

# COHU INVESTOR PRESENTATION

January 2023

# Cautionary Statement Regarding Forward-Looking Statements

## Forward-Looking Statements:

Certain statements contained in this presentation may be considered forward-looking statements within the meaning of the U.S. Private Securities Litigation Reform Act of 1995, including statements regarding all Serviceable Addressable Market (SAM) estimates; share and growth over time; market segments CAGRs and growth drivers for each business; 3-5 year target “Plan” or “Target Model” financial goals; target revenue CAGRs by business; market position in business verticals and changes over time; end-market growth estimates; savings from higher yield; resiliency of recurring business; Q4’22 financial guidance; recurring revenue and backlog; any other FY’22 or FY’23 forecasts; any references to product plans, roadmaps, developments and schedules; increases in test intensity, power and IoT nodes; expanding into probe card market; product lower cost, higher yield, throughput, productivity or life estimates; Sense+ gaining traction and growth; PdM TAM and growth; DI-Core plans; gross margin expansion; est. Cap Ex; business segment revenue split at Target Model; revenue growth to \$1 Bil; investment thesis; any future M&A; any future Term Loan B principal reduction; the amount, timing or manner of any share repurchases; and any other statements that are predictive in nature and depend upon or refer to future events or conditions; and/or include words such as “may,” “will,” “should,” “would,” “expect,” “anticipate,” “plan,” “likely,” “believe,” “estimate,” “project,” “intend,” and/or other similar expressions among others. Statements that are not historical facts are forward-looking statements. Forward-looking statements are based on current beliefs and assumptions that are subject to risks and uncertainties and are not guarantees of future performance. Any third-party industry analyst forecasts quoted are for reference only and Cohu does not adopt or affirm any such forecasts.

Actual results and future business conditions could differ materially from those contained in any forward-looking statement as a result of various factors, including, without limitation: political and economic instability and adverse worldwide impacts resulting from the military incursion into Ukraine by Russia, including potential energy shortages in Europe; the ongoing effects of the COVID-19 pandemic and its impact on our operations and the operations of our key suppliers, customers and other business partners; we are making investments in new products and product enhancements, which may adversely affect our operating results and these investments may not be commercially successful; we have manufacturing operations in Asia and any failure to effectively manage multiple manufacturing sites and to secure raw materials meeting our quality, cost and other requirements, or failures by our suppliers to perform, could harm our sales, service levels and reputation; any failure to perform or unexpected downtime experienced by our sole contract manufacturer for certain semiconductor automated test equipment; any failure of critical suppliers to deliver sufficient quantities of parts in a timely and cost-effective manner, including ongoing shortages of semiconductor devices used in our system products; continued high inflation and increasing interest rates; we may not be able to increase prices to fully offset inflationary pressures on costs, such as raw and packaging materials, components and subassemblies, labor and distribution costs; the semiconductor industry we serve is seasonal, cyclical, volatile and unpredictable; the semiconductor equipment industry is intensely competitive; semiconductor equipment is subject to rapid technological change, product introductions and transitions which may result in inventory write-offs, and our new product development involves numerous risks and uncertainties; the seasonal nature of the semiconductor equipment industry places enormous demands on our employees, operations and infrastructure; a limited number of customers account for a substantial percentage of our net sales; inherent uncertainty of backlog wherein customers may delay shipments or cancel orders; majority of our revenues are generated from exports to foreign countries, primarily in Asia, that are subject to economic and political instability and we compete against a number of Asia-based test contactor, test handler and automated test equipment suppliers; we are exposed to the risks of operating in certain foreign locations from where Cohu manufactures certain products, and supports our sales and services to the global semiconductor industry; increasingly restrictive trade and export regulations, including new U.S. export rules announced October 7, 2022 relating to certain advanced computing and semiconductor manufacturing items and supercomputer and semiconductor end use, may materially harm or limit Cohu’s business and ability to sell its products; the remaining indebtedness in connection with our financing of the Xcerra acquisition may have an adverse impact on Cohu’s liquidity, access to capital and business flexibility; we are exposed to other risks associated with additional potential acquisitions, investments and divestitures such as integration difficulties, disruption to our core business, dilution of stockholder value, and diversion of management attention; our financial and operating results may vary and fall below analysts’ estimates, or credit rating agencies may change their ratings on Cohu, any of which may cause the price of our common stock to decline or make it difficult to obtain other financing; we have experienced significant volatility in our stock price; there may be changes in, and uncertainty with respect to, legislation, regulation and governmental policy in the United States; and impacts in the event of a cybersecurity breach.

These and other risks and uncertainties are discussed more fully in Cohu’s filings with the SEC, including the most recently filed Form 10-K and Form 10-Q, and the other filings made by Cohu with the SEC from time to time, which are available via the SEC’s website at [www.sec.gov](http://www.sec.gov). Except as required by applicable law, Cohu does not undertake any obligation to revise or update any forward-looking statement, or to make any other forward-looking statements, whether as a result of new information, future events or otherwise.



# COHU AT A GLANCE



**\$887M**

*FY21 Revenue <sup>(1)</sup>*

**\$369M**

*Cash & Investments <sup>(2)</sup>*

**~ 26%**

*5-year Revenue CAGR <sup>(1)</sup>*

**~ 23%**

*5-year Stock CAGR <sup>(3)</sup>*

**Aligned to high growth semiconductor markets<sup>(4)</sup>:**

- Automotive Electronics CAGR ~ 13%
- Industrial Electronics CAGR ~ 9%
- Wired Comm. Electronics CAGR ~ 9%
- Computing-Server CAGR ~ 8%

**~ 23,700**

*Equipment Installed Base*

<sup>(1)</sup> For the period ending December 25, 2021; revenue includes \$26.8M of PCB Test business divested June 2021

<sup>(2)</sup> As of September 24, 2022

<sup>(3)</sup> Average adjusted share price December 2016 – December 2021

<sup>(4)</sup> Source: Gartner Worldwide Semiconductor Forecast Database (2Q22 Update)



# DELIVERING HIGHER YIELD & PRODUCTIVITY



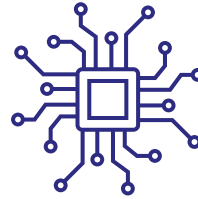
High performance product portfolio at lower cost-of-ownership

**Strong market**  
position in each business vertical



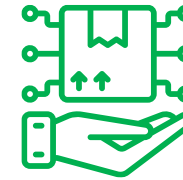
Diverse customers and applications expanding addressable market

**~ 20% share**  
in \$4.4 billion addressable market <sup>(1)</sup>



Increasing semiconductor complexity and package integration

**Opportunities**  
in 5G connectivity, artificial intelligence, advanced packaging, industrial IoT <sup>(2)</sup>, automotive ADAS <sup>(3)</sup> and electrification, consumer wearables



Innovative solutions delivering higher yield & productivity

**Broad IP portfolio**  
and strong global support enabling customers' production ramps and productivity goals



Scalable model that optimizes profitability and Plan <sup>(4)</sup> that delivers growth and drives shareholder value

Revenue <sup>(4)</sup>  
**\$1 billion**  
Gross Margin <sup>(4)</sup>  
**49%**  
Operating Income <sup>(4)</sup>  
**25%**

<sup>(1)</sup> Cohu SAM: Serviceable Addressable Market are company estimates for 2021

<sup>(2)</sup> Internet of Things

<sup>(3)</sup> Advanced Driver Assistance Systems

<sup>(4)</sup> Plan references a mid-term (3-5 years) target. Gross Margin and Op Income are Non-GAAP, see Appendix for notes regarding use of forward-looking non-GAAP figures

# MARKET AND TECHNOLOGY LEADERSHIP

Equipment and Services enabling higher yield and productivity



#3

Semiconductor Test <sup>(1)</sup> Test Interface

High fidelity measurement instruments  
Compact, low-power systems → Scalability



#1



#1

Services <sup>(2)</sup>

Global footprint  
Data analytics



#2

Inspection & Metrology

Thermal and Vision Inspection  
Technologies enabling higher yield



#1

Automation <sup>(3)</sup>

(1) Leading supplier of RF Front-End test equipment; company estimates

(2) Service business of Cohu systems

(3) Automation includes test handlers

# DELIVERING HIGHER THAN MARKET GROWTH

## Applications



Secular tailwinds driving  
end-market growth  
(fcst. 3-year growth)

~ 21%

CAGR

3D-stacked package  
growth <sup>(1)</sup>

~ 25%

CAGR

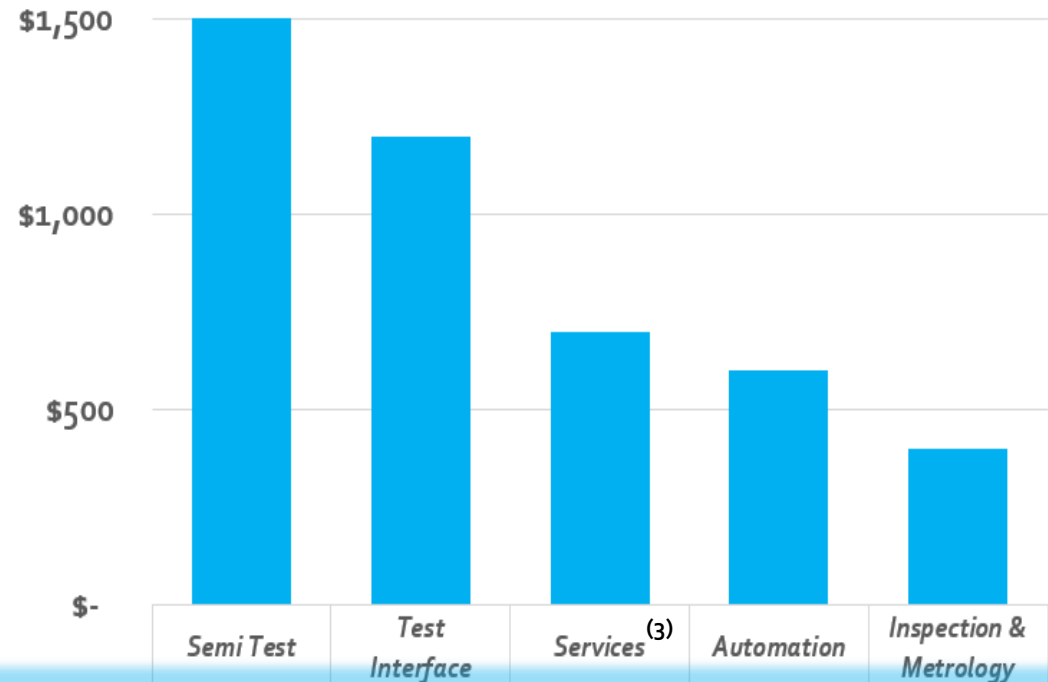
ADAS and xEV <sup>(2)</sup>  
Semi content in autos <sup>(1)</sup>

~ 43%

CAGR

5G subscriptions <sup>(1)</sup>

~ \$4.4 billion addressable market



Target revenue CAGR from FY21 baseline revenue

(1) Source: Gartner (December 2021), Yole Développement (2020), selected Wall Street research

