to a resurgence in orders for our Tcon product line. Adoption of our automotive local dimming Tcon is rapidly expanding, as evidenced by hundreds of project awards across the board. This paves the way for robust growth in the coming years, mirroring the success seen in our automotive TDDI. Jordan will share more insight shortly. Non-driver products accounted for 13.6% of total revenues, as compared to 14.1% in the previous quarter and 15.8% a year ago.

Fourth quarter operating expenses were \$52.3 million, a decrease of 17.9% from the previous quarter and roughly flat compared to a year ago. The substantial sequential decrease was caused mainly by decreased annual bonus and salary expenses, partially offset by an increase in R&D expenses. Our standard practice of granting annual bonuses, including cash and RSUs, at the end of September each year, can lead to higher IFRS operating expenses in the third quarter compared to other quarters

of the year. Amidst prevailing macroeconomic headwinds, we are currently exercising strict budget and expense control with full year 2023 OPEX declining 4.0% compared to the year before.

Fourth quarter operating income was \$16.7 million or 7.3% of sales, compared to 10.5% of sales for the same period last year and 4.6% of sales last quarter. The sequential increase was primarily a result of lower operating expenses from lower annual bonus compensation, partially offset by decreased sales and gross margin in the fourth quarter. The year-over-year decrease was primarily a result of lower sales and gross margin compared to the same period last year. Fourth quarter after-tax profit was \$23.6 million, or 13.5 cents per diluted ADS, compared to \$11.2 million, or 6.4 cents per diluted ADS last quarter and \$42.2 million, or 24.1 cents in the same period last year. It's worth noting that the favorable after-tax profit exceeding operating income reflects the positive tax adjustments made to rectify overestimated tax expenses for preceding quarters this year. As a reminder and for the purpose of year-over-year comparison, we made a divestiture of long-term assets during Q4 2022, resulting in a non-operating income of around \$11 million on an after-tax basis.

### **2023 Full Year Summary**

Now, let's quickly review the financial performance for the full year 2023. Revenues totaled \$945.4 million, reflecting a 21.3% decline compared to 2022. Persistent subdued global demand, coupled with looming recession concerns, presented significant challenges to our operations throughout 2023. These market dynamics adversely affected both demand and procurement processes of panel customers, particularly in the realm of consumer electronics. Yet, our optimism in the automotive business remains steadfast as automotive TDDI sales witnessed a remarkable surge of over 50%, reflecting the resilience and potential of our largest business segment.

Revenue from large panel display drivers totaled \$175.7 million in 2023, marking a decrease of 33.5% year-over-year, and representing 18.6% of total sales, as compared to 22.0% in 2022. Small and medium-sized driver sales totaled \$629.2 million, reflecting a decrease of 19.2% year-over-year, and accounting for 66.5% of our total revenues, as compared to 64.8% in 2022. Non-driver product sales totaled \$140.5 million, a decrease of 11.2% year-over-year, and representing 14.9% of our total sales, as compared to 13.2% a year ago.

Inventory management also presented unique challenges for us throughout the sluggish demand environment this year. To navigate these circumstances, our primary objectives were the strategic depletion of excess inventory while also tactically controlling our wafer starts. Following quarters of aggressive destocking, which often involved sacrificing short-term gross margin, inventory decreased to near historical norms by end of 2023. The remaining stocks feature promising customer design-ins and long product life cycles that lay the groundwork for a more stable outlook in 2024.

Gross margin in 2023 was 27.9%, decreasing from 40.5% in 2022. As a reminder, in Q2, we strategically terminated high-cost foundry capacity agreements, leading to a depressed Q2 gross margin of just 21.7%. Despite the temporary margin contraction, this decision liberates new wafer starts from minimum fulfillment constraints while positioning us to capitalize on a turnaround in demand.

