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Growth in Process Solutions

Needham Growth Conference

January 15, 2020

Safe Harbor

The information presented herein contains forward-looking statements that relate to anticipated future operating results and performance. These statements are only predictions based on management's current expectations and assumptions, including market size and forecasted growth, Total Available Market (or "TAM"), Served Available Market (or "SAM") and revenue estimates, and necessarily involve risks and uncertainties. We do not assume any obligation to update the information provided. Actual events or results may differ materially from those projected, including as a result of changing industry and market trends, reduced demand for our products, the timely development of our new products and their adoption by the market, increased competition in the industry, price reductions and other subsequent developments and business conditions. Additional information and considerations regarding the risks faced by Nanometrics and Rudolph are available in Nanometrics' and Rudolph's Form 10-K reports for the year ended December 2018 and other filings with the Securities and Exchange Commission.

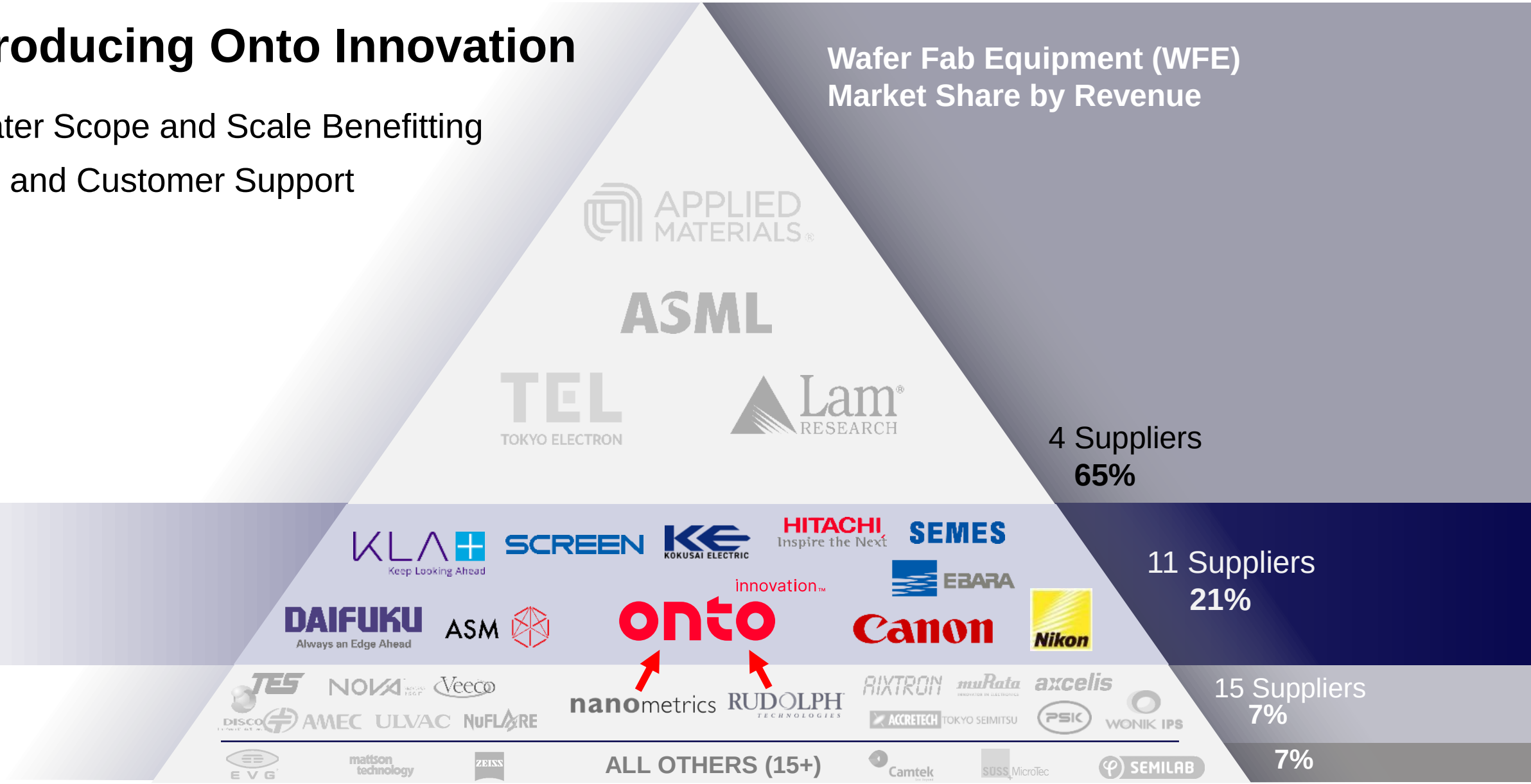
The presentation includes non-GAAP financial measures which are not intended to be considered in isolation or as a substitute for the financial information prepared and presented in accordance with GAAP. Management uses both GAAP and non-GAAP measures when evaluating the business internally and therefore believes it is important to make these non-GAAP measures available to the financial community. Reconciliations of non-GAAP measures to the most relevant GAAP amounts are included in the Company press releases.

As the forward-looking statements are based on Onto Innovation's current expectations, the company cannot guarantee any related future results, levels of activity, performance or achievements. Onto Innovation does not assume any obligation to update the forward-looking information contained in this presentation.

