



May 18, 2017

CURRENT PRICE: \$18.25
RATING: HOLD
PRICE TARGET: N/A
CURRENT YIELD: 1.3%

EPS Estimates

	DEC 16A	DEC 17E
1Q	(\$0.07)	\$0.24A
2Q	\$0.10	\$0.28
3Q	\$0.01	\$0.29
4Q	\$0.08	\$0.32
	\$0.12	\$1.13

Trading Data

52-WEEK PRICE RANGE: \$21.64-\$10.01
SHARES OUTSTANDING: 27.33(M)
MARKET CAP: \$498.9(M)
AVG. DAILY TRADING VOLUME: 0.30(M)
S&P 500: 2,366

Valuation Data

BOOK VALUE: \$8.99
PRICE TO BOOK: 2.0x
DIVIDEND: \$0.24

COHU, Inc. (NSDQ: COHU)

1Q17 Earnings Results

Highlights

- 1Q17 earnings of \$0.24/share vs. 1Q16's (\$0.07)/share
- Auto demand & low cost production drive profitability
- Meeting with COHU management
- COHU expects revenue ramp up in 2017
- Maintain HOLD rating

Investment Thesis

Use of integrated circuits throughout the world continues to accelerate as it finds its way into more products. A few decades integrated circuits were only associated with computers. However, their use has now spread into cellphones, automobiles, mobility items (i-Pads, Kindles, FitBit, etc.), communications, industrial robotics, solid state lighting (LED), and high speed memory. The current annual integrated circuit market is estimated to be \$11 billion with expectations of it growing to \$20 billion by 2020. One way for investors to invest in this growth area is through shares of COHU.

Company Summary

COHU is headquartered in the greater San Diego Metropolitan area (Poway CA) and has 1,600 employees. Formerly known as Cohu Electronics, the company changed its name to Cohu, Inc. in 1972 and was originally founded in 1947. The company develops, manufactures, sells, and services products used by the semiconductor industry to automate the testing of integrated circuits, wafer-level packages (WLPs) and light-emitting diodes (LEDs) found in many consumer products (i.e., cellphones, automobile sensors, computers, i-pads, automobile sensors, and other products). The company is comprised of four operating units: 1) Delta Design, 2) Rasco, 3) Ismeca, and 4) Integrated Test Solutions (ITS).

For Important Disclosure information regarding the Firm's rating system, valuation methods and potential conflicts of interest, please refer to the last two pages of this report.

100 Concourse Boulevard, Suite 101
 Glen Allen, Virginia 23059

804.612.9700 ■ 800.612.1484
 804.527.1104

www.CapitolSecurities.com

Member
 FINRA
 SIPC

Offices: Glen Allen, VA ■ Reston, VA ■ Charlottesville, VA ■ Silver Spring, MD ■ Baltimore, MD ■ Tampa, FL ■ Boston, MA ■ Florham Park, NJ



COMPANY PRODUCTS

Cohu's products include semiconductor test handling and back-end finishing systems, micro-electronic mechanical systems (MEMS) test modules, thermal subsystems for burn-in and system level test of integrated circuits (ICs), and test contactors. COHU's products are used in the back-end of the semiconductor manufacturing process by global-semiconductor manufacturers and test subcontractors to automate the testing of ICs. This testing determines the quality of performance of the ICs prior to shipment to customers.

The company is comprised of four operating units: 1) Delta Design, 2) Rasco, 3) Ismeca, and 4) ITS.

Delta sells "pick & place" and "thermal sub-systems" used for burn-in and system level testing. This unit sells its Pyramid, Matrix, Eclipse, T-Core, and Linx products to semiconductor manufacturers and test subcontractors. The ICs tested with COHU's products go into the mobile markets (phones, tablets, etc.), computing, the automotive area, and high-performance memory.

Rasco was purchased by COHU in 2008 and sells "gravity feed", "test-in-strip", and "micro-electronic mechanical systems" (MEMS) test solutions. Test handles sold by this unit include Jupiter, Saturn, and Jaguar. ICs tested by these products are used in mobile products, "internet of things", and magnetic and pressure sensors used in automotive applications.

Ismeca, purchased in 2013 by COHU, sells "current-based test handling" and "back-end finishing equipment". This unit's products include NY20 and NX32 used for IC testing, LEDs, discrete devices, and sensors. ICs tested by these handlers are used in mobile products, "internet of things", solid state lighting, portable wearable items (e.g. Apple Watches & Fitbit wrist bands), and cyber security.