(2) Electric Vehicles

(3) Cohu SAM: Serviceable Addressable Market are company estimates for 2021

(4) Mid-term target revenue CAGR per business segment



# WHY WE ARE WINNING

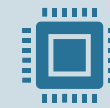
1% higher yield  
equates to

~ \$5 billion

customer value <sup>(1)</sup>

Delivering higher yield  
at lower cost-of-ownership

Solutions approach  
*faster time-to-yield*



Precision instruments  
*higher accuracy & yield*



Faster ramps  
*satisfying demand*



Advanced vision  
*higher inspection yield*



Global support  
*greater productivity*



Active thermal  
*higher test yield*



(1) Semiconductor Industry Association (SIA): global semiconductor industry sales totaled \$556 billion in 2021

# TARGET MODEL

Revenue <sup>(1)</sup>

**\$1B**

Gross Margin <sup>(1)</sup>

**49%**

Operating Income <sup>(1)</sup>

**25%**

# STRATEGY

Expand Semiconductor Test in high-growth markets beyond RF <sup>(2)</sup> Front-end ICs <sup>(3)</sup> with scalable, precision instrumentation

Accelerate Interface product sales in test cells and high-end RF probe card market

Expand Services business with data analytics to optimize equipment productivity

Deliver high-end Inspection & Metrology to key growth applications: 5G, AI <sup>(4)</sup>, advanced packaging

<sup>(1)</sup> Mid-term (3-5 years) target. Gross Margin and Op Income are Non-GAAP, see Appendix for notes regarding use of forward-looking non-GAAP figures

<sup>(2)</sup> Radio Frequency

<sup>(3)</sup> Integrated Circuits

<sup>(4)</sup> Artificial Intelligence

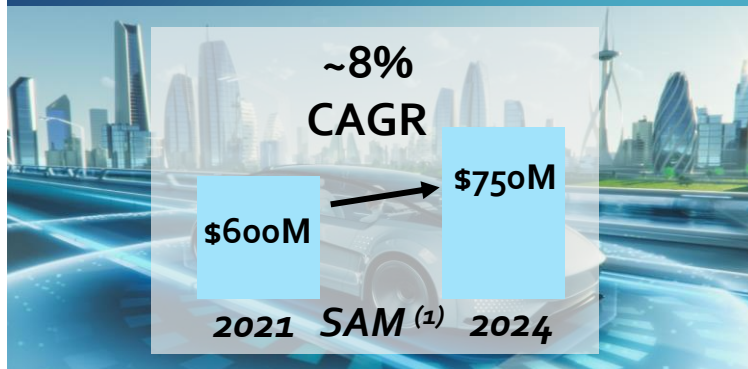




# GROWTH STRATEGY

# SEMI TEST

## Automotive & Industrial



### Focused applications

- Automotive xEV and ADAS

### Growth drivers

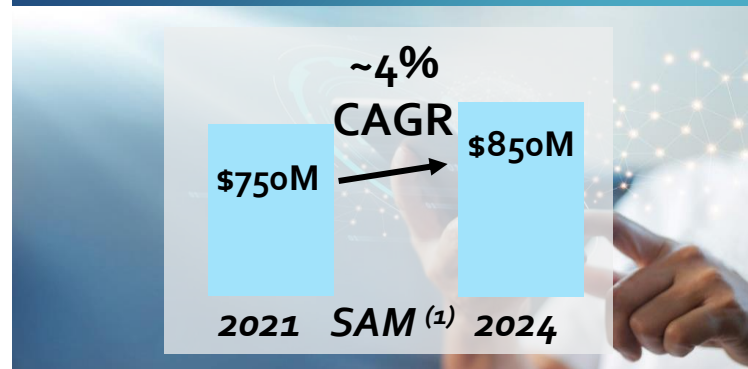
- *Battery management and sensing ASSPs <sup>(2)</sup> growing at 12% CAGR <sup>(3)</sup>*
- *ASSPs with added analog, power and RF content are driving 2x-3x increase in IC spend per vehicle <sup>(4)</sup>*

<sup>(1)</sup> Company estimates

<sup>(2)</sup> Application Specific Standard Product

<sup>(3)</sup> IC Insights, 2022: IC unit growth projection 2021 to 2024

## Mobility & Consumer



### Focused applications

- Internet of Things
- 5G sub-6 GHz and mmWave

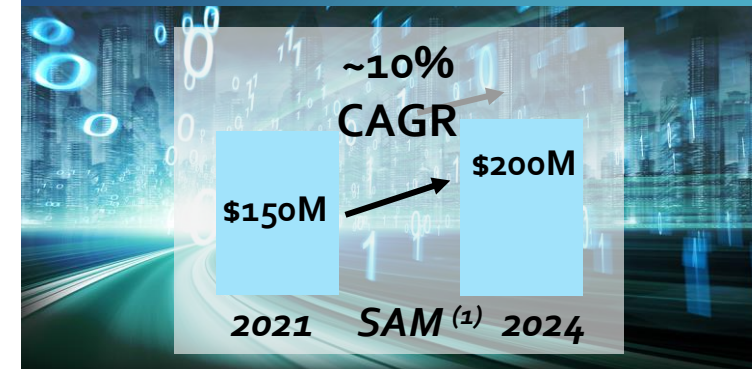
### Growth drivers

- *Wi-Fi 6E/7, UWB <sup>(5)</sup>, narrow-band RF-IoT and other new enabling standards deploying widely*
- *Increasing frequencies and bandwidths more than doubling test intensity*

<sup>(4)</sup> Analog Devices Investor Presentation, April 2022

<sup>(5)</sup> Ultra-wideband

## Computing & Network



### Focused applications

- Data Centers, Computing & Network Infrastructure

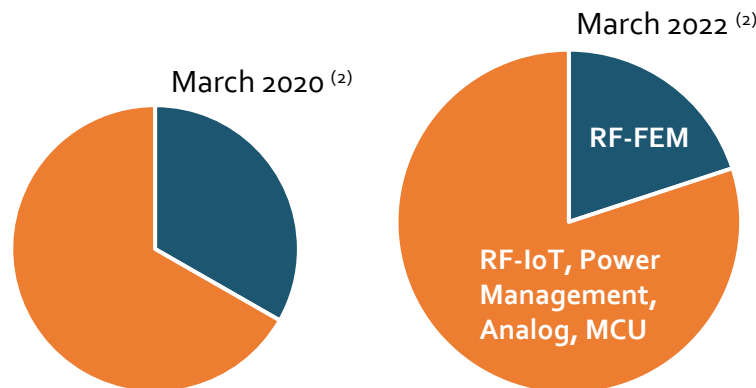
### Growth drivers

- *Display drivers, power management and analog ICs are growing faster than market*
- *Customers are choosing a single test platform that can test their mixed signal chipset solutions*

# GROWING BEYOND RF-FEM <sup>(1)</sup>

## Diversification

**30%**  
2-year order  
CAGR



## Diamond<sub>x</sub> market penetration



Doubled install base in the last 3 years



Expanding SAM in data storage analog, power management, automotive analog and RF-IoT



Extending RF leadership in Front-end Module, RF-IoT, Ultra-wideband and Wi-Fi devices



Design-wins at leading display driver IC customers

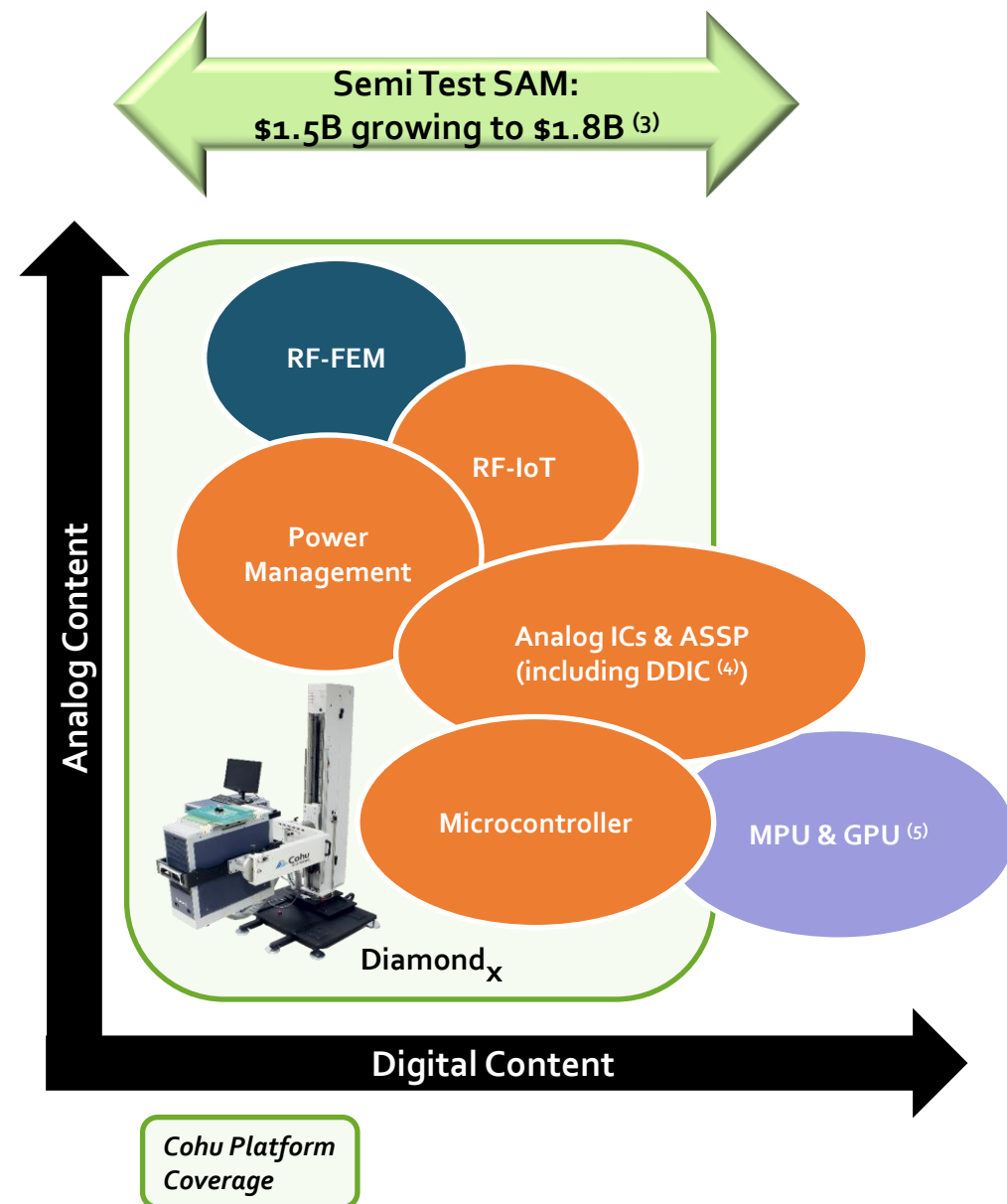
<sup>(1)</sup> RF Front-End Modules

<sup>(2)</sup> Trailing twelve months product orders Q1 of each year

<sup>(3)</sup> Company estimates for Diamond<sub>x</sub> 2021 to 2024 Semi Test SAM

