

# Forward Looking Statements



Factors that could cause actual events or results to differ materially from those described in this conference call include, but are not limited to, the effect of the Covid-19 pandemic on the Company's business; general business and economic conditions and the state of the semiconductor industry; market acceptance and competitiveness of the driver and non-driver products developed by the Company; demand for end-use applications products; reliance on a small group of principal customers; the uncertainty of continued success in technological innovations; our ability to develop and protect our intellectual property; pricing pressures including declines in average selling prices; changes in customer order patterns; changes in estimated full-year effective tax rate; shortage in supply of key components; changes in environmental laws and regulations; changes in export license regulated by Export Administration Regulations (EAR); exchange rate fluctuations; regulatory approvals for further investments in our subsidiaries; our ability to collect accounts receivable and manage inventory 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, 2020 filed with the SEC, as may be amended. Images of devices depicted in this presentation may be representative of those in which Himax has specification, or for reference-only and may not be associated with actual bill-of-material or design-win in the displayed image. Any association of such, without a confirmed disclosure of such by the Company or the Company's customer are coincidental. Himax is under strict customer disclosure guidelines on the release of such information.

# Global Display and Imaging IC Design House



## **Global Top 10**

Fabless IC Design Company\*

## US \$1.5 Billion

2021 Sales Avg. 100 Million ICs Per Month

### **40% Global Market Share**

Driver IC for Automotive Displays

## **Listed on NASDAQ**

NASDAQ: HIMX Since 2006









<sup>\* 3</sup>Q21 WW revenue ranking. Source: TrendForce, Dec 2021

# Himax – Driver for Better Future





## **Automotive**

- Very Large-Size, Curved, In-Cell Touch Next Generation Displays
- Head-Up Display (AR-HUD)
- 3D Sensing
- Ultralow Power Computer-Vision Al



## **AloT**

- World Leading Ultralow Power AI Sensing for Extreme Edge
- Total Solution: AI Processor + Always-On Image Sensor + Algorithm
- Ecosystem: Google, Microsoft, Amazon, Arm, tinyML, and Many Others



## **Optical product line-up/Metaverse**

- Microdisplay
- Diffractive Optics
- 3D Sensing

# Recognized Industry Leader



For the last 30 years, we have worked with leading OEMs to develop the most recognized imaging and human interfacing technologies.

1990s

Founder B.S. Wu pioneers flat panel technologies at Chimei Electronics as CTO

**2000s** 

Chairman Wu establishes Himax to meet DDIC demand for large panels and fastgrowing medium and small panels

**2010s** 

Himax gains market share with design wins with leading technology products companies, worldwide

## 2015 and Beyond

Himax leads WLO shipment and development with North American OEM's mainstream applications. 3D sensing for e-Payment; LCoS for AR glasses and AR-HUD; CMOS for NB and Webcam; Smart Sensing for Edge Al; WLO integration keeps Himax at the forefront of AR/VR product design





















March 2021

WE-I Plus AloT

Platform received

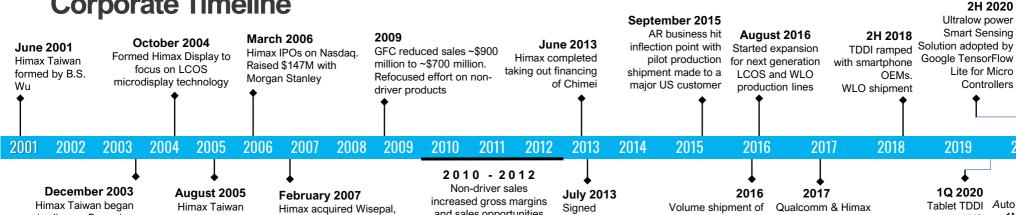
Microsoft Azure

IoT PnP

2020

Certification

## **Corporate Timeline**



trading on Emerging Stock Board (TW) under "3222"

delisted from **Emerging Stock** Board

and forms Himax Semiconductor to focus on small and medium sized DDICs

and sales opportunities

#### investment agreement with Google

AR related LCOS and WLO, AMOLED DDIC, and in-cell TDDI

jointly announced structured lightbased 3D depth sensing solution

#### 1Q 2020

Tablet TDDI started MP

2H 2021 Auto TDDI shipment over 1M pcs in Q3. Ultralow power Smart Sensing and Auto AMOLED driver started shipment for key account from 4Q21

2021

# Investment Highlights



## Leading Imaging and Human Interfacing Technology Innovator

- Global display driver player with a wide range of display technologies for panels of all sizes
- Thousands of patents for Himax's IP and designs
- Imaging technology and human interfacing total-solution provider

## **Diversified Base of Customers and Revenues**

- DDIC market share leader
- Penetration throughout all display market segments and with a leading position in several segments, including automotive
- Diversified revenues from traditional large and small/medium DDICs to TDDI, Timing controller, WLO, 3D Sensing, CIS, Smart Sensing and LCOS microdisplays
- Top-tier partnerships with major U.S. and Asian AP platform providers, device makers, and the world's mega tech names
- Expect non-driver product lines to improve corporate profit margin

## **Operational and Public Market Performances**

- Long-term profitability potential with no fund raising since IPO
- Focus on delivering P&L improvement by executing on the technologies Himax already developed for both driver IC and non-driver IC areas
- Committed to high dividend payout ratio

## **Innovative New Products Capturing Growth Markets**

- TDDI and AMOLED technologies fuel growth for core display driver ICs business
- Our leading specifications and continuous design-wins for WLO, 3D sensing, AoS CIS, ultralow power Smart Sensing, LCoS microdisplay, all position Himax at the forefront for future product releases covering Structured Light & ToF, AR/VR, Medical Devices, Robotics, AloT, Edge AI, Smart Home, Automotive LiDAR, AR-HUD applications

## **Visionary Management Team**

# Himax on NASDAQ



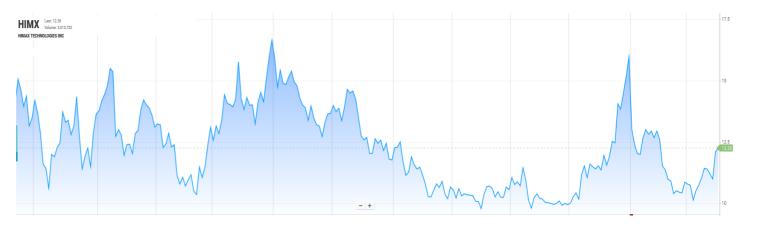
## HIMX Nasdaq Listed

Fiscal Year	December 31		
Last-Traded Price (2/16/22)	\$12.26		
Diluted Weighted Ave. Out. ADS	174.8M		
Equivalent ADS Out	174.3M		
Market Capitalization (2/16/22)	\$2,134M		
Average Volume	4.06M		
Insider Ownership*	24.0%		

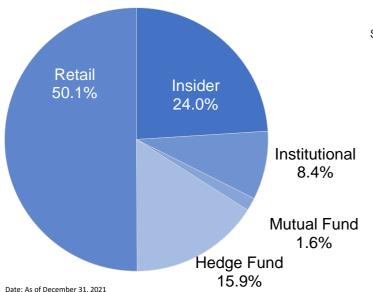
<sup>\*</sup> Insider ownership includes executives and board members

## **12 Month Trading Chart**





## **Shareholder Type**



Source: https://www.nasdaq.com/symbol/himx/stock-chart

## **Analysts**

Credit Suisse
Mizuho Securities Asia Ltd.
Nomura Securities
Baird Equity Research
Vertical Group