Operating expenses in 2023 were \$220.3 million, a decline of 4.0% from 2022, primarily a result of the lower vested portion of the annual bonus compensation awarded to employees in 2023 and preceding years, partially offset by increased salaries and R&D expenses. 2023 operating income was \$43.2 million, or 4.6% of sales, a decrease from \$257.6 million, or 21.4% of sales, in 2022. Our

net profit for 2023 was \$50.6 million, or \$0.29 per diluted ADS, as compared to \$237.0 million, or \$1.36 per diluted ADS in 2022.

Turning to the balance sheet, we had \$206.4 million of cash, cash equivalents and other financial assets as of December 31, 2023. This compares to \$229.9 million at the same time last year and \$155.4 million a quarter ago. We achieved a strong positive operating cash flow of \$68.7 million for the fourth quarter, a result of the substantial reduction in inventory across major product lines. As of December 31, 2023, we had \$40.5 million in long-term unsecured loans, with \$6.0 million representing the current portion.

Our year-end inventories were \$217.3 million, lower than \$259.6 million last quarter and \$370.9 million at the end of last year. Our inventory level has declined steadily over the last five quarters and reached a healthy level by the end of 2023. Accounts receivable at the end of December 2023 was \$235.8 million, a decline from \$248.5 million last quarter and down from \$261.1 million a year ago. DSO was 91 days at the quarter end, as compared to 95 days last quarter and 79 days a year ago. Fourth quarter capital expenditures were \$15.1 million, versus \$2.6 million last quarter and \$2.3 million a year ago. Fourth quarter capex was mainly allocated to in-house testers for our IC design business, in addition to other R&D related equipment. Total capital expenditures for 2023 were \$23.4 million as compared to \$11.8 million in 2022.

As of December 31, 2023, Himax had 174.7 million ADS outstanding, unchanged from last quarter. On a fully diluted basis, the total number of ADS outstanding for the fourth quarter was 175.0 million.

### **Q1 2024 Guidance**

Now, turning to our first quarter 2024 guidance. We expect first quarter revenues to decline 9% to 16% sequentially. Gross margin is expected to be around 28.5%, depending on the final product mix. The first quarter profit attributable to shareholders is estimated to be in the range of 2.0 to 5.0 cents per fully diluted ADS.

I will now turn the call over to Jordan to discuss our Q1 outlook. Jordan, the floor is yours.

### **Q1 2024 Outlook**

Traditionally, business operations in the first quarter decelerate due to the Lunar New Year holidays. This year, exacerbated conditions due to sluggish demand are causing panel makers to strategically lower factory utilizations, in an attempt to support panel pricing and profitability. In tandem, OEMs and end customers are maintaining their cautious approach with heightened procurement scrutiny, even with inventories now at more manageable levels. This shift has resulted in shortened forecasts and more frequent last-minute orders, ultimately constraining our visibility, particularly in consumer electronics products.

To fortify the resilience of our operations, we are actively implementing strategies to optimize costs and diversify suppliers in both foundries and backend sources to enhance supply flexibility and cost-effectiveness. The recent partnership with Nexchip for the automotive market illustrated our supplier diversification strategy. It also highlighted our strategic approach to better align with customers' regional supply policies, particularly addressing the surging demand in China's automotive industry.



In addition, our recent presence at CES provided a comprehensive outlook on our strategic focus for the upcoming years, covering automotive, WiseEye AI and optical technologies. In automotive, our primary revenue contributor, we remain as optimistic as ever given our extensive, unparalleled product portfolio across a broad spectrum of technologies from mainstream LCD technology to the emerging OLED technology. Notably, within the automotive LCD display sector, we have secured hundreds of design-wins in TDDI and local dimming Tcon and continue to see ongoing expansion in our pipeline. The majority of these design-wins are slated for mass production in the next two years, underscoring our continued market dominance moving forward. Furthermore, our expansion into automotive OLED displays, covering all of DDIC, Tcon, and touch controller, bolsters our market share leadership by offering customers an integrated bundle solution. As a reminder, our automotive driver business represented 36% of total sales in the full year 2023, and we anticipate it will expand to well over 40% of our total sales in 2024.

