



MagnaChip Investor Presentation

March 16, 2020

MagnaChip 

Forward-Looking Statements

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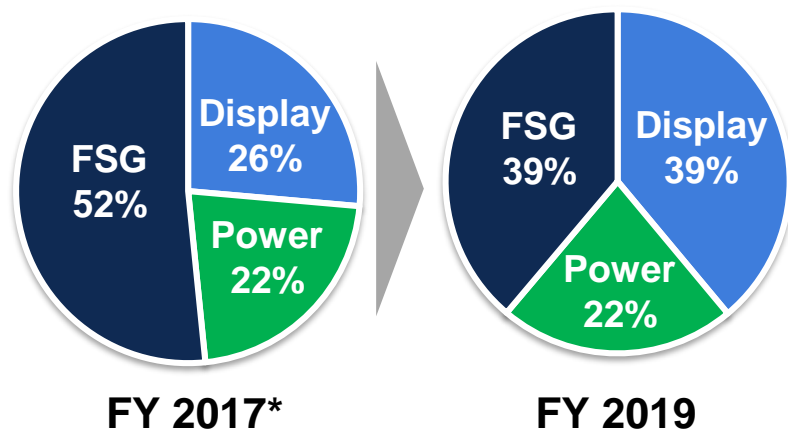
This presentation also includes references to certain non-GAAP financial measures. Management believes that non-GAAP financial measures, when viewed in conjunction with GAAP results, can provide a meaningful understanding of the factors and trends affecting MagnaChip's business and operations and assist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

Key Business / Investment Highlights

- Well-positioned to capitalize on industry trends in higher growth end markets
 - ✓ #1 independent supplier of OLED display drivers
 - ✓ Deep relationships with world's Top 2 panel makers in Korea
 - ✓ Large portfolio of Power standard products for broad range of markets
 - ✓ Specialized Foundry Services for Analog and Mixed Signal, including BCD EEPROM
- Strategic re-positioning and organic investments have strengthened the standard products solutions and Foundry services capabilities
- 100% of IP developed in Korea
- Global footprint and scale to serve clients of all sizes, across many verticals and geographies
- Strong management team focused on growth, scale and profitability

A Balanced Portfolio of Products and Services with Growth Opportunities in Diversified Markets

Net sales mix



*2017 amounts reclassified for consistency with 2019 presentation.

Product Breadth

- Over 2,000 products

Intellectual Property

- Approximately 3,000 registered patents and pending applications
- >50 novel OLED design and manufacturing patents

Business Lines



• Display Solutions

- Largest independent supplier of OLED display drivers to world's Top 2 panel makers for smartphones
- Portfolio of more than 11 OLED drivers, including five 28-nanometer DDIC
- 28nm OLED drivers have lowest power in industry; now in mass production
- Record OLED sales of \$267M in 2019, up 42%



• Power Solutions

- Leading provider of battery protection discrete semiconductor products
- Premium power products include Super-Junction MOSFET, IGBT and Power IC for mobile, consumer and industrial applications
- Moving into automotive, including EV
- Power revenue increased three consecutive years