Introducing Onto Innovation

Greater Scope and Scale Benefitting

R&D and Customer Support



Source: Company Rank Order based on 2018 Share of Total WFE Revenue, Gartner Market Share Data, May 2019

Who Is Onto Innovation? (Merger: Oct 2019)

High tech capital equipment company specializing in process solutions for semiconductor and related markets

COMPANY

NYSE **(ONTO)**

REVENUE[1]

$534 Million

EMPLOYEES

~1350

Balance Sheet[2]

$337 Million Cash
No Debt

Gross Margin[3]

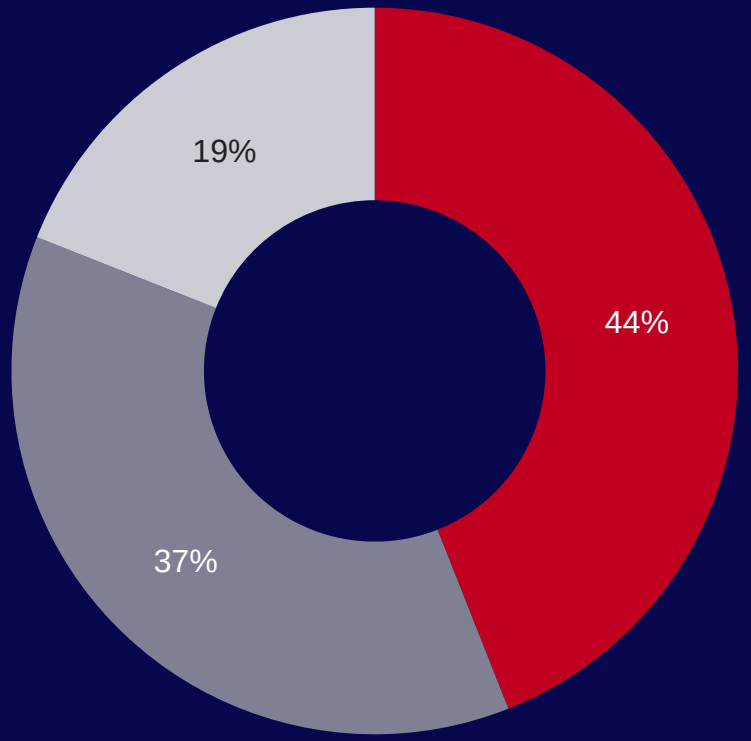
~53%

Market Leadership

#1 or #2 in core markets

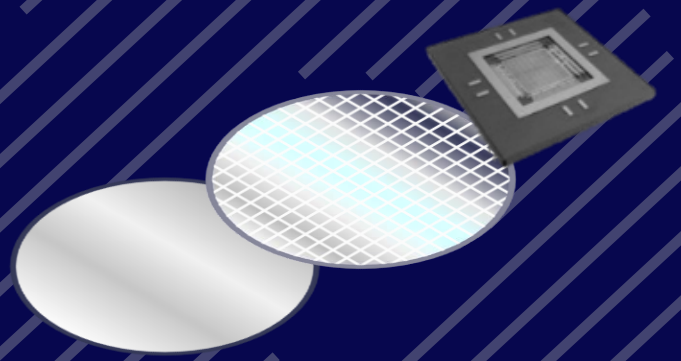
Notes 1: Proforma trailing 12 months revenue
2: Cash balance as of 9/30/2019 for the combined two legacy companies
3: Average gross margin for combined two legacy companies over last 24 months

Balanced Revenue Distribution



***Based on TTM revenue*

Why Invest In Onto Innovation?



MARKET AND PRODUCT DIVERSITY

EXPANDING TO A $3B TAM



EXPAND GROSS AND OPERATING MARGINS

$20M COST SYNERGIES IN 2020



INCREASE SHAREHOLDER VALUE

STRONG CASH GENERATOR >$120M

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5G Contributes to Virtuous Cycle

Driving Multiple Onto Innovation Markets

5G

Growth Beyond Mobile

Mobile:
Smartphones, Tablets, Wearables

Massive IOT:
1M Devices per Km^2

Infrastructure:
cities, vehicles, medical, etc.



Onto Innovation Broadly Serving Semiconductor Leaders



155 Customers Served*

Top 10 Customers Represent 46% of Total Revenue

**Proforma customer base: 12 months revenue for combined legacy companies*

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Complementary Products, No Overlap

Leverage of core IP in optics and software strengthens entire portfolio



Product and Process Matrix for Onto Innovation

	Si Wafer Mfg.	Wafer Fab					Advanced Packaging			
	OQA	Litho	Deposition / Implant	Etch / Cleans	CMP	OQA	Bump / TSV	Dicing	Litho	Etch / Plating
NovusEdge Inspection	●	●								
QS/FTIR Metrology	●		●							
Atlas III+ Metrology			●	●	●					
IMPULSE+ Metrology			●	●	●					
MetaPULSE G Metrology			●	●	●					
Dragonfly G2 Inspection						●	●	●	●	●
NSX / F30 Inspection		●		●	●	●		●	●	●
JetStep Lithography									●	
Discover Software	●	●	●	●	●	●	●	●	●	●

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R&D Pipeline Supports Innovation and Growth