<sup>(4)</sup> Display Driver ICs

<sup>(5)</sup> Microprocessors and Graphic Processors



# SCALABLE TEST SOLUTIONS ON DIAMOND<sub>x</sub>

## Cost-Performance Challenge

*Devices with increasing mixed signal complexity*

RF FEM &  
RF-IoT

Analog & Power  
Management

Customer Portfolio

Microcontrollers

Display  
Drivers

*Device cost down enabling market expansion*

## Platform Advantages

### **Best-in-Class Throughput**

Event-Link architecture suited for efficient multisite mixed signal test

### **Air-Cooled Universal**

Platform scalable from 5-slots suitable for low pin-count devices to 40-slots enabling >300 multisite test parallelism

### **Calibration to Device Pin**

The only company positioned to solve technical and yield challenges through integrated tester-interface-handler solutions

## Design-Wins <sup>(1)</sup>

### **RF-IoT (Ultra-wideband)**

Low digital speed devices with high RF content benefiting from cost-performance optimized multisite instruments

up to **4X**

### **Higher Output**

### **Power Management for Computing**

Universal platform addressing high-power requirements, a more flexible alternative to dedicated solutions

up to **6x**

### **Competitors' Maximum Voltage**

<sup>(1)</sup> Based upon customer provided benchmarking data



# SENSE+ GAINING EARLY TRACTION

New architecture with Stimulus Tester maximizes accuracy and production output



**10X**

Increase in Accuracy & Output<sup>(1)</sup>

**~\$18B** TAM<sup>(2)</sup>

**~7%** CAGR<sup>(2)</sup>



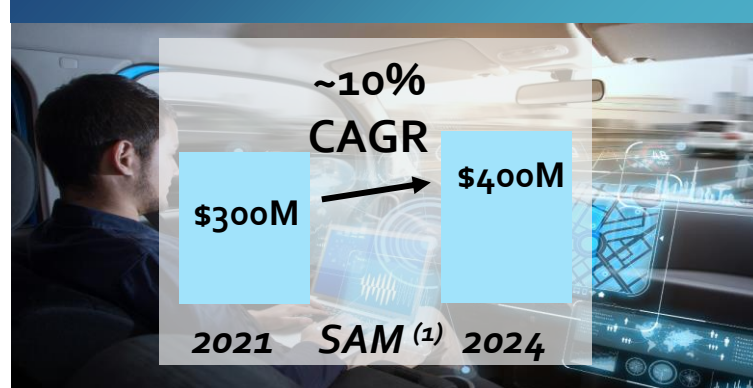
Fully configured, Sense+ delivers one-pass automated test, inspection & metrology for the most complex MEMS devices including <1 mm WLCSP

<sup>(1)</sup> Compared to prior generation solutions

<sup>(2)</sup> MEMS market forecast 2025, CAGR 2020-2026 - Yole Developpement 2021

# TEST INTERFACE

## Automotive & Industrial



### Focused applications

- Automotive xEV and ADAS

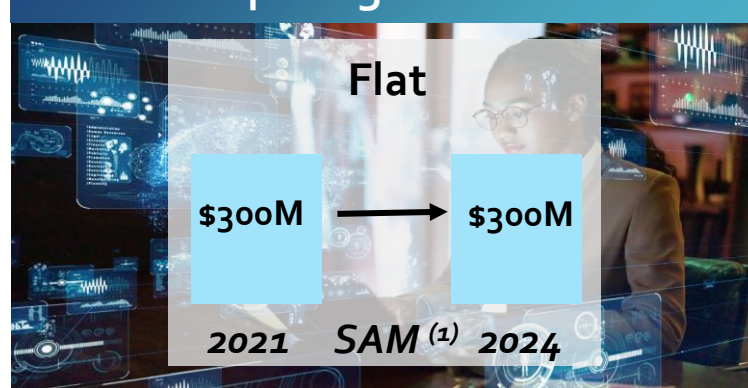
### Growth drivers

- SiC higher efficiency offers >3.5x higher power density vs Si <sup>(2)</sup>, driving high current applications
- Advanced packaging in KGD <sup>(3)</sup>
- ADAS processor power (>50 W) challenging temperature control during test

<sup>(1)</sup> Company estimates

<sup>(2)</sup> Wolfspeed power density (KW/L) comparative values for Silicon Carbide (SiC) vs. Silicon (Si)

## Computing & Network



### Focused applications

- Data Center & AI

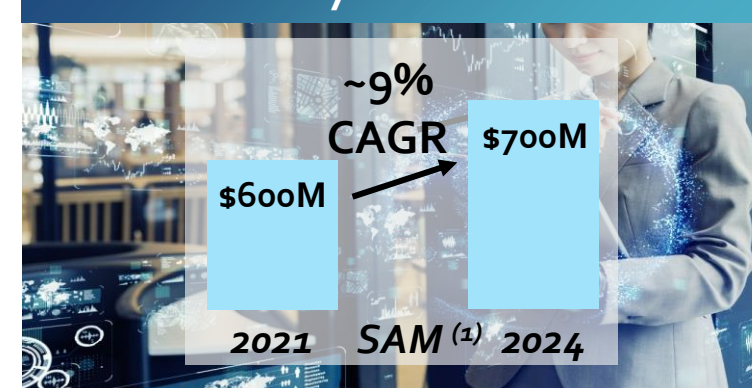
### Growth drivers

- Input/Output bandwidth doubling every three years, increasing demand for higher frequency solutions
- Adoption of heterogeneous packaging increasing power and thermal requirements

<sup>(3)</sup> Known Good Die

<sup>(4)</sup> Wafer-Level Chip Scale Package

## Mobility & Consumer



### Focused applications

- mmWave 5G

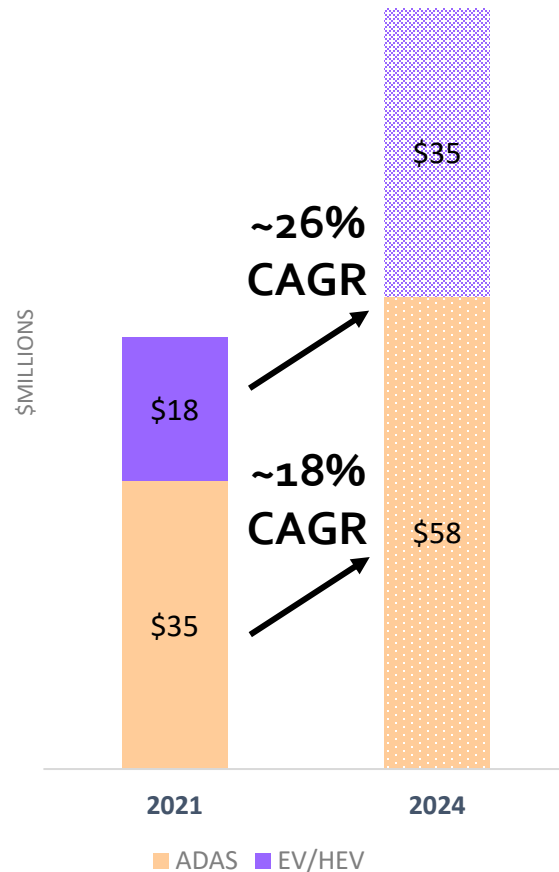
### Growth drivers

- Expanding applications at higher frequencies (up to 60 GHz), demanding performance at low cost
- Opportunities for WLCSP <sup>(4)</sup> probe technology testing at functional performance speeds

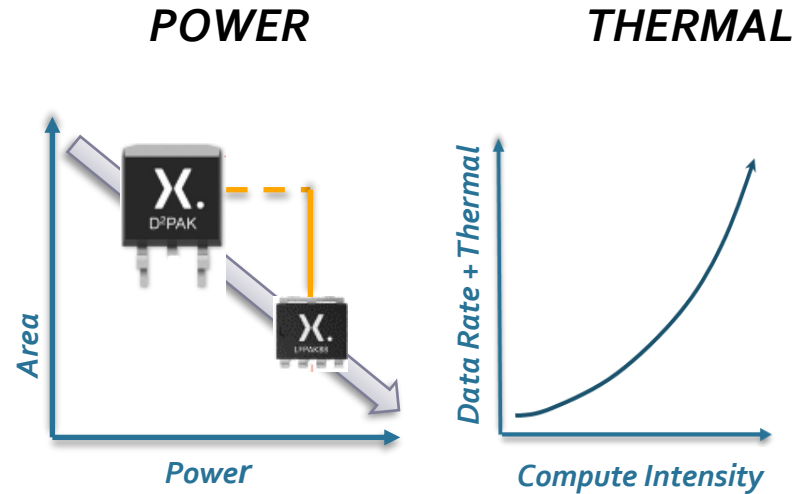
# LEADERSHIP IN AUTOMOTIVE TEST SOLUTIONS

## Accelerated Growth Segment

Contactor SAM <sup>(1)</sup>



## Technical Drivers

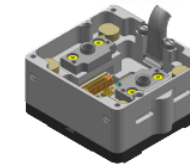


## Customers



## Product Leadership

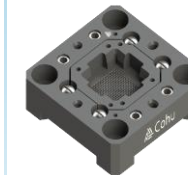
### High Current Contactor



Unique pin architecture and heat dissipation structure delivers ~30% higher current capacity

~ 2X<sup>(1)</sup> Life Increase      ~ 50%<sup>(1)</sup> Lower Cost

### Thermal Contactor



Smart sensors for improved temperature accuracy when combined with Cohu test handlers

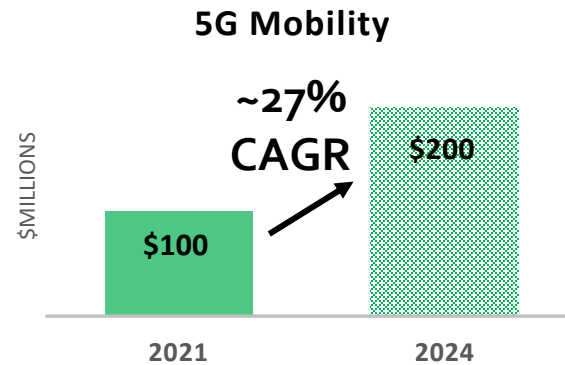
**Higher Yield**  
with Thermal Accuracy

<sup>(1)</sup> Company estimates

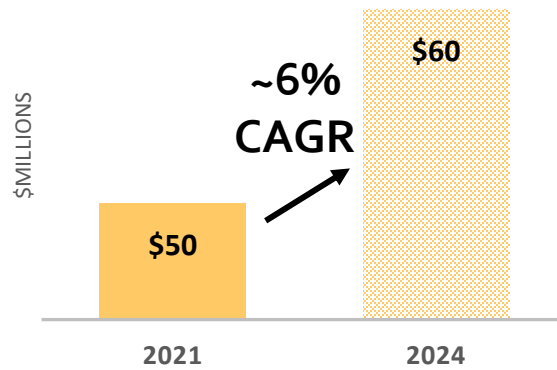
# SOLUTIONS IN HIGH-PERFORMANCE APPLICATIONS

