



# Magnachip Semiconductor (NYSE: MX)

January 2023





# Forward-Looking Statements

Information in this presentation regarding Magnachip's forecasts, business outlook, expectations and beliefs are forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 that involve risks and uncertainties. All forward-looking statements included or incorporated by reference in this presentation, including expectations about estimated historical or future operating results and financial performance, business strategies, outlook and plans, including third quarter 2022 revenue and gross profit margin expectations, future growth and revenue opportunities from new and existing products and customers, the impact of market condition associated with inflation and rising interest rates, the COVID-19 pandemic or the emergence of various variants of the virus, geopolitical conflicts between Russia and Ukraine, and escalated trade tensions and supply constraints on Magnachip's third quarter 2022 and future operating results, and the timing and extent of future revenue contributions by our products and businesses, are based upon information available to Magnachip as of the date of this presentation and the accompanying press release, which may change, and we assume no obligation to update any such forward-looking statements. These statements are not guarantees of future performance, and actual results could differ materially from our current expectations. Factors that could cause or contribute to such differences include, among others: the impact of changes in macroeconomic and/or general economic conditions, including those caused by or related to inflation, potential recessions or other deteriorations, economic instability or civil unrest, the COVID-19 pandemic or the emergence of various variants of the virus, other outbreaks of disease, and governmental lock-downs or other measures implemented in response thereto, and the Russia-Ukraine conflict; manufacturing capacity constraints or supply chain disruptions that may impact our ability to deliver our products or affect the price of components, which may lead to an increase in our costs, as well as impacting demand for our products from customers who are similarly affected by such capacity constraints or disruptions; the impact of competitive products and pricing; timely design acceptance by our customers; timely introduction of new products and technologies; ability to ramp new products into volume production; industry wide shifts in supply and demand for semiconductor products; industry and/or company overcapacity; effective and cost efficient utilization of manufacturing capacity; financial stability in foreign markets and the impact of foreign exchange rates; unanticipated costs and expenses or the inability to identify expenses which can be eliminated; compliance with U.S. and international trade and export laws and regulations by us, our customers and our distributors, including those related to the Russia-Ukraine conflict; change or ratification of local or international laws and regulations, including those related to environment, health and safety; public health issues, including the COVID-19 pandemic or the emergence of various variants of the virus; other business interruptions that could disrupt supply or delivery of, or demand for, Magnachip's products, including uncertainties regarding the impacts of the COVID-19 pandemic or the emergence of various variants of the virus that may result in factory closures, reduced workforces, scarcity of raw materials and goods produced in infected areas, as well as reduced consumer and business spending affecting demand for Magnachip's products due to government and private sector mandatory business closures, travel restrictions or the like to prevent the spread of disease; and other risks detailed from time to time in Magnachip's filings with the U.S. Securities and Exchange Commission (the "SEC"), including our Form 10-K filed on February 23, 2022 and subsequent registration statements, amendments or other reports that we may file from time to time with the SEC and/or make available on our website. Magnachip assumes no obligation and does not intend to update the forward-looking statements provided, whether as a result of new information, future events or otherwise.

This presentation also includes references to certain non-GAAP financial measures. Management believes that non-GAAP financial measures, when viewed in conjunction with GAAP results, can provide a meaningful understanding of the factors and trends affecting Magnachip's business and operations and assist in evaluating our core operating performance. However, such non-GAAP financial measures may have limitations and should not be considered as a substitute for net income (loss) or as a better indicator of our operating performance than measures that are presented in accordance with GAAP. Reconciliation of GAAP results to non-GAAP results is also included in this presentation.