New innovation provides increasing value to customers

NEW PRODUCTS

Dragonfly G2 System

NovusEdge System

Atlas III+ System

QS4300/FTIR System

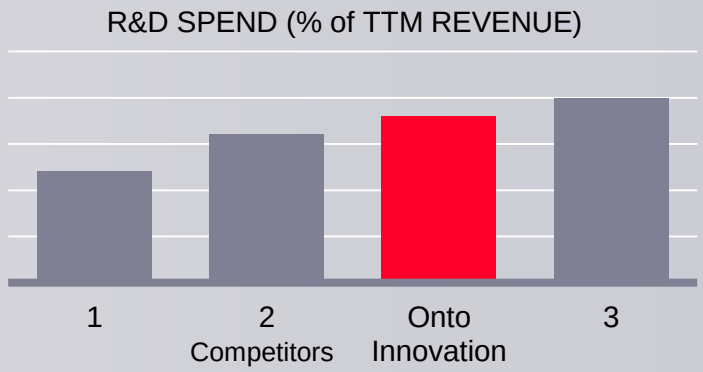
New Products:

>130M

of System Revenue

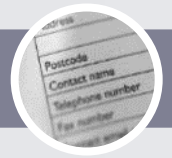
2019

INCREASING OUR PACE OF INNOVATION



We Deliver Differentiated Solutions

Extensive software portfolio enhances value of Onto Innovation products



SPECIFICATIONS



MEET SPECIFICATION

TOOL SALE



Onto Innovation Quality Data

Process Adjustment

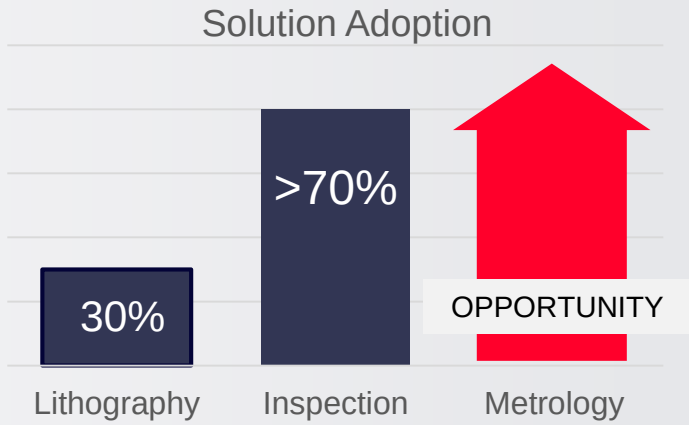
Onto Process Solutions

Machine Learning

External Data Sources

SOLUTION SALE

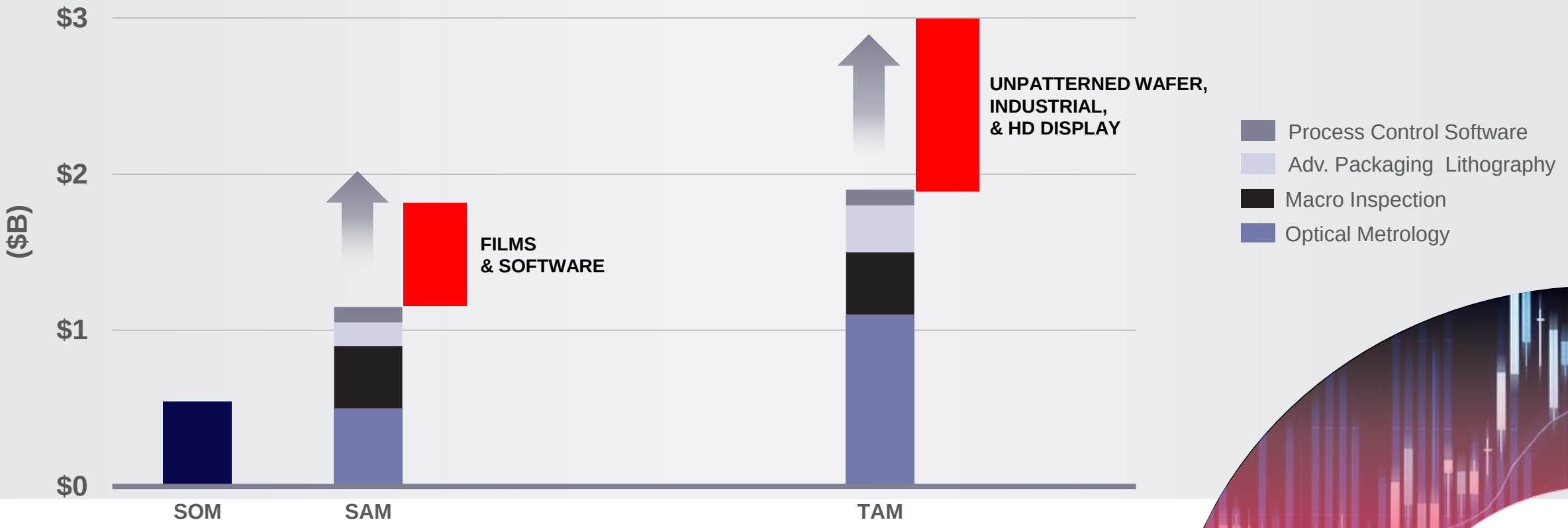




Complementary Technology Expand Our Markets