Jerry Su

Kevin Wang

Donnie Teng

Tristan Gerra

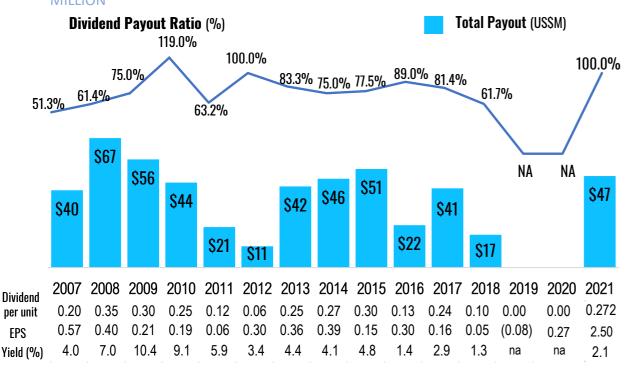
Jonathan Lopez

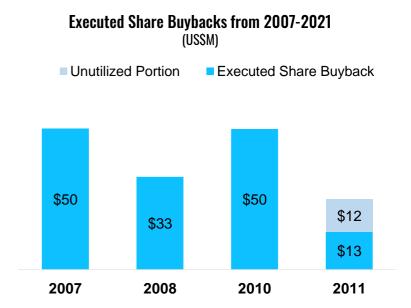
Date: As of December 31, 2021

# History of Dividend and Share Buyback



## \$651 HAS BEEN RETURNED TO SHAREHOLDERS INCLUDING DIVIDENDS AND SHARE BUYBACKS SINCE





#### Himax Dividend and Policy

- Distributed a total of \$505 million of cash dividend since IPO
- Dividends referenced primarily on prior year's profitability and cash demand for future growth
- Typically pays out annual cash dividend at approximately the middle of the current calendar year, e.g., 2021 dividend payouts in July was for fiscal year 2020
- 2021 high dividend payout ratio reflected the confidence we have in our ability to execute on strategic growth initiatives, strong financial position for 2021 and overall long-term growth prospect

#### **Himax Share Buyback**

- Initiated four share buyback programs totaling \$158 million since 2007
- Repurchased a total of 46.5 million ADSs as of 2012 at average purchase price per ADS: \$3.15
- Note: On 11/30/2018 & 12/3/2021 Himax chairman announced share purchase plans. Chairman Dr. Biing-Seng Wu intended to use his personal funds to purchase up to approximately \$5 million and \$10 million respectively of the Company's American Depositary Shares ("ADSs") in the open market, subject to market conditions and other factors

# Q4 Summary and Q1 Guidance



	402021	302021	402020	YoY	QoQ
Revenues	\$451.9M	\$420.9M	\$275.8M	+63.9%	+7.4%
Non-IFRS Gross Margin (%)	51.8%	51.7%	31.2%	+20.6%	+0.1%
Non-IFRS Profit	\$148.4M	\$138.9M	\$34.2M	+333.8%	+6.8%
Non-IFRS Earnings per ADS	\$0.849	\$0.795	\$0.197	+332.2%	+6.8%
IFRS Profit	\$142.4M	\$118.7M	\$34.0M	+318.7%	+19.9%
IFRS Earnings per ADS	\$0.815	\$0.680	\$0.195	+317.2%	+19.9%
	2021		2020	YoY	
Revenues	\$1,547.1M		\$887.3M	+74.4%	
Non-IFRS Gross Margin (%)	48.5%		24.9%	+23.6%	
Non-IFRS Profit	\$463.6M		\$52.3M	+785.8%	
Non-IFRS Earnings per ADS	\$2.651		\$0.302	+778.3%	
IFRS Profit	\$436.9M		\$47.1M	+826.9%	
IFRS Earnings per ADS	\$2.498		\$0.272	+819.1%	

## **102022 Guidance**

Revenues	Decrease 5% to 9% sequentially
Non-IFRS Gross Margin (%)	Around 46% to 48%, depending on our final product mix
Non-IFRS Profit	To be around 67.0 cents to 73.0 cents
IFRS Profit	To be around 63.5 cents to 69.5 cents

# A Gløbal Semiconductor Company



- Fabless semiconductor company with world leading visual imaging processing technologies
- Global market leader in TFT-LCD display driver and timing controller ICs
- 200+ customers across Taiwan, China, Japan, Korea, U.S. and Europe
- 3,041 patents granted and 482 patents pending approval worldwide as of December 31, 2021
- NASDAQ-listed since March 2006 (HIMX)
- Around 2,100 employees worldwide; more than 90% are engineers
- Headquartered in Tainan, Taiwan with 9 R&D centers in Taiwan, China, Korea, Israel and U.S., out of a total of 24 offices across Taiwan, China, Japan, Korea, Israel and U.S.

## Himax's Global Reach



**HEADQUARTERS Tainan, Taiwan** 

# Corporate Structure



## Nasdaq Listed

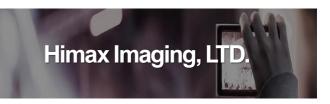
# Himax Technologies, Inc.

## Himax Technologies, LTD.

- TFT-LCD Drivers, EPD Drivers, and AMOLED Drivers
- TCON and Bridge IC
- Touch Controllers
- Pure in-cell Touch (TDDI)
- AloT Edge Al Processors
- 3D Decoder Processors
- ASIC Service and IP Licensing
- Power Management ICs, P-Gamma OP, Level Shifter and LED Driver
- Wafer Level Optics and 3D Sensing Modules
- In-house Color Filter Fab for LCoS and CIS

## Himax Display, Inc.

- LCoS Modules for Head-Mounted Display, Head-up Display and Pico-projector Applications
- Phase Modulation for Communication, Holographic Displays and AR-HUD
- Light Guide



- CMOS Image Sensors
- Ultralow Power Always-on (AOS) CMOS Image Sensors

































# Display Driver IC (DDIC)





We are a leader in display driver ICs used to enable large, small and medium-sized flat panel displays in TFT and Touch

#### MARKETS WE SERVE

Smartphones, Tablets, Automotive, Monitors, Notebooks, TVs, Gaming, Education, Industrial, Healthcare plus 100's more applications that use all types of flat panel displays

## In what devices can you find Himax DDIC technologies

















#### Who uses Himax DDICs





































Japan Display Inc.

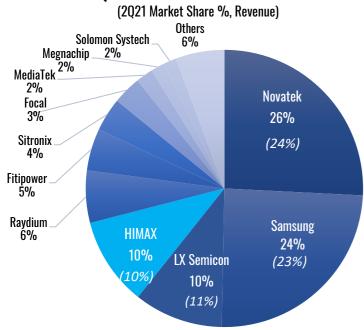




# **Our DDIC Market Share**



## **3Q21 Driver Market Share**



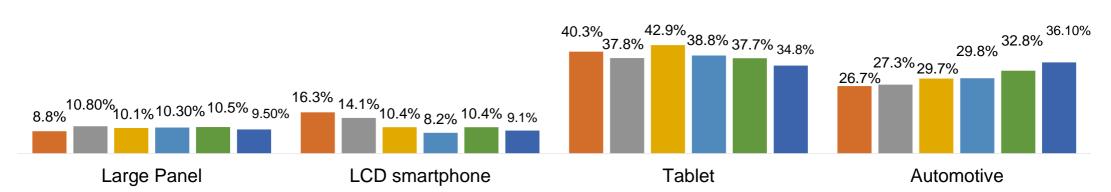
We provide a complete solution of image processing technologies and leverage our expertise in TV, Monitor, NB, mobile devices, automotive and other mass-market technology releases

- Large display driver IC business positions toward high end 8K/4K TV, gaming monitor and low power NB
- Strong market share in fastest moving consumer devices including tablet and automotive application
- Major TDDI design-wins and shipments for smartphones, tablets and automotive well executed backed in 2020 and continues to accelerate into 2022

Source: Omdia and company estimates (This covers TFT-LCD and OLED DDICs)

## HIMX's Strong Driver IC Market Share in Mass Market Devices





# **TDDI Technologies**





We provide technologies for touch sensor displays including in-cell touch and the fast-growing segment of Touch and Display Driver Integration (TDDI) single-chips

#### MARKETS WE SERVE

Beginning with smartphones, expanded to tablets, automotive, and many other consumer electronic devices