## Accelerated Growth Segment

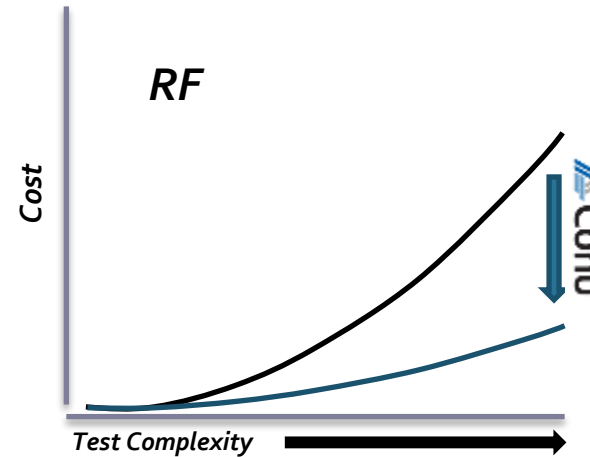
### Contactor SAM <sup>(1)</sup>



### Data Center



## Technical Drivers



## Customers



## Product Leadership

### Coaxial Contactor



High isolation for PAM<sub>4</sub> <sup>(2)</sup>  
Improved isolation delivering higher signal integrity

**2X<sup>(1)</sup>**

**Better Isolation**

### mmWave Contactor



RF optimized to 60 GHz  
~ 70% increase in performance over standard pins

**~ 50%<sup>(1)</sup>**

**Lower Cost-of-Ownership**

<sup>(1)</sup> Company estimates

<sup>(2)</sup> Pulse-amplitude Modulation



# EXPANDING IN RF PROBE CARD



## 60 GHz Performance

- Multisite test at mmWave performance
- Direct attach technology



## Time to Yield

- Turnkey solution simplifies implementation



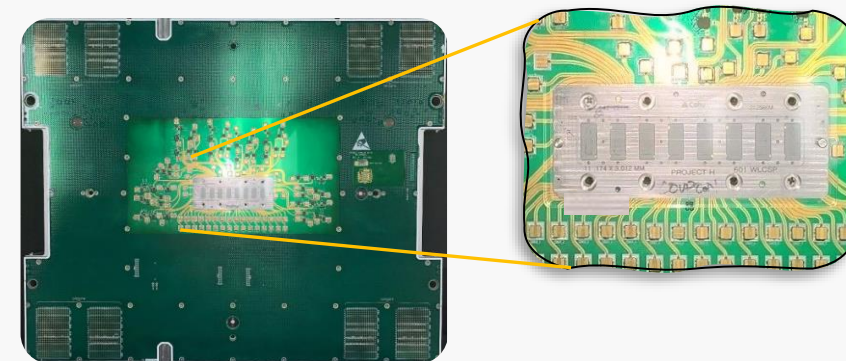
## Cost of Test

- Field replaceable probe technology
- Integration with Cohu's Diamond<sub>x</sub> semi tester enables calibration to the device



## Production Ramp

- First time right quality with automated RF verification and full mechanical testing



Vertical

Membrane

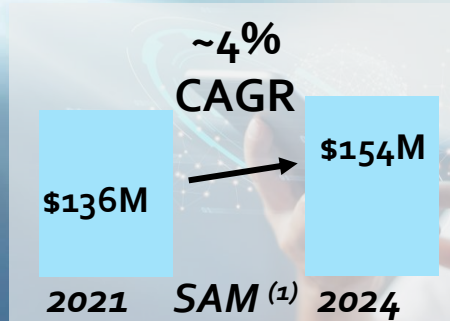
|                    |   | Vertical | Membrane |
|--------------------|---|----------|----------|
| mmWave frequencies | ✓ | ✗        | ✓        |
| mmWave multisite   | ✓ | ✗        | ✗        |
| >1A current        | ✓ | ✓        | ✗        |
| Field repair       | ✓ | ✓        | ✗        |
| Cost               | ✓ | ✓        | ✗        |

Expanding addressable market by \$300M <sup>(1)</sup>  
Addressing 5G mobility and ADAS radar sensor markets

(1) Company estimates

# INSPECTION & METROLOGY

## System-in-Package



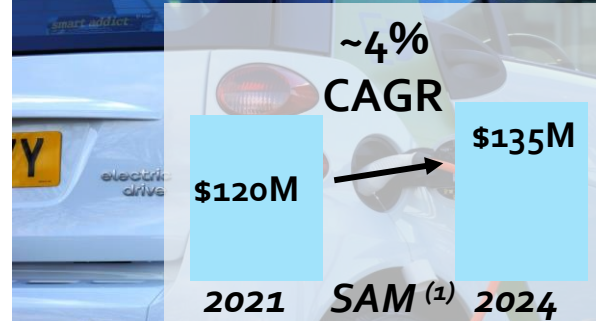
### Focused applications

- Wafer-Level Chip Scale and module inspection

### Growth drivers

- *Mobility 5G devices in small form-factor packages*
- *System-in-package integration driving higher demand on quality to ensure production yield*

## Analog Test and Scan



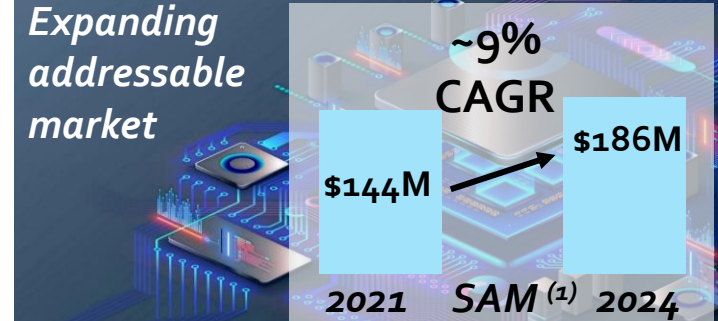
### Focused applications

- Silicon Carbide Known Good Die test and inspection

### Growth drivers

- *Automotive xEV requiring higher volume of reliable electronics*
- *High-power efficiency enabled by new SiC technology*

## High-Performance Digital



### Focused applications

- Advanced packages 2.5 / 3D inspection and metrology

### Growth drivers

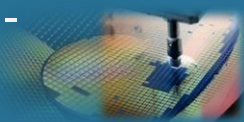
- *Automotive ADAS processors are life-critical systems requiring the ultimate inspection quality*
- *High-performance computing driving more 2.5 / 3D stacking*

<sup>(1)</sup> Company estimates

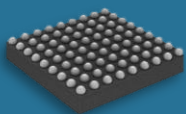
# NEON INSPECTION MAXIMIZES YIELD

## Customer Challenges

Small form-factor WLCSP devices with sub-millimeter size and exposed structure



Integrated modules with higher pad density, smaller pad size and pitch



Bringing tighter inspection requirements and need for higher yield



Infrared NV-Core technology enabling micro-scale defect detection below the device surface



Artificial Intelligence algorithms enabling pattern recognition and precise defect classification



Optimized for small form-factor processing at high-speed and yield



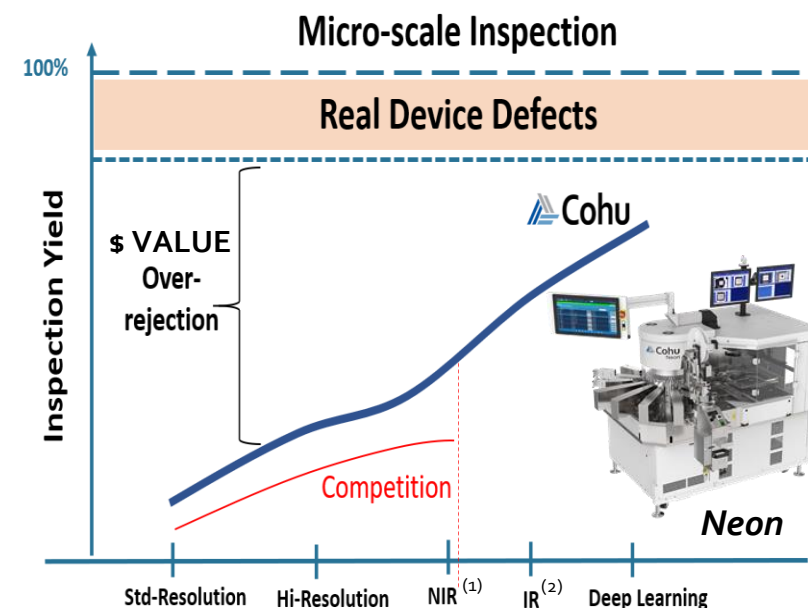
Automation compatible solutions supporting Industry 4.0 requirements

## Cohu Solution

## Value to Customer

up to **5%**<sup>(3)</sup>

## Higher Inspection Yield



<sup>(1)</sup> Near infrared

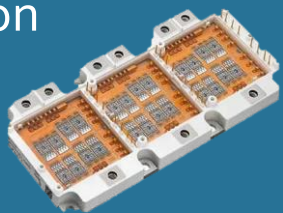
<sup>(2)</sup> Infrared

<sup>(3)</sup> Company estimates

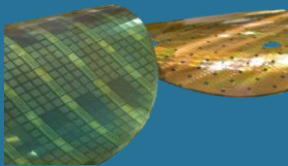
# TRUE KNOWN GOOD DIE FOR MODULE INTEGRATION

## Customer Challenges

Power module yield losses linked to multiple die integration



Test thinner SiC dies at higher power levels with full device integrity



## Cohu Solution



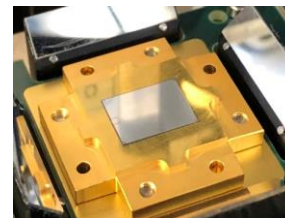
Proven high-power testing of 50  $\mu\text{m}$  thin bare die with controlled contactor insertion assisted by NV-Core vision



Full 6-side micro-scale inspection post testing



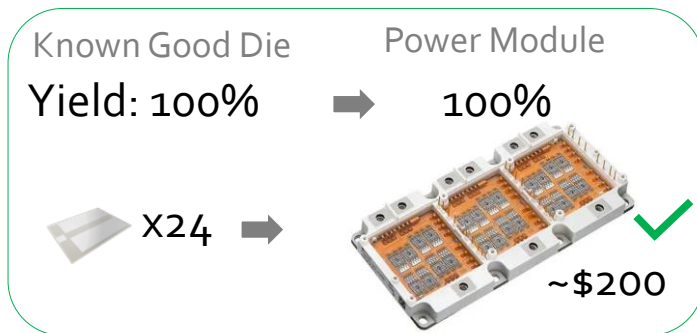
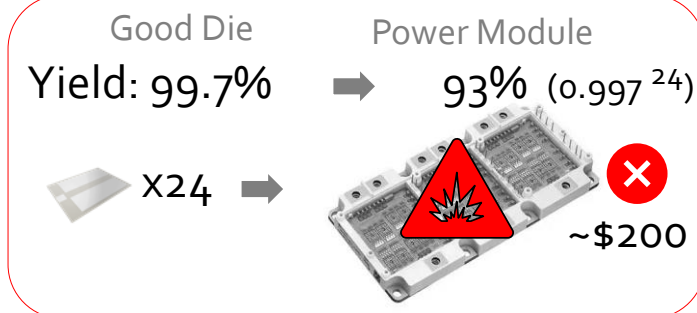
100% die traceability from wafer to tape-pocket



