

Cypress Semiconductor Corp.

Nasdaq:CY

Analyst: Nicholas Luca

Sector: Technology

BUY

Price Target: \$16.65

Key Statistics as of 03/28/2015

Market Price:	\$14.36
Industry:	Semiconductor-Broad Line
Market Cap:	\$2.37B
52-Week Range:	\$8.04-16.25
Beta:	1.0

Thesis Points:

- Ability to separate themselves from the negatively viewed semiconductor industry
- Rapid innovation creates entrance into new segments
- New revenue streams and reduction of costs through recent merger

Company Description:

Cypress Semiconductor Corporation provides mixed-signal programmable solutions, specialized semiconductor memories, and integrated semiconductor solutions worldwide. The company's Memory Products division designs and manufactures static random access memory (SRAM) products and nonvolatile RAMs used to store and retrieve data in networking, wireless infrastructure and handsets, computation, consumer, automotive, industrial, and other electronic systems; and general-purpose programmable clocks. Its Data Communications division focuses on universal serial bus (USB) controllers, Bluetooth low energy and wirelessUSB solutions, and module based solutions for trackpads and other user interface applications used in PC and peripheral, industrial automation imaging, security camera, and consumer devices, such as mobile handsets and set-top boxes. The company's Programmable Solutions division designs and develops programmable product offerings, including Programmable System-on-Chip (PSoC) devices used in various industrial applications, mass storage, household appliances, laptop computers, and toys; CapSense devices are used in applications that employ buttons or sliders, such as handsets and various other consumer, industrial, and automotive applications; TrueTouch touch-sensing/touch screen products used in mobile phones, tablets, e-readers, wearables, GPS, automobiles, digital cameras, and other mobile systems; and automotive products. Its Emerging Technology division provides wafer level chip scale packaging solutions and foundry services, as well as other development stage activities. The company sells its semiconductor products through distributors, manufacturing representative firms, and its sales force to original equipment manufacturers and manufacturers. It has a strategic foundry partnership with HuaHong Grace Semiconductor Manufacturing Corporation and United Microelectronics Corporation.



Thesis

As of March 28th, 2015, Cypress Semiconductor Corp. (CY) is a BUY due to the market undervaluing the company because of the struggling industry of semiconductors they compete in. The rapid decline in semiconductor stocks is reflective of the long-term decline in personal computers, or PCs; because of this correlation, the market is scared to invest with CY. However, Cypress's ability to separate themselves from the industry is quite attractive, as most of their products have little connection to the PC segment. Homes and cars are becoming more involved with the revolution of the Internet of things, incorporating technology within at a fast rate. Their touch screen leadership is ahead of it's time, and is gaining popularity amongst consumers. 2015 shall be a favorable year for CY as they expect upwards of 45% YoY growth.

Separation from Rest of Industry

The semiconductor industry struggled in 2014, with many of companies down double digit percentages. As stated before, this is heavily due to the decline in personal computers. PC's are a dying product, as consumers switch over to tablets, and other substitutes. Because of this decrease in demand of PC's and the products that tie with them, semiconductors have struggled.

The issue however is the misconception of CY that the market holds. Cypress no longer holds as close of relationship with PC's and PC related products as the market believes it does. They have been planning for this decline and adapted by investing heavily in Internet of Things or IoT, of which can simply put as incorporating internet into devices, like televisions, automobile radio docks, and other such appliances that didn't used to have internet capability. They are creating products that will help develop internet in such places. Soon enough everything will be related through a network. The evidence lies within the progression of systematic networks like linking a mobile phone to the radio of an automobile, or the connection of tablets-PCs-televisions-phones, of which are all capable of being integrated together. All of their peers are much more related to PCs and relate to the negative view of semiconductors at this moment, but Cypress should not be valued on the same basis, as they are continuing to separate themselves.

It is a good time to buy as estimates by analysts rose over the past month for the current fiscal year by about 28.0%. But that is not yet reflected in its price, as the stock gained only 2.9% over the same time frame. The company posted a positive earnings surprise of 28.57% in the reported fourth quarter. The stock has only risen about roughly 2.4% since the release of Q4 earnings. The stock has also delivered an average earnings surprise of nearly 83.19% over the trailing four quarter.

Innovating Products

Cypress has been conducting a lot of research into products separate of PCs over the past few years. During fiscal 2014, 2013, and 2012, research and development expenses totaled \$164.5 million, \$190.9 million, and \$189.9 million, respectively. This heavy R&D has now led to products that are significantly ahead the competition and gaining notice from consumers positively in new markets

TrueTouch Touchscreen

TrueTouch offers single-chip touchscreen solutions for products such as smartphones and superphones, tablets, e-readers, wearables, portable media players, cameras, automotive infotainment systems and other products. The TrueTouch family includes devices that perform traditional touchscreen functions including interpreting multitouch operation, single touches, and gestures such as tap, double-tap, pan, pinch, scroll and rotate. Recently, Cypress expanded the TrueTouch portfolio by adding solutions with advanced features such as water resistance, passive stylus support and hover functionality to its Gen5 and Gen4X families



