

COHU INVESTOR PRESENTATION

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 systems installed base statements and any related financial results; assessments regarding market position for various products and services; resiliency of recurring business; effect of annual renewal rate on service contracts on future business; or employee tenure; market segments CAGRs and growth drivers for each business; 3–5-year target plan or financial goals of a target model; target revenue CAGRs by business; test utilization and potential impacts on forecasts; all addressable market estimates; share and growth over time; market position and/or share in business verticals and changes over time; end-market growth estimates and related opportunities; any references to research and development, product plans, roadmaps, developments and schedules and any related product performance capabilities; success of any new market entry opportunities; the success or contribution of any future M&A; savings or value from higher yield or increasing productivity; diversification of customer base; strength of IP portfolio; sustainability objectives; ongoing gross margin expansion or balance sheet strength; strength of the balance sheet; effectiveness of capital allocation strategies; 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: cyclical COVID-19 pandemic impacts; new product investments and product enhancements which may not be commercially successful; inability to effectively manage multiple manufacturing sites in Asia and secure reliable and cost-effective raw materials; failure of sole source contract manufacturer; ongoing inflationary pressures on material and operational costs coupled with rising interest rates; economic recession; instability of financial institutions where we maintain cash deposits and potential loss of uninsured cash deposits; the semiconductor industry is seasonal, cyclical, volatile and unpredictable; the semiconductor mobility market segment (primarily semiconductors used in smartphones, also other wearables) is undergoing a significant downturn; risks of using artificial intelligence within Cohu’s product developments and business; the semiconductor equipment industry is intensely competitive; rapid technological changes and product introductions and transitions; a limited number of customers account for a substantial percentage of net sales; significant exports to foreign countries with economic and political instability and competition from a number of Asia-based manufacturers; loss of key personnel; reliance on foreign locations and geopolitical instability in such locations critical to Cohu and its customers; natural disasters, war and climate-related changes, including economic impacts from the Hamas-Israel conflict or any other wars; increasingly restrictive trade and export regulations impacting our ability to sell products, specifically within China; significant goodwill and other intangibles as percentage of our total assets; risks associated with the EQT acquisition, such as integration and synergies, and other risks associated with additional potential acquisitions, investments and divestitures; levels of debt; financial or operating results that are below forecast or credit rating changes impacting our stock price or financing ability; law/regulatory and including tax law changes; significant volatility in our stock price; and the risk of cybersecurity breaches.

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. 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



\$445M

LTM Revenue⁽¹⁾

~ 47%

LTM Gross Margin⁽¹⁾⁽³⁾

\$269M

Cash & Investments⁽²⁾

Consumables

63% Recurring Revenue⁽⁴⁾

Yield & Productivity

Customer Value Creation

~ 24,700

Equipment Installed Base⁽²⁾



(1) Last twelve months ending September 28, 2024

(2) As of September 28, 2023

(3) Non-GAAP, see Appendix for GAAP to non-GAAP reconciliations

(4) % of total revenue over the last twelve months ending September 28, 2024

A LEADER IN SEMICONDUCTOR TEST & INSPECTION⁽²⁾

Global infrastructure to supply equipment and services optimizing semiconductor manufacturing yield and productivity



#1

Test Automation

Thermal control and vision inspection technologies enabling higher yield



#2

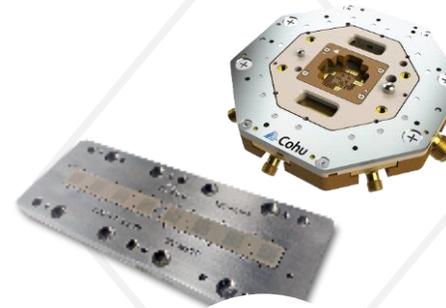
Inspection



#1

Services⁽¹⁾

Device applications, spares, data analytics



#1

Test Interface

High current MEMS interface architecture



#3

Semi Tester

Compact, low-power, scalable instruments

Recurring Business

⁽¹⁾ Service business of Cohu systems.

