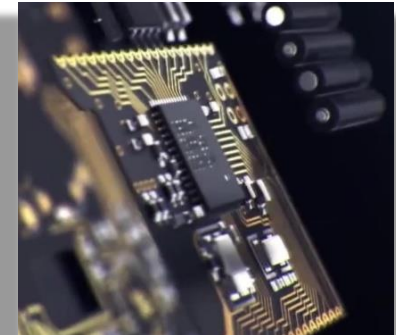
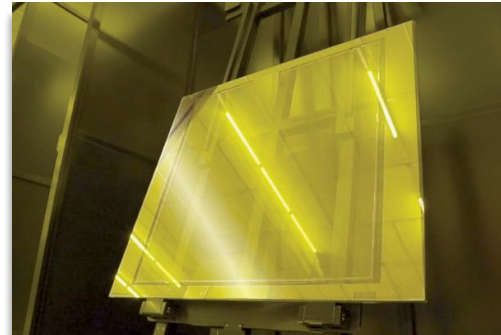
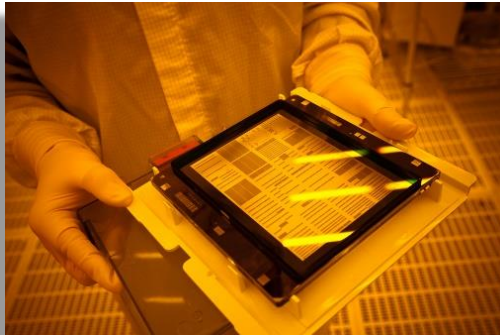


Global Merchant Photomask Leader

Stifel Cross Sector Insight Conference
June 7-9, 2022



Safe Harbor Statement

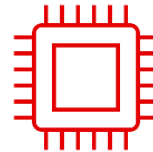
Certain statements in this presentation are “forward-looking statements” regarding our industry, our strategic position, and our financial and operating results. These forward-looking statements are subject to a number of risks and uncertainties that could cause actual results, performance or achievements to differ materially. Please refer to the documents we file with the Securities and Exchange Commission. These documents contain and identify important factors that could cause our actual results to differ materially from those contained in these forward-looking statements. These certain factors can be found at www.photronics.com/riskfactors. Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, levels of activity, performance, or achievements. We are under no duty to update any of the forward-looking statements after the date of this release to conform these statements to actual results.