- Smartphone: LCD TDDI widely adopted for entry & mid-range smartphones. TDDI penetration >70% and rapidly replace traditional DDIC
- **Tablet**: New in-cell TDDI refreshed tablet life cycle starting 1Q20. Himax, the primary supplier for non-iOS tablet tier-1 customers, expects continuous growth into 2022
- Automotive: 2Q19 MP. Selected by many leading tier-1 and OEMs for their upcoming vehicles. Shipped over 1M automotive TDDI chips within 3Q21 alone. Contribution of automotive revenue grows will better position our long-term product mix in both profit margin and business visibility

## In what devices can you find Himax TDDI technologies



A-Si HD+ Smartphone



1003

LTPS FHD+ and HD+ Smartphone



8" and Large-sized Tablets, In-cell TDDI



Tablet PC & Smart Speaker



Auto CID & Infotainment

Who uses Himax Touch and TDDI Technologies



















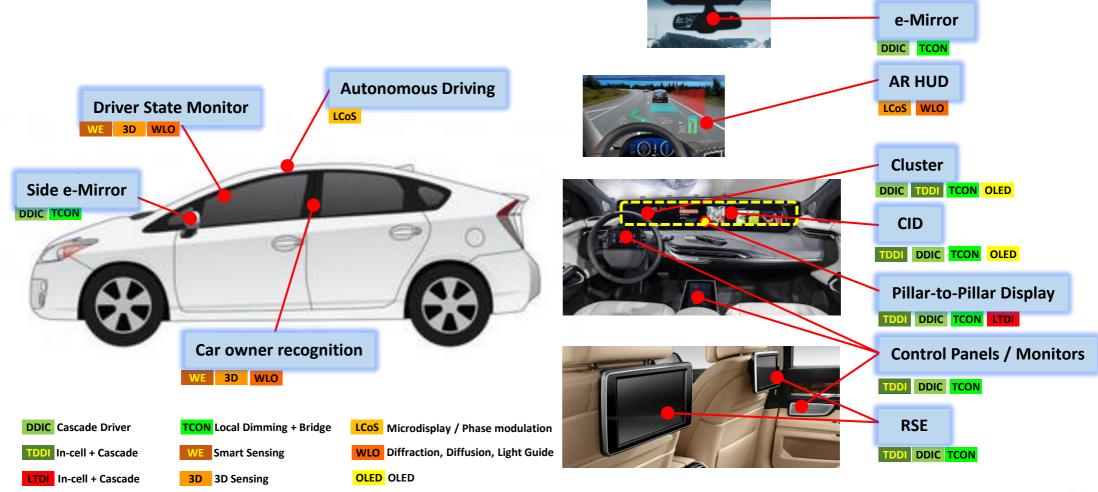
# **Leadership in Automotive Displays**



**Dash Cam** 

DDIC TCON

We offer comprehensive automotive display solutions covering DDIC, TDDI, TCON and OLED. Moreover, we also offer leading-edge non-driver solutions, covering LCoS, WLO, CIS, 3D Sensing and Smart Sensing for advanced automotive applications.



# WLO and 3D Sensing





We offer industry leading WLO design know-how and mass production expertise in structured light and ToF. Himax 3D sensing offers SLiM total solution with leading depth perception feature and key components, 3D decoder IC, to reach out diversified end applications

#### MARKETS WE SERVE

#### Wafer Level Optics (WLO):

- DOE, diffuser, lens and other nanoimprinting diffractive optics for structured light, ToF and others. Accelerating new design activities of ToF projectors in world-facing ToF 3D sensing camera for smartphone
- Waveguide for AR and LCoS. Lens for CIS

#### 3D Sensing:

e-payment, VR, smart door lock, automotive, access control, medical inspection, service robotics, industrial robotics, eye tracking and gesture controls for AR/MR/XR/VR

## In what applications can you find Himax WLO and 3D Sensing











## **3D Ecosystem Partners**







iCatch Technology



Others

# **Ultralow Power Smart Sensing and CIS**







Significant motion







Head detection

Head motion box

## **AI Ecosystem Partners**





















ECO LUX

Himax Smart Sensing brings computer vision Al to edge devices with extremely low power. We participated tier-1 edge-to-cloud ecosystems for broad market access. Himax CMOS image sensors include RGB, near infrared (NIR) and ultralow power Always-on Sensor (AoS)

#### **MARKETS WE SERVE**

#### **Smart Sensing:**

 NB, smart tripod, battery security camera, automotive, panoramic video conferencing, utilities meter, QR code reader, doorbell, door lock, endoscope, smart buildings, manufacturing, retail, agriculture

#### CIS:

- Ultralow power AoS: Best for IoT/ Smart sensing in human/ Occupancy Detection
- NIR: 3D sensing and smart sensing
- RGB: NB and web camera

## In what applications can you find Himax 3D/Smart Sensing technologies























# **LCoS Microdisplays**





We are the leader and long-term innovator of Liquid Crystal on Silicon (LCoS) displays and one of the companies capable of high-volume production runs of LCoS displays for the launch of mass-market devices

#### Front-Lit LCoS Technology Advantages

- Compact form factor, brightness, power efficiency
- Simpler optical engine design and lower cost

#### **MARKETS WE SERVE**

#### **LCoS** and Front-Lit LCoS

 Industrial, consumer, shopping, search, gaming, sports, pico projector, AR/VR smart glasses, automotive head-up displays, Tier-1 OEM's market leading AR glasses

#### **Phase Modulation and Beam Steering**

Holographic display, AR-HUD, WSS, ADAS and LiDAR

## Who uses Himax LCoS micro display technologies











# **Opportunities in Metaverse**





Himax owns exceptional Diffractive
Optics and AI solutions with mass
production records. The diverse
Optical and AI non-driver solutions
fulfill different AR/MR/XR/VR
application and functionality needs for
emerging metaverse







**XR** Headset

Lens Holographic Display Diffuser Pico Projector • DOE • MLA **LCoS WLO**  Micro Display Wave Guide WLO LCoS 3D **3D**  Gesture Smart • Gesture Sensing Sensing Eye Tracking (SL/TOF) Eye Tracking Object Detection Face Recognition Voice Command