# Magnachip (NYSE: MX) at a Glance

**Two main business lines**

Display and Power Solutions

**Technology leadership** in OLED drivers for power efficiency and size

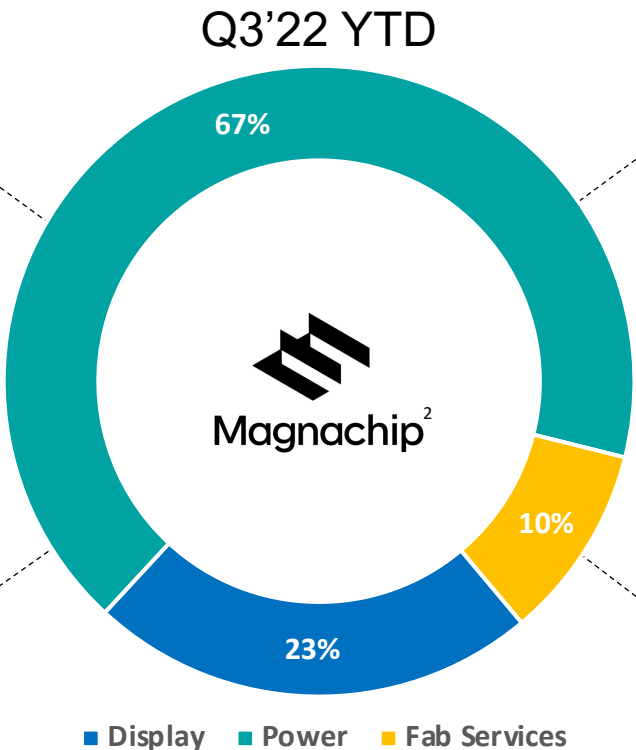
**Increasing Premium Power** products

**Strong tailwind** of OLED display adoption and electrification of everything

**Leading tier 1 customer base and International expansion**

**Diversifying into Solar, Datacenters and Automotives**

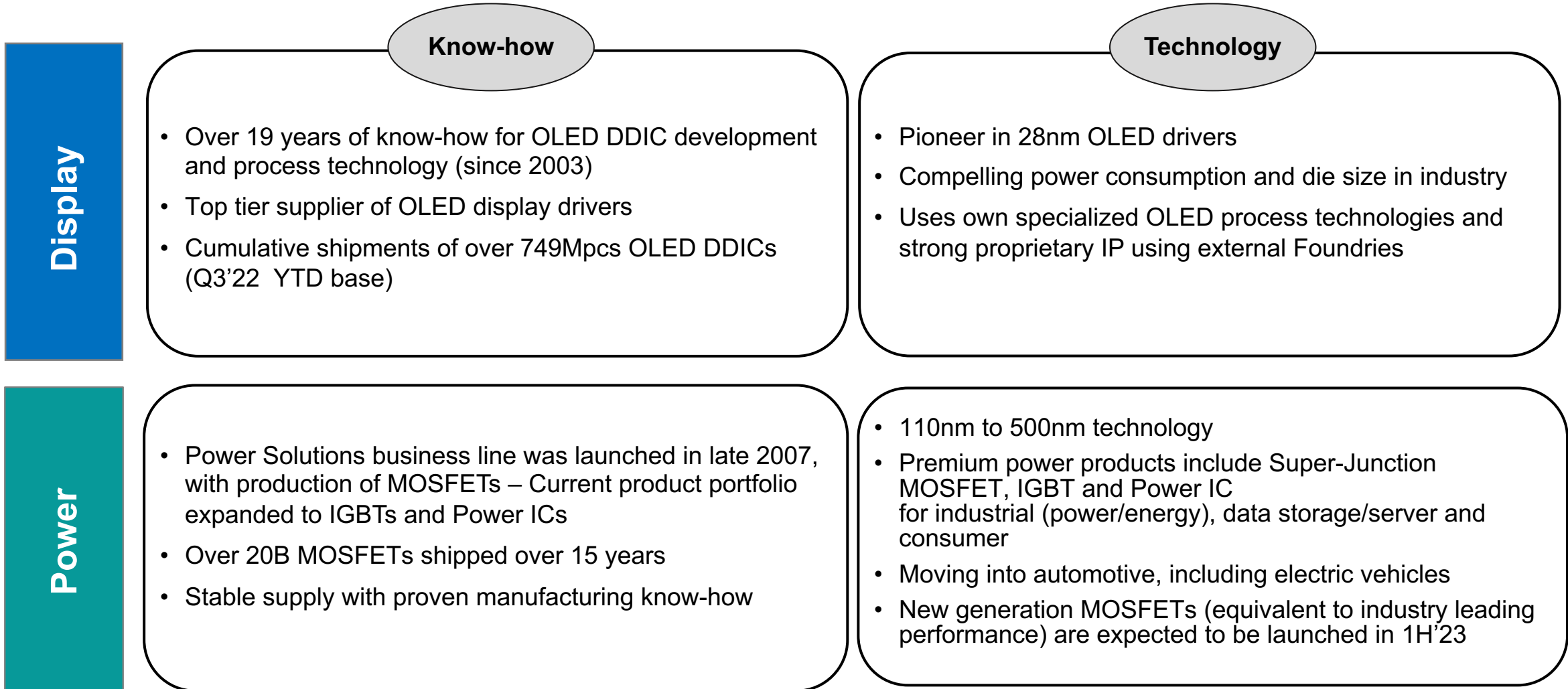
**Robust balance sheet<sup>1</sup>**  
\$250.8M cash and \$0 debt