A Compelling Investment Thesis



A GLOBAL LEADER in the **merchant photomask industry**

Delivering growth
by leveraging core
competencies



TECHNOLOGY ALIGNED with **secular growth trends**

China industry expansion
(IC & FPD) – Made in
China 2025

Display technology
inflections

Resurgence of legacy
foundry sector



INVESTMENT GROWTH strategy targeting **EPS growth >50%***

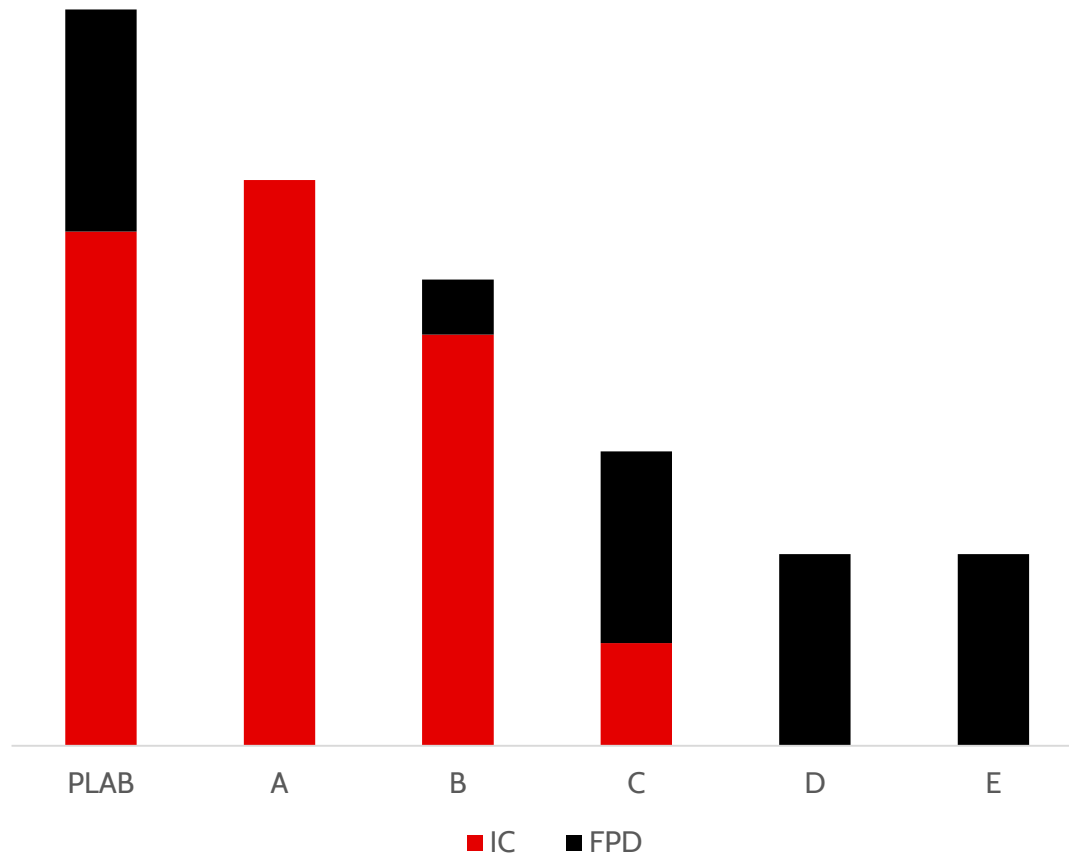
Operating margins
in the twenties

Free cash flow
above \$100M

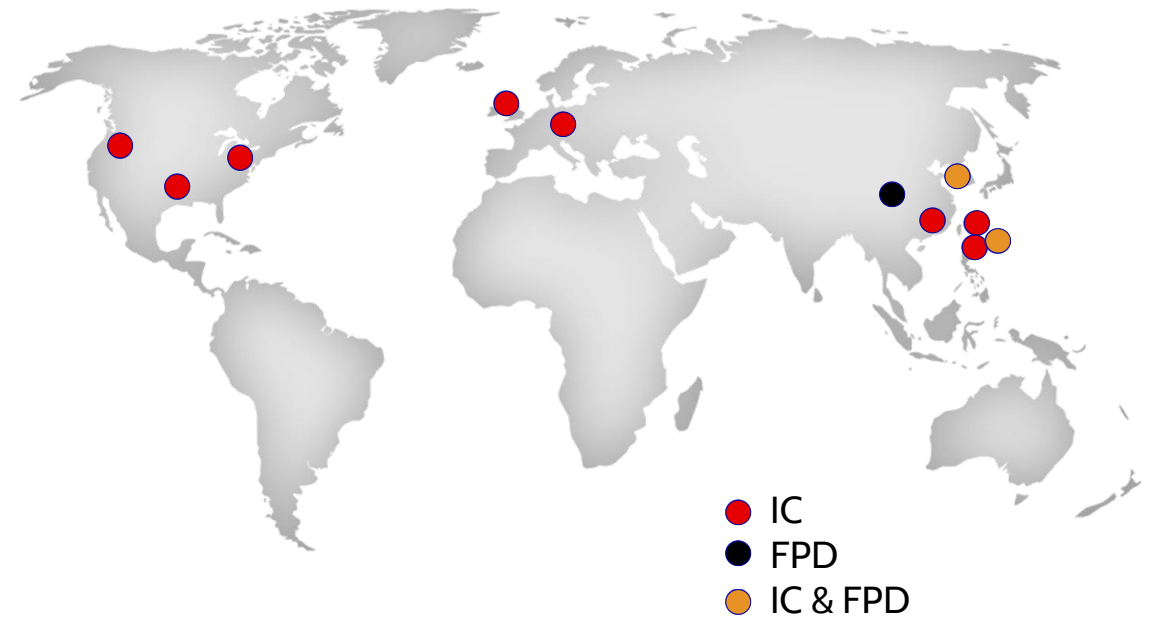
*Upper range of fiscal year 2023 target model compared with fiscal year 2021

Leading merchant with unmatched global presence

Largest Merchant Photomask Manufacturer (\$M)



Unmatched Global Footprint
11 Strategically Located Manufacturing Facilities



Sources: SEMI 2020 Photomask Characterization Study; internal estimates

Investment Strategy

Revenue Growth

- Win lion's share of "Made in China 2025" TAM growth
- Supplement new factories with point tool investments
- Capitalize on technology leadership in AMOLED to continue improving mix
- Leverage global footprint to exploit growth in "legacy foundry" business

Margin Expansion

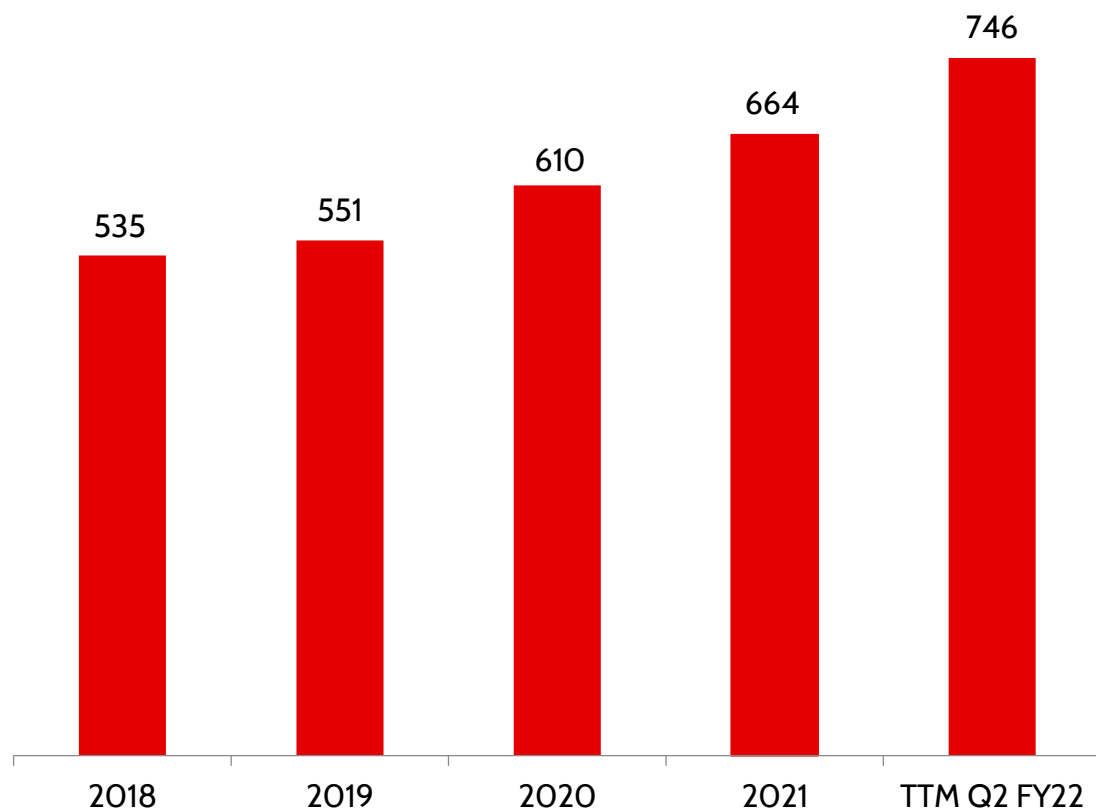
- Sustained pricing strength in mainstream IC through 2022
- Optimize asset tool set to match end-market demand
- Increasing benefit from operating leverage