In the AI domain, we are relentlessly dedicated to our WiseEye product line where we have already achieved industry-leading ultralow power consumption and AI inference performance. Our achievement with WiseEye is also now further supported through strategic collaborations with ecosystem partners and system integration companies covering a broad range of AI applications. Concurrently, we are actively expanding our easy to adopt WiseEye Module offering for the endpoint AI market to cater to its diverse needs and capitalize on the extensive opportunities in endpoint AI. Looking further out on the horizon, while the realization of LCoS may span several years, the ultra-illuminance Color Sequential Front-Lit LCoS microdisplay that we unveiled at the CES marked a major technology breakthrough that we believe will pave the way for the realization of true see-through AR goggles.

In summary, driven by accelerating growth in our automotive segment and expansion beyond our core driver business, we are well positioned for sustainable long-term revenue growth and profitability. Furthermore, our automotive, WiseEye, and LCoS product lines have attracted a strong global client base, which significantly extends our reach and strengthens our presence in markets worldwide while diversifying regional exposure and adding stability to our operations.

## **Display Driver IC Businesses**

### **LDDIC**

With that, I'll now begin with an update on the large panel driver IC business. In Q1 2024, we anticipate a sequential decline of single digit in large display driver IC revenue, primarily attributed to weaker-than-expected sell-through during the slow season. As I just mentioned, panel makers are deliberately lowering factory utilizations, striving to safeguard panel prices by constraining panel supply amidst the prevailing sluggish market. We expect Q1 sales for TV and monitor ICs to decline quarter over quarter. However, Q1 notebook IC sales are poised for a decent increase, bolstered by customer restocking following several quarters of muted demand.

In the notebook market, as customers strive to differentiate and add value to their products, a discernible trend is unfolding, marked by increasing adoption of touch features and AMOLED displays in premium notebooks and upcoming AI PCs. Touch features enhance user interaction and enrich AI user experience while AMOLED display elevates visual enhancement in areas such as gaming and entertainment. It's crucial to emphasize our heightened focus and the growing significance of both technologies. Notably, during CES this year, we unveiled industry-leading on-cell AMOLED touch controller and in-cell TDDI for premium OLED and LCD notebooks respectively. Our on-cell AMOLED touch controller is designed to address the demand for accurate touch response and enhanced

handwriting capability in the emerging mid-sized OLED displays for notebooks that feature thinner, lighter, brighter and wider color gamut visual experience. What distinguishes our touch controller is a comprehensive set of features, which include support for various OLED panel types in rigid, flexible and hybrid, the capability to handle responsive touch operations of up to 10 fingers, and compatibility with various industry-standard active stylus protocols. By expanding our OLED portfolio to include a touch controller IC along with existing DDIC and Tcon, we provide a comprehensive AMOLED notebook solution. Meanwhile, our recently launched in-cell TDDI for LCD notebooks offers precise touch sensitivity, vibrant multi-finger operation, and acute active stylus functionalities, along with support for large size, high resolution, low power consumption, and slim bezel designs. By leveraging these extensive product portfolios, we are well positioned to capitalize on this market shift through collaborations with key Korean and Chinese panel makers where mass production is scheduled to commence in the second half of this year for next generation premium notebook models. Furthermore, the incorporation of high-value-added features increases the content value gained per panel while presenting a new opportunity for Himax. Looking ahead to 2025, we anticipate a decent replacement cycle when, armed with leading solutions for high-end market launched lately, Himax's presence in the notebook market will be further lifted.