PRODUCT SYNERGIES
$500M SAM Expansion

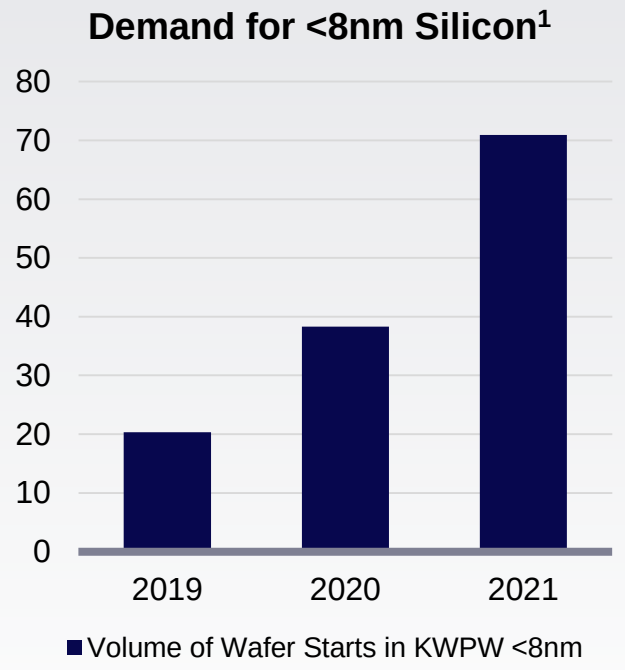
R&D INVESTMENTS
$1B TAM Expansion



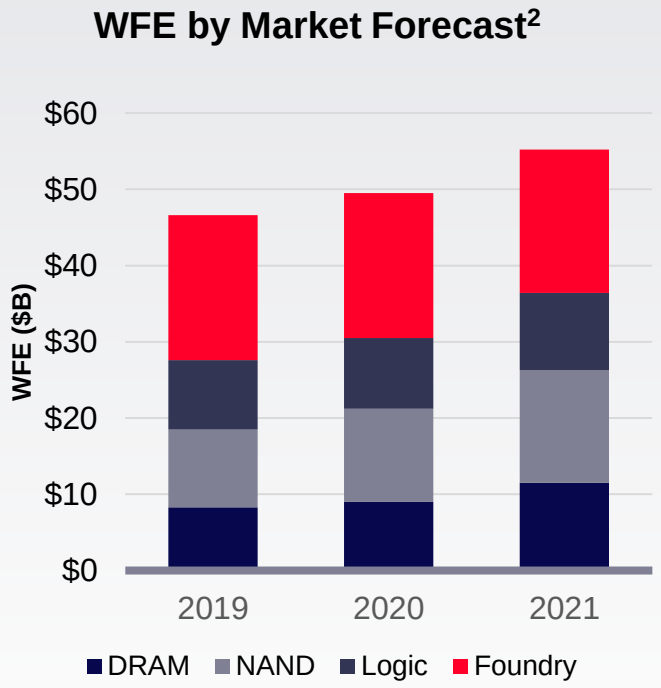
Source: Gartner WFE 2018 Market Share, May 2019 and company estimates

Broad Exposure to Secular Growth Markets

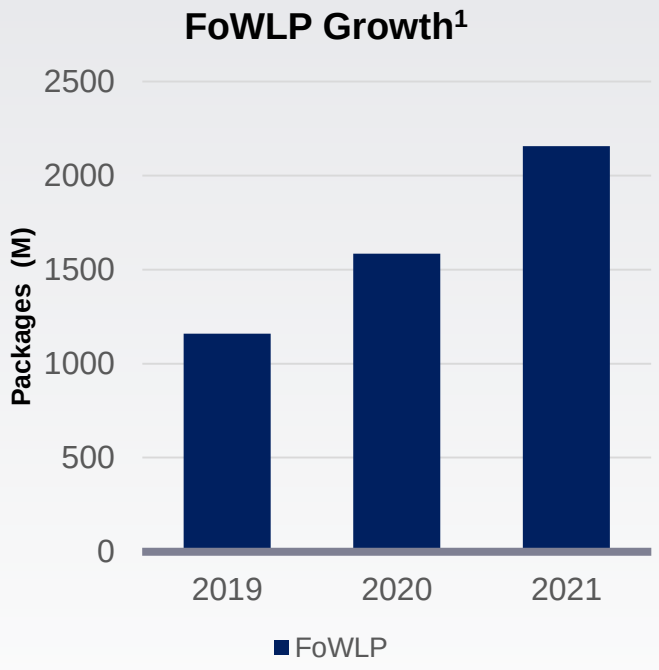
Advanced Silicon Demand
NovusEdge Inspection | QS/ FTIR



Leading Edge Nodes
Atlas III+ Metrology
IMPULSE-EV Metrology



Advanced Packaging
Dragonfly G2 Inspection
JetStep Lithography



In 2019 Onto Innovation Expanded Our Position in Each Segment

Note 1: Source: VLSI Research December 2019 Forecasts for wafer growth <8nm and Fan Out Wafer Level Package growth
2: Source: 19 Street Analysts' Average Forecast, December 2019