Explore Strategic Partnerships

Investment strategy is working

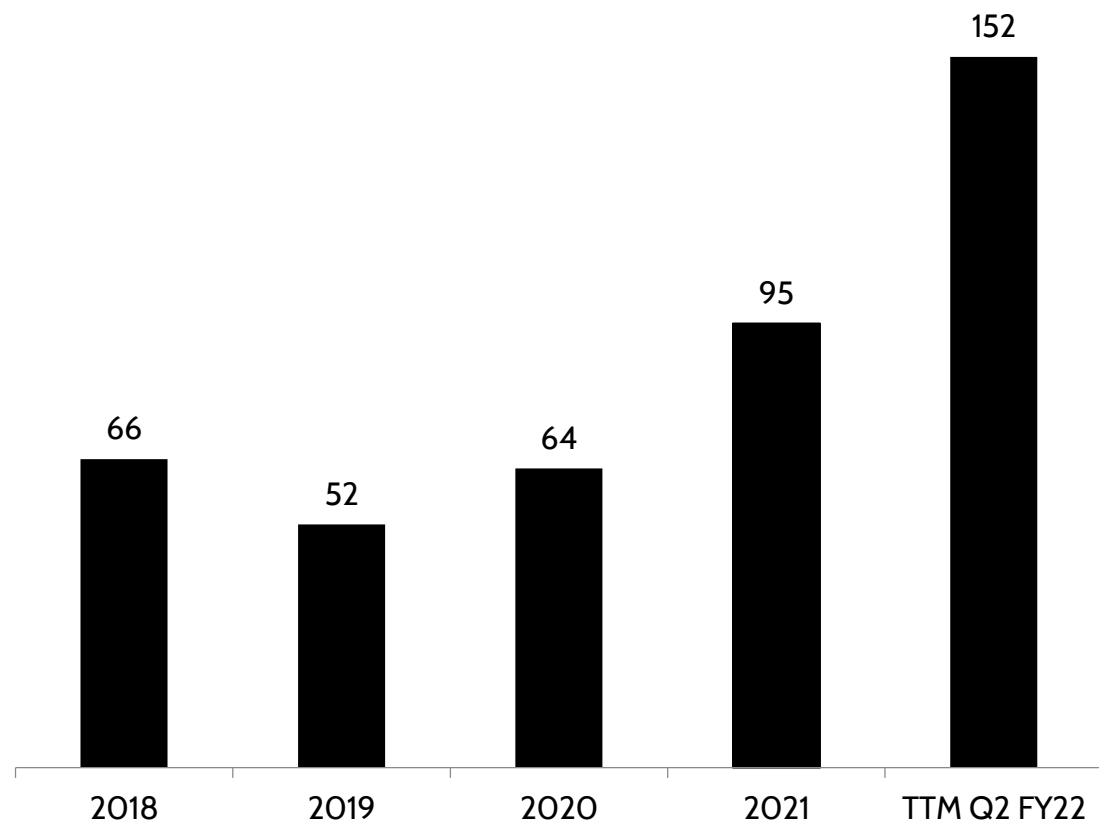
Converting Investments Into Revenue (\$M)

4th consecutive year of record revenue



Growing Operating Income (\$M)