• Specialized Foundry

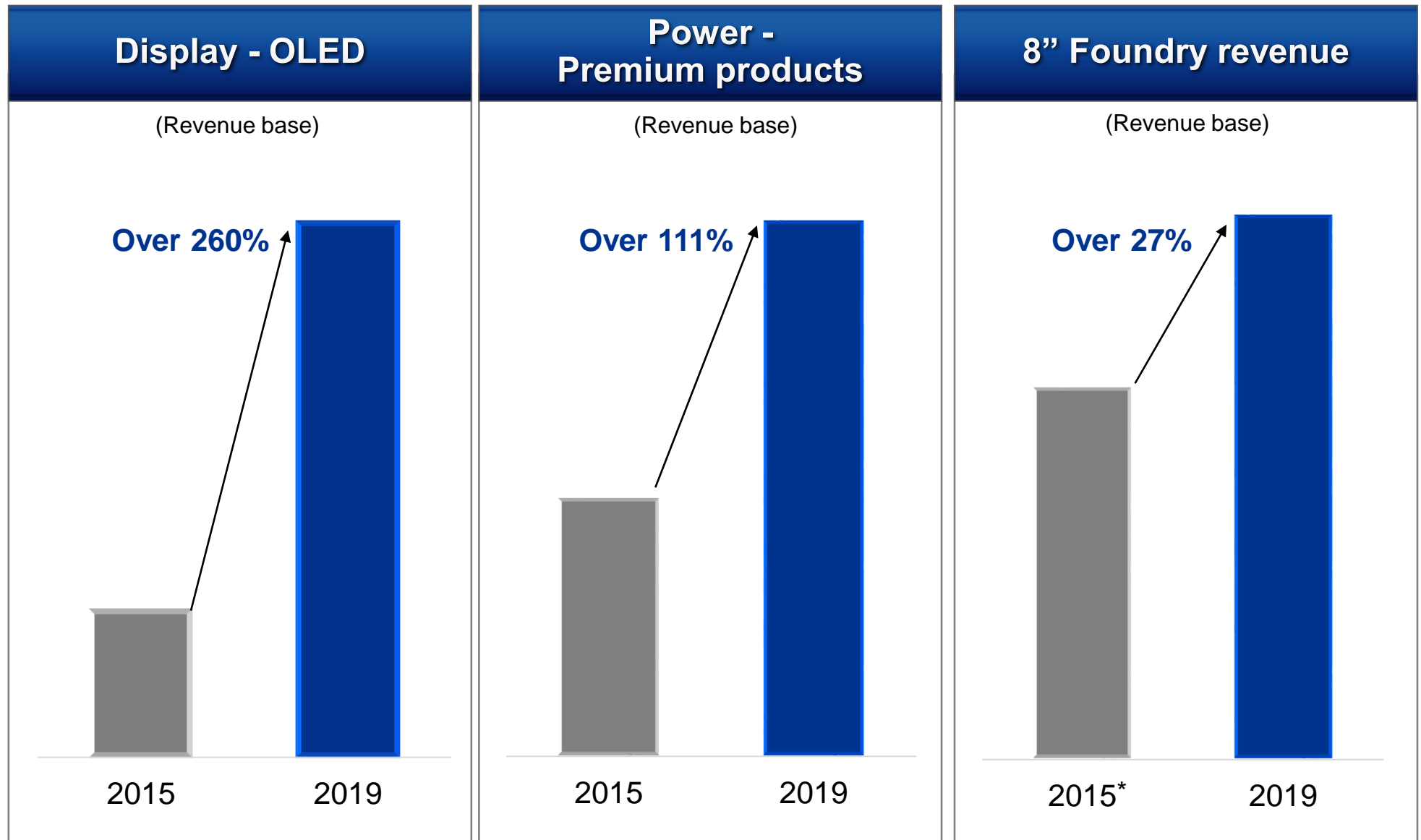
- Specialized analog and mixed-signal foundry services
- High voltage, embedded memory, hybrid offerings including BCD EEPROM

Foundry business recovered rapidly in 2H'19 from the semiconductor market downturn in 1H'19

- 8" Foundry net sales in the second half of 2019 was at its highest level since the Company went public in 2011
- Best Q4 net sales in the past 6 years due to demand increase of new products from end customers
- Net sales contribution of new products was still strong in 2019, representing approximately 26% of foundry net sales
- BCD/EEPROM represented over 40% of total Foundry revenue in 2019