## Value to Customer

up to **7%** <sup>(1)</sup>

**Higher Yield**

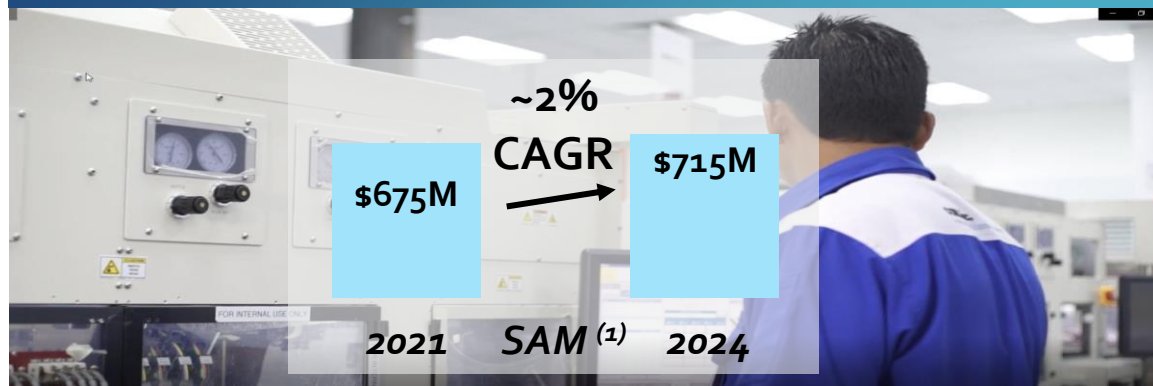


(1) Company estimates



# SERVICES

## Services



### Focused applications

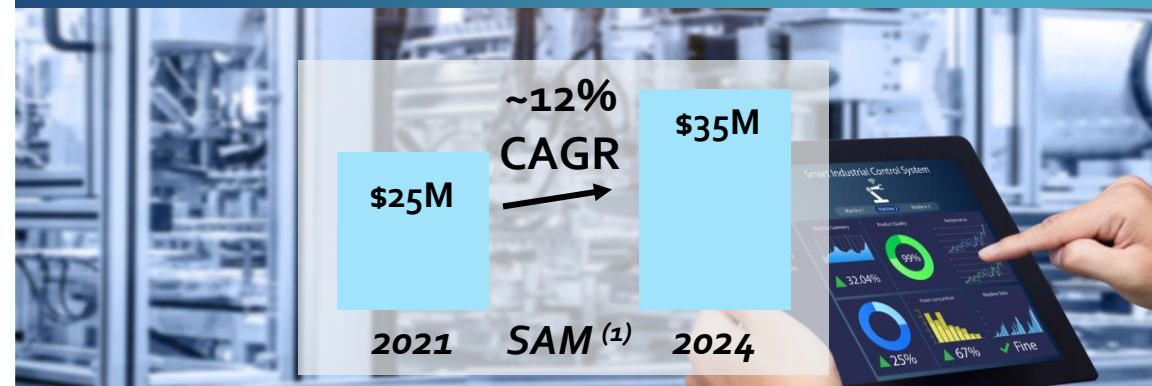
- Drive above market growth rate in spares by increased focus on customers' maintenance programs
- Grow board repair, including premium services, to support expanding semiconductor tester fleet

### Growth drivers

- *Constrained floor space in customer back-end operations placing a premium on equipment uptime and output*
- *Cost optimization for max. output per \$ CAPEX investment*
- *Stable revenue at 50%+ gross margin*

(1) Company estimates

## Data Analytics



### Focused applications

- Grow data analytics software to maximize uptime on large and growing fleet of Cohu systems
- Launch predictive maintenance enabling proactive service to minimize downtime and increase output

### Growth drivers

- *Real-time equipment diagnostics aligned to Industry 4.0*
- *AI algorithms enabling proactive service to minimize downtime and maximize output*
- *Subscription model stable revenue at 90%+ gross margin*

# RESILIENT RECURRING BUSINESS MODEL



**\$336M**

LTM<sup>(1)</sup> Recurring  
Revenue



**\$145M**

LTM<sup>(1)</sup> Service  
Revenue



**> 23,700**

Systems Installed  
Base



**300+**

Highly Skilled Field  
Service Engineers

**6.5 %**

*3-year CAGR <sup>(2)</sup>*

**> 87%**

*Annual Renewal Rate  
on service contracts*

**> 100**

*Customers*

**~ 12 year**

*Average Tenure*

*Stable revenue at  
50%+ gross margin*

*Cloud-based, automated  
order management for  
~ 14,000 different spares*

*Over 280 high-volume  
manufacturing facilities  
in 31 countries*

*Virtual-assist and  
on-site support*

(1) Last Twelve Months (LTM) revenue

(2) Compound Annual Growth Rate (CAGR) from Q3'19 through Q3'22

# DATA INTELLIGENCE SYSTEMS INCREASING OUTPUT



Real-time equipment monitoring and data analytics for Industry 4.0 factory automation of Cohu Equipment

Collect Equipment Data

Analyze

Report, Conclude and Act

*insight* Software



## Online Equipment Monitoring

Track uptime, yield, and throughput with proactive notifications for real-time corrective action



## Process Control

Test process control via central recipe management for downloading applications to equipment fleet



## Alarm Reporting

Pareto alarm reporting to expedite maintenance of critical problems

*PdM* Software <sup>(1)</sup>

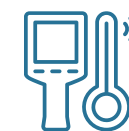
## Predict Out of Specification Performance

Analyze remaining useful life of critical components enabling proactive replacement before failure



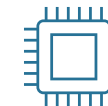
## Real-time Monitoring of System

Track system components and thermal performance reducing out of guard band testing



## Contactor Analytics

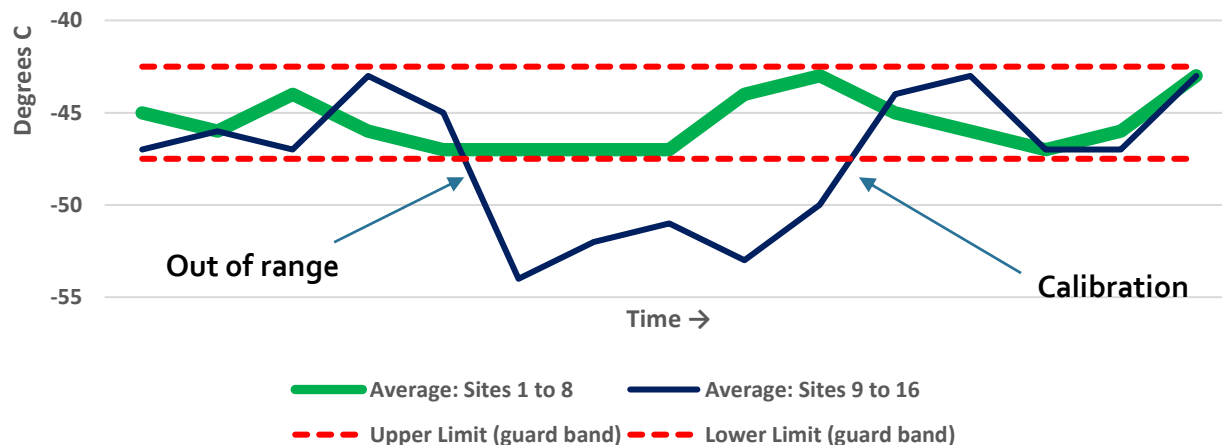
Monitor insertions and yield per site for optimal contactor maintenance



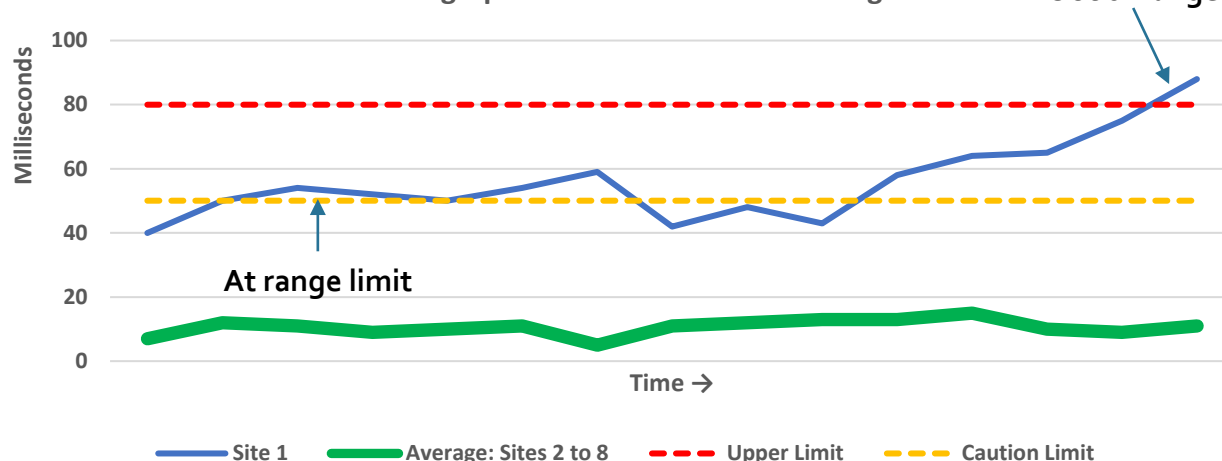
(1) PdM (Predictive Maintenance) software launching 1H'23

# DI-CORE DATA INTELLIGENCE MAXIMIZES OUTPUT

Temperature Variation from -45 °C Target Over 16 Sites



Time for Picking-up Device in Milliseconds Using Vacuum



## Thermal Performance Out of Guard Band

**Real-time monitoring of thermal performance**

When testing temperature goes out of guard band, in this case below the lower limit, early detection enables real-time calibration

~4%

**Increase in Productivity <sup>(1)</sup>**

## Degradation of Component Performance

**Real-time monitoring of device pick-up time**

Monitoring device pick-up excursions to specification enables proactive service prior to failure <sup>(2)</sup>

~3%

**Increase in Productivity <sup>(1)</sup>**

<sup>(1)</sup> Company estimates based on Beta site data

<sup>(2)</sup> Failure can be a jam resulting in unplanned downtime, or more often, disabling of site resulting in reduced output





# DELIVERING PROFITABILITY AND SHAREHOLDER VALUE

# Q4'22 OUTLOOK

|                                   | Q2'22<br>Actual | Q3'22<br>Actual | Q4'22<br>Guidance <sup>(2)</sup> |
|-----------------------------------|-----------------|-----------------|----------------------------------|
| Revenue                           | \$217.2M        | \$206.7M        | \$180 - \$198M                   |
| Gross Margin <sup>(1)</sup>       | 46.5%           | 47.5%           | ~ 47%                            |
| Operating Expenses <sup>(1)</sup> | \$51.9M         | \$52.6M         | ~ \$52.5M                        |
| Non-GAAP EPS <sup>(1)</sup>       | \$0.81          | \$0.74          |                                  |
| Adjusted EBITDA <sup>(1)</sup>    | 24.9%           | 24.5%           | ~ 22%                            |