High-teens operating margin run-rate at year end 2021

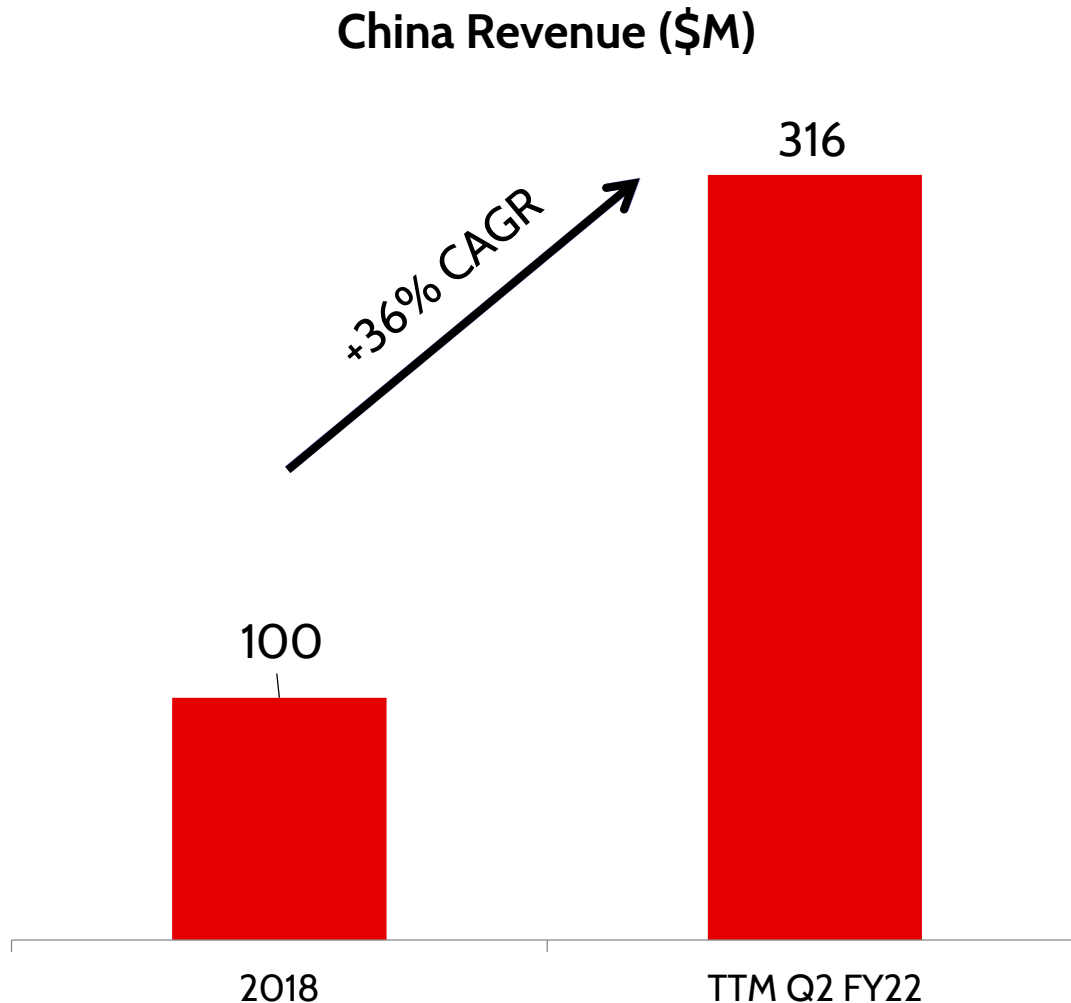


Delivering on Updated Target Model

	2020	2021	Q2 2022 LTM	Q2 2022 YTD	Illustrative Target Model - 2-Year Horizon Range of Expected Outcomes for FY 2024		
Revenue	\$610	\$664	\$746	\$394	\$900	\$950	\$975
Gross Margin	22%	25%	31%	34%	38-40%	40-42%	42-43%
Operating Margin	10%	14%	20%	23%	28-30%	30-32%	32-33%
Operating Cash Flow	\$143	\$151	\$196	\$103	\$350-375	\$365-380	\$375-400
Free Cash Flow	\$77	\$47	\$127	\$68	\$250-275	\$265-280	\$275-300
EPS	\$ 0.52	\$ 0.89	\$1.47	\$0.87	\$2.35-\$2.45	\$2.50-2.55	\$2.60-2.65

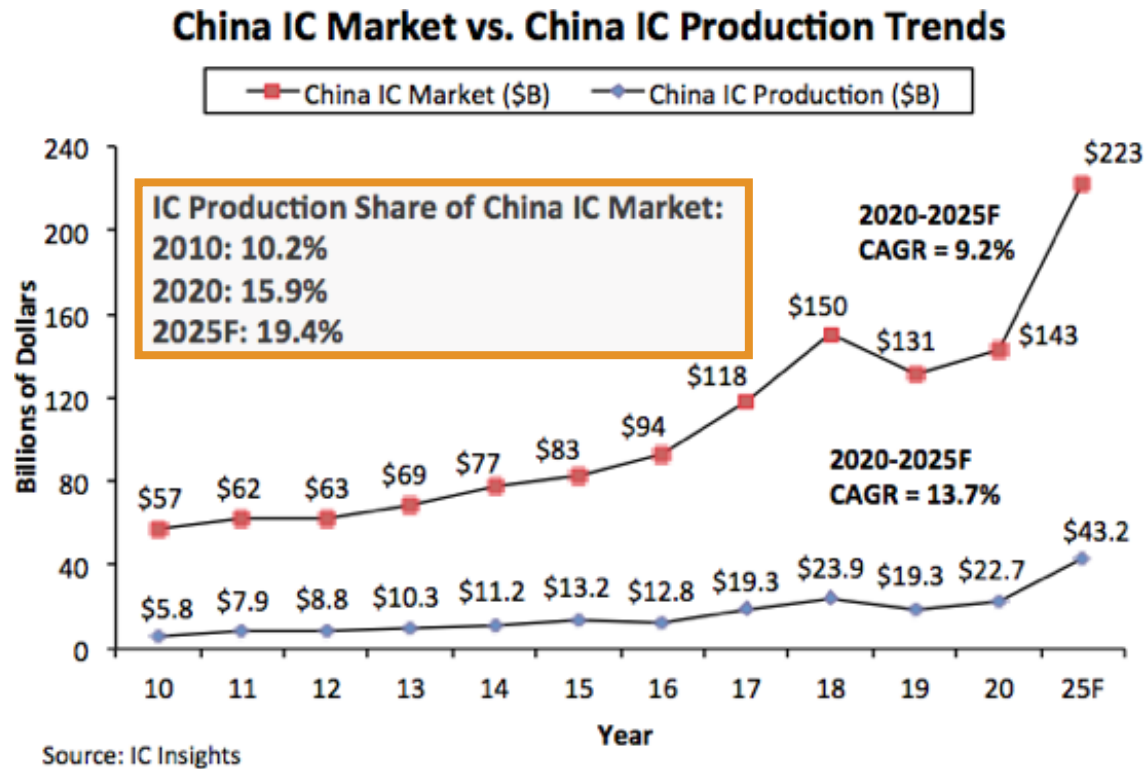
*Free Cash Flow is a non-GAAP term; see reconciliation included in this presentation

Growing China business



- We have growing business in China
 - Strong annual growth rate
 - 42% of total revenue TTM Q2 FY22
- Local manufacturing accelerated growth
- Customer contracts fosters sustainable results
- IC JV enables us to compete more effectively