<sup>1</sup> Cash and debt balance as of September 30, 2022

<sup>2</sup> Q3 2022 YTD business mix

# Differentiated Technologies



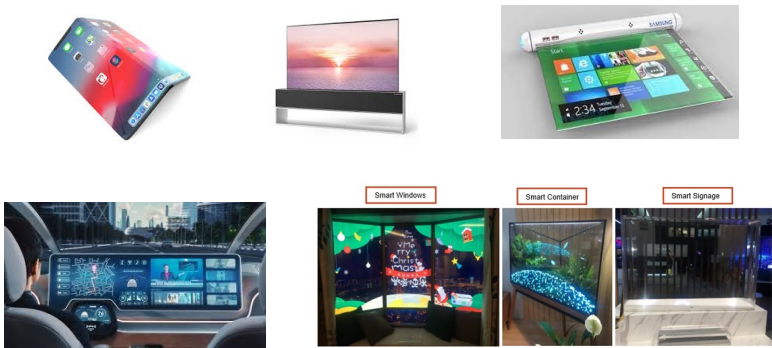
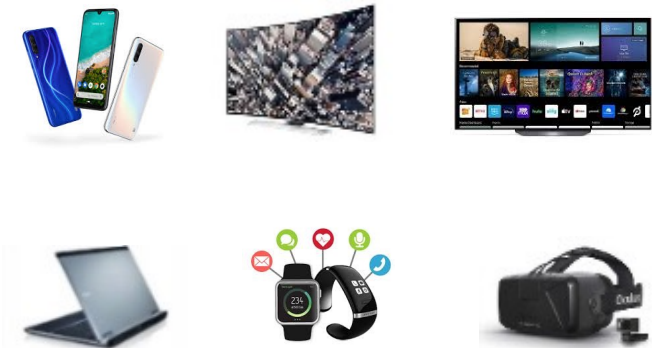
# Strong Product Portfolio in Growing Applications

## Current

## New Trends

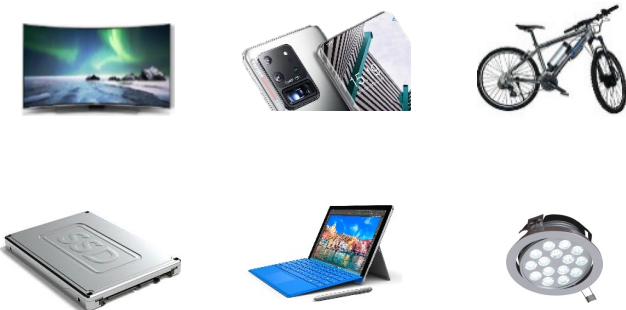
### Display

Cutting edge display technology  
Leading expertise in OLED DDIC design  
Low power consumption, small die size, and flexible form factors