## **Our Customers**



#### **DISPLAY DRIVERS**



#### WAFER LEVEL OPTICS

#### **CMOS IMAGE SENSORS**

#### SONY FOXCONN

**Others** 

**ASIC SERVICE & IP** LICENSNING







**MICRODISPLAYS** 







🕦 LG Innotek 🖽

**TDDI & TOUCH** CONTROLLERS

SAMSUNG OPPO



LUMOTIVE



Optinuent











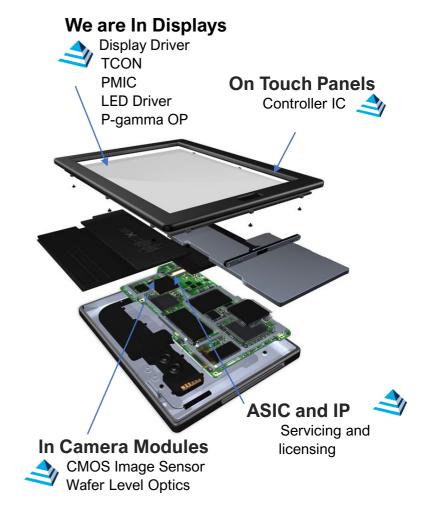


#### POWER MANAGEMENT IC & LED DRIVERS



#### TIMING CONTROLLERS







In AR Devices LCOS, WLO



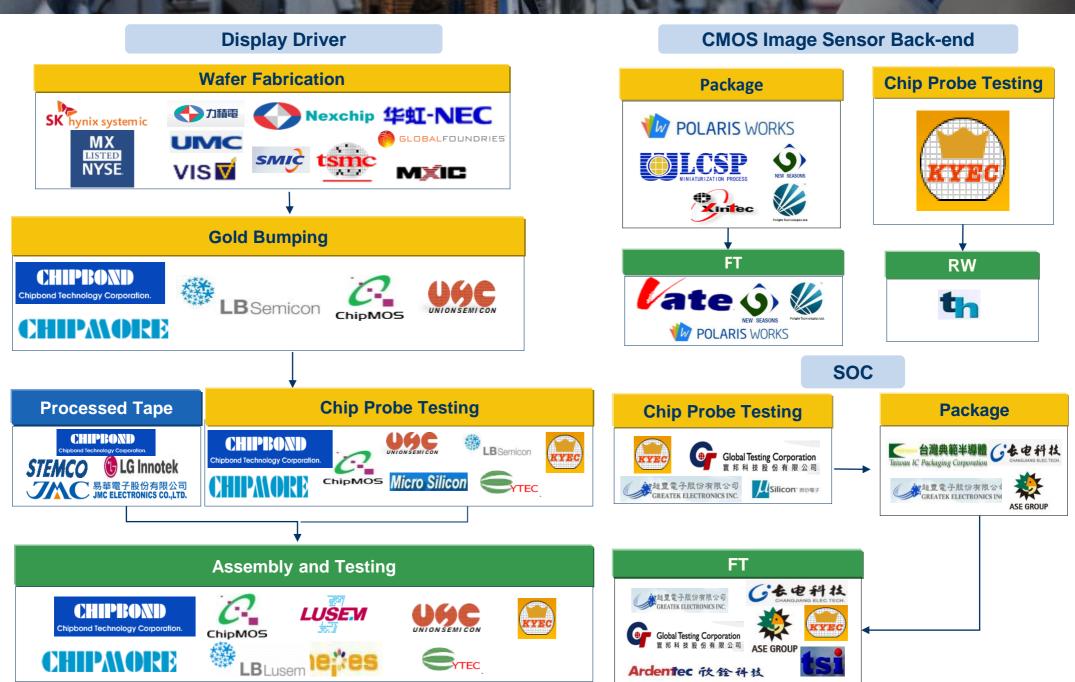


In VR Devices



# Fabless Manufacturing Expertise











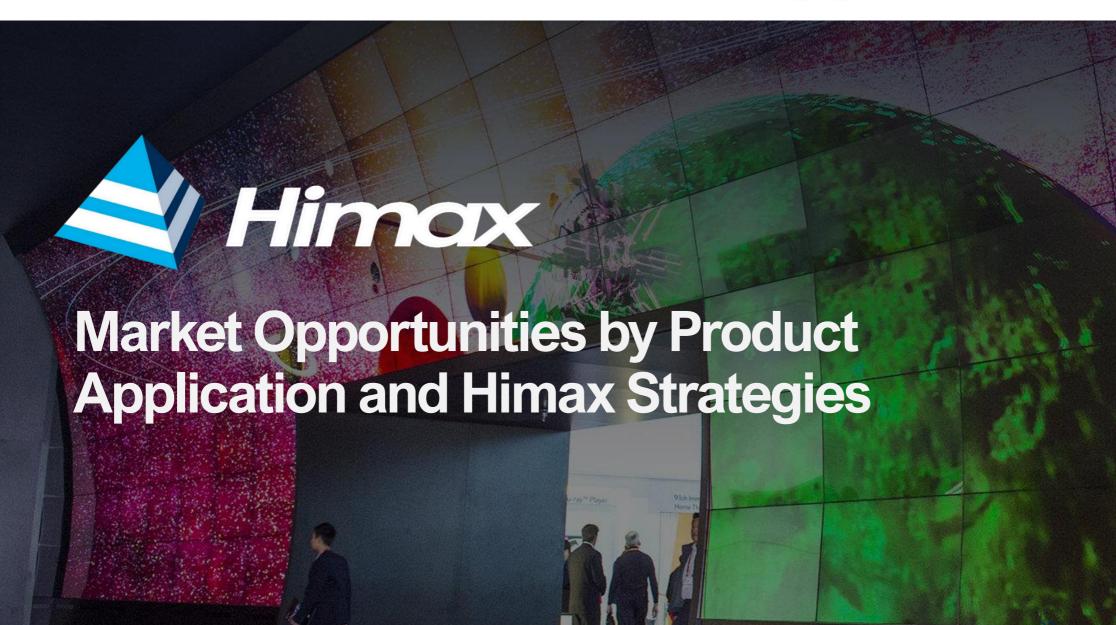














## **Market Trends**

- Expect higher TDDI penetration in tablet and auto going forward
- TDDI fits in consumer demand for slimmer devices
- Higher penetration of TDDI is refreshing smartphone /tablet/ automotive life cycle, creating higher dollar content and margin
- Panel features, size and quantity inside the car are increasing, driving higher demand of TDDI for automotive

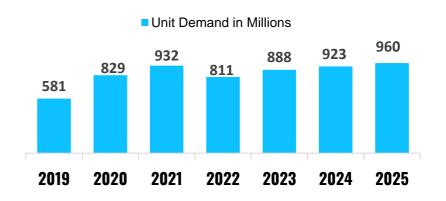
## **Himax Strategies and Market Position**

#### **TDDI pure in-cell solution**

- Numerous new design-wins and shipment with top-tier tablet and smartphone makers started 4Q19
- TDDI is the biggest growth driver for Himax from 2020. Amid semiconductor capacity shortage, we strategically favor high margin product segments such as tablet and automotive as we are the main or sole supplier to customers
- In-cell TDDI is becoming mainstream for non-iOS tablet, where Himax is the primary source. Mass production started for major Tier-1 OEMs since 1Q20, with robust growth from 2020 and throughout 2021
- Himax tablet TDDI with active stylus feature is well penetrated into new designs for accurate handwriting and painting. TDDI with active stylus feature represented over 30% of tablet TDDI sales in 3Q21
- Himax dominates automotive TDDI technology with mass production experience and advanced specification for leading panel makers. Shipped over 1M automotive TDDI chips within 3Q21 alone. Expect exponential growth in 2022
- Product migration and new TDDI product development towards higher performance, ultra slim bezel and higher resolution feature

# Global Smartphone TDDI Demand Forecast 2019-2025

(Omdia, 2022)



# TDDI Technology Enables OEMs to Manufacture Thinner, Better and Less Expensive Phones



# **Display Driver IC (DDIC)**



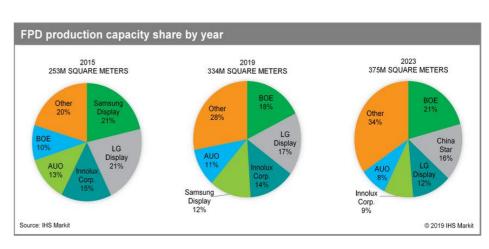
## **Market Trends**

- Chinese panel makers, benefited from Korean fab restructuring and increased their global market share, will procure more volume from Taiwan DDIC supply chain
- Leading Chinese panel makers' shipments continue to dominate the market. China ranked the No. 1 position with its total TFT-LCD capacity
- 4K TV penetration accelerates; 8K TV started to emerge
- Demands for more sophisticated and higher performing displays are rising in the automotive segment

## **Himax Strategies and Market Position**

- · Leading market share of large DDIC in China
- Major beneficiary of Industry and Korean fab restructuring which will increase Chinese panel maker's global market share
- Increased shipments of 4K solutions. Collaborate with major panel makers on the development of next generation 8K TVs. 8K TV is a strategic area for Himax as it represents a high barrier of entry for late comers and much more IC and Tcon used per device
- Leader in higher frame rate and low power solution in high end gaming monitor and NB market
- Not only DDIC, Himax also provides comprehensive TCON lineups for a total solution to meet demands of high resolution, high frame rate and low power display. For automotive sector, Himax's local dimming TCON is broadly adopted by leading vehicle makers

## China Takes a Leading Role in Display Panel Manufacturing and DDIC Demand



# WLO and 3D Sensing



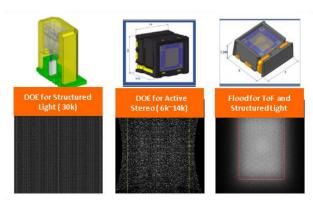
## **Market Trends**

- Wafer-Level Optics (WLO) remains the best technology for structured light, Time-of-Flight (ToF) related 3D sensing
- Very few companies can provide advanced WLO solutions to achieve optical high efficiency, small form factors, and eye safety regulations for consumer devices
- 3D sensing is expected to be widely adopted by smartphones, AR/VR, e-payment and access control, etc