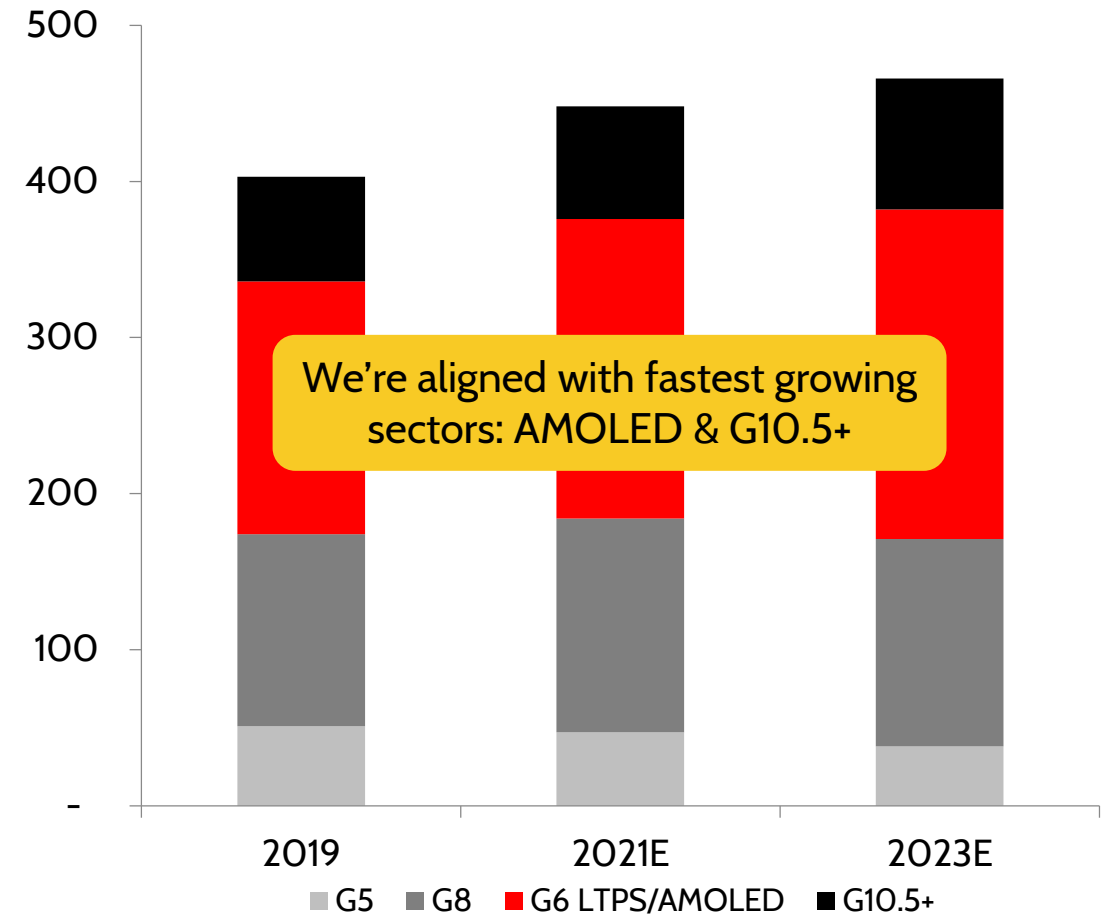
“Made in China 2025” driving growth



January 2021

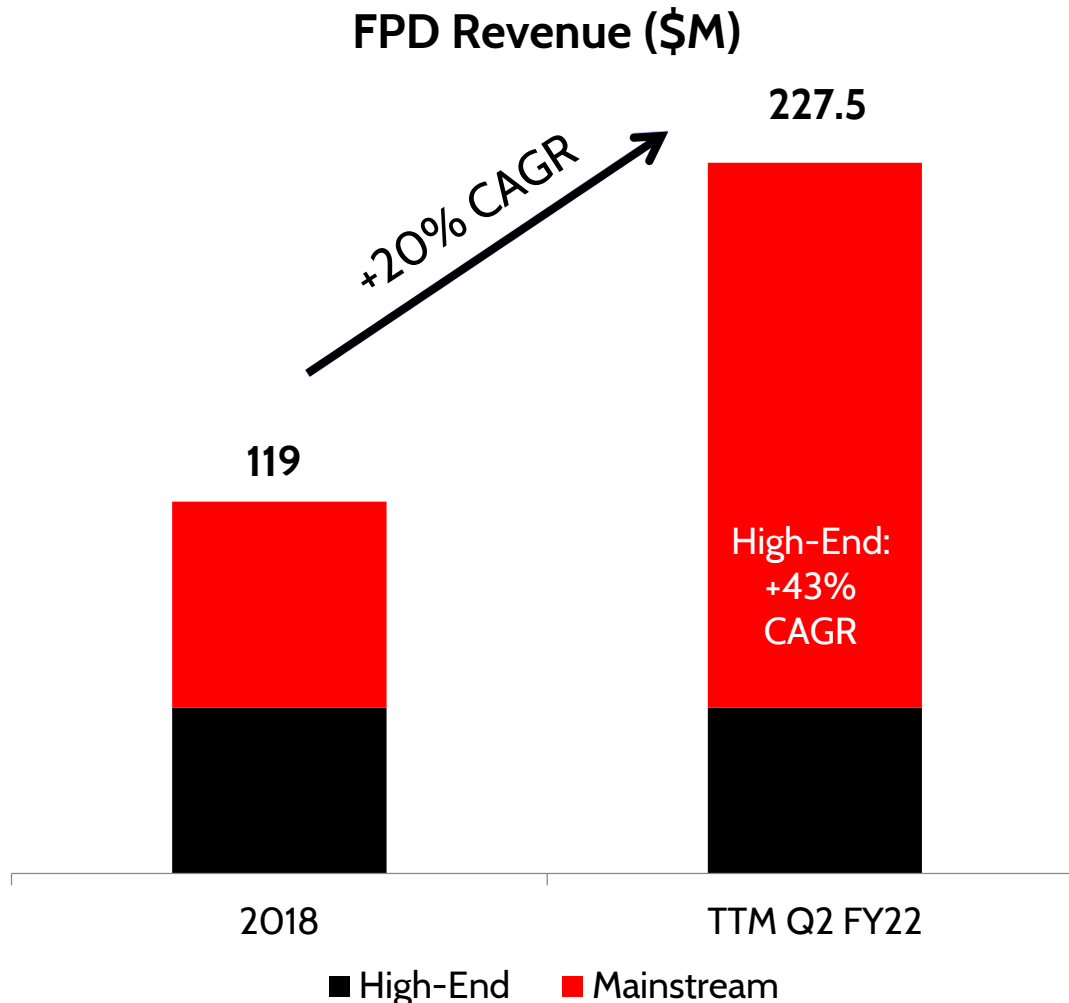
Forecast falling short of policy goals (70% by 2025)
More investment needed to meet targets

China FPD Mask TAM (\$M)