Display, Power and Foundry Metrics Show Growth



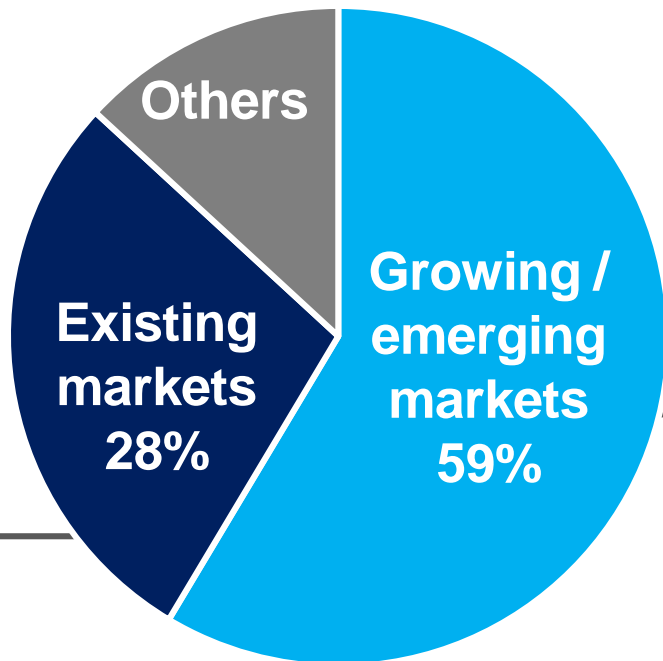
*Reclassified for consistency with 2019 presentation

Industry Analyst IHS and MagnaChip

Forecast Continued Growth in Target Markets

Semiconductor market by application

2023 = \$511 billion

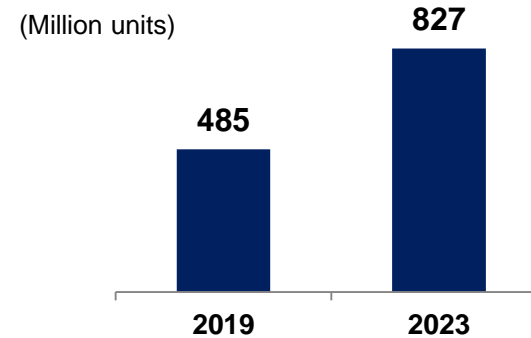


- **Computing**
(Notebook, Monitor etc.)
- **Consumer**
(LCD TV, Game, etc.)
- **OLED / Smartphones**
- **Automotive / Industrial**
- **Data center server / SSD**
- **Wearable / Virtual Reality**
- **IoT**

Source - IHS Markit and MagnaChip internal estimates

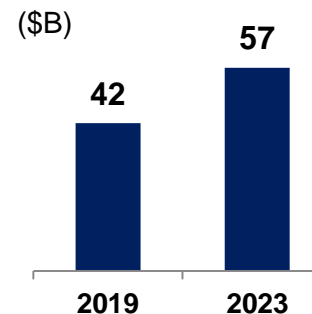
Growing / Emerging markets

Smartphone (OLED display shipment) (CAGR 14%)



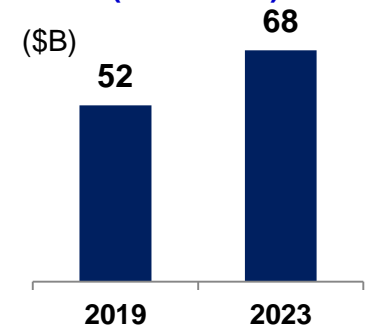
Source - IHS Markit, Q3'19

Automotive (Semi. Revenue) (CAGR 8%)



Source - IHS Markit, Q3'19

Industrial (Semi. Revenue) (CAGR 7%)



Source - IHS Markit, Q3'19

*Results based on IHS Markit, Technology Group, Pure play foundry market tracker, Q3 2019 and Small Medium Display Market Tracker, Q3 2019. Results are not an endorsement of MagnaChip Semiconductor. Any reliance on these results is at the third party's own risk. Visit technology.ihs.com for more details.