## **Himax Strategies and Market Position**

- WLO: Exceptional design know-how and mass production expertise. We deliver consistent product quality and high yields for WLO anchor customer's large-scale adoption since 2015 with continuous shipment
- Continue to participate the most advanced 3D sensing projects covering structured light for non-smartphone applications and ToF for smartphone
- Collaborating with tier-1 laser and sensor partners to develop new world-facing 3D sensing camera for tier-1 OEM whereby we provide optical components and/or projectors, which are critical for the performance of the whole ToF solution
- Offer market leading 3D decoder ASIC to customers who wish to design their own structured light 3D sensing solution. Good achievement in epayment engagement in China. Welcomed by 3D industry in areas where privacy is of importance
- In non-smartphone, working with industry-leading facial recognition algorithm and application processor partners to develop new 3D sensing application for business access control, medical inspection, etc
- 3D sensing technology also moves toward eye tracking and gesture control features for emerging AR/MR/XR/VR metaverse applications

## **Himax WLO for 3D Sensing**



#### Wafer Level Process Integrated Optics High Accuracy Scalability In Production



## **WLO for 3D ToF / Structured Light**



# **Ultralow Power Smart Sensing and CIS**



## **Market Trends**

- Smart Al devices demand boosted, but very few companies can provide ultralow power solutions in vision Al in the area of human detection, people tracking, people counting, and gesture control
- Adoption for Al-based, ultralow power smart sensing solution is expected to be broader in 2022 for edge AloT applications, including smart home, smart building, and devices for agriculture, industrial, healthcare and retail purposes

## **Himax Strategies and Market Position**

- Himax Ultralow Power CMOS Image Sensor (CIS):
  - Industry first ultralow power and low latency back-illuminated CIS solution for always on, intelligent visual sensing
  - Our CIS includes near infrared (NIR) sensors for 3D sensing and ultralow power computer vision Always-on-Sensor (AoS). Good for smart building and security applications, next generation NB, and AR/VR for mobile devices
  - Support ggHD/QVGA/VGA AoS and industrial first 2-in-1 RGB/NIR/AI sensor
  - Reference design win for Google TensorFlow Lite
- Himax Smart Sensing:
  - Smart Sensing total solution: Composed by industry leading AoS, AI processor and TinyML AI algorithm. Meet strong demands for edge AI devices with features of ultralow power. Optimize computer vision-based total solutions in applications such as NB, air conditioner, battery camera, door lock, doorbell and many other. In 1Q21, received sizable orders for mainstream application from an existing global client and well entered into production in 4Q21. More design-ins in areas such as smart meter, smart tripod, endoscopes, battery camera and panoramic video conference from global leading brands. Some of them are slated for shipment from 1Q22
  - Key component business model: We reinforce our go-to-market strategy by intensively participating cutting-edge AI ecosystem and cloud service partners' AI infrastructure, such as Google TensorFlow Lite for Microcontrollers, Microsoft Azure, Arm and tinyML Foundation

#### **Who uses Himax CIS**



## Ultralow Power Sensor Applications











#### **Best For IoT/Smart Sensing**

Face/Body Detection, Eye Tracking & Gesture Control,





















# **LCoS Microdisplays**

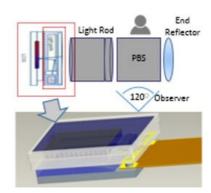
# A Himax

## **Market Trends**

- Many top name multinationals and start-ups are investing heavily to develop the AR ecosystem, including applications, software, operating systems, system electronics and optics
- Capabilities in technology know-how and scalable manufacturing are significant barriers of entry to new market entrants and existing technology companies
- Himax can provide the integrated services of R&D, joint development and manufacturing expertise

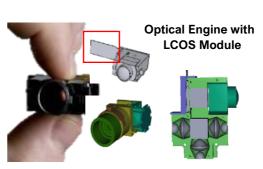
## **Himax Strategies and Market Position**

- The leader in microdisplays with patent-protected technology, inhouse facilities and shipping record of > 4M units
- Focus on AR goggle devices and HUD for automotive applications
- Customer list for AR goggle device covers many of the world's biggest tech giants. Many of whom demoed their new AR goggles at CES 2020
- LCoS is one of the mainstream technologies for AR goggle devices.
   On-going collaboration with global Tier 1 AR glasses device manufacturers since 2011
- Design-wins of high-end HUD for the automotive sector
- Introduced Phase Modulation technology for LCoS 2.0 microdisplay. Aiming holographic display for AR-HUD, LiDAR for autonomous driving or ADAS, WSS for WDM
- LCoS represents a long-term growth opportunity for Himax



#### Front Lit LCOS Advantages

- Compact Form Factor
- Brightness
- Power Efficiency
- MP Efficiency & Readiness



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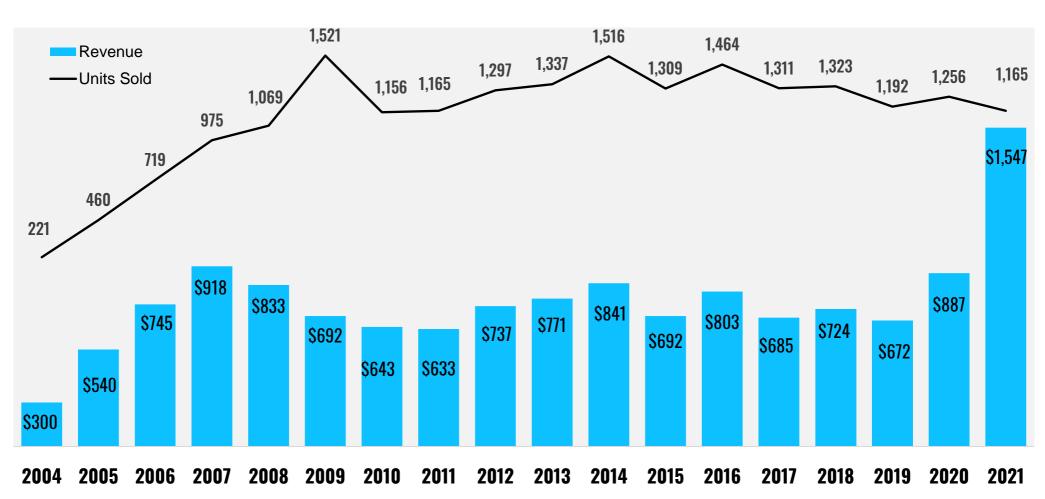


# Unit and Revenue History



## We are One of the Leading Semiconductor Companies in the World

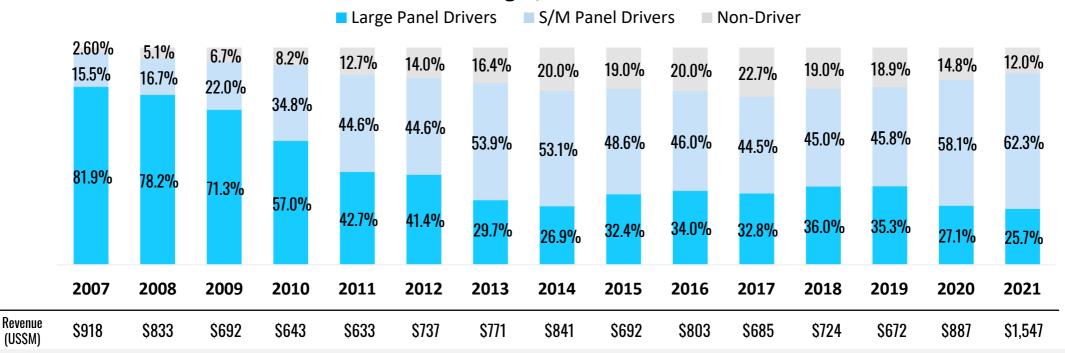
Units Sold and Revenue (in millions of units and millions of USD)