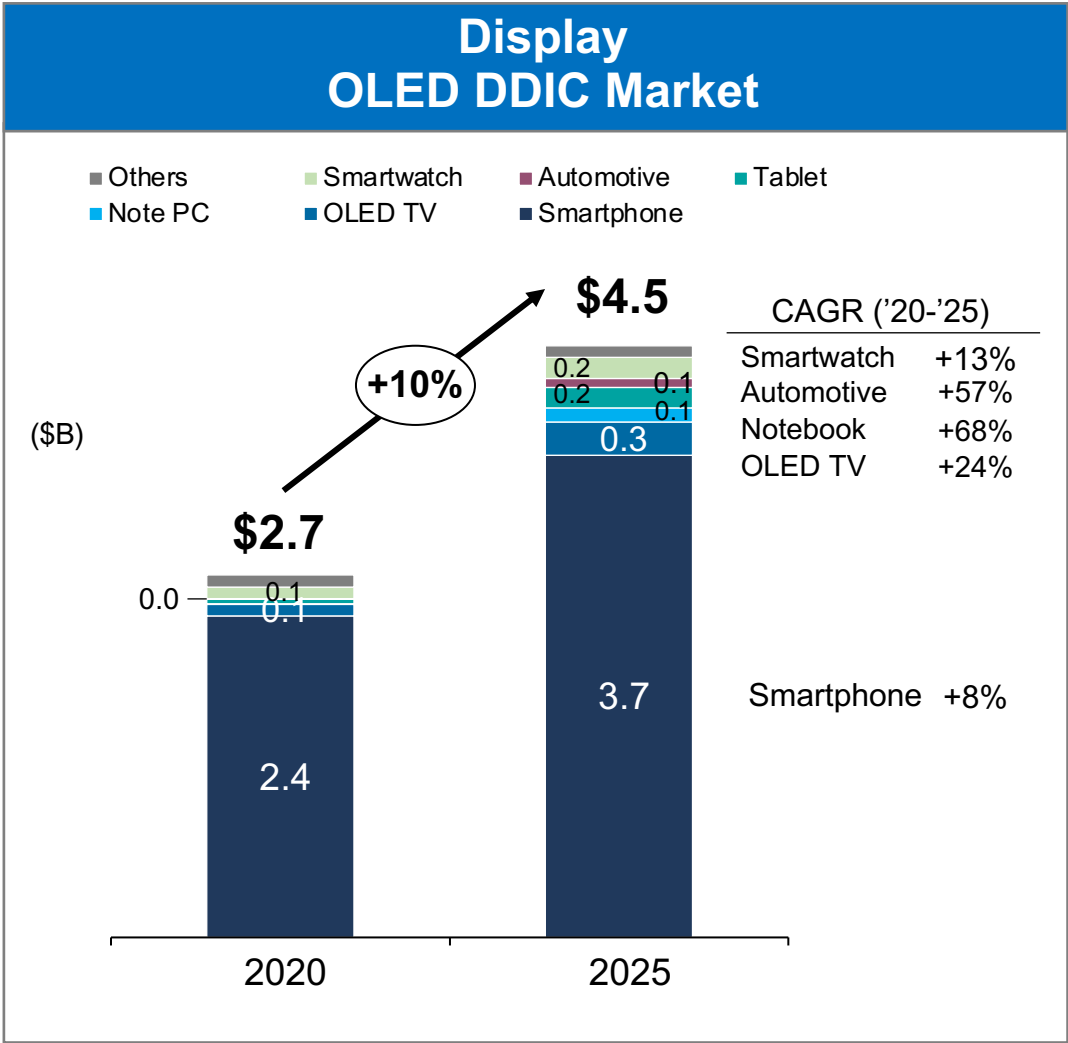


### Power

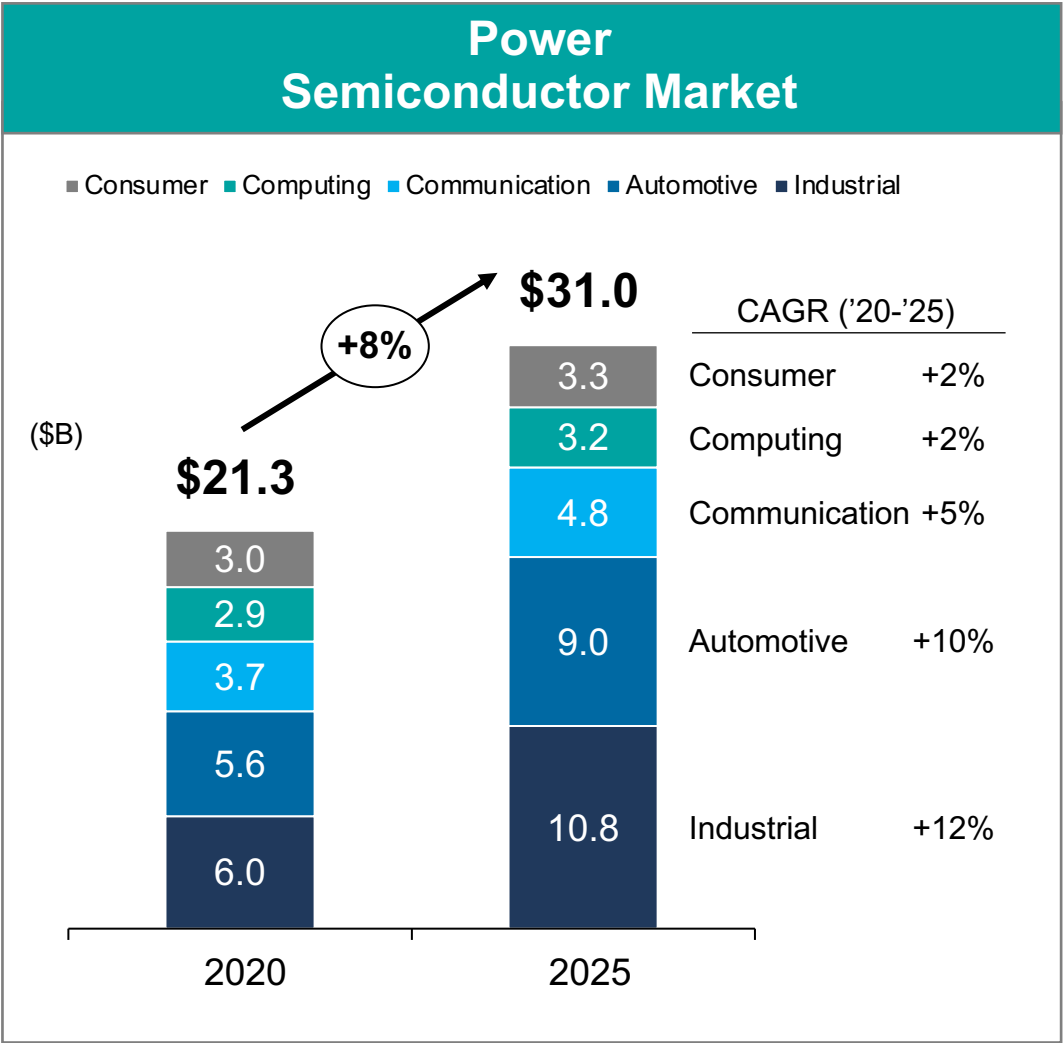
SJ MOSFETs  
Battery FETs  
IGBTs / FRDs  
Trench MOSFETs  
Power Management ICs  
LDOs / Load switches  
LED BLU drivers  
LED lighting drivers