ITS provides high performance products for the test contactor markets was created in 2014 to drive growth in this sector. Growth of the test contactor market has made it vital for COHU to supply an integrated solution for power semiconductor testing in automotive, industrial, and LED markets. The company designs, manufactures, sells, and provides support for various lines of test contractor solutions. These are consumable electro-mechanical assemblies connecting the device under test, inside COHU's test handlers, and the automotive test equipment.

COHU'S MANUFACTURING FACILITIES

- Poway, CA : 338,000 square feet (sold/leased back)
- Kolbermoor, Germany: 40,000 square feet (owned)
- Malacca, Malaysia: 50,000 square feet (leased)
- Calamba City, Laguna, Philippines: 51,000 square feet (leased)
- La Chaux-de-Fonds, Switzerland: 34,000 square feet (leased)
- Suzhou, China: 6,000 square feet (leased)



SEMICONDUCTOR INDUSTRY'S USE OF COHU PRODUCTS:

Back-end testing includes the final test of an IC by manufacturers, or subcontractors, before end use in cellphones, computers, tablets, wearable internet products, solid state lighting products, automotive vehicles, and cybersecurity items. COHU provides test handling equipment to automate test the final test of ICs, reducing the likelihood of faulty product shipment by semiconductor manufacturers.

The problem for IC manufacturers is the more functions a chip is asked to perform, the more heat it generates which could potentially shut-down the IC and its ability to do its programmed tasks. COHU's thermal-control products controls/lowers the temperature of these multi-function chips during the testing process, solving the "heat problem", thus allowing the manufacturer to produce more ICs for sales to its customers. The more chips making it through the testing period is known as "increasing yield" and increases sales/profits for IC manufacturers.

MANAGEMENT'S OPERATING GOALS

1) Increase market share in the ~\$940 million test handling market. COHU plans to leverage its leading "handler" market position, broad product portfolio, and thermal control technology to optimize test yield and increase its market share. 2) Expand total available market to ~\$2 billion with expansion into Wafer Level Package (WLP) probe and test contacting. 3) Continuously lowering product costs and expand COHU's gross margins by moving more of its manufacturing to Asia 4) Hit its 3-5 year financial targets of \$400 million in annual revenues, non-GAAP gross margins of 40%, and 17% adjusted EBITDA.

REVENUE/PROFIT GROWTH OPPORTUNITIES:

COHU's success is directly tied to the semi-conductor industry and the proliferating use of integrated circuits/chips in various consumer products such as cell phones, i-pads, computing products, automobiles/vehicles, consumer products, and the growing connectivity of individuals into the internet. This provides three potential sources of revenue growth for COHU:

GROWTH OF THE OVERALL SEMICONDUCTOR INDUSTRY. In 2014 this industry grew 9.9% to \$336 billion, according to the Semiconductor Industry Association (SIA). COHU could piggy-back its own revenue growth with the semiconductor market as this sector grows into the future.

COHU COULD EXPAND MARKET SHARE IN ITS CORE MARKETS. Increasing its share in growing segments (mobility/automotive/LED), from optimizing test yields of ICs through new technologies, such as COHU's active thermal control/vision inspection.



EXPAND TOTAL AVAILABLBE MARKET TO ~\$2 BILLION FROM INCREASED SALES INTO TEST CONTACTING & WLP PROBE MARKETS. COHU introduced its new business unit, ITS, in 2014 to help increase revenues in the ~\$650 million test contactor market. The company's test handlers include test contactors which until recently only focused on selling the test handler. COHU's new strategy is to focus on selling both the handlers and test contactors and believes this could increase its market share of the test contractor market.

Additionally, 20% of semiconductors remain as WLPs and are not subject to traditional IC assembly and final test. These WLPs are only visually inspected and cannot be tested by traditional "test-handlers" and automated test equipment. However, COHU is developing products to test WLPs, and solve this issue, which potentially opens up an additional revenue stream in a market estimated at approximately ~\$250 million in size.

TRADING INFLUENCES ON COHU'S STOCK:

COHU's stock is very volatile, mirroring movements of semiconductor stocks. By modern day views, COHU would be viewed as a momentum, or growth stock, subject to potentially wide fluctuations in its share price. There are two things which tend to dictate the direction of COHU's share price movement. First, is the directional movement of semiconductor stocks. This occurs since COHU gets its orders from the semiconductor industry and as the anticipation of profits in this sector rises and falls, so do investor expectations regarding stocks in this sector. Thus both bullish and bearish Wall Street expectations associated with this sector drives the direction of trading in these stocks, as well as COHU's.