OLED is Everywhere and Evolves Over Time

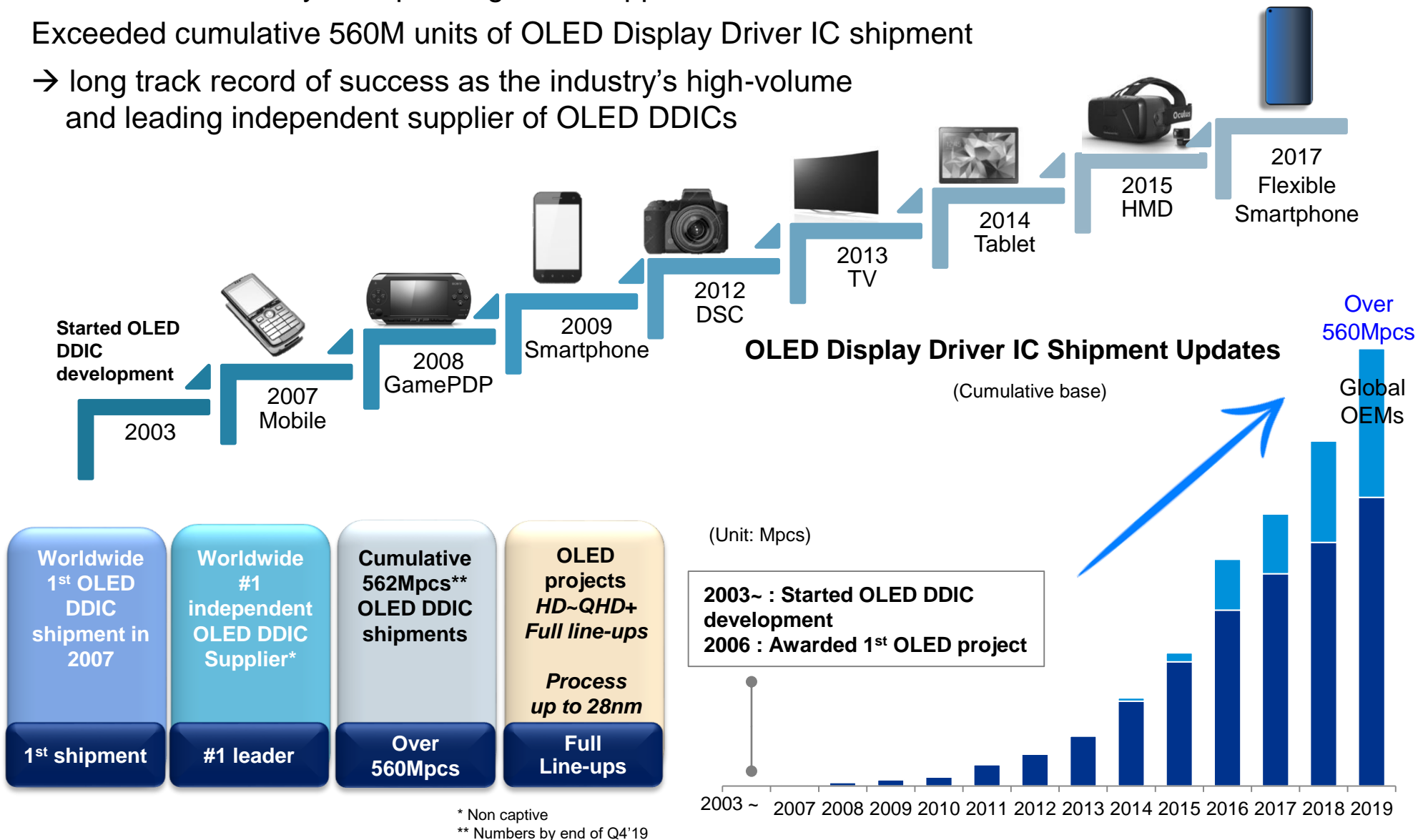


MagnaChip: First Adopter and Independent OLED Leader

Over 17-Year History of Expanding OLED Applications

Exceeded cumulative 560M units of OLED Display Driver IC shipment

→ long track record of success as the industry's high-volume and leading independent supplier of OLED DDICs



MagnaChip: Leading edge OLED DDICs for new 5G era

40nm, 60Hz
(COP)*

28nm, 120Hz

MX's 1st COP
DDIC solution

Supports flexible
displays

Smaller
Chip Size
(<20% than 40nm)

Reduced power
consumption
(more than 20%
than 40nm)