Onto Innovation Expands Footprint in Silicon Wafer Manufacturers

Laying foundation for additional growth

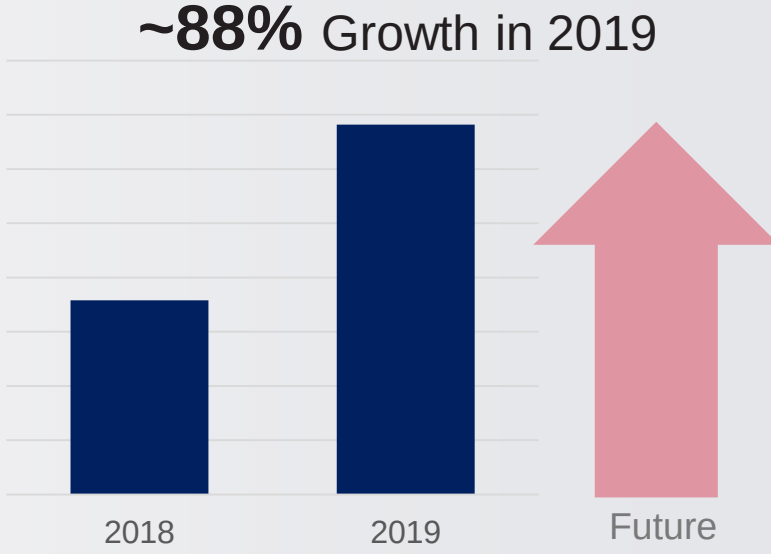


NOVUSEDGE SYSTEM

3 NEW CUSTOMERS ADDED

QS / FTIR SYSTEM

4 NEW CUSTOMERS ADDED



Inspect
NovusEdge System
+
Measure
QS/FTIR System
+
Analyze
TrueADC® Software

Solutions for Wafer Quality

Source: Siltronic investor materials, October 2019

Leading Edge Processes Require More Optical Metrology

Atlas III+ Metrology selected for six new process slots in 2019

TRANSISTORS (LOGIC / DRAM)

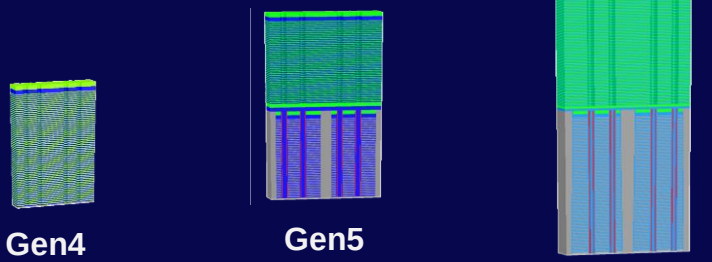
7nm FinFet | 5nm FinFet | 3nm Nano-Sheet



1.3X | 2X | 3X

INCREASING COMPLEXITY

2X | 4X | 6X



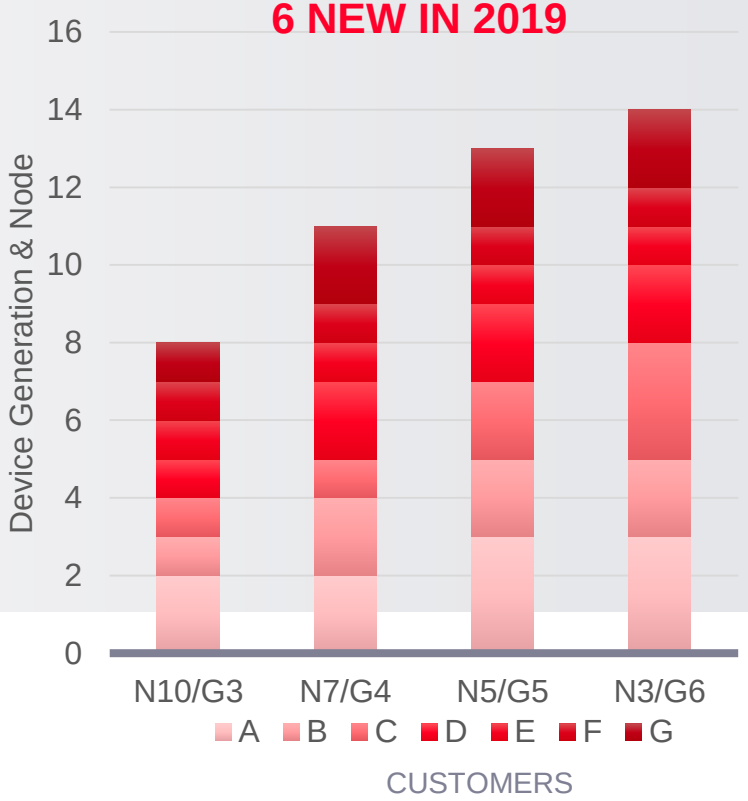
Gen4 | Gen5 (Dual Tier) | Gen6 (Dual Tier)