Touchscreen devices face tough environments. With form factors becoming thinner, chargers and displays

becoming noisier, and consumers using their devices in harsher conditions, providing high touch performance demands a tougher touchscreen controller. TrueTouch touchscreen controllers leverage the industry's through being able to meet these consumer needs, as well as adding other innovated features that separate their screen from large competitors like the iPhone 6. Cypress Corp.'s unmatched IP portfolio is backed by more than 100 capacitive touch-sensing patents

TrueTouch's Increased Demand in China

As a result of the efficiency of their *TrueTouch Touchscreen*, Cypress has landed design wins at a number of Chinese smartphone manufacturers. The company's latest design has been bought and used by Huawei, the largest telecommunications equipment maker in the world, in 5 of their new smartphones. Along with Huawei, ZTE, a leading global provider of telecommunications equipment, will also use Cypress Corp.'s Gen5 TrueTouch screen in its new Nubia superphone. These two companies should help Cypress benefit from a booming smartphone market in China. At the end of last year, smartphone penetration in China was only 40%. By 2017, this rate is expected to go up to 49%. This means that half the population in China will still need a smartphone beyond 2017. Since Huawei and ZTE are two key players in the Chinese smartphone market, Cypress is creating relationships with the right companies to profit from this booming market.

Wearable MCUs

Cypress' entry into the wearables market with its TrueTouch controllers is a major achievement. The use of its TrueTouch controllers in Qualcomm and Sony's smartwatches are likely to boost the company's revenues. The strength in wearable devices and continued innovation in the space should lead to higher demand for Cypress' controllers over the next few years.



Merging with Spansion

Earlier this year, Cypress announced that it entered into a definitive agreement to merge with Spansion, Inc., a leading designer, manufacturer and developer of embedded systems semiconductors, in an all-stock, tax-free transaction. The post-merger company is expected to generate approximately \$2 billion in revenue annually and realize more than \$135 million in cost synergies on an annualized basis within three years, and create a leading global provider of microcontrollers and specialized memories needed in today's embedded systems.

Cypress Semiconductor's merger with Spansion is transformative, as the combined company should be able to leverage a combined sales force and R&D workforce that is smaller than if each company operated stand-alone



The most important aspect of merging with Spansion is the increase in dominance in the automotive market, of which Spansion has a \$450 million automotive business in microcontrollers(MCUs), flash memories and analog – many in missioncritical sockets. This has added significantly to their investment in automotive business, which stood at \$40 million prior to the merging with Spansion.



Cypress Semiconductor Corp. recently announced the expansion of its Traveo™ microcontroller (MCU) family with a new series that provides automotive manufacturers with a cost-effective platform to deliver 2-D and 3-D graphics and advanced functionality for dashboards, head-up displays and HVAC systems in compact vehicles. This new series of the Traveo family is the first automotive product launched as part of Cypress and is another step forward in bringing the luxury car experience to the mass market. By offering a cost-effective yet high-performance and scalable platform, customers can affordably deliver 2-D and 3-D graphics and other advanced functionality in compact vehicles