# Massive Market Opportunity



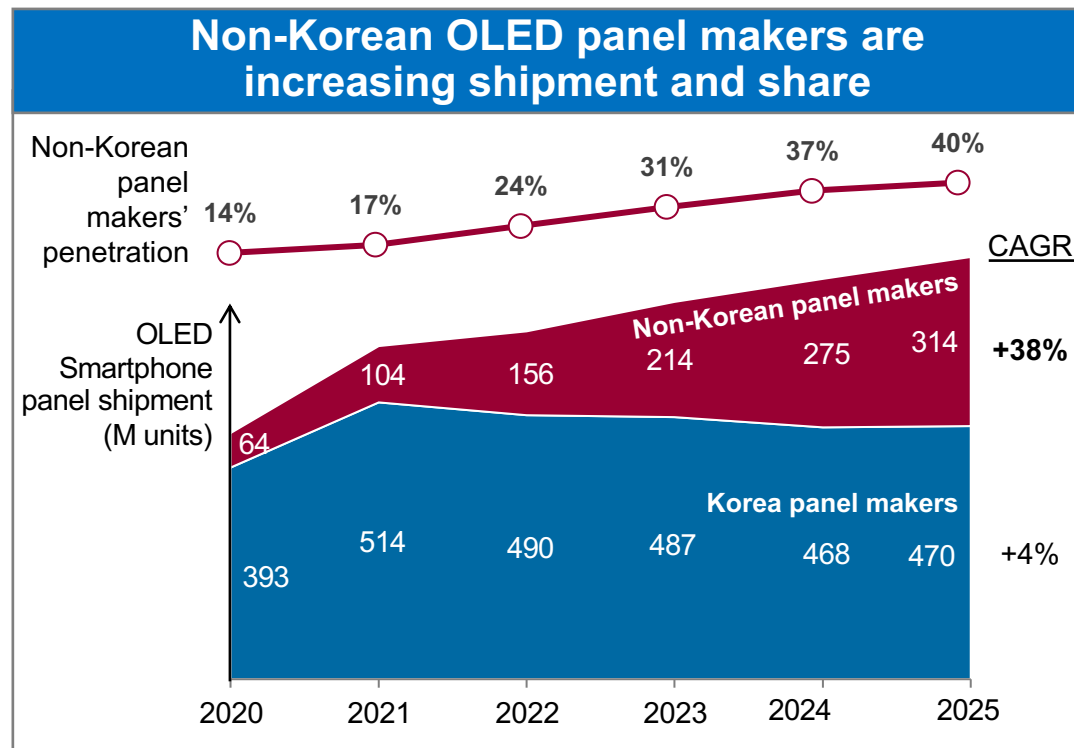
Source: OMDIA, Oct.'22



Source: OMDIA, Oct.'22

# Growth Strategy

- **Leveraging MX's OLED technology leadership in smartphones and expand to multi OLED panel makers**
  - New OLED business with top-tier panel maker outside Korea is progressing well
  - Expansion into other Asian customers from 2024



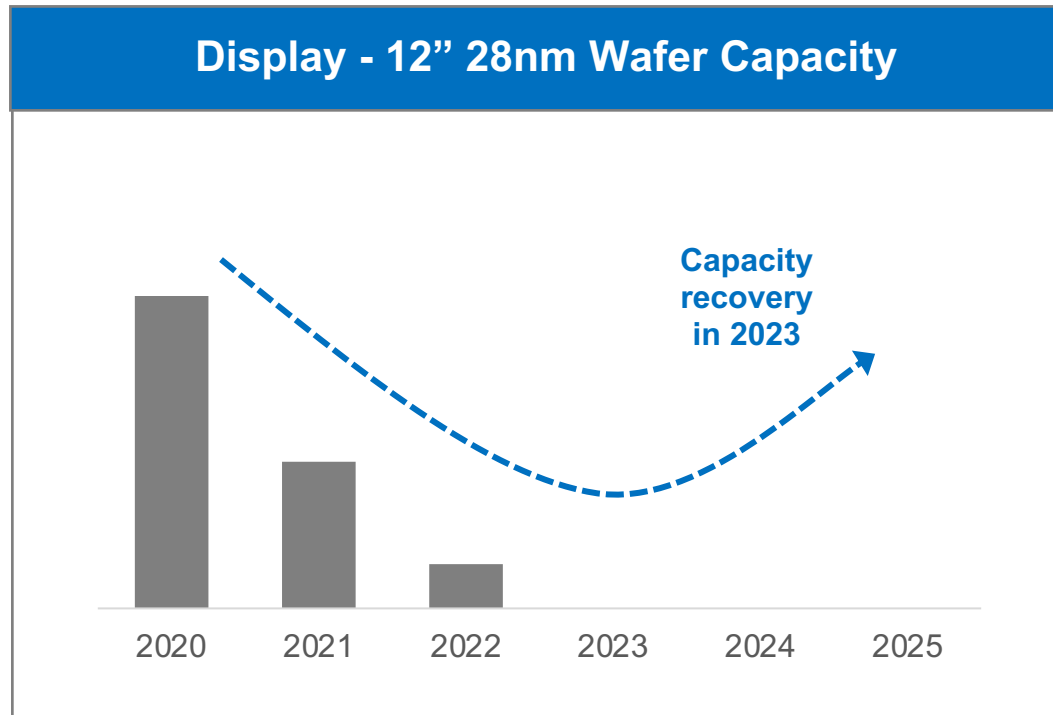
- **Automotive market penetration both Korea and Overseas**
  - 40V MV MOSFET obtained design-win for EOP and EWP of Electric vehicles in China customer
  - Received 1<sup>st</sup> PO in Jan'22 for 40V MV MOSFET and mass production started from Q2'22
  - 700V and 1200V IGBT development for Power train