3D NAND

Increases Demand for Atlas Metrology

TOOL OF RECORD POSITIONS

6 NEW IN 2019



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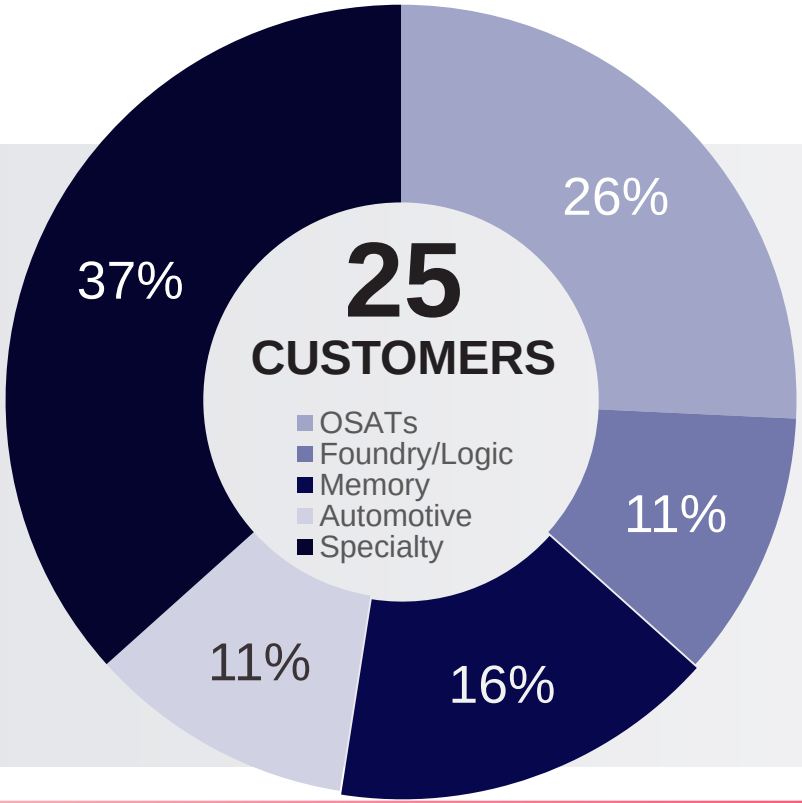
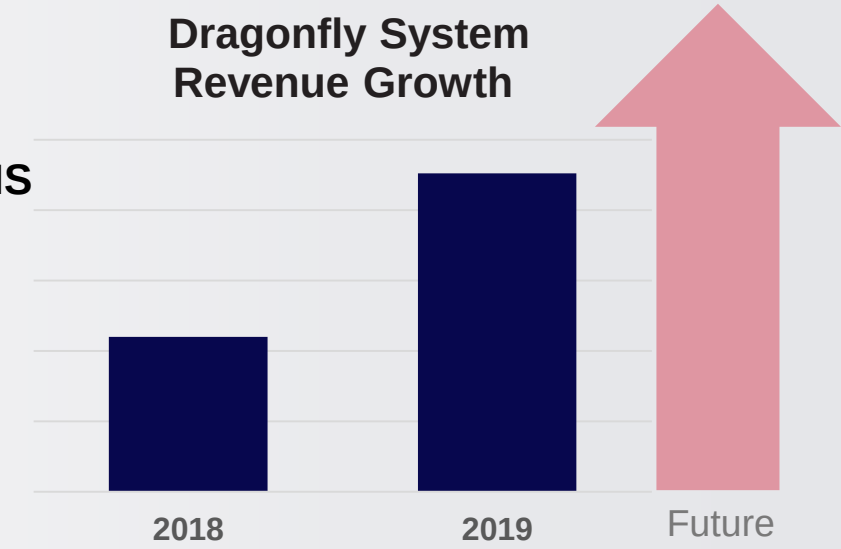
Dragonfly G2 Inspection Gains Broad Adoption in 2019

Lays foundation for growth across multiple segments across the semiconductor value chain



2 NEW MARKET EXPANSIONS

16 NEW CUSTOMERS ADDED



Inspect 2D Dragonfly System + Measure 3D Dragonfly System + Analyze Discover Software + Analyze TrueADC® Software

Solutions for Complex Device Quality

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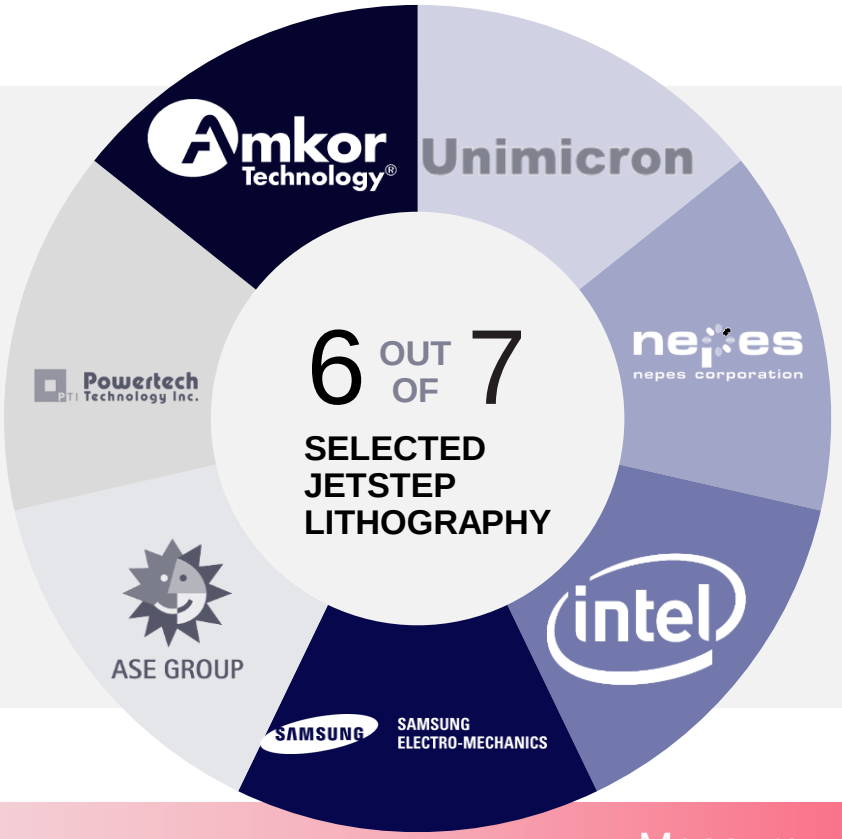
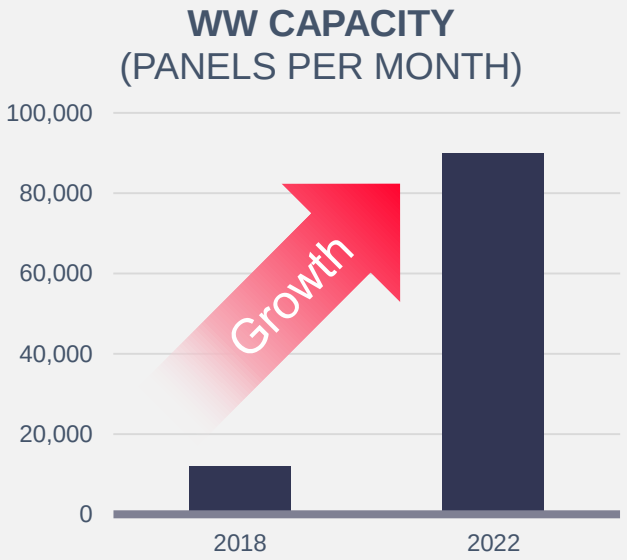
Panel Investments Continue in 2019 with Onto Innovation Suite