# A Balanced Product Mix.



## **Category Product Mix**



#### Global market leader in driver ICs for large and small & medium-sized panels

- Large display driver business positions toward high end 8K/4K TV, gaming monitor and low power NB
- Leadership in auto driver sales, in both DDIC & TDDI. First mover of auto TDDI with over 1M shipment in 3Q21 alone. Auto sales anticipated to be major revenue contributor from 2022
- Market leader in tablet TDDI with mass production from 1Q20. Strategically favoring tablet over smartphone for higher margin amid short capacity
- Continuous growth in smartphone segments with selected customers amid short

#### Innovative technologies in advanced Tcon, Wafer Level Optics, CIS, Smart Sensing and LCOS microdisplays

- Outstanding performance in high value added Tcon area including 8K/4K TV, gaming monitor, low power NB and automotive
- Smart sensing collaborates with global edge-AI solution partners by actively engaging edge-to-cloud platforms
- Market leader in 3D sensing for both Structured Light and TOF. 3D decoder IC well adopted in e-payment
- Enlarge LCoS microdisplay for AR/VR, pico projector. Extend to phase modulation LCoS technology for AR-HUD, LiDAR and WSS
- Top choice of global leaders to jointly develop non-driver category / optical related technologies for emerging metaverse
  applications. Enjoy diversified customer base, strengthened product portfolio and higher gross margin

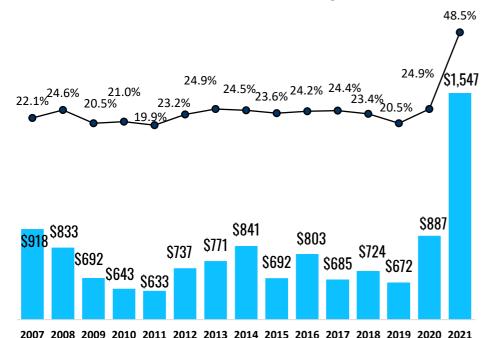
# Gross Margin is a Key





## **Revenue & Gross Margin**

USSM in Revenue and Gross Margin %



## Margin improved with favorable product mix

- Revenue growth with improved gross margin in 2021 due to favorable product mix and clientele
- High margin segments supporting our long-term growth
  - Leadership in auto: a leading supplier with leading technology spec (DDIC/TDDI/Tcon/OLED). First mover in auto TDDI now broadly adopted by main auto makers Demand unfolding with a trend in electric vehicle and auto pilot
  - Leadership in tablet: a dominate supplier with leading technology spec
  - New revenue stream: ultralow power and always on sensor are needed for edge Al devices

#### **Geographical Revenue Mix & Quarterly GM** Non-IFRS Measures

US\$M in Revenue and Quarterly Gross Margin %

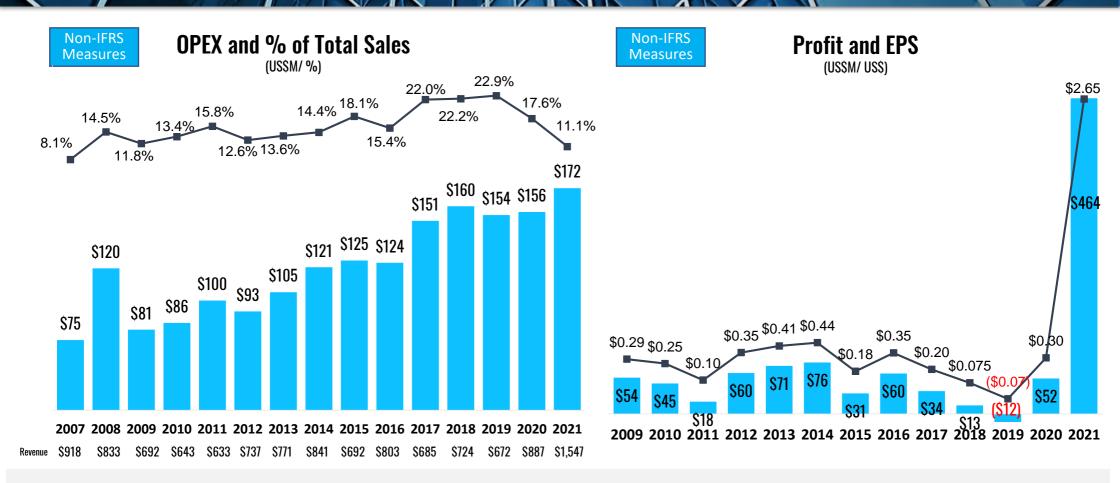


1Q18 2Q18 3Q18 4Q18 1Q19 2Q19 3Q19 4Q19 1Q20 2Q20 3Q20 4Q20 1Q21 2Q21 3Q21 4Q21

- 2019 GM declined due to adverse product mix change
- Sales and GM started to ramp from Q2 2020 from the surging demands triggered by pandemic along with the capacity shortage
- 2H21 GM continued to set a new high for favorable price and product mix amid severe capacity shortage
  - Strong demand for monitor and NB due to WFH/LFH
  - TV sales enjoy decent growth on the backdrop of a sluggish global TV market
  - Strong growth in TDDI for tablet / automotive
  - Robust auto demand derived from display inside the auto increase in number, size and feature, implying more demand for auto drivers ICs

# OPEX and the Bottom Line





- 2018 & 2019 Higher capex to meet the demands of 3D sensing total solution, projector module or optics
- 2019 Completion of the new WLO facility, including additional WLO capacity, active alignment equipment and extra office
- Continuous commitment to R&D and customer engineering for strategic area with great growth potential in the future
- 2019 Profit declined due to adverse product mix change, weaker market demand and intensified competition
- 2021 OPEX Up 9.7% YoY. Operating expense ratio reduced from 17.6% in 2020 to 11.1% in 2021, reflecting our careful management over operating expenses

# Performance History



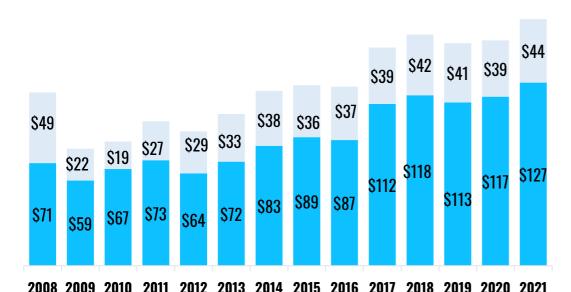


## Operating and R&D Expenses (USSM)

R&D Expense Operating Expense ex. RD

Total Operating and R&D Expense (US\$M)

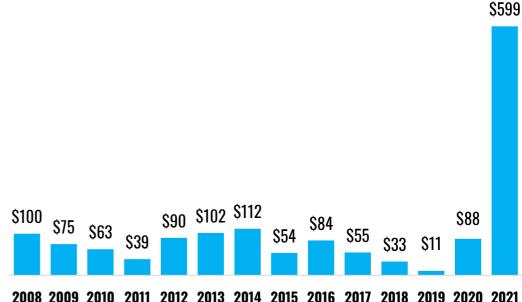




- Well-manage R&D investment and expense for customer engineering for strategic growth areas including WLO, CIS, TDDI, Auto and AMOLED
- IFRS Share-based compensation and cash award from 2014 to 2021: \$11.1mn, \$6.2mn, \$10.2mn, \$6.9mn, \$4.1mn, \$0.4mn, \$5.4mn and \$31.0mn



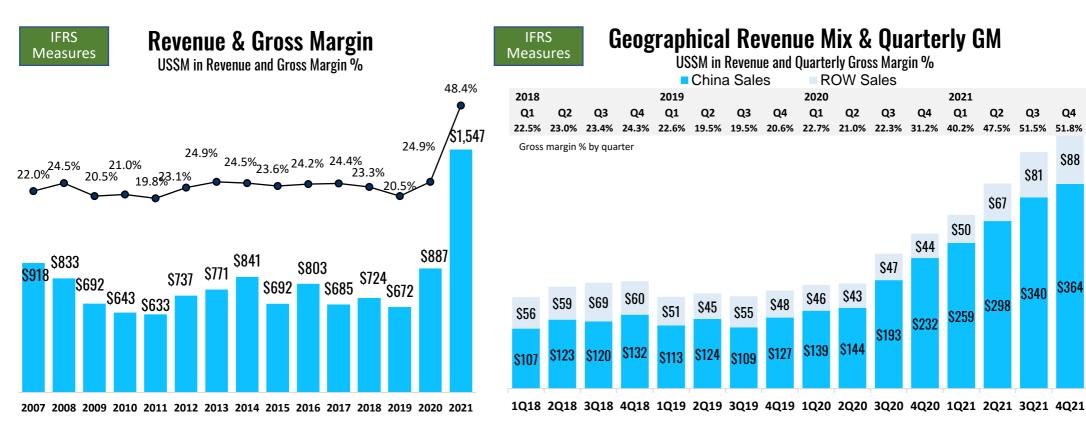
#### EBITDA (US\$M)