Q4 seasonally lower revenue; no anticipated impact from new China export rules  
 Increased contactor manufacturing insourcing, product mix and declining IC component cost headwinds maintain strong Gross Margin  
 OPEX projected to be flat QoQ  
 Q4 fully diluted shares outstanding estimated at 48.0 million

<sup>(1)</sup> Non-GAAP, see Appendix for Q2'22, Q3'22 GAAP to non-GAAP reconciliations and for notes regarding use of forward-looking non-GAAP figures

<sup>(2)</sup> Guidance as provided on October 27, 2022 press release and earnings conference call

# MID-TERM TARGET MODEL<sup>(3)</sup>

**\$1 billion**

**Revenue**

**\$4.00**

**EPS<sup>(1)</sup>**

|                                   | FY2021<br>Actuals | Q3'22<br>Actuals | Target<br>Model <sup>(3)</sup> |
|-----------------------------------|-------------------|------------------|--------------------------------|
| Revenue                           | \$887.2M          | \$206.7M         | \$1 billion                    |
| Gross Margin <sup>(1)</sup>       | 43.6%             | 47.5%            | 49%                            |
| Operating Expenses <sup>(1)</sup> | 23.1%             | 25.4%            | 24%                            |
| Non-GAAP EPS <sup>(1)</sup>       | \$3.20            | \$0.74           | \$4.00                         |
| Adjusted EBITDA <sup>(1)</sup>    | 22.2%             | 24.5%            | 26%                            |
| Free Cash Flow <sup>(2)</sup>     | \$85.7M           | \$34.5M          | \$180M                         |

Margin expansion tracking to mid-term target

FY21 Revenue includes \$27M from PCB test business divested in June 2021

(1) Non-GAAP, see Appendix for GAAP to non-GAAP reconciliations, and for notes regarding use of forward-looking non-GAAP figures

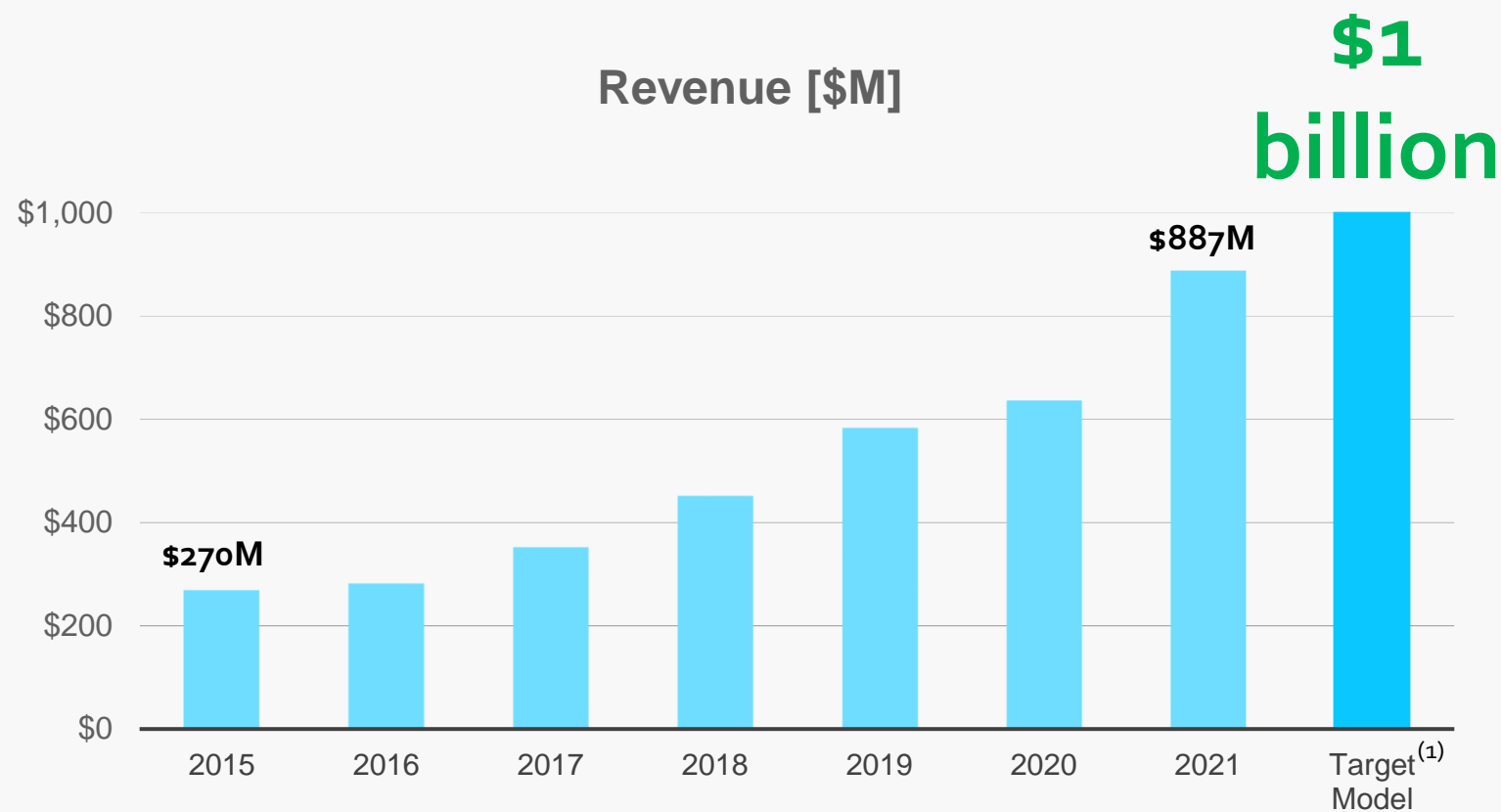
(2) Reflects cash from operating activities minus capital expenditures

(3) Mid-term (3-5 years) target model

# REVENUE TARGET

Mid-Term Target <sup>(1)</sup>  
Revenue CAGR

~ 7%



Winning new customers and expanding SAM in growing markets  
Substantial revenue stream from recurring <sup>(2)</sup> with attractive profit profile

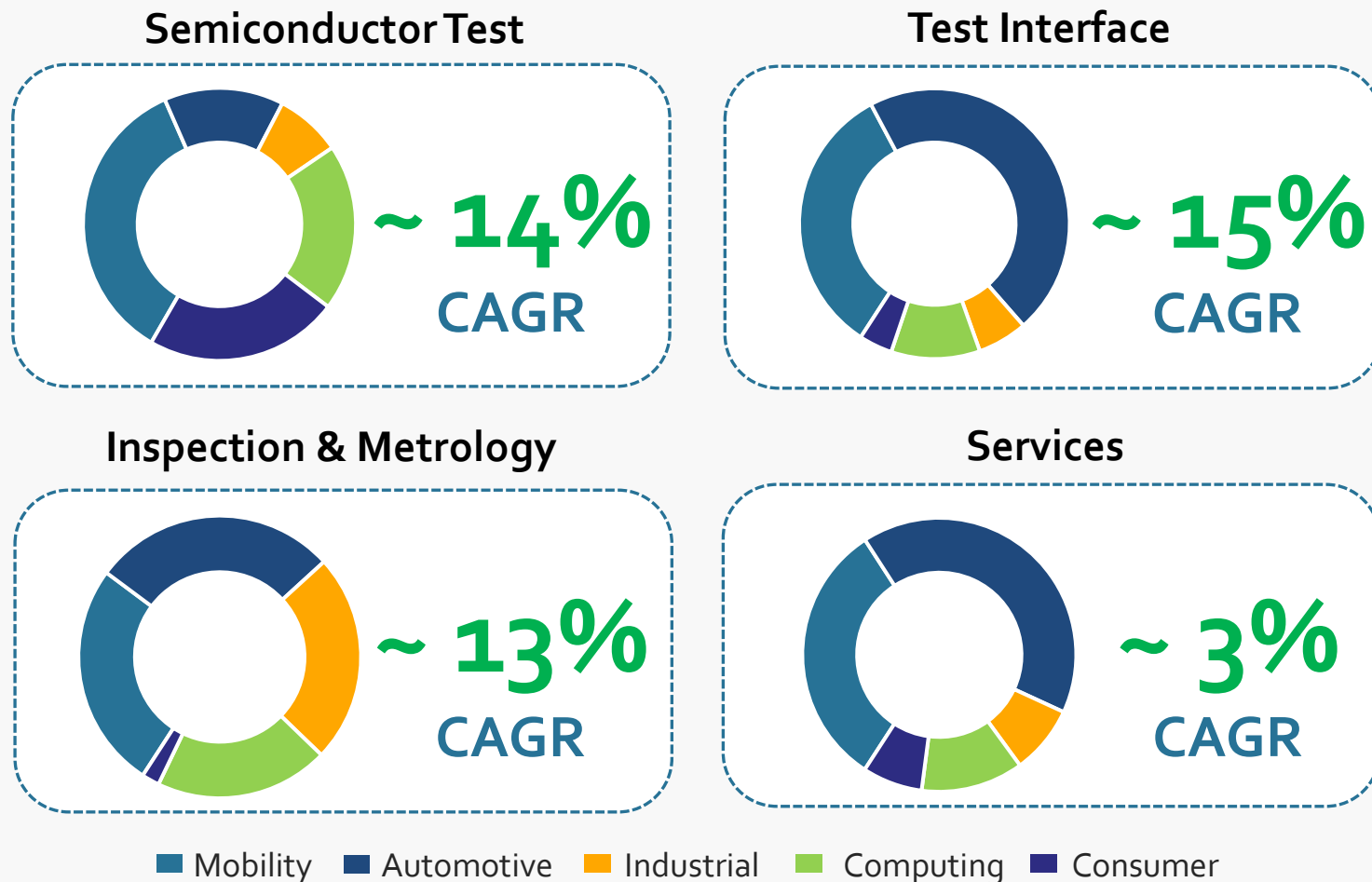
<sup>(1)</sup> Mid-term (3-5 years) target

<sup>(2)</sup> Recurring includes revenue from Interface and Service-related products