⁽²⁾ Based on Company estimates of addressable markets

DELIVERING HIGHER YIELD & PRODUCTIVITY



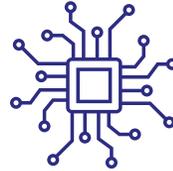
Diverse customers and applications expanding addressable market

Strong market position

in each business vertical

~ 20% share

in ~ \$3.2 billion addressable market⁽¹⁾



Increasing semiconductor complexity and package integration

Opportunities

AI data centers, automotive ADAS⁽²⁾ and electrification, edge AI computing, industrial automation, consumer wearables, infotainment



Innovative solutions delivering higher yield & productivity

Broad IP portfolio

in thermal control for processors test (*GPUs, MPUs, APUs*), vision inspection, MEMS test interface (*SiC, RF, digital*)

⁽¹⁾ Cohu SAM: Serviceable Addressable Market are company estimates for 2023.

⁽²⁾ Advanced Driver Assistance Systems

RESILIENT RECURRING BUSINESS MODEL



\$278M

LTM⁽¹⁾ Recurring Revenue



\$129M

LTM⁽¹⁾ Service Revenue



~ 24,700
Systems Installed Base



~ 500
Highly Skilled Field Engineers

63%

of Consolidated Revenue

Consumable products generate stable revenue

~ 95%

Annual Renewal Rate on service contracts

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

108

Customers

Over 280 high-volume manufacturing facilities in 31 countries

~ 11 year

Average Tenure

Virtual-assist and on-site support

(1) Last Twelve Months (LTM) ending September 28, 2024

I4.0 & FACTORY AUTOMATION DATA ANALYTICS



Enables automation and optimization of test process

- ❑ On-line equipment monitoring and management
- ❑ Real-time component and thermal performance analytics
- ❑ Advance notice to perform proactive maintenance to minimize failures and increase equipment uptime
- ❑ AI inspection to optimize yield and prevent over-rejection

DI-Core software significantly improves overall equipment efficiency, increases inspection yield, and maximizes device output per machine

CUSTOMER ORDERS FOR NEW AI INSPECTION



Optimizes inspection yield without quality compromise

- ❑ Accurately differentiates micro-scale defects from cosmetic patterns
- ❑ Utilizes deep learning and neural network technologies to improve inspection yield
- ❑ Delivers higher first-pass inspection yield

Up to **2%**
Yield Improvement

Software provides optimized yield and defect detection through real-time Artificial Intelligence inspection

PDM⁽¹⁾ MAINTENANCE SELECTED BY MAJOR IDM



Enables automation and optimization of test process

- ❑ Real-time component and thermal performance analytics
- ❑ Early warning to replace parts or service
- ❑ Reduces downtime and increased production output per machine
- ❑ Significantly improves overall equipment efficiency

Software provides advance notice to perform proactive maintenance to minimize failures and increase equipment uptime

⁽¹⁾ Predictive Maintenance



COHU TO ENHANCE DATA ANALYTICS AND AI/ML PLATFORM WITH ACQUISITION OF TIGNIS

COHU TO ACQUIRE TIGNIS⁽¹⁾

- Founded in 2017 in Seattle, WA, with development teams in U.S. and Canada
- Provider of AI⁽³⁾ process control and analytics-based monitoring software
 - **PAICe Monitor**[®] is an AI-driven anomaly detection and predictive maintenance platform, enabling customers to quickly deploy the power of Machine Learning for deep analysis and prediction models
 - **PAICe Maker**[®] is an AI-driven advanced process control solution for manufacturing that automatically adapts to process drift over time
 - **Digital Twin Query Language (DTQL)**⁽⁴⁾ provides syntax enabling users to manage complex data cleaning and analytics techniques without requiring data science experience
- Deepens Cohu's expertise in data science while adding advanced analytics to its **DI-Core software**



~ \$2.6B⁽²⁾

**Semiconductor Process
Control SAM**

Significant opportunity to accelerate growth in semiconductor process control, broaden product portfolio, and expand our customer presence