**Automotive market opportunities**

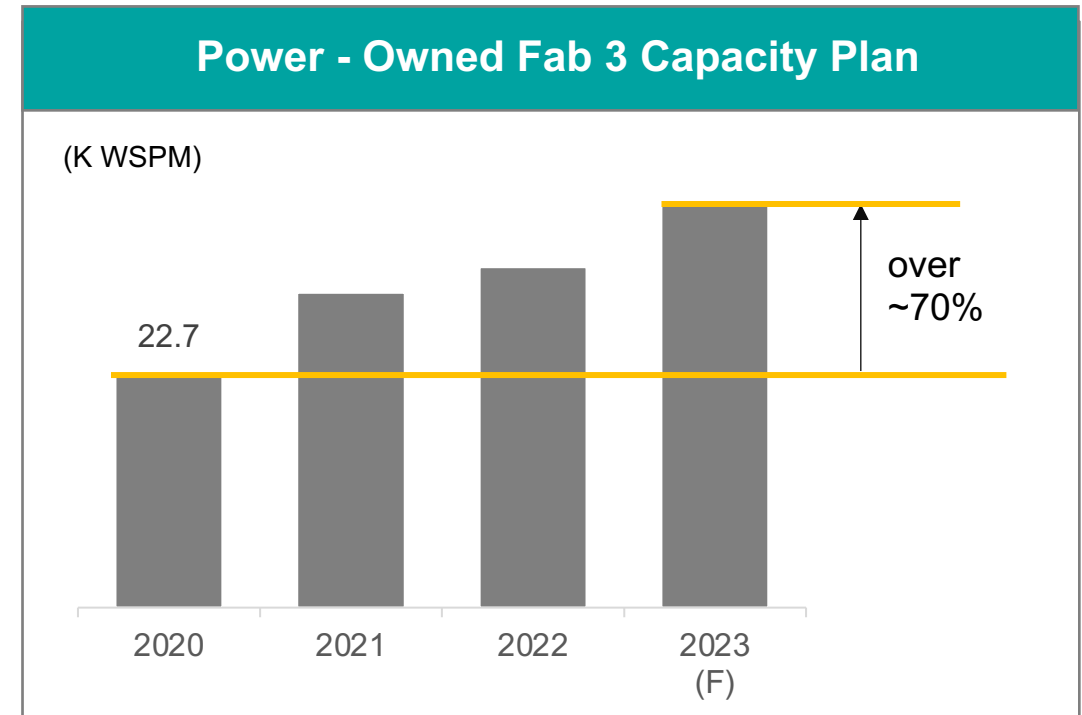
- EOP / EWP
- Motor controller
- Power door / wiper/ seat

EOP (Electric Oil Pump)      EWP (Electric Water Pump)

# Production Capacity



- Strategically working with external foundries to ensure 2023 wafer capacity and long-term wafer capacity
- Secured additional new 12" 28nm foundry wafer supplier to expand non-Korea OLED business



- MX owned Fab 3 Power Capacity Increase
  - New product expansion: MOSFET and IGBT technology
  - 110nm technology ready: Mass production ready by 2022