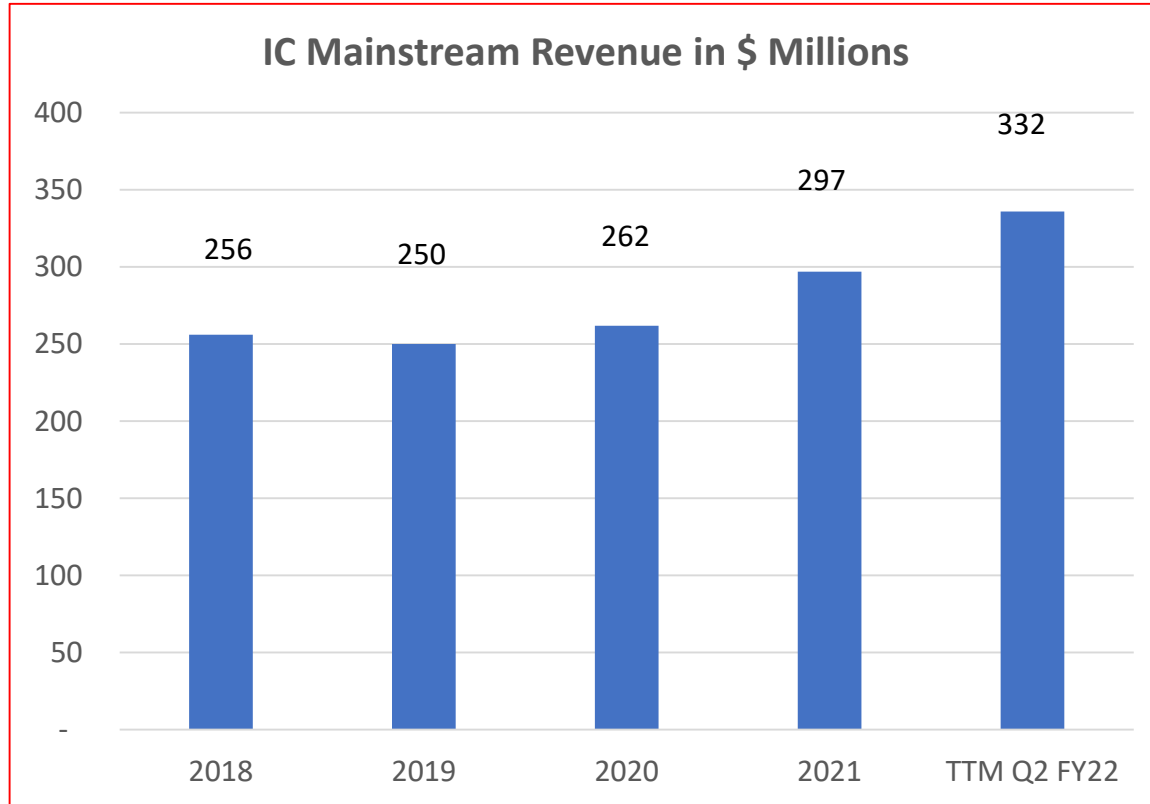
Source: Internal Estimates

Technology leadership improves FPD business mix



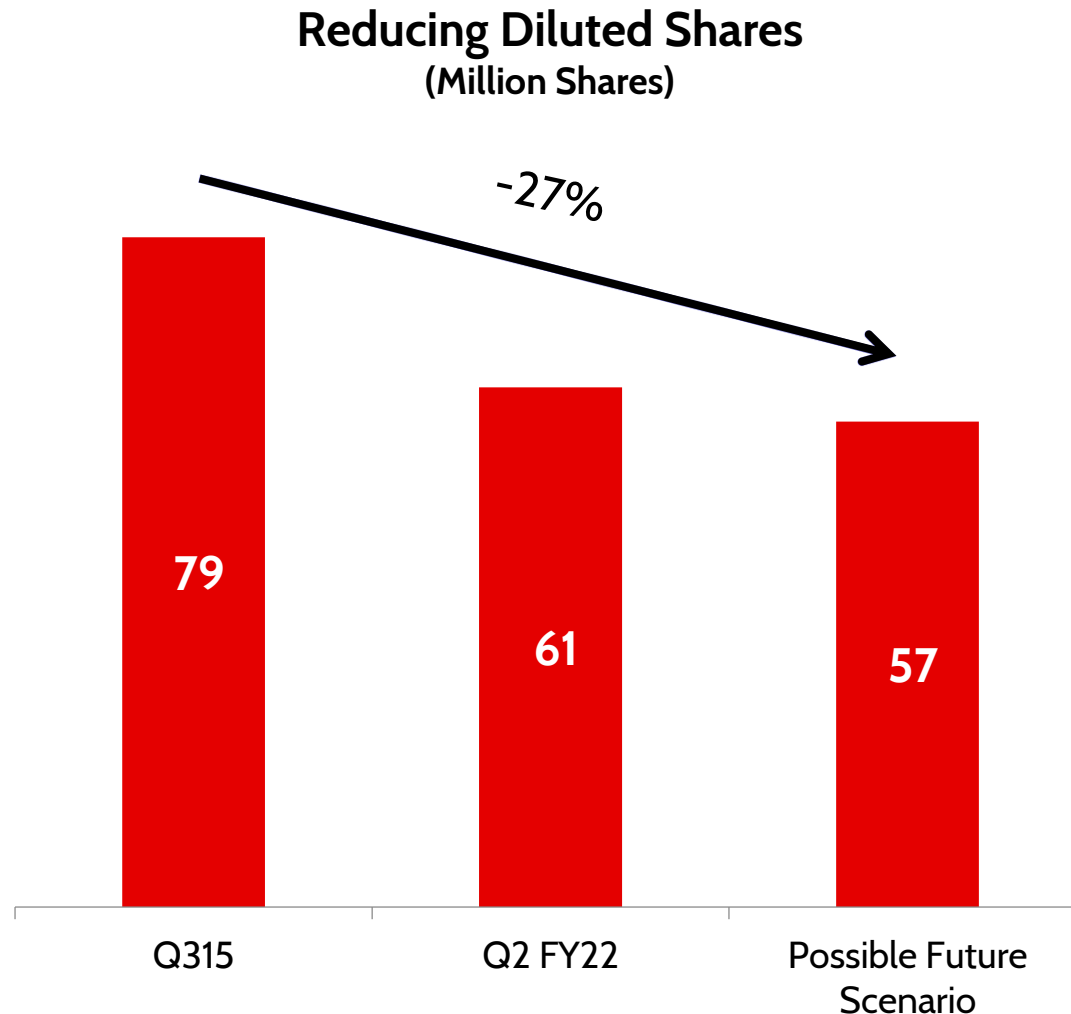
- Investments aligned with secular growth trends
 - AMOLED & LTPS for mobile
 - New OLED TV technologies
 - G10.5+
- Partners with largest panel makers
- Runway left for advanced display growth
 - Mobile platforms
 - Advanced TV
 - Mini & Micro LED