Second, is the amount of revenues generated on a quarterly basis. Being a small company, investors judge COHU's growth prospects upon increasing revenues on a quarter-to-quarter basis. Growing quarterly revenues, or new orders from COHU's customers, could be seen as positive and cause increased buying in its stock. Conversely, the opposite is true should revenues decline or customers delay/halt orders. Thus, management's forward guidance regarding expectations often times influences the direction of COHU's stock price movement.

RECENT DEVELOPMENTS

COHU recently completed its acquisition of Kita Manufacturing Co. LTD, a Japanese based company for \$15 million. Kita had 2016 revenues of \$17 million and designs, manufactures, and sells spring probe contacts used in final test contactors, probe cards, PCB test boards, and connectors sold to worldwide customers.



RECENT MEETING WITH MANAGEMENT

We recently met with management to discuss the company's products, strategy, and growth prospects. COHU said autos are adding to its revenue growth rates due to vehicle additions of semiconductors for entertainment and internet purposes. Further, the development of driverless cars could also create additional demand for COHU's products.

The recent acquisition of Kita Manufacturing doubled COHU's contactor sales from \$16 million to approximately \$33 million and allows management to offer Kita's PINs product to its existing customers. From these current revenue levels, and successful marketing of this product and combination products, COHU believes this revenue stream could grow annual revenues 10% and give it another opportunity to further penetrate the \$650 million contactor market.

The Malaysian manufacturing facility has lowered COHU's product production and improved overall gross profit margins. Management believes this facility could handle further order growth and easily increase its manufacturing capacity another 50% from current levels.

R&D expense should be 10%-12% of revenues as COHU continues to create products needed for the changing technology needs of its customers. The company wants to take different technology from across different business segments, combine them, and create products that improve yield for its customers. Potentially, this may materialize in gravity feed and turret products based on wafer level needs. COHU will continue to in handler R&D, despite it being a low growth area, because each customer has different methodologies of testing.

COHU could make future acquisitions based on growth purposes, adding customers, and/or for technology gains. Use of either equity or debt could be used to finance any purchases. Having \$100 million in cash on its balance sheet, COHU estimates this could be used on acquisitions up to \$60 million - \$70 million while amounts higher could warrant some type of a new offering

Management listed several challenges going forward: 1) Lead times have expanded due to increased auto sector demand, 2) Forecasting product mix for forward sequential quarters and how they may grow, 3) Growing existing share in the contactor and wafer level probe markets, 4) Adjusting to slower product demand from the auto sector should an economic recession materialize in the future.



EQUITY RESEARCH

Recent Earnings

COHU reported 1Q17 GAAP earnings of \$0.24/share vs. (\$0.06)/share during 1Q16. The improvement was due to higher revenues and improved gross profit margins. Revenue rose to \$81.1 million from \$65.8 million from increased customer demand for its pick & place handler products. Gross profit margins rose to 40% from 31.5% as COHU shifted 80%-90% of pick & place handler production to its lower cost production facility in Malaysia. Automotive, mobility, & “internet of things” accounted for 60% of orders and 40% of recurring orders. High performance mixed signal orders accounted for 35% of system orders coming mainly from automotive, industrial, and consumer markets. Analog RF/power discrete accounted for 26% of system orders, 16% from MEMS/LED, 14% from processors, 7% from power management, and 2% from other segments.

Total expenses rose 8.6% to \$73.1 million from \$67.3 million due to higher cost of sales (\$48.8 million vs. \$46.5 million), R&D expense (\$9.8 million vs. \$7.7 million), and SG&A (\$14.5 million vs. \$13.1 million). The rise in revenues allowed operating income to increase to \$8.0 million from a loss of \$1.5 million. EBIT improved to \$8.1 million from -\$1.5 million and income from continuing operations rose to \$6.8 million from -\$1.7 million.

1Q16 non-GAAP increased to \$0.35/share from \$0.24/share. Income from operations rose to \$11.5 million from \$2.2 million. The GAAP to non-GAAP adjustments include \$1.7 million of stock based compensation expense, \$1.1 million of purchased intangible amortization expense, \$104,000 of restructuring costs, \$187,000 related to Kita acquisition costs, and \$347,000 of related costs to step up and valuation of acquired inventory.

Our Thoughts

COHU's 1Q17 operating results surpassed investor expectations as the company reported GAAP earnings of \$0.24/share vs. (\$0.06)/share during 1Q16. The improvement came from increased customer orders and higher gross margins as COHU continues to benefit shifting much of its product manufacturing to the low-cost Malaysian production facility. The auto industry's continued increase of putting semiconductors into vehicles to provide entertainment/internet features has increased demand for COHU's products. During the 1Q17 conference call management provided 2Q17 guidance of approximately \$86 million in revenues and a gross profit margin of 40%, with potential of higher margins going forward if quarterly revenues meet, or exceed, \$90 million.