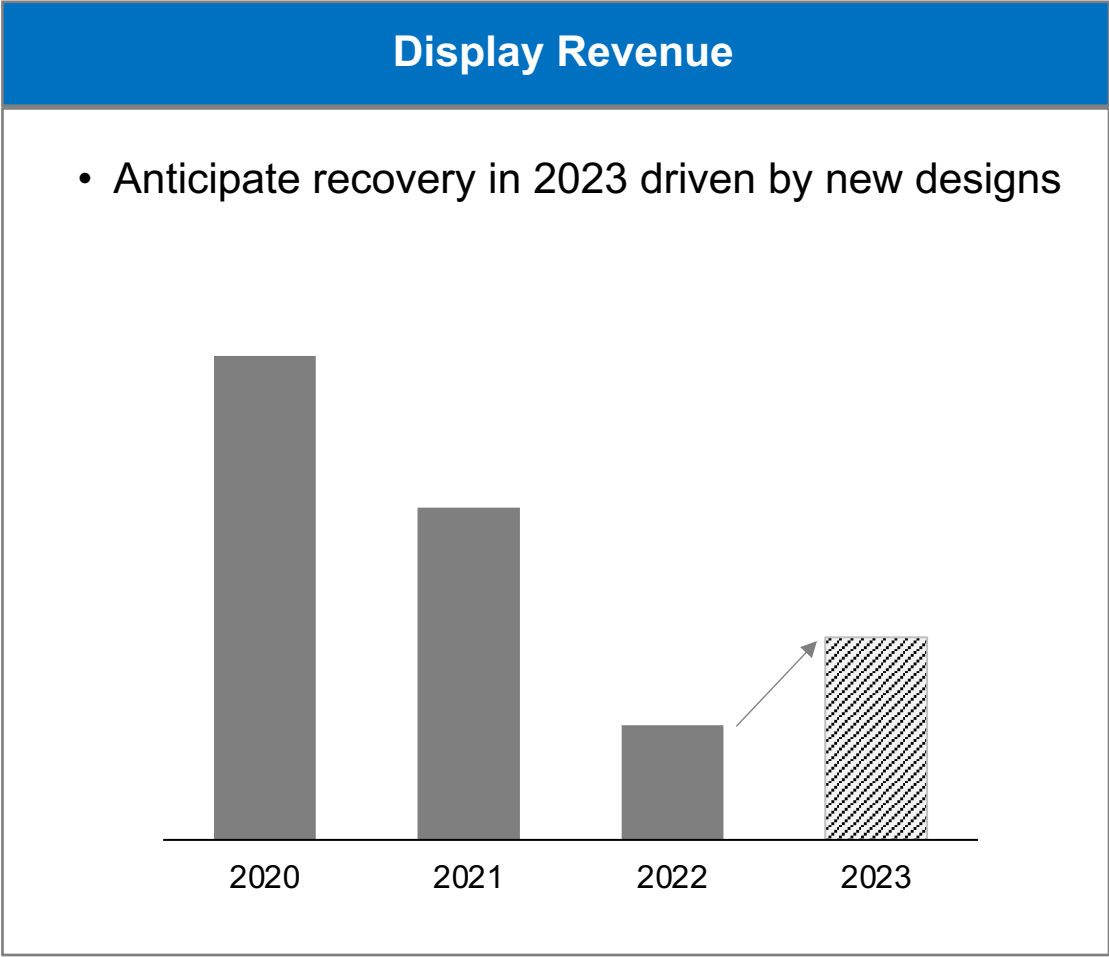


# Ramping New Designs for 2023

New designs anticipated to ship in 2023 and will contribute to revenue growth in 2023 & 2024

Key New Design Projects mentioned so far

Application	Display Resolution	High frame rate	5G	Mass production
Smartphone	QHD+	144Hz	O	2H'23
Smartphone	FHD+	144Hz	O	1H'23
Smartphone	FHD+	144Hz	O	2H'23
Automotive	FHD			1H'23



# 2023 Recovery

'21/'22 Challenges	End of 2023	Comments
Wise Road deal terminated	✓	M&A arbitrage investors likely gone
OLED wafer shortages	✓	Capacity available in 2023-2024 (2-4X higher v. '22)
Share loss	✓	Multiple new DDIC projects expected to ship
China zero-Covid	✓	Re-opening process has begun
Smartphone inventories	✓	China smartphone channel inventories anticipated to normalize
Macroeconomy	✓	An improved macro backdrop may drive recovery in consumer demand