### **SMDDIC**

Turning to the small and medium-sized display driver IC business. First quarter revenue is expected to decline high teens sequentially, on the backdrop of traditional low seasonality where demand for consumer electronics remains sluggish. Smartphone and tablet sales are projected to decline single digit and double-digit respectively in Q1. Automotive revenue is also expected to decline mid-teens sequentially, following robust order replenishment in previous quarters. In contrast, Q1 automotive TDDI sales are still poised for sequential growth, defying recent reports of slower electric vehicle demand in China. The swift and ongoing expansion of TDDI adoption, as evidenced by our over 400

secured design-win projects, positions us significantly ahead of our peers. With approximately 30% of awarded projects currently in mass production and a continuous influx of new pipeline and design wins across the board, our leadership position is reinforced looking ahead into 2024 and beyond. Remarkably, automotive TDDI sales are anticipated to account for almost half of total automotive driver sales in Q1. Meanwhile, a prominent trend is emerging as more customers opt for our TDDI or LTDI, coupled with our local dimming Tcon, as their standard development platform for crafting new automotive displays of various sizes. This movement has drawn the interest of leading panel makers, Tier 1s, and car manufacturers across the spectrum, who acknowledge the benefits of our supreme bundle solution to accelerate their new panel development and elevate their product values.

Moving on to our industry leading LTDI. Himax is proud to be pioneering the introduction of LTDI to the automotive display market. Once again, we stand as the first company in the world to initiate mass production of LTDI, starting with Geely Auto's NEVs in the third quarter 2023. For displays larger than 30 inches, the incorporation of LTDI signifies increased content value for Himax on a per-panel basis, where such large displays usually necessitate six or more LTDI chips and at least one local dimming Tcon. This opens a new revenue stream for us and fortifies our market leadership moving forward.

During CES this year, Himax presented the most comprehensive product lineup for display semiconductor technologies, ranging from traditional DDIC and TDDI, to cutting-edge LTDI and local dimming Tcon for LCD panel, and extending into AMOLED display solutions. Our AMOLED portfolio, which used to be comprised of DDIC and Tcon, now expands to on-cell touch controller. It's important to point out that the automotive industry upholds stringent standards of quality and reliability, surpassing those of consumer products. In acknowledgement of these heightened requirements, our recently unveiled AMOLED touch controller IC is meticulously engineered with an industry-leading touch signal-to-noise ratio exceeding 45 dB, making it the ideal solution to meet the needs of flexible

OLED panels often required for automotive application. It also provides improved sensitivity to challenging user conditions such as glove-wearing and wet finger operations, guaranteeing exceptional performance with display quality free from interference by touch-display interactions. Furthermore, our touch controller supports multi-finger capacitive touch, is compatible with multiple OLED panel types and has the capability to cascade multiple chips in support of larger than 20-inch displays. With project awards from leading AMOLED panel manufacturers, our automotive AMOLED touch controller is poised to commence mass production in the upcoming quarters. We continue to strive toward providing the most extensive array of automotive display solutions in the market. This commitment involves fostering robust partnerships with all panel makers, Tier 1 suppliers, and car manufacturers across the globe, ensuring comprehensive solutions that cater to a wide spectrum of customer preferences and industry requirements.

In terms of our smartphone and tablet product lines, we continue to see lackluster demand in the market. On a positive note, our inventory has substantially rebalanced to a satisfactory level. With the destocking process nearly complete, we placed wafer starts for select products starting in Q2 last year. Concurrently, we are diligently working on improving our cost structure through supplier diversification and strategic alliances, thereby positioning ourselves for an anticipated resurgence in demand.

Next for an update on our AMOLED business. As I mentioned earlier, we are actively venturing into AMOLED market by forging strategic partnerships with leading panel manufacturers in Korea and China, spanning a diverse range of applications, including automotive, tablets, notebooks, and smartphones. As I just covered, we have made great progress in automotive, tablet, and notebook markets, where we offer comprehensive solutions covering DDIC, Tcon, and touch controller. Mass production for most of these new solutions is expected to commence in the second half of 2024. In

the smartphone AMOLED display driver segment, however, the prevailing slowdown in smartphone market demand has led to adjustments to our initial timeline. Nevertheless, collaborations with customers in Korea and China are ongoing with verification and partnership projects underway.