Our 2017 earnings estimate is \$1.13/share based on steadily improving revenue growth based on continued growing order demand from the auto sector. However, recent lackluster consumer spending numbers indicate robust US economic growth projections for 2017, expected by Wall Street, may be at risk during the next few months. Moreover, a slowdown in the US economy could decrease order flow for COHU from the auto sector. We believe COHU's shares are fully valued at current levels and rate this stock a HOLD.



Risks

There are no guarantees COHU will be able to grow future earnings. Declining customer orders, increasing commodity prices, and rising operating costs could negatively affect the company's profits. Economic slowdowns, downturns in the semiconductor industry, and political change in Europe and Asia could have adverse effects on earnings. Currency fluctuations could influence earnings. New products from competitors, or changing industry trends/technology, are risks for COHU's ability to sell its products. Negative equity markets, rising interest rates, terrorist attacks, and failure to comply with the Sarbanes Oxley Act could cause a decline in COHU's share price. Given the relatively small amount of daily trading activity in COHU's stock, any increase in trading volume could significantly accelerate the volatility of its share price movement.

Steve Marascia
Director of Research
Capitol Securities Management
804-612-9715
smarascia@capitolsecurities.com



EQUITY RESEARCH

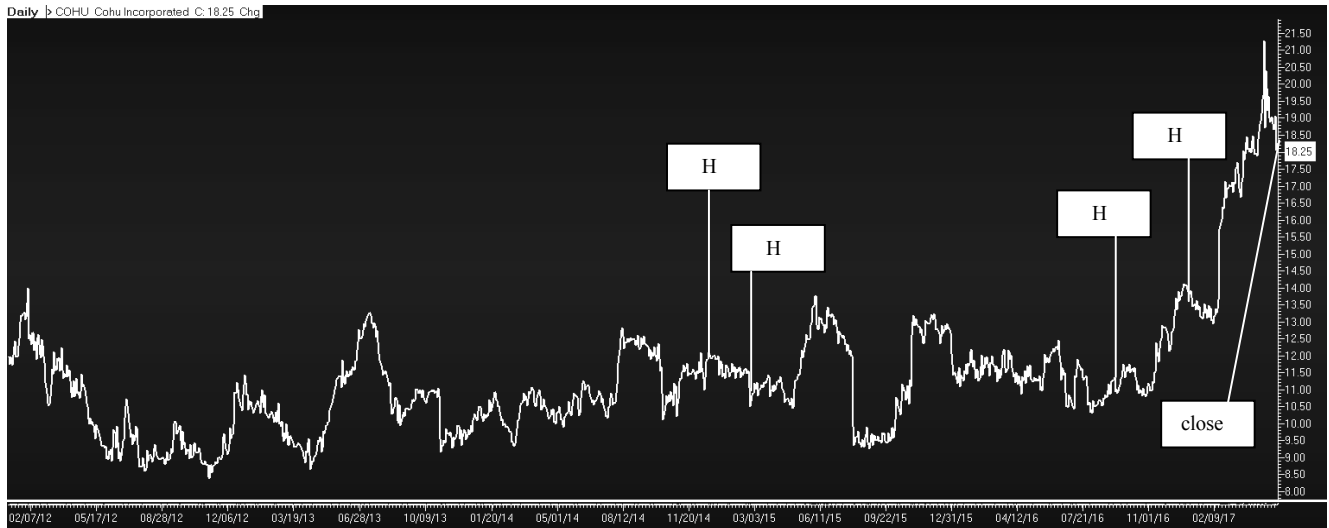
COHU, Inc.

(dollars in figures, except for per share figures)