CENTER FOR GLOBAL FINANCIAL STUDIES									
Cypress Semiconductor Corporation	CY	Analyst Nicholas Luca	Current Price \$14.36	Intrinsic Value \$14.79	Target Value \$16.65	Divident Yield 3%	Target Return 19.03%	NEUTRAL	
General Info		Peers		Market Cap.	Management				
Sector	Information Technology	Altera Corp.	\$13,356.64	Professional	Title	Comp. FY2012	Comp. FY2013	Comp. FY2014	
Industry	Semiconductors and Semiconductor Equip	Broadcom Corp.	\$25,703.09	Rodgers, T.	Co-Founder, Chief Executive Of	\$ 3,425,411.00	\$ 2,996,266.00	\$ 2,131,243.00	
Last Guidance	Oct-16-2014	Silicon Laboratories Inc.	\$2,146.15	Trent, Thad	Chief Financial Officer, Principal	\$ -	\$ -	\$ 657,432.00	
Next earnings date	4/16/2015	Maxim Integrated Products, Inc.	\$9,799.03	Keswick, Paul	Executive Vice President of Mark	\$ 1,732,006.00	\$ 2,147,002.00	\$ 1,167,734.00	
Market Data		Xilinx Inc	\$11,064.01	Nazarian, Dana	Executive Vice President of Mem	\$ 1,456,076.00	\$ 1,978,777.00	\$ 1,062,518.00	
Enterprise value	\$4,721.49	Atmel Corporation	\$3,459.04	Oliveira, J.	Chief Technical Officer and Exce	\$ -	\$ -	\$ -	
Market Capitalization	\$4,602.94	Cavium, Inc.	\$3,957.49	McCarthy, Joseph	Director of Corporate Communi	\$ -	\$ -	\$ -	
Daily volume	6.77	Cirrus Logic Inc	\$2,088.41	Historical Performance					
Shares outstanding	320.54	Microchip Technology Inc.	\$9,912.30	CY		Peers		Industry	
Diluted shares outstanding	169.12	Linear Technology Corporation	\$11,165.58	Growth	-3.5%	8.6%	6.5%	6.0%	
% shares held by institutions	44.28%	Current Capital Structure			Retention Ratio	127.4%	50.2%	44.1%	
% shares held by insiders	4.26%	Total debt/market cap	5.15%	ROIC		14.8%	14.1%	11.8%	
Short interest	17.51%	Cost of Borrowing	2.35%	EBITDA Margin	1.0%	33.7%	13.5%	13.7%	
Days to cover short interest	8.36	Interest Coverage	100.00%	Revenues/Invested capital	54.9%	76.7%	99.0%	202.3%	
52 week high	\$16.25	Altman Z	2.32	Excess Cash/Revenue	31.1%	64.1%	54.7%	18.5%	
52-week low	\$8.04	Debt Rating	AAA	Unlevered Beta	1.78	1.15	1.26	0.95	
5y Beta	1.57	Levered Beta	1.46	TEV/REV	2.6x	3.7x	2.8x	2.4x	
6-month volatility	40.37%	WACC (based on market value weights)	10.25%	TEV/EBITDA	25.5x	14.5x	14.0x	11.3x	
Past Earning Surprises		Revenue		EBITDA		Norm. EPS		TEV/EBITDA	
Last Quarter	0.8%		-5.5%		-7.1%	TEV/UFCE			
Last Quarter-1	-0.1%		4.6%		6.7%	39.2x			
Last Quarter-2	-0.1%		21.0%		33.3%	Non GAAP Adjustments			
Last Quarter-3	0.0%		-10.4%		0.0%	Operating Leases Capitalization	100%	Straightline	10 years
Last Quarter-4	0.7%		2.7%		12.5%	R&D Exp. Capitalization	100%	Straightline	10 years
Proforma Assumptions		Period		Rev. Growth		Adj. Op. Cost/Rev		Forecasted Profitability	
Operating Cash/Cash	0.0%	LTM	0%	72%	Revenue	NOPLAT	Invested capital	UFCE	
Unlevered Beta	1.40	LTM+1Y	8%	70%	\$725.50	-\$41.51	\$1,410.92	-\$41.51	
Rev/Invested Capital	51.4%	LTM+2Y	8%	54%	\$784.67	-\$2.42	\$1,393.03	\$15.43	
Continuing Period Revenue Growth	9.9%	LTM+3Y	9%	49%	\$846.26	\$66.60	\$1,391.54	\$68.09	
Long Term ROIC	15.0%	LTM+4Y	9%	47%	\$919.11	\$137.78	\$1,418.66	\$110.66	
Invested Capital Growth	Equals to Maintenance	LTM+5Y	9%	46%	\$1,003.42	\$190.60	\$1,465.14	\$144.12	
Justified TEV/REV	3.7x	LTM+6Y	10%	45%	\$1,098.56	\$234.81	\$1,531.64	\$168.32	
Justified TEV/EBITDA	14.5x	LTM+7Y	10%	44%	\$1,204.52	\$274.32	\$1,630.35	\$175.61	
Justified TEV/EBITDA	100.8x	LTM+8Y	10%	44%	\$1,321.83	\$313.13	\$1,727.71	\$215.77	
Justified TEV/UFCE	39.2x	LTM+9Y	10%	43%	\$1,451.32	\$352.58	\$1,840.67	\$239.62	
Valuation		ROIC		WACC		EVA		Enterprise Value	
LTM	-2.9%		10.2%		-\$185.99		\$5,177.10	Total Debt	\$243.25
LTM+1Y	-0.2%		10.3%		-\$146.55		\$5,715.59	Other claims	\$96.72
LTM+2Y	4.8%		10.5%		-\$78.95		\$6,298.36	Equity	\$5,339.70
LTM+3Y	9.9%		10.6%		-\$9.42		\$6,887.99	Adjusted Price	\$220.12
LTM+4Y	13.4%		10.7%		\$40.46		\$7,497.85		\$22.69
LTM+5Y	16.0%		10.8%		\$80.40		\$8,141.89		\$25.26
LTM+6Y	17.9%		10.9%		\$114.52		\$8,847.89		\$28.26
LTM+7Y	19.2%		11.0%		\$141.91		\$9,606.50		\$31.31
LTM+8Y	20.4%		11.1%		\$171.30		\$10,426.69		\$34.77
LTM+9Y	21.4%		11.2%		\$201.23		\$11,311.70		\$38.60
Monte Carlo Simulation Assumptions		Base		Min		Max		Distribution	
Revenue Variation	0	10%	N/A	N/A	N/A	Normal	Mean est.	Intrinsic Value	\$15.75
Op. Costs Variation	0	10%	N/A	N/A	N/A	Normal	σ(e)		\$0.32
Market Risk Premium	6%	N/A	5%	7%	Triangular	3 σ(e) adjusted price			\$14.79
Long term Growth	10%	N/A	-4%	9%	Triangular	Current Price			\$14.36
Terminal Value	0	0.1	N/A	N/A	Normal	Analysts' median est.			\