⁽¹⁾ Expect to close the transaction in January 2025

⁽²⁾ Offering PAICe Monitor and PAICe Maker solutions enables Cohu to expand its analytics offerings to an industry-estimated semiconductor process control market of \$2.6B in 2023

⁽³⁾ Artificial Intelligence

⁽⁴⁾ Patent pending

STRATEGIC RATIONALE

- ❑ Expands our breadth in ~ \$2.6 billion semiconductor process control market
- ❑ Combination of DI-Core and Tignis technologies creates a state-of-the-art analytics platform
 - Acquiring critical technology components including data cleaning and modeling, advanced analytics⁽¹⁾, and visualization; and data science expertise with strong semiconductor-domain analytics
 - Adding talented engineering and data science expertise to drive growth in analytics market
- ❑ Accelerates predictive maintenance (PdM) growth over the mid-term
- ❑ Enables PdM for broad semiconductor manufacturing
 - Utilize state-of-the-art analytics platform and data science expertise to expand solutions
 - Targeting broader semiconductor manufacturing, beyond CoHu equipment

⁽¹⁾ Includes machine learning, multi-variate analysis, and scripting

SEMICONDUCTOR-DOMAIN ANALYTICS EXPERIENCE

~ **132 years**⁽¹⁾

**AI and Semiconductor
Leadership**

7 PhDs

9⁽²⁾

Deep AI Experience



Jon Herlocker, President & CEO - Deep technologist and experienced executive in both on-premises enterprise software and consumer SaaS businesses

**Former CTO of Cloud Services at
VMware and EMC**



Matt McLaughlin, COO - Seasoned execution-oriented leader with experience in SaaS and enterprise on-premises software

**Former VP of Engineering at
VMware, Digital Sirocco and Red Rover**

TICNIS

Proven ability to design and deploy deep technology-based enterprise AI analytics software at scale

(1) *Six-person executive team combined experience in AI and semiconductor leadership*

(2) *Number of data science engineers with deep AI experience*



COHU RECENT CUSTOMER DESIGN-WINS

DIAMOND_x MIXED SIGNAL TEST CELL

- Selected by a Top 5 automotive semiconductor manufacturer
- Integrated test cell solution; system includes new VI100 instrument & major mixed signal platform enhancements, paired with a NY32 handler and cCompact interface
- Cost-efficient & multi-site testing scales throughput for optimal cost-of-test
- Same system for lab characterization & high-volume manufacturing

\$860M

Addressable Market

**Auto, Industrial,
Computing**

Device Markets

2M Samples/sec

**Simultaneous Current
and Voltage Capture**



Diamond_x Tester

**Increased voltage and current range for broader device coverage
in a scalable universal air-cooled platform**

ENTERING HBM MEMORY MARKET WITH NEON

- Selected by a world leading memory manufacturer for inspection metrology of HBM used in high-performance computing and generative AI applications
- Cohu's AI Inspection software utilizes deep learning and neural network pattern recognition to improve inspection yield
- Highly efficient vision technology delivers accurate and reliable metrology of thousands of micro-pillars distributed over the device

6-sided
Micro-scale inspection

AI Inspection
Improves yield

\$100M⁽¹⁾
Revenue opportunity



ai inspection™

Integration with factory automation and efficient output sorting process addresses current and roadmap HBM market needs

⁽¹⁾ The HBM market is projected to be approx. \$23B in 2024 with a CAGR of 22% through 2029

DIE-LEVEL BURN-IN TEST SOLUTION FOR SiC DEVICES

- Selected by a leading SiC power device manufacturer for die-level burn-in and stress-test process
- Significant yield and productivity gains – *eliminates 40%+ yield loss with burn-in of tested-good dies*
- Full die traceability from input wafer to output media
- High current signal integrity testing interface up 2.5kV test per die, 3000W per carrier
- Advanced inspection with AI deep learning technology optimizes yield and enhances productivity