Onto Innovation product suite improves productivity and yield for panel lithography



2 NEW PANEL CUSTOMERS

2 STEPFAST SOLUTIONS TO EXISTING CUSTOMER



*Source: TechSearch Advanced Packaging Update, Feb '19

Measure Firefly® System + Analyze Discover® Software + Print JetStep® Litho → **StepFAST™ Solution for Panel**

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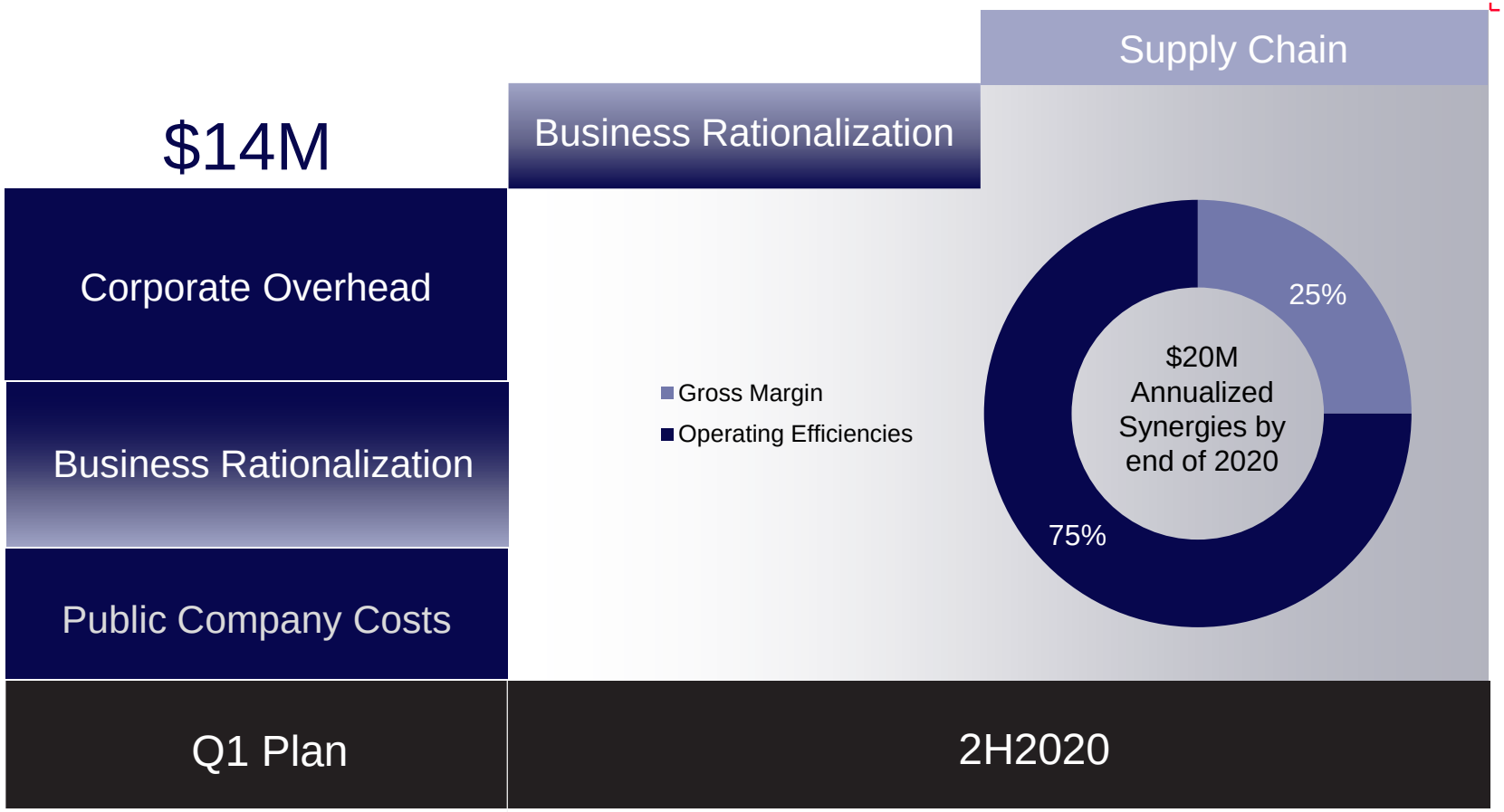
Improving Operations and Efficiencies