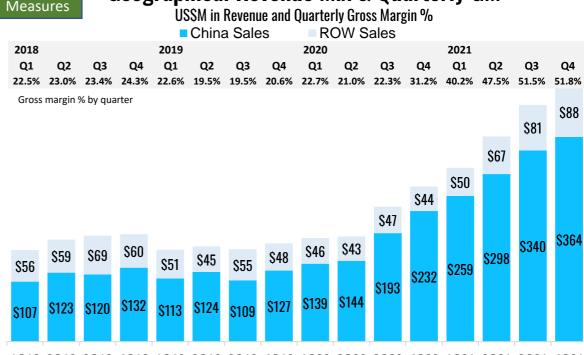


- Robust profit growth in 2016 as a result of revenue growth and GM enhancement from new product
- 2019 profit setbacks caused by lower gross margin due to adverse product mix change
- 2021 much higher GM is mainly a reflection of the tight foundry capacity which resulted in a more favorable IC pricing and product mix

# Gross Margin - IFF

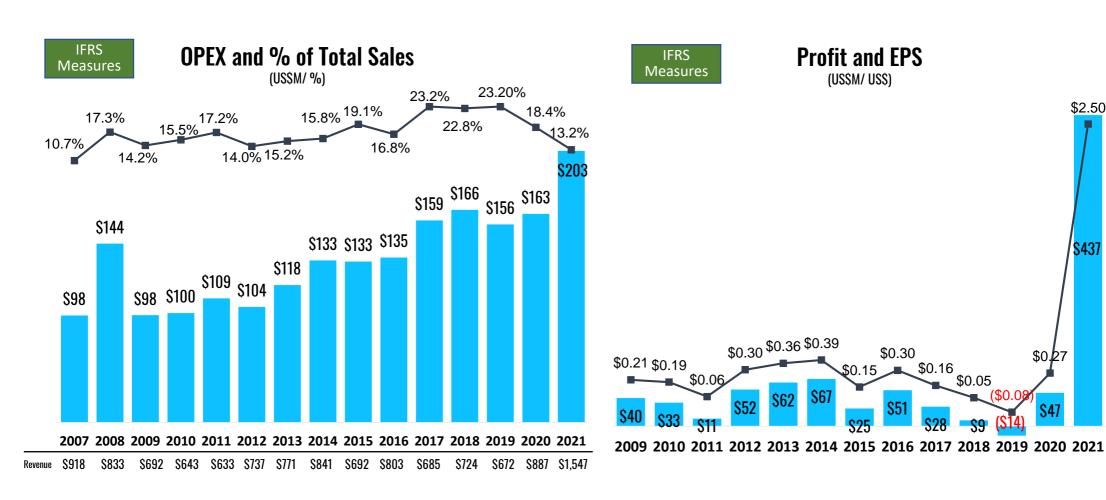






# **OPEX and the Bottom**

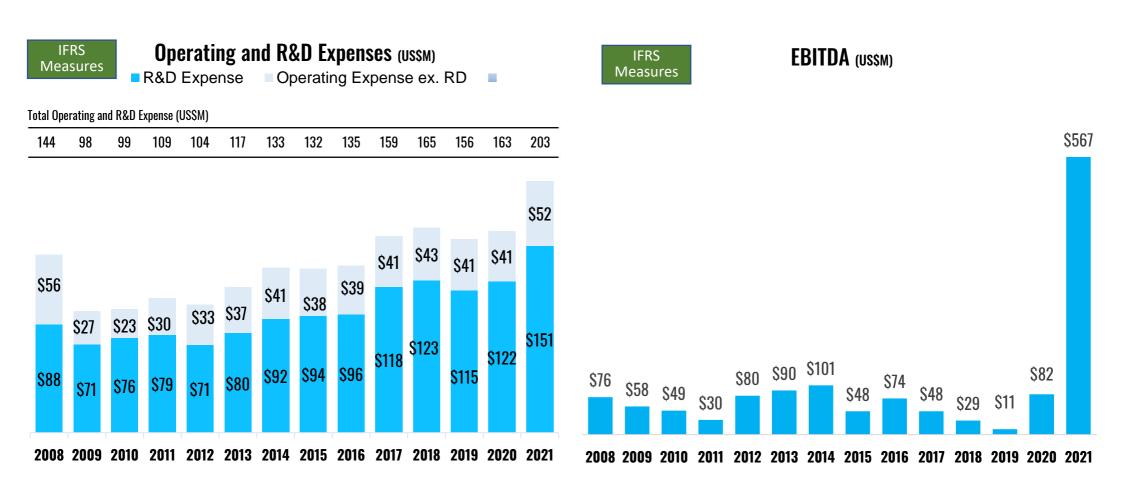




\$2.50

# Performance History - IFRS





# Income Statement



For the Fiscal Period Ended	<u>4Q-2021</u> (Unaudited)	<u>4Q-2020</u> (Unaudited)	3Q-2021 (Unaudited)	Y2021 (Unaudited)	<u>Y2020</u> (Audited)
Revenues	\$451,895	\$275,770	\$420,938	\$1,547,097	\$887,282
Cost of revenues	217,919	189,774	204,213	798,519	666,501
Gross profit Gross margin	233,976 <i>51.8%</i>	85,996 <i>31.2%</i>	216,725 <i>51.5%</i>	748,578 <i>48.4%</i>	220,781 24.9%
Operating expenses Research and development General and administrative Sales and marketing Total operating expenses	41,540 8,086 6,399 56,025	33,100 5,919 4,787 43,806	51,399 9,025 8,057 68,481	151,386 29,281 22,890 203,557	122,265 23,915 16,675 162,855
Operating income	177,951	42,190	148,244	545,021	57,926
Non-operating income (loss)	146	(85)	(15)	(429)	(1,054)
Profit before income taxes	178,097	42,105	148,229	544,592	56,872
Income tax expense	36,625	8,759	30,379	110,657	11,712
Profit for the period	141,472	33,346	117,850	433,935	45,160
Add: Loss attributable to noncontrolling interests	921	660	866	2,961	1,974
Profit attributable to Himax stockholders	\$142,393	\$34,006	\$118,716	\$436,896	\$47,134
Non-IFRS profit attributable to Himax stockholders	\$148,423	\$34,218	\$138,931	\$463,565	\$52,330
IFRS earnings per ADS attributable to Himax stockholders (in cents)  Basic Diluted	81.5 81.5	19.6 19.5	68.0 68.0	250.2 249.8	27.3 27.2
Non-IFRS earnings per ADS attributable to Himax stockholders (in cen Basic Diluted	ts) 85.0 84.9	19.7 19.7	79.5 79.5	265.5 265.1	30.3 30.2