6-sided

Micro-scale inspection

40%+

Higher burn-in quality

\$50M⁽¹⁾

Revenue opportunity



ai inspection™

**High parallelism, singulated die burn-in test & inspection solution
for Wide Bandgap Devices**

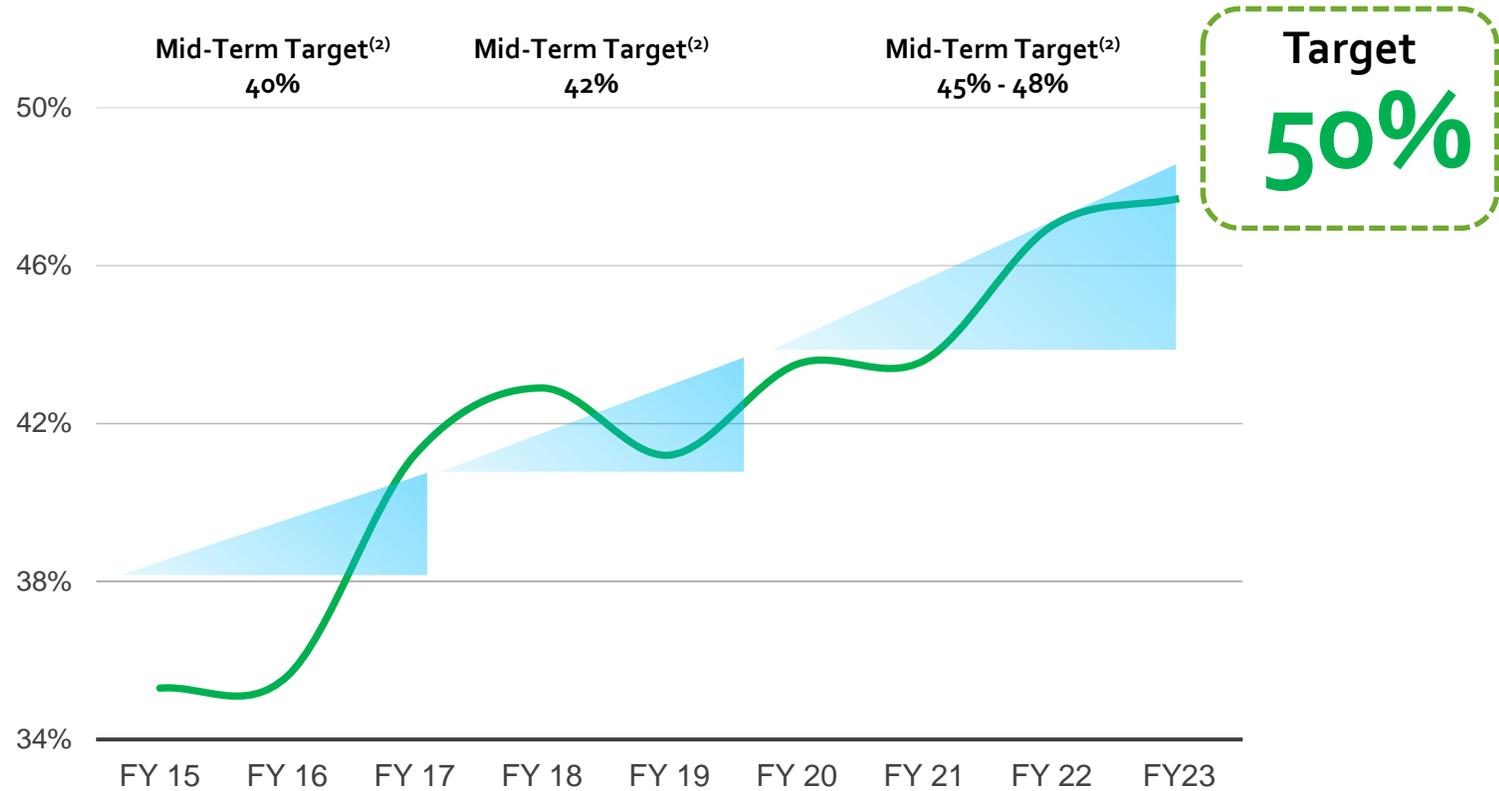
⁽¹⁾ The SiC market is projected to be approx. \$2.2B in 2024 with a CAGR of 25% through 2029

The background of the slide features a complex financial data visualization. It includes a candlestick chart with red and green bars, overlaid with a network of glowing blue and green lines and dots, suggesting a digital or data-driven environment. The overall color palette is dominated by teal and blue tones.