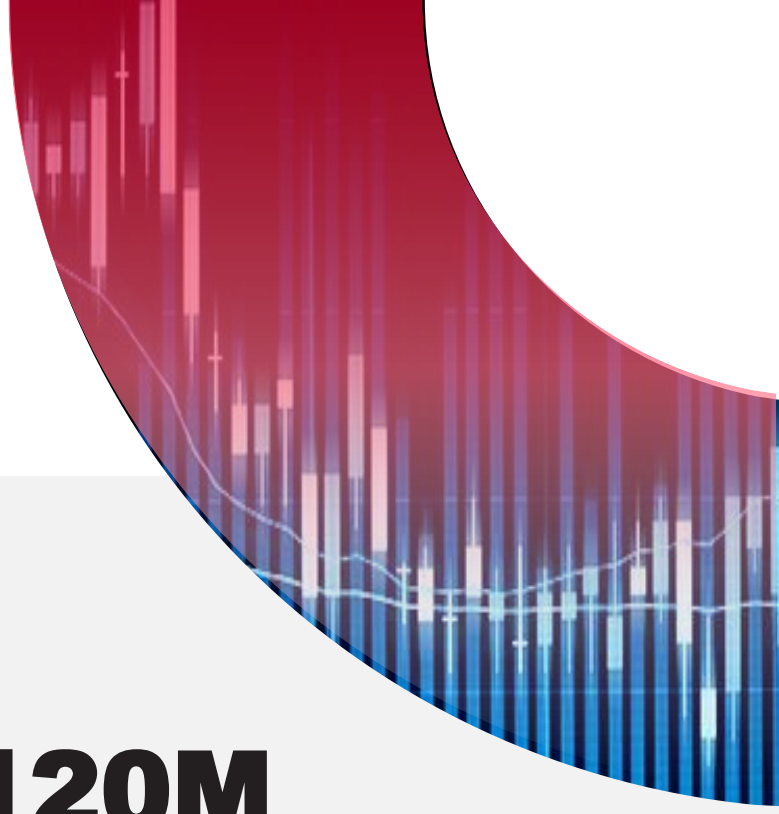
On track to deliver $20M in cost synergies in 2020

OPPORTUNITIES FOR ADDITIONAL SYNERGIES IN 2021-2022



Common Automation Supply Chain

Synergies Contribute to Financial Operating Model



GROSS MARGIN[1]

+1%

- Supply Chain Synergies
- Regional Support Costs

OPERATING MARGIN[1]

+3%

- Public Company Costs
- Operational Synergies

SYNERGY CONTRIBUTIONS

>$120M

FREE CASH FLOW[2]

- Share Capital Requirements
- Better Working Capital Mgt.

Notes: 1. Gross Margin and Operating Margin are estimated incremental improvements, based on $20M annualized synergies.
2. Free Cash Flow is an estimated total from shared capital requirements, working capital management and $20M annualized synergies.

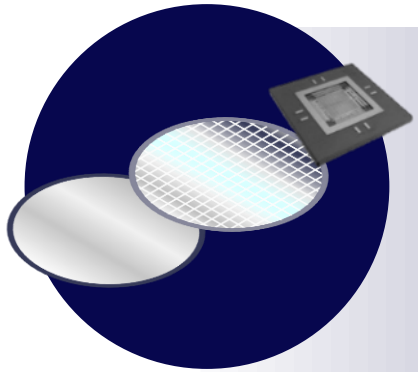
Pro Forma Financial Model*

Annual Revenue	$600M Model	$800M Model	$1B Model
Gross Margin	54% - 55%	55% - 56%	56% - 57%
Operating Profit	24% - 25%	29% - 30%	32% - 33%
Earnings per Share	$2.40 - $2.50	$3.85 - $4.00	$5.05 - $5.25



*Non-GAAP Long Term Financial Model: excludes amortization and merger costs; includes stock-based compensation

Key Takeaways



EXPANDING TO A $3B TAM

POSITIONED FOR GROWTH ACROSS THE VALUE CHAIN

Technical wins in 2019 lay foundation for growth!

Expanding TAM, SAM, and market share.



$20M COST SYNERGIES IN 2020

STRONG FINANCIAL MODEL FUELS PROFITABLE GROWTH

Delivering $20M synergies ahead of plan!

Improving gross and operating margins.



INCREASE SHAREHOLDER VALUE

STRONG CASH GENERATOR >$120M

Cash generation and deployment increases shareholder value and fuels growth

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谢谢 | 謝謝

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Thank You!

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