# **Balance Sheet**



	December 31, 2021 (Unaudited)	September 30, 2021 (Unaudited)	December 31, 2020 (Audited)
<u>Assets</u>			
Current assets:			
Cash and cash equivalents	\$336,024	\$229,197	\$184,938
Financial assets at amortized cost	26,013	17,861	8,682
Financial assets at fair value through profit or loss	2,345	3,765	7,799
Accounts receivable, net (including related parties)	410,211	400,897	243,626
Inventories	198,600	160,947	108,707
Restricted deposit	154,100	156,800	104,000
Other current assets	65,551	55,832	36,659
Total Current Assets	1,192,844	1,025,299	694,411
Financial assets at fair value through profit or loss	13,668	13,943	13,966
Equity method investments	3,302	3,920	3,983
Property, plant and equipment, net	133,236	133,874	132,074
Goodwill	28,138	28,138	28,138
Refundable deposits	199,982	87,001	12,144
Other assets	32,024	35,726	25,102
Total Assets	\$1,603,194	\$1,327,901	\$909,818
<u>Liabilities and Equity</u> Current liabilities:			
Current portion of long-term unsecured borrowings	6,000	6,000	6,000
Short-term secured borrowings*	151,400	151,400	104,000
Accounts payable (including related parties)	248,425	226,290	173,471
Income taxes payable	96,552	61,217	13,466
Other current liabilities	98,848	65,685	55,305
Total Current Liabilities	601,225	510,592	352,242
Long-term unsecured borrowings	46,500	48,000	52,500
Other liabilities	83,487	38,093	19,877
Himax stockholders' equity	869,724	728,231	480,176
Noncontrolling interest	2,258	2,985	5,023
Total Liabilities and Equity	\$1,603,194	\$1,327,901	\$909,818

<sup>\*</sup> Short-term secured borrowings is guaranteed by restricted deposit

# Cash Flow Statement

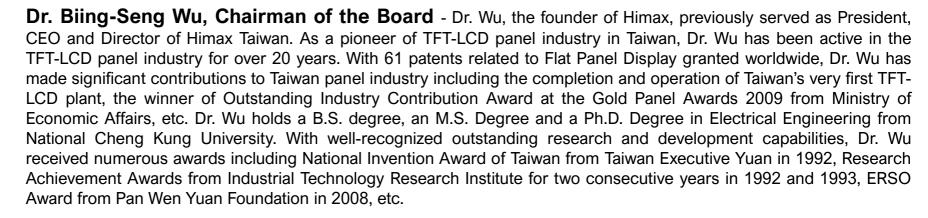


	4Q-2021 (Unaudited)	3Q-2021 (Unaudited)	2021FY (Unaudited)	2020FY (Audited)
Profit for the period	<u>\$141,472</u>	<u>\$117,850</u>	<u>\$433,935</u>	<u>\$45,160</u>
Depreciation and amortization	5,329	5,292	21,342	23,596
Share-based compensation expenses	603	97	700	763
Finance costs	285	269	1,074	1,705
Income tax expense	36,625	30,379	110,657	11,712
Inventories write downs	4,103	1,224	9,448	11,919
Others	(494)	88	(490)	(1,284)
Changes in:	187,923	155,199	576,666	93,571
Changes in:  Decrease (increase) in accounts receivable (including related parties)	(9,124)	(71,874)	(166,395)	(78,297)
Decrease (increase) in accounts receivable (including related parties)	(41,756)	(27,928)	(99,341)	24,772
Increase (decrease) in accounts payable (including related parties)	22,135	15,802	74,954	57,335
Others	23,059	(1,679)	22,260	8,675
Cash generated from operating activities	182,237	69,520	408,144	106,056
Interest received	333	112	852	1,066
Interest paid	(275)	(269)	(1,074)	(1,811)
Income tax paid	(47)	(8,852)	(19,646)	(2,701)
Net cash provided by operating activities	\$182,248	\$60,511	\$388,276	\$102,610
Acquisitions of property, plant and equipment	(2,020)	(2,128)	(7,562)	(5,786)
Acquisitions of financial assets at amortized cost	(10,341)	(8,384)	(25,362)	(3,829)
Proceeds from disposal of financial assets at amortized cost	2,300	4,009	8,011	6,735
Acquisitions of financial assets at fair value through profit or loss	(6,864)	0	(23,417)	(19,743)
Proceeds from disposal of financial assets at fair value through profit or	8,258	1,339	29,141	12,068
Increase in refundable deposits	(119,289)	(33,007)	(213,056)	(13,992)
Others	2,659	5,491	(435)	2,182
Net cash used in investing activities	(\$125,297)	(\$32,680)	(\$232,680)	(\$22,365)
Payments of cash dividends	0	(47,404)	(47,424)	(4)
Proceeds from short-term unsecured borrowings	5,000	0	15,000	208,137
Repayments of short-term unsecured borrowings	(5,000)	0	(15,000)	(265, 355)
Proceeds from long-term unsecured borrowings	0	0	0	60,000
Repayments of long-term unsecured borrowings	(1,500)	(1,500)	(6,000)	(1,500)
Proceeds from short-term secured borrowings	221,400	233,200	611,600	278,000
Repayments of short-term secured borrowings	(221,400)	(185,800)	(564,200)	(338,000)
Release (pledge) of restricted deposit	0	(47,400)	(47,400)	60,000
Guarantee deposits received	54,050	0	54,050	0
Others	(2,712)	(1,347)	(5,113)	1,983
Net cash provided by (used in) financing activities	\$49,838	(\$50,251)	(\$4,487)	\$3,261
Effect of foreign currency exchange rate changes	38	(108)	(23)	377
Net increase (decrease) in cash and cash equivalents	<b>\$106,827</b>	<u>(\$22,528)</u>	<b>\$151,086</b>	<u>\$83,883</u>
Cash and cash equivalents at beginning of period	\$229,197	<b>\$251,725</b>	<b>\$184,938</b>	<b>\$101,055</b>
Cash and cash equivalents at end of period	<u>\$336,024</u>	<u>\$229,197</u>	\$336,024	<u>\$184,938</u>

# Management Team









**Jordan Wu, President, CEO and Director** Mr. Jordan Wu, co-founder of Himax, previously served as the chairman of the board of Himax Taiwan from April 2003 to October 2005. Prior to joining Himax Taiwan, he served as CEO of TV Plus Technologies, Inc. and CFO and executive director of DVN Holdings Ltd. in Hong Kong. Prior to that, he was an investment banker in Hong Kong with Merrill Lynch (Asia Pacific) Limited, Barclays de Zoete Wedd (Asia) Limited and Baring Securities. Mr. Wu holds a B.S. degree in Mechanical Engineering from National Taiwan University and an M.B.A. degree from the University of Rochester.



**Jessica Pan, Chief Financial Officer** - Jessica joined Himax in 2006 with over 22 years of experience in finance and accounting. Jessica has played an integral role at Himax on finance, accounting, financial planning and analysis, forecasting and tax, having served as interim Chief Financial Officer from October 2010 to January 2012. Prior to joining Himax, Jessica worked as Assistant Finance Manager for Advanced Semiconductor Engineering, Inc. from 2002 to 2006 and as Auditor at Arthur Andersen LLP in Taiwan from 1998 to 2001. She holds a B.S. degree in Agriculture Chemistry from National Taiwan University and an M.B.A. degree from the State University of New York at Buffalo.



**Eric Li, Chief IR/PR Officer** - Joining Himax in 2012, Mr. Eric Li has extensive experience in image processing related IC design, having worked in the areas of sales, marketing, R&D and served as Associate Vice President at Himax covering the Intelligent Sensing AI product line. Mr. Li has previously worked in video processing ASIC service and TV/monitor ASSP products before he was put in charge of the fab construction and operation of Himax's WLO advanced optics operation. Prior to Himax, Mr. Eric Li served in executive positions of Cadence Design Systems, Socle Technology, Macronix International and Powerchip Semiconductor. He holds a B.S. degree in Nuclear Engineering from National Tsing Hua University and an M.S. degree in Computer Science from New Jersey Institute of Technology.



## **Company**

Eric Li, Chief IR/PR Officer

Tel: +886-6-505-0880 hx\_ir@himax.com.tw

**Karen Tiao, IR Relations** 

Tel: +886-2-2370-3999 hx\_ir@himax.com.tw

Mark Schwalenberg, Director

Investor Relations - US Representative MZ North America Tel: +1-312-261-6430 HIMX@mzgroup.us www.mzgroup.us

**Corporate Counsel** 

Baker & M!Kenzie

SEC Legal Counsel

DAVIS POLK & WARDWELL

**Auditor** 