# REVENUE GROWTH TO \$1 BILLION

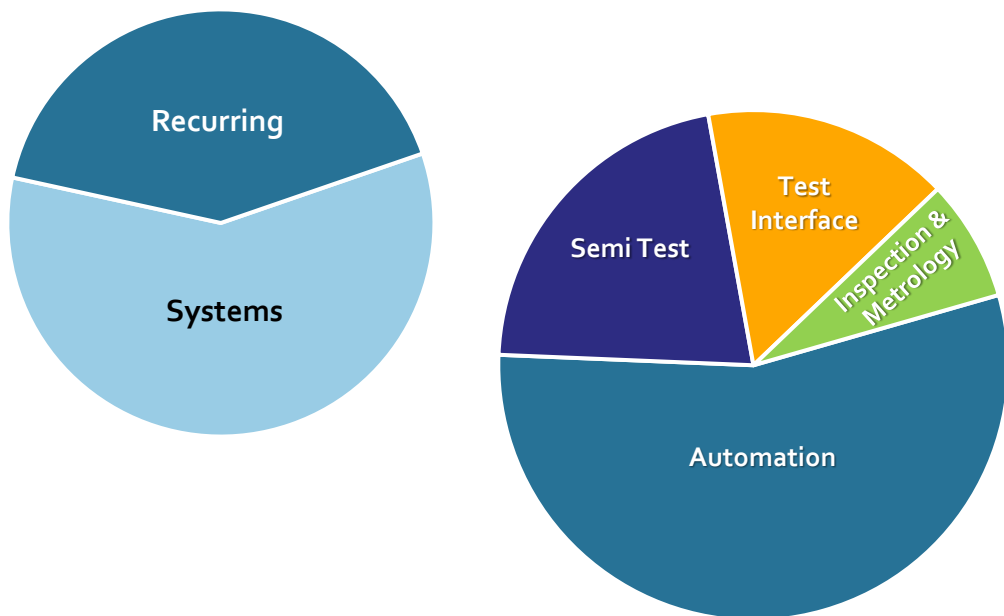
Increasing Revenue  
in Key Secular  
Growth Markets <sup>(1)</sup>



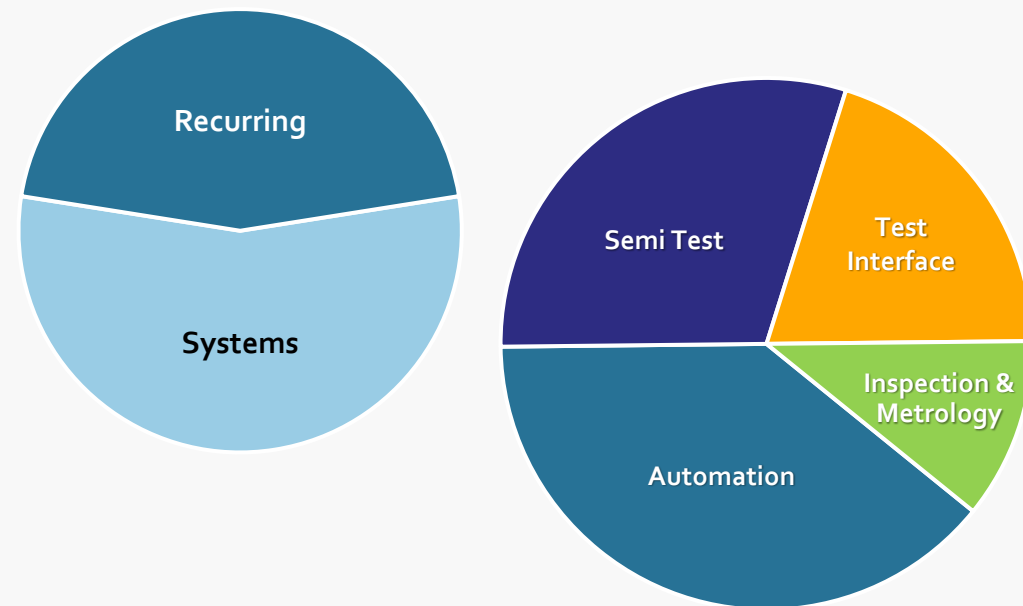
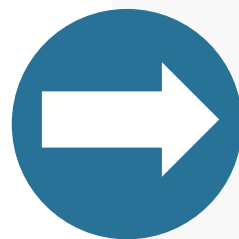
Leveraging market position & leading-edge products to drive revenue in high-growth applications incl. display drivers, ADAS, xEV, RF test and inspection

(1) Mid-term (3-5 years) targeted annual revenue growth and CAGR

# REVENUE DISTRIBUTION AT TARGET FINANCIAL MODEL



Q3'22 TTM Actual Results



Target Financial Model <sup>(1)</sup>

Improved through-cycle profitability with large recurring business  
Gross margin expansion from growth in premium product sales

(1) Mid-term (3-5 years) target

# TRACK RECORD OF MARGIN EXPANSION

Achieved  
**+10 Points**  
of Gross Margin <sup>(1)</sup>  
Expansion



**1H22 revenue mix progressing to target model and expanding gross margin**  
**Increasing insourced manufacturing and efficiencies improves gross margin**

<sup>(1)</sup> All Gross Margin amounts are Non-GAAP, see Appendix for GAAP to Non-GAAP reconciliations, and notes regarding use of forward-looking non-GAAP figures

<sup>(2)</sup> Reflects actual results for the first 9 months of FY22

<sup>(3)</sup> Prior years' gross margin targets

# EFFECTIVE CAPITAL ALLOCATION STRATEGY



## R&D Investment <sup>(1)</sup>

Funding organic growth  
\$414M invested from FY15 – FY21



## Share Repurchase

\$140M authorized  
Repurchased 1.6M shares for \$45.4M through Q3'22



## Debt

\$13M repaid in Q3'22  
\$68M term loan B debt at Q3'22  
<1x gross leverage <sup>(2)</sup>



## M&A

Expand SAM and technology portfolio  
Accelerate timeline to financial targets



## Capital Expenditures

Capex light ~\$20M annually  
Expanding in-house manufacturing, global IT and R&D tools

<sup>(1)</sup> Amounts are Non-GAAP. See Appendix for GAAP to Non-GAAP reconciliations, and notes regarding use of forward-looking non-GAAP figures

<sup>(2)</sup> Total debt divided by Adjusted EBITDA for last 12 months ending September 24, 2022; Non-GAAP figure – see Appendix for GAAP to Non-GAAP reconciliations



# INVESTMENT THESIS

|  |  |  |  |
|--|--|--|--|
| <b>\$1 Billion</b><br>Revenue                            | <b>49%</b><br>Gross Margin <sup>(1)</sup>  | <b>25%</b><br>Operating Income <sup>(1)</sup>  | <b>18%</b><br>Annual Free Cash Flow <sup>(2)</sup>   |
| <b>~ 7% <sup>(3)</sup></b><br>Target 3-Year Revenue CAGR | <b>+500 bps <sup>(3)</sup></b><br>Premium product sales and stable recurring revenue | <b>+400 bps <sup>(3)</sup></b><br>Cost discipline driving strong operating leverage      | <b>~ \$180M <sup>(3)</sup></b><br>Driven by significant margin expansion and earnings growth |
| <i>Products aligned with secular growth markets</i>      | <i>Expanding Asia contactor insourcing operations</i>                                | <i>R&amp;D investments to drive differentiated products and new customer acquisition</i> | <i>Effective capital allocation delivering shareholder value</i>                             |

(1) Non-GAAP forward-looking figures; See Appendix for notes regarding use of forward-looking non-GAAP figures

(2) Reflects cash from operating activities minus capital expenditures

(3) Mid-term (3-5 years) growth targets

# APPENDIX

## Use of Non-GAAP Financial Information:

This presentation includes non-GAAP financial measures, including non-GAAP Gross Margin/Profit, Income and Income (adjusted earnings) per share, Operating Income, Operating Expense, Adjusted EBITDA, free cash flow and debt/leverage ratio that supplement the Company's Condensed Consolidated Statements of Operations prepared under generally accepted accounting principles (GAAP). These non-GAAP financial measures adjust the Company's actual results prepared under GAAP to exclude charges and the related income tax effect for: share-based compensation, the amortization of purchased intangible assets including favorable/unfavorable lease adjustments, restructuring costs, manufacturing transition and severance costs, asset impairment charges, acquisition-related costs and associated professional fees, reduction of indemnification receivable, depreciation of purchase accounting adjustments to property, plant and equipment, purchase accounting inventory step-up included in cost of sales, and amortization of cloud-based software implementation costs (Adjusted EBITDA only). Reconciliations of GAAP to non-GAAP amounts for the periods presented herein are provided in this Appendix and should be considered together with the Condensed Consolidated Statements of Operations.

These non-GAAP measures are not meant as a substitute for GAAP, but are included solely for informational and comparative purposes. The Company's management believes that this information can assist investors in evaluating the Company's operational trends, financial performance, and cash generating capacity. Management uses non-GAAP measures for a variety of reasons, including to make operational decisions, to determine executive compensation in part, to forecast future operational results, and for comparison to our annual operating plan. However, the non-GAAP financial measures should not be regarded as a replacement for (or superior to) corresponding, similarly captioned, GAAP measures.

## Use of Forward-Looking Non-GAAP Information:

This presentation includes non-GAAP forward looking figures that exclude estimated charges related to stock-based compensation, amortization of purchased intangibles, restructuring costs, acquisition-related costs, manufacturing transition/severance costs, inventory step-up costs, amortization of cloud-based software implementation costs (Adjusted EBITDA only), or other non-operational or unusual items, which we are unable predict without unreasonable efforts due to their inherent uncertainty, therefore, reconciliation of these non-GAAP forward looking figures to GAAP is not provided. Where a non-GAAP figure includes historical data and forward-looking estimates, we have reconciled the historical data, but for the foregoing reasons have not reconciled the forward-looking estimates.