*Chip-On-Plastic

28nm,
120Hz

World's First Non-Captive FHD+ 120Hz
frame rate supportable OLED Driver IC

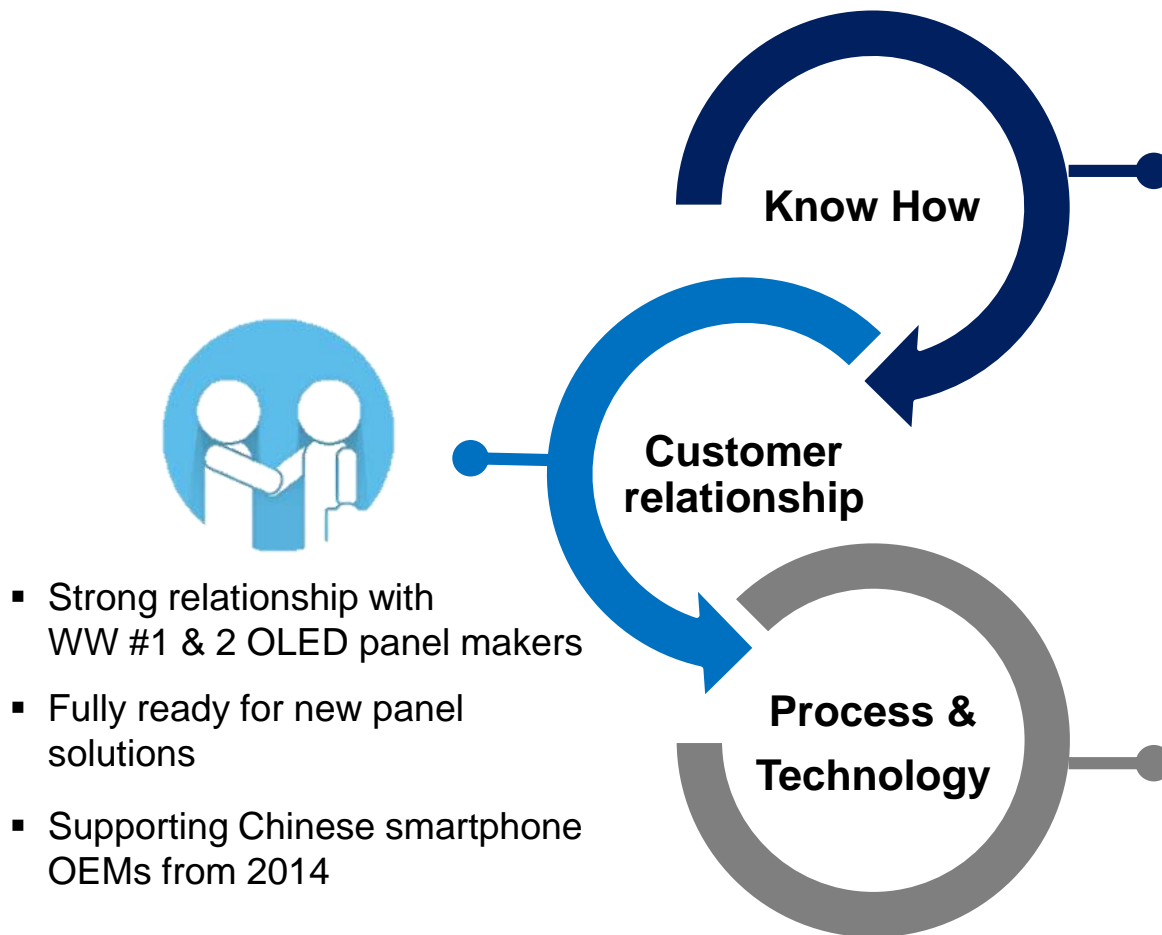
- Aspect ratio up to 21:9 (2,520:1,080)
- Supports 60 / 90 / 120Hz frame rate
- 28nm process
- Works with rigid (COF) and flexible (COP) Display
- Under Mass production

40nm,
60Hz

Chip-On-Plastic Enables Narrower
Borders and low BOM costs

- Aspect ratio up to 21:9 (2,520:1,080)
- Supports flexible Displays
- 40nm process
- Under Mass production