PROFITABILITY AND SHAREHOLDER VALUE

TRACK RECORD OF MARGIN EXPANSION

Achieved
+13 Points
of Gross Margin⁽¹⁾
Expansion



Differentiated products and recurring revenue expanding gross margin
Optimizing supply chain and manufacturing to improve gross margin

⁽¹⁾ 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.

⁽²⁾ Prior years' gross margin targets.

STRONG BALANCE SHEET

	Q3'24
Cash and Investments ⁽¹⁾	\$269M
Accounts Receivable	\$92M
Total Debt	\$11M
Capital Additions	\$2.3M
Cash Flow From Operations	\$17.4M

- Cash position supports inorganic growth and share purchase program
- CapEx target of ~ \$20M / year
- \$8.1M of cash in Q3 used for repurchase of 315K shares of Common Stock
- Positive Q3 cash flow from operations at trough revenue

⁽¹⁾ Net cash per share Q3'24 = \$5.53; See Appendix for GAAP to non-GAAP reconciliations.

EFFECTIVE CAPITAL ALLOCATION STRATEGY



R&D Investment⁽¹⁾

Funding organic growth
\$556M invested from FY16 – FY23



Share Repurchase

\$140M authorized
Repurchased 3.6M shares for \$108.6M through Q3'24



Debt

Paid off remaining Term Loan B balance of \$29.3M in Q1'24



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

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



**We deliver leading-edge solutions to
enable a smarter, safer,
and more connected future.**

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

Gross Profit Reconciliation	12 Months Ending																			
	Dec 26, 2015	% of Net Sales	Dec 31, 2016	% of Net Sales	Dec 30, 2017	% of Net Sales	Dec 29, 2018	% of Net Sales	Dec 28, 2019	% of Net Sales	Dec 26, 2020	% of Net Sales	Dec 25, 2021	% of Net Sales	Dec 31, 2022	% of Net Sales	Dec 30, 2023	% of Net Sales	Sep 28, 2024	% of Net Sales
Net Sales	\$ 269,654		\$ 282,084		\$ 352,704		\$ 451,768		\$ 583,329		\$ 636,007		\$ 887,214		\$ 812,775		\$ 636,322		\$ 444,883	
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%	383,326	47.2%	302,868	47.6%	206,238	46.4%
Share Based Compensation	566	0.2%	398	0.1%	423	0.1%	546	0.1%	736	0.1%	893	0.1%	828	0.1%	646	0.1%	845	0.1%	985	0.2%
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%
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%	(454)	-0.1%	(62)	0.0%	(39)	0.0%
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%	(13)	0.0%	25	0.0%	9	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%	1,141	0.2%	868	0.2%
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%	\$383,505	47.2%	\$304,817	47.9%	\$208,061	46.8%

Net Cash per Share	3 Months Ending Sep 28, 2024
Cash and investments	\$ 269,238
Less: total debt	(10,520)
Net cash	\$ -
Weighted Average Shares - Diluted	46,815
Net Cash per Share	\$ 5.53

Research & Development Reconciliation ⁽¹⁾	Cumulative Dec 31, 2016 - Dec 30, 2023
Research & Development - GAAP ⁽²⁾	\$ 577,433
Share Based Compensation	(19,813)
Restructuring included in R&D	(273)
Manufacturing transition and severance costs	(1,071)
Research & Development - Non-GAAP	\$ 556,276

(1) From continuing operations

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