### **Non-Driver Product Categories**

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

### **Timing Controller (Tcon)**

First for an update on our Tcon business. We expect Q1 Tcon sales to increase by single digit sequentially, driven by increasing Tcon shipments for automotive displays and OLED displays for tablets. Despite subdued end market demand, we are actively developing next generation Tcon IC for OLED tablets, notebooks, and automotive applications. The initiative aims to broaden and diversify our product offerings while also positioning us to capitalize on a market resurgence. Thanks to our cutting-edge local dimming technology, Himax is the industry leader in automotive Tcon with an unchallenged leading position of over one hundred design-win projects under our belt. At CES 2024, we unveiled our latest local dimming Tcon which features advanced image enhancement with wide color spectrum, ensuring exceptional visual quality that supports resolutions of up to 12Kx1K, and exceptional dynamic contrast enhancement tailored to real time display content, all while adhering to power efficiency and stringent automotive safety standards. The rapid increase in customer adoption reflects the growing traction and trust in our solutions. We expect a decent growth trajectory for local dimming Tcon over the next few years.

## **WiseEye™ Smart Image Sensing**

Switching gears to the WiseEye™ Smart Image Sensing total solution, a cutting-edge endpoint AI integration featuring Himax's ultralow power AI processor, always-on CMOS image sensor, and advanced CNN-based AI algorithm. During CES this year, we highlighted a range of application demonstrations which have swiftly gained adoption across various domains, featuring our industry leading ultralow power and potent AI capabilities. We achieved noteworthy progress with customers, particularly in implementing WiseEye in smart door locks. The collaboration with the China smart door lock leader, DESMAN, marks a groundbreaking feature advancement in the door lock industry, as our ultralow power WiseEye AI, with remarkably low power consumption of just 1 mW, enables the world's first smart door lock featuring uninterrupted surveillance with 24/7 real-time sentry monitoring while at the same time significantly extending battery life. We also showcased an adoption of WiseEye in a capsule endoscope, a highly encouraging advancement in the medical area. Our WiseEye AI solution empowers tiny pill-sized capsule endoscopes which are easy to swallow, facilitating smooth medical examination processes. The device consumes minimal power to sustain continuous image capture and transmission for up to 12 hours. This creates a significantly simplified medical process when compared to conventional procedures, which often involves the use of invasive endoscope tubes. We are excited about the potential for this transformative development for the healthcare industry and expect to commence production with a customer in 2025.

Turning to an update on WiseEye2, our new generation AI processor. We are honored to report that WiseEye2 was awarded the "2023 Best AI Product Award" by EE Awards Asia, further elevating Himax's WiseEye AI prominence in the industry. WiseEye2 is pioneering a new standard in endpoint AI benchmarks, earning recognition for its outstanding AI inference capability, industry-leading ultralow power efficiency, and advanced security features. In the realm of context-aware AI, WiseEye2

facilitates high-precision detection with features such as face mesh, facial landmark, hand gesture, and human pose and skeleton, which expands the intuitive, user-friendly scope of interactive applications in real-life, all achieved with minimal power consumption. Moreover, WiseEye2 streamlines the system integration with a rich set of peripheral interfaces, effectively lowering the system cost for edge appliances by eliminating the need for costly, power-hungry discrete MCUs otherwise required to process various sensor data. Additionally, WiseEye2 boasts versatile sensor fusion capabilities, encompassing image, video, audio, vibration and thermal inputs. This enables sophisticated, integral and highly accurate detection with low latency, especially suitable in anomaly detection with timely warnings, making it an ideal solution for a range of industrial applications, notably in automated and unmanned factories. Alongside our ongoing collaboration with end customers, significant progress is being made in partnerships with major CPU and AP SOC players in preparation for their next generation smart notebooks, AI PCs, surveillance applications and a host of other endpoint AI applications. We will provide more details as they come about.