MagnaChip: OLED Key takeaways



Power Product Portfolio and Product Competitiveness

Power products portfolio



Power IC AC/DC

- LED BLU driver and LED lighting
- PFC IC / PWM IC
- LCD TV, lighting and SMPS



Power IC DC/DC

- PMIC and linear regulator for SSD
- LED driver for digital signage
- Mobile DC/DC



SJ MOS HV planar MOS

- 200V – 900V
- High performance & optimal R_g
- LCD TV, travel adapter, computing, lighting and Industrial



IGBT

- 650V / 1200V discrete IGBT
- Low $V_{ce(sat)}$, high speed & ruggedness
- Motor drive, solar, welding and consumer appliances

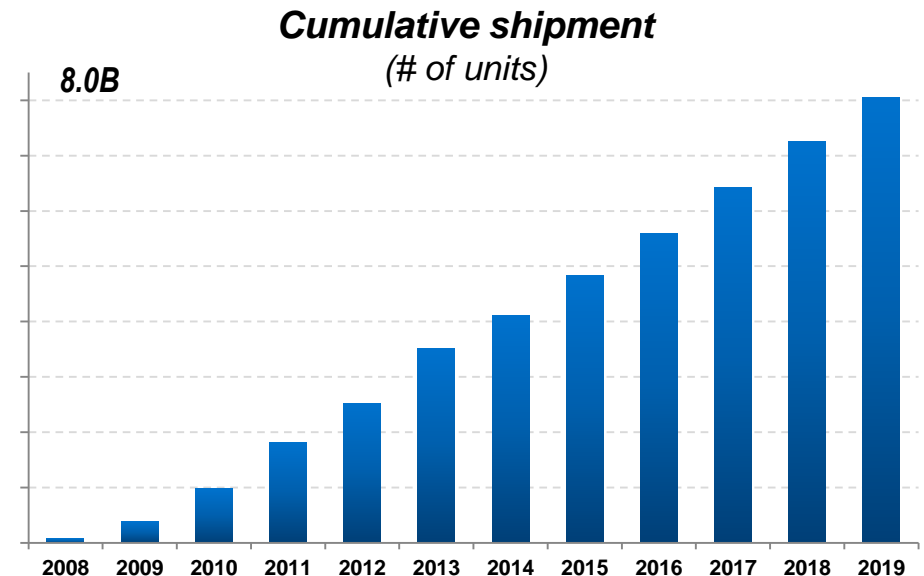


LV MOS MV MOS

- 12V – 150V
- SR MOS and battery protection MOS
- Battery pack, power tool and E-bike

Product Competitiveness

- **Super Junction MOSFET Gen 2**
 - Ruggedness for robust system reliability
 - Continue to expand share in consumer, mobile, LED, computing and industrial
- **Battery Protection MOSFET**
 - Leadership position in smartphone market