# GAAP TO NON-GAAP RECONCILIATION

|   | <u>12 Months Ending</u> |                   | <u>12 Months Ending</u> |                   | <u>12 Months Ending</u> |                   | <u>12 Months Ending</u> |                   | <u>12 Months Ending</u> |                   | <u>12 Months Ending</u> |                   | <u>12 Months Ending</u> |                   | <u>12 Months Ending</u> |                   | <u>3 Months Ending</u> |                   | <u>3 Months Ending</u> |                   | <u>9 Months Ending</u> |                   |
|---|-------------------------|-------------------|-------------------------|-------------------|-------------------------|-------------------|-------------------------|-------------------|-------------------------|-------------------|-------------------------|-------------------|-------------------------|-------------------|-------------------------|-------------------|------------------------|-------------------|------------------------|-------------------|------------------------|-------------------|
| <u>Gross Profit Reconciliation</u>              | Dec 26,<br>2015         | % of Net<br>Sales | Dec 31,<br>2016         | % of Net<br>Sales | Dec 30,<br>2017         | % of Net<br>Sales | Dec 29,<br>2018         | % of Net<br>Sales | Dec 28,<br>2019         | % of Net<br>Sales | Dec 26,<br>2020         | % of Net<br>Sales | Dec 25,<br>2021         | % of Net<br>Sales | Dec 25,<br>2021         | % of Net<br>Sales | Jun 25,<br>2022        | % of Net<br>Sales | Sep 24,<br>2022        | % of Net<br>Sales | Sep 24,<br>2022        | % of Net<br>Sales |
| Net Sales                                       | \$ 269,654              |                   | \$ 282,084              |                   | \$ 352,704              |                   | \$ 451,768              |                   | \$ 583,329              |                   | \$ 636,007              |                   | \$ 887,214              |                   | \$ 887,214              |                   | \$ 217,226             |                   | \$ 206,687             |                   | \$ 621,670             |                   |
| Gross Profit - GAAP                             | 89,038                  | 33.0%             | 94,828                  | 33.6%             | 143,407                 | 40.7%             | 159,308                 | 35.3%             | 229,829                 | 39.4%             | 271,782                 | 42.7%             | 386,961                 | 43.6%             | 386,961                 | 43.6%             | 100,953                | 46.5%             | 98,066                 | 47.4%             | 290,175                | 46.7%             |
| Share Based Compensation                        | 566                     | 0.2%              | 398                     | 0.1%              | 423                     | 0.1%              | 546                     | 0.1%              | 736                     | 0.1%              | 893                     | 0.1%              | 828                     | 0.1%              | 828                     | 0.1%              | 172                    | 0.1%              | 161                    | 0.1%              | 478                    | 0.1%              |
| Amortization of purchased intangible assets     | 5,420                   | 2.0%              | 5,170                   | 1.8%              | 0                       | 0.0%              | 0                       | 0.0%              | 0                       | 0.0%              | 0                       | 0.0%              | 0                       | 0.0%              | 0                       | 0.0%              | 0                      | 0.0%              | 0                      | 0.0%              | 0                      | 0.0%              |
| Restructuring costs related to inventory in COS | 0                       | 0.0%              | 0                       | 0.0%              | 0                       | 0.0%              | 19,053                  | 4.2%              | 2,729                   | 0.5%              | 3,731                   | 0.6%              | (558)                   | -0.1%             | (186)                   | -0.1%             | (186)                  | -0.1%             | (58)                   | 0.0%              | (419)                  | -0.1%             |
| Manufacturing transition and severance costs    | 0                       | 0.0%              | 75                      | 0.0%              | 0                       | 0.0%              | 0                       | 0.0%              | 1,211                   | 0.2%              | 26                      | 0.0%              | (7)                     | 0.0%              | 0                       | 0.0%              | 0                      | 0.0%              | 0                      | 0.0%              | 0                      | 0.0%              |
| Amortization of inventory step-up               | 0                       | 0.0%              | 0                       | 0.0%              | 1,404                   | 0.0%              | 14,782                  | 0.0%              | 6,038                   | 0.0%              | 0                       | 0.0%              | 0                       | 0.0%              | 0                       | 0.0%              | 0                      | 0.0%              | 0                      | 0.0%              | 0                      | 0.0%              |
| Gross Profit - Non-GAAP                         | \$95,024                | 35.2%             | \$100,471               | 35.6%             | \$145,234               | 41.2%             | \$193,689               | 42.9%             | \$240,543               | 41.2%             | \$276,432               | 43.5%             | \$ 387,224              | 43.6%             | \$ 387,224              | 43.6%             | \$ 100,939             | 46.5%             | \$ 98,169              | 47.5%             | \$290,234              | 46.7%             |

|  | <u>3 Months Ending</u> |                   | <u>3 Months Ending</u> |                   | <u>12 Months Ending</u> |                   |
|--|------------------------|-------------------|------------------------|-------------------|-------------------------|-------------------|
| <u>Operating Expense Reconciliation</u>                        | Jun 25,<br>2022        | % of Net<br>Sales | Sep 24,<br>2022        | % of Net<br>Sales | Dec 25,<br>2021         | % of Net<br>Sales |
| Operating Expense - GAAP                                       | \$ 64,039              | 29.5%             | \$ 64,359              | 31.1%             | \$ 256,258              | 28.9%             |
| Share based compensation                                       | (3,761)                | -1.7%             | (3,579)                | -1.7%             | (12,964)                | -1.5%             |
| Amortization of purchased intangible assets                    | (8,341)                | -3.8%             | (8,206)                | -4.0%             | (35,414)                | -4.0%             |
| Restructuring costs  | (7)                    | 0.0%              | (17)                   | 0.0%              | (1,833)                 | -0.2%             |
| Manufacturing transition and severance costs                   | 0                      | 0.0%              | 0                      | 0.0%              | 2                       | 0.0%              |
| Impairment charge  | 0                      | 0.0%              | 0                      | 0.0%              | (100)                   | 0.0%              |
| PP&E step-up included in SG&A                                  | 0                      | 0.0%              | 0                      | 0.0%              | (435)                   | -0.1%             |
| Reduction of Indemnification Receivable                        | 0                      | 0.0%              | 0                      | 0.0%              | (75)                    | 0.0%              |
| Payroll taxes due to accelerated vesting of share-based awards | 0                      | 0.0%              | 0                      | 0.0%              | (300)                   | 0.0%              |
| Operating Expense - Non-GAAP                                   | \$ 51,930              | 23.9%             | \$ 52,557              | 25.4%             | \$ 205,139              | 23.1%             |

|  | <u>3 Months Ending</u> |                | <u>3 Months Ending</u> |                | <u>12 Months Ending</u> |                |
|--|------------------------|----------------|------------------------|----------------|-------------------------|----------------|
| <u>Earnings Reconciliation</u>                                 | Jun 25,<br>2022        | Diluted<br>EPS | Sep 24,<br>2022        | Diluted<br>EPS | Dec 25,<br>2021         | Diluted<br>EPS |
| Income From Continuing Operations - GAAP                       | \$ 28,768              | \$ 0.59        | \$ 24,882              | \$ 0.51        | \$ 167,325              | \$ 3.45        |
| Share based compensation                                       | 3,933                  | 0.08           | 3,740                  | 0.08           | 13,792                  | 0.28           |
| Amortization of purchased intangible assets                    | 8,341                  | 0.17           | 8,206                  | 0.17           | 35,414                  | 0.73           |
| Restructuring costs related to inventory in COS                | (186)                  | (0.01)         | (58)                   | (0.01)         | (558)                   | (0.01)         |
| Restructuring costs  | 7                      | 0.00           | 17                     | 0.00           | 1,833                   | 0.04           |
| Manufacturing transition and severance costs                   | 0                      | 0.00           | 0                      | 0.00           | (9)                     | 0.00           |
| Impairment charge  | 0                      | 0.00           | 0                      | 0.00           | 100                     | 0.00           |
| PP&E step-up included in COS and SG&A                          | 0                      | 0.00           | 0                      | 0.00           | 435                     | 0.01           |
| Gain on sale of PCB Test business                              | 0                      | 0.00           | 0                      | 0.00           | (70,815)                | (1.46)         |
| Reduction of Indemnification Receivable                        | 0                      | 0.00           | 0                      | 0.00           | 75                      | 0.00           |
| Payroll taxes due to accelerated vesting of share-based awards | 0                      | 0.00           | 0                      | 0.00           | 300                     | 0.01           |
| Tax effect of Non-GAAP adjustments                             | (1,134)                | (0.02)         | (685)                  | (0.01)         | 7,194                   | 0.15           |
| Income From Continuing Operations - Non-GAAP                   | \$39,729               | \$ 0.81        | \$36,102               | \$ 0.74        | \$155,086               | \$ 3.20        |
| Weighted Average Shares - GAAP                                 | Basic                  | 48,475         | Basic                  | 47,984         | Basic                   | 47,409         |
| Weighted Average Shares - Non-GAAP                             | Diluted                | 48,928         | Diluted                | 48,526         | Diluted                 | 48,460         |

# GAAP TO NON-GAAP RECONCILIATION

| <u>Adjusted EBITDA Reconciliation</u>                     | <u>3 Months Ending</u> |                   | <u>3 Months Ending</u> |                   | <u>12 Months Ending</u> |                   |
|---|------------------------|-------------------|------------------------|-------------------|-------------------------|-------------------|
|   | Jun 25,<br>2022        | % of Net<br>Sales | Sep 24,<br>2022        | % of Net<br>Sales | Dec 25,<br>2021         | % of Net<br>Sales |
| Net income - GAAP Basis                                   | \$ 28,768              | 13.2%             | \$ 24,882              | 12.0%             | \$ 167,325              | 18.9%             |
| Income tax provision                                      | 8,898                  | 4.1%              | 10,193                 | 4.9%              | 25,019                  | 2.8%              |
| Interest expense  | 919                    | 0.4%              | 1,028                  | 0.5%              | 6,413                   | 0.7%              |
| Interest income   | (308)                  | -0.1%             | (1,132)                | -0.5%             | (239)                   | 0.0%              |
| Amortization of purchased intangible assets               | 8,341                  | 3.8%              | 8,206                  | 4.0%              | 35,414                  | 4.0%              |
| Depreciation  | 3,191                  | 1.5%              | 3,240                  | 1.6%              | 13,153                  | 1.5%              |
| Amortization of cloud-based software implementation costs | 478                    | 0.2%              | 478                    | 0.2%              | 1,644                   | 0.2%              |
| Loss on extinguishment of debt                            | 128                    | 0.1%              | 80                     | 0.0%              | 3,411                   | 0.4%              |
| Other Non-GAAP Adjustments                                | 3,754                  | 1.7%              | 3,699                  | 1.8%              | (55,282)                | -6.2%             |
| Adjusted EBITDA   | <u>\$54,169</u>        | <u>24.9%</u>      | <u>\$50,674</u>        | <u>24.5%</u>      | <u>\$196,858</u>        | <u>22.2%</u>      |

| <u>Free Cash Flow</u>            | <u>3 Months Ending</u> | <u>12 Months Ending</u> |
|----------------------------------|------------------------|-------------------------|
|                                  | Sep 24, 2022           | Dec 25, 2021            |
| Cash flow from operations - GAAP | \$ 39,496              | \$ 97,729               |
| Capital expenditures             | (4,976)                | (12,000)                |
| Free cash flow - Non-GAAP        | <u>\$ 34,520</u>       | <u>\$ 85,729</u>        |

| <u>Research &amp; Development Reconciliation <sup>(1)</sup></u> | <u>Cumulative</u>           |
|---|-----------------------------|
|   | Dec 26, 2015 - Dec 25, 2021 |
| Research & Development - GAAP <sup>(2)</sup>                    | \$ 429,380                  |
| Share Based Compensation  | (14,411)                    |
| Restructuring included in R&D                                   | (273)                       |
| Manufacturing transition and severance costs                    | (1,056)                     |
| Research & Development - Non-GAAP                               | <u>\$ 413,640</u>           |

| <u>Adjusted EBITDA Reconciliation</u>                     | <u>12 Months Ending</u> |
|---|-------------------------|
|   | Sep 24, 2022            |
| Net income (loss) - GAAP Basis                            | \$ 96,108               |
| Income tax provision                                      | 21,778                  |
| Interest expense  | 3,969                   |
| Interest income   | (1,593)                 |
| Amortization of purchased intangible assets               | 33,328                  |
| Depreciation  | 12,782                  |
| Amortization of cloud-based software implementation costs | 1,921                   |
| Loss on extinguishment of debt                            | 312                     |
| Other non-GAAP adjustments                                | 19,548                  |
| Adjusted EBITDA   | <u>\$ 188,153</u>       |
| Total debt  | \$ 79,837               |
| <b>Leverage Ratio</b>                                     | <b>0.4</b>              |

(1) From continuing operations

(2) Total includes R&D costs of our PCB Test Business totaling \$7,698