Concurrently, to meet various application requirements and extend market reach, we are in collaborations with numerous ecosystem partners and system integration companies, offering hands-on development tools and vigorous AI models to streamline customer development efforts and reduce cost for their AI product introduction. The launch of our production-ready WiseEye Modules exemplifies this business model. These modules incorporate Himax's low-power CMOS image sensors, WiseEye1 or WiseEye2 AI processor, and versatile AI models from either in-house or third-party partners. Meticulously designed with tiny form factors, highly integrated and plug-and-play characteristics, the modules feature user-programmable, pre-loaded AI models to facilitate seamless system integration, lowering the entry barrier and cost for AI development. This initiative is particularly well-suited for early-stage market engagement applications. Furthermore, we continue to collaborate



with ecosystem partners to unveil a spectrum of plug-and-play AI modules that incorporate advanced no-code/low-code AI solutions. By leveraging their strengths in specific domains and existing channels, these collaborative efforts ensure we can meet diverse development needs for both software and hardware. Notably at CES 2024, our partnership with Seeed Studio on its battery-powered endpoint AI vision processing module, Grove Vision AI Module V2, significantly underscores our dedication to making AI technology easily accessible.

After years of dedicated efforts to enhance our AI capabilities in ultralow power AI processing and image sensing for endpoint AI applications, we believe that our WiseEye AI business will emerge as a multi-year structural growth driver for Himax.

### **Optical Related Product Lines / Metaverse**

Lastly, I'd like to provide an update on our optical product lines. Himax is a distinguished industry leader with a diverse range of optical and optoelectronics products crucial for building emerging metaverse applications. We strive to innovate and advance various technologies in this arena, including Wafer Level Optics (WLO), 3D Sensing, Liquid Crystal on Silicon (LCoS), among others, pushing the envelope in a variety of fields. Our technological expertise and extensive manufacturing experience are evident in our growing clientele for AR/VR goggles and ongoing engineering projects. Now, let's review some recent progress we have made.

First on our advancements in LCoS, a technology where Himax boasts a decade-long expertise and proven track record of shipments for AR goggles with global leading names. Our latest breakthrough

Color Sequential Front-Lit LCoS Microdisplay offers unparalleled industry-leading brightness of up to 180,000 nits, providing ultra-luminance performance in vibrant RGB displays. It also features superior optical power efficiency, a compact form factor, and ultra-lightweight design which make it the best choice for the next generation of see-through AR devices. Currently, we are actively involved in follow-up engineering activities in collaboration with key tech players and anticipate significant opportunities in the coming years.

Next, let's discuss the recent introduction of nano-imprint optical film technology in automotive lighting by Himax's subsidiary, CMVT, in collaboration with Ta Yih Industrial, a global leader in automotive lighting manufacturing. The state-of-the-art technology was implemented within a leading-edge LED Edge-Lit Type automotive lighting. By leveraging our nano-imprint optical film, side-emitting LED light is reflected or refracted towards the illumination direction of the automotive lamps, ensuring uniformity, minimizing fixture size, and enabling precise control of light, compared to conventional direct-lit type automotive lighting. This results in enhanced efficiency, reduced LED usage, and the ability to create versatile patterns at a significantly lower cost. This groundbreaking development unlocks not only extensive visual possibilities for automotive lighting, but also interior light decoration design as well as related illumination applications. We will provide more updates as they come about.

We believe our optical and optoelectronics technologies are poised to play an important enabling role in developing next generation metaverse applications. We are committed to advancing this technology suite, collaboratively expanding application possibilities with industry leaders who are deeply devoted to advancing their next-generation metaverse-related products.

For non-driver IC business, we expect revenue to decline single digit sequentially in the first 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.

**OPERATOR TO QUEUE QUESTIONS**

**Jordan's closing remarks**

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