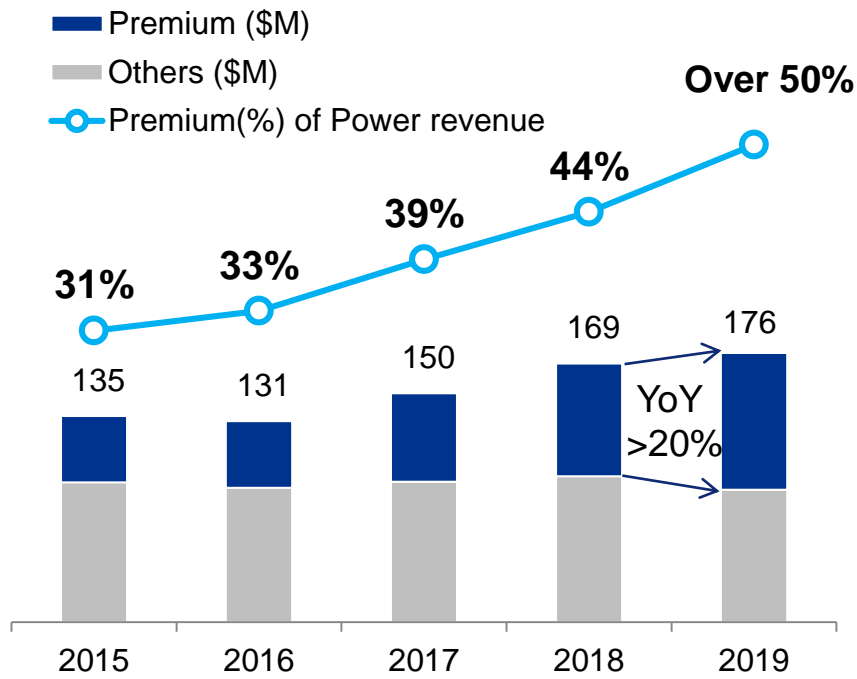


Power premium products have shown growth; Auto/EV segment a potential future growth opportunity

Power premium products

- **Super Junction MOSFET, IGBT and Power IC**
 - Advanced technology
 - Higher margin & value added products

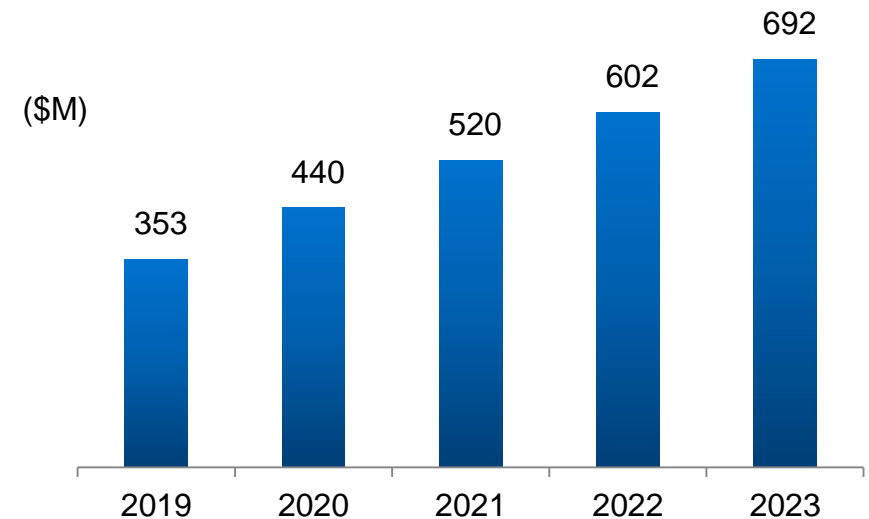
Net Sales from premium products



IGBT Forecast for xEVs

- **IGBT chips for EV application growth**
 - CAGR('19-'23): 18%
 - MX collaborated with major two automotive companies in Korea and China
 - 11 projects(IGBT/FRD chips) under development (MP target: xEV in 2022)

IGBT chip revenue forecast for Hybrid and EV



Source – IHS Markit, 2019

Key Business Takeaways

MagnaChip's unique position in high-growth end markets

Largest Independent
Supplier of OLED
Display Driver IC's

- Largest independent provider of OLED DDIC
- Deep relationships with #1 and #2 OLED panel makers
- Design track record and manufacturing know-how
- Advanced OLED process: 28nm now in mass production

Diversified Portfolio of
Power products

- Leading provider of battery protection discrete products for major leading smartphone makers
- Focused on premium products and currently in 10,000 qual stages to penetrate to electric vehicle (EV)

Specialty 8" Foundry with
Differentiated Analog / Mixed
Signal Process Technologies

- Focused on providing highly engineered analog and mixed signal processes (BCD, EEPROM, IoT)
- Focus on higher ASP and high margin products and customers

A microscopic view of a circuit board with a magnifying glass. The image shows intricate circuitry, including various chips, capacitors, and resistors. A magnifying glass is positioned over the center, highlighting the detailed patterns of the board. The overall color scheme is blue and green, with a semi-transparent blue band across the middle containing the text.