Growth in Legacy Foundry = Dynamic Mainstream Mask Market



- Demand far outstripping supply
 - Delivery times expanding from days to months
 - Cannot add new lines cost effectively
- Rebirth of the ASIC mask market
 - Moore's law no longer working for much of the logic market
 - Mask to silicon revenue of 3% vs 1% for over-all semiconductor market
- Pricing leverage
 - Double digit increases implemented in Taiwan and China
 - Actively raising prices in Europe and Korea

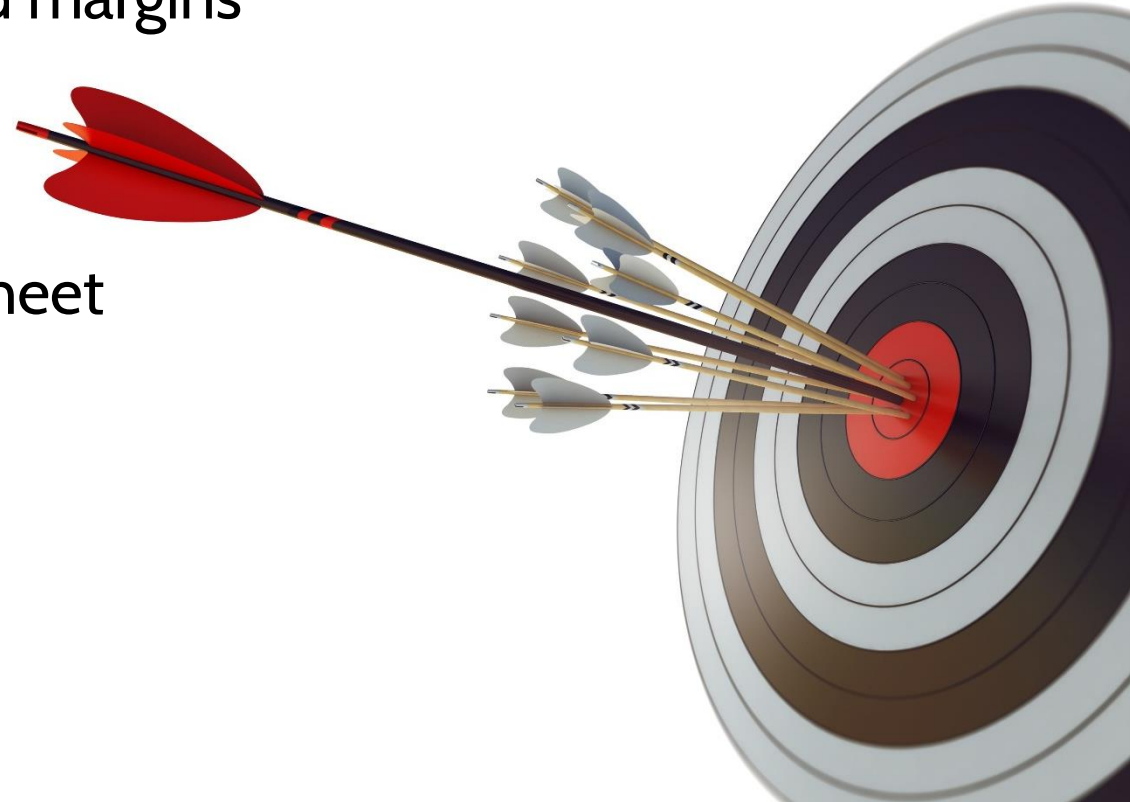
Clear capital deployment priorities



- Fund organic growth
 - Geographic expansion into China
 - Investments to maintain technical leadership
 - Capacity expansion when reciprocated by customer commitment
 - Financial discipline to improve ROIC
- Explore strategic M&A
 - Photomask industry – IC & FPD
 - Adjacencies to increase revenue diversification
- Share repurchase
 - Repurchased 12M shares, returning \$130M to shareholders since 2018
 - Redeemed \$115M in convertible debt since 2016, eliminating 10.3M potentially dilutive shares

Financial Discipline Improves Shareholder Value

- Targeted investments drive top-line growth in excess of market
- Operating leverage and cost reductions expand margins
 - Target operating margins high-teens
 - Target incremental margins 50%
- Strong cash flow generation fortifies balance sheet
- Capital deployment priorities to improve ROIC



2021 Summary

Revenue
was a record
\$663.8M



IC and FPD both achieved record revenue, up 10% and 6%, respectively
Record revenue to China, up 20%

Net Income
\$55.4M
\$0.89 / Sh



Net Income attributable to Photronics
4-Year CAGR 46%

Cash
balance
\$277M

100% of free cash flow returned to investors through share repurchases
\$151M generated from operating activity
\$109M invested in capex (\$103M net of government incentives)

Completed FPD capacity expansion ahead of schedule

Another year with record revenue and improved performance in a challenging environment

Q2 2022 Summary

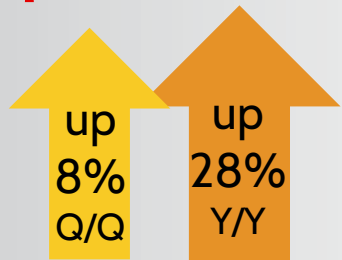
Revenue
was a record

\$204.5M

IC: +12% Q/Q, +30% Y/Y

FPD: -2% Q/Q, +23% Y/Y

To China: +8% Q/Q; +58% Y/Y



\$329M

Cash
balance

\$44M generated from operating activity

\$16M invested in capex

\$10M contribution from JV partner

- Net income attributable to Photronics, Inc. shareholders of \$29.8M (\$0.49/share)
- Appointment of Frank Lee as CEO; 42+ years industry experience; 16+ years with PLAB
- Investing in mainstream IC capacity to capitalize on market growth trends