	1Q16	2Q16	3Q16	4Q16	FY16	1Q17	2Q17e	3Q17e	4Q17e	2017e
Revenues	\$65,778	\$76,353	\$69,259	\$70,694	\$282,084	\$81,097	\$86,143	\$87,232	\$88,185	\$342,567
Cost of Sales	46,337	49,669	46,083	45,167	187,256	48,841	51,686	52,339	52,029	204,895
Research & Development	7,803	8,305	8,634	10,143	34,481	9,776	9,817	9,825	9,903	39,321
Selling, general, & Administrative	13,370	15,015	13,591	12,232	54,332	14,460	14,604	14,677	14,788	58,529
Impairment of goodwill/assets										
Gain on sale of facility										
Total costs/expenses	\$67,510	72,989	68,263	67,642	276,419	73,077	76,107	76,841	76,720	302,745
Gain/(loss) from Operations	-1,732	3,364	996	3,052	5,665	8,020	10,036	10,039	11,465	39,560
Interest & other, net	43	59	71	169	342	101	108	113	118	440
Gain/(loss) from Cont. operations pre-tax	-1,689	3,423	1,067	3,221	6,007	8,121	9,928	10,278	11,347	39,674
Income tax/benefit	222	761	849	915	2,747	1,358	1,986	2,056	2,274	7,674
Gain/(loss) from Cont. operations	-1,911	2,662	218	2,306	3,260	6,763	7,942	8,222	9,073	32,000
Discontinued operations										
Income from dis. Ops pre-tax		-55	51	-217	-221					
Income tax										
Income(loss) from discontinued ops		-55	51	-217	-221					
Net Gain/(loss)	-1,911	2,607	269	2,089	3,039	6,763	7,942	8,222	9,073	32,000
Income from Discontinued Ops.		\$0.00	\$0.00	\$0.00	(\$0.01)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Diluted earnings per share (GAAP)	(\$0.07)	\$0.10	\$0.01	\$0.08	\$0.12	\$0.24	\$0.28	\$0.29	\$0.32	\$1.13
Non-GAAP earnings per share	\$0.06	\$0.22	\$0.14	\$0.24	\$0.68	\$0.35	\$0.33	\$0.41	\$0.37	\$1.46



Important Disclosures



12/31/15 \$12.07 initiate with HOLD rating

Ratings-
 BUY: B
 HOLD: H
 SELL: S

Steven Marascia certifies, with respect to the companies or securities that he analyzes, that (1) the views expressed in this report accurately reflect his personal views about all of the subject companies and securities and (2) no part of his compensation was, is or will be directly or indirectly related to the specific recommendations or views expressed in this report.

Stock ratings used in this report are defined as follows:

- (1) Buy – The stock's total return including dividends is expected to exceed the industry or market average by at least 10% over the next twelve months.
- (2) Hold – The stock's total return including dividends is expected to be in line with the industry or market average of +/- 10% over the next twelve months.
- (3) Sell – The Stock's total return including dividends is expected to be below the industry or market average by 10% or more over the next twelve months.

The distribution of investment ratings for all companies in our coverage universe are as follows: (1) 50%, (2) 50%, (3) 0%

The distribution of investment ratings used for companies whom we have performed banking services in the last 36 months are (1) 100%, (2) 0%, (3) 0%

Capitol Securities Management's Investment Banking/Public Finance unit has not received compensation for investment banking services from the subject company in the past 12 months. Nor does it expect to receive, or intend to seek compensation for, investment banking services from the subject company in the next 3 months.

No affiliate of Capitol Securities Management, or Capitol Securities Management, received compensation from the subject company for products or services during the past 12 months.

The subject company is not, or during the past 12 months, was not, a client of Capitol Securities Management's Investment Banking/Public Finance unit.



Other Disclosures

This report is not directed to, or intended for distribution to or use by any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction where such distribution, publication, availability or use would be contrary to law or regulation or which would subject Capitol Securities or its affiliates to any registration or licensing requirement within such jurisdiction. The information presented in this report is provided to you for information purposes only and is not to be used or considered as an offer or the solicitation of an offer to sell or buy or subscribe for securities or other financial instruments. Capitol Securities may not have taken any steps to ensure that the securities referred to in this report are suitable for any particular investor. Capitol Securities will not treat recipients of this report as its customers by virtue of their receiving this report. The investments and services contained or referred to in this report may not be suitable for you and it is recommended that you consult an independent investment advisor if you are in doubt about such investments or investment services. Nothing in this report constitutes investment, legal, accounting or tax advice, or a representation that any investment or strategy is suitable or appropriate to your individual circumstances, or otherwise constitutes a personal recommendation to you. Capitol Securities does not advise on the tax consequences of investments and you are advised to contact an independent tax advisor. Information and opinions presented in this report have been obtained or derived from sources believed by Capitol Securities to be reliable, but Capitol Securities

Makes no representation as to their accuracy or completeness. This report is not to be relied upon in substitution for the exercise of independent judgment. Capitol Securities may have issued, and may in the future issue, other reports that are inconsistent with, and reach different conclusions from, the information presented in this report. Past performance should not be taken as an indication or guarantee of future performance, and no representation or warranty, express or implied, is made regarding future performance. Information, opinions and estimates contained in this report reflect a judgment at its original date of publication by Capitol Securities and are subject to change without notice. The price, value of and income from any of the securities mentioned in this report can fall as well as rise.

For more information on this report, please contact us at 800.612.1484 or write to Capitol Securities, 100 Concourse Boulevard, Suite 101, Glen Allen, Virginia 23059