Financial Summary

MagnaChip 

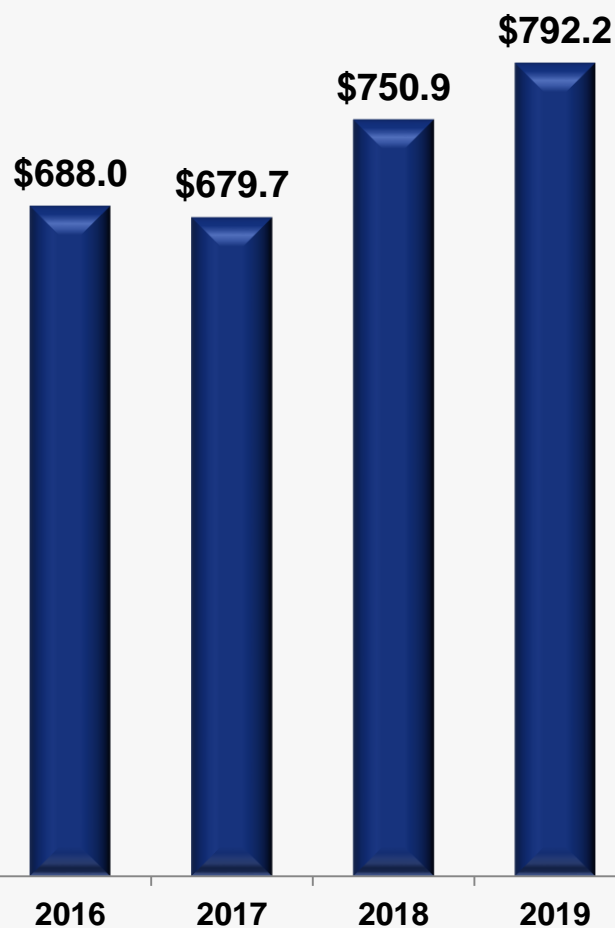
FY 2019 Highlights

- ✓ Net Sales of \$792.2M, up 5.5% YoY from \$750.9M
Q4'19 revenue of \$200M, met high-end of updated guidance
- ✓ Net Sales for OLED and Power business both set records
- ✓ OLED net sales ↑ 42% YoY – 2.5 times the rate of growth for OLED smartphone panel shipments worldwide, according to IHS. We now have a total of more than 11 OLED display drivers in our portfolio, including five of the latest-generation 28 nm drivers
- ✓ Premium power products revenue: over 50% of power revenue and ↑ 20% YoY. We expect the auto segment to present a meaningful growth opportunity for our Power business in 2021 and beyond
- ✓ Operating income, adjusted net income and adjusted EBITDA increased YoY
- ✓ Cash and cash equivalents totaled \$152M, highest in six years

Financial Results - Yearly

Net Sales

(\$M)



Gross Profit

(\$M)



Adj. EBITDA (1)

(\$M)



(1) A reconciliation of Adjusted EBITDA, a non-GAAP measure, to net income (loss) can be found on the next slide.

Reconciliation of Adjusted EBITDA

(\$M)	2019	2018	2017	2016
Net Income (Loss)	(21.8)	(3.9)	84.9	(29.6)
Interest expense, net	19.9	20.4	20.5	16.0
Income tax expenses	4.7	4.6	1.2	3.7
Depreciation and amortization	32.7	32.0	28.1	25.4
EBITDA	35.6	53.2	134.7	15.5
Adjustments:				
Restructuring and other gain, net	9.2	-	(17.0)	(5.5)
Early termination charges	-	-	13.4	4.2
Equity-based compensation expense	7.0	4.4	2.3	3.8
Foreign currency loss (gain), net	21.8	24.4	(65.5)	15.4
Derivative valuation loss (gain), net	0.3	2.4	(0.2)	0.3
Restatement related expenses (gain)	-	(0.8)	10.3	7.0
Secondary offering expenses	-	-	0.7	-
Loss on early extinguishment of long-term borrowings, net	-	0.2	-	-
Others	0.6	0.4	-	-
Adjusted EBITDA	74.5	84.3	78.7	40.7

Thank You