Committed to driving long-term, profitable growth through strategic investments

Income Statement Summary

\$M (except EPS)	Q222	Q122	Q/Q	Q221	Y/Y
Revenue	\$ 204.5	\$ 189.8	8%	\$ 159.8	28%
Gross Profit	\$ 72.9	\$ 59.9	22%	\$ 39.2	86%
Gross Margin	35.7%	31.5%	420 bps	24.6%	1,110 bps
Operating Income	\$ 52.1	\$ 38.2	36%	\$ 20.8	150%
Operating Margin	25.5%	20.1%	540 bps	13.0%	1,250 bps
Other non-operating income (expense)	\$ 8.0	\$ 4.7	\$ 3.3	(\$ 0.8)	\$ 8.8
Income tax provision	\$ 14.7	\$ 11.2	\$ 3.5	\$ 3.7	\$ 11.0
Minority interest	\$ 15.6	\$ 8.7	\$ 6.9	\$ 5.8	\$ 9.8
Net income*	\$ 29.8	\$ 23.1	29%	\$ 10.5	184%
Diluted EPS*	\$ 0.49	\$ 0.38	\$ 0.11	\$ 0.17	\$ 0.32
Days in quarter	91	91	-	91	-

*Net income attributable to Photronics, Inc. shareholders

- Margins improved on operating leverage, disciplined cost management, and IC price realization
- Other non-operating income/expense primarily due to unrealized FX gain/loss
- Minority interest from IC JVs in Taiwan and China

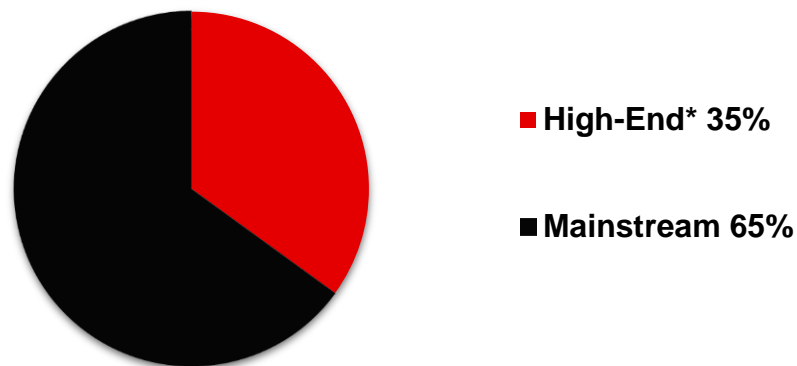
IC Photomask Revenue

<u>\$M</u>	<u>Q222</u>	<u>Q122</u>	<u>Q/Q</u>	<u>Q221</u>	<u>Y/Y</u>
High-End*	\$ 51.4	\$ 46.5	10%	\$ 41.3	24%
Mainstream	\$ 94.4	\$ 83.2	13%	\$ 70.7	34%
Total	\$ 145.8	\$ 129.8	12%	\$ 112.0	30%

Total may differ due to rounding

- High-end growth driven by strong demand in Asia and US and higher price
- Continued mainstream growth from chip proliferation in consumer products, IoT, 5G, and Crypto supporting higher ASPs
- Outlook
 - Continued strength from remote work and education
 - Regionalization driving investments for global chip capacity
 - Mainstream demand strong, expanding ASPs

Q222 Revenue by Technology



*28nm and smaller

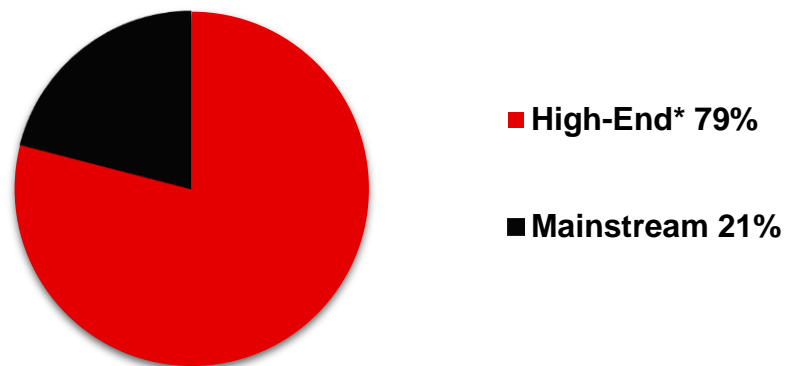
FPD Photomask Revenue

\$M	Q222	Q122	Q/Q	Q221	Y/Y
High-End*	\$ 46.6	\$ 46.3	1%	\$ 39.4	18%
Mainstream	\$ 12.1	\$ 13.8	(12%)	\$ 8.4	45%
Total	\$ 58.7	\$ 60.1	(2%)	\$ 47.8	23%

Total may differ due to rounding

- High-end demand up Q/Q as mobile growth offset soft G10.5+
- Mainstream demand remains solid
- Outlook
 - Dynamic market environment
 - Mobile demand strength and mainstream LCD recovery expected to continue
 - Technology development drives demand for higher-value masks

Q222 Revenue by Technology



*≥G10.5, AMOLED and LTPS

Select Financial Data

<u>\$M</u>	<u>Q222</u>	<u>Q122</u>	<u>Q221</u>
Cash	\$ 329	\$ 314	\$ 256
Debt	\$ 83	\$ 97	\$ 114
Net Cash*	\$ 247	\$ 217	\$ 142
Operating Cash Flow	\$ 44	\$ 59	\$ 32
Capital Expenditures	\$ 16	\$ 19	\$ 56
Share repurchase	-	\$ 3	\$ 10

- Debt is US equipment lease and local China loans; reduced debt \$29M YTD
- Capex mostly mainstream IC capacity & facility expansion
- Balance sheet able to fund investments, share repurchases, and strategic M&A opportunities
- Total share repurchases of \$68M under current (Sep 2020) \$100M plan

*Net cash defined is a non-GAAP term; see reconciliation included in this presentation

Summary



4 consecutive years of **record revenue**, growing 10% CAGR over that period



Our **leadership position is expanding** – growing more quickly than markets



Moving forward, our investment focus is narrowing to drive **accretive growth**



With a business model demonstrated to deliver **increasing shareholder value**

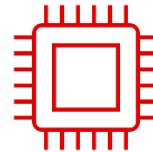
- Margin expansion creates earnings power
- Strong cash flow generation
- Strategic use of cash to fund growth and enhance shareholder returns

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above \$100M

*Upper range of fiscal year 2023 target model compared with fiscal year 2021

Thank you for your interest!

For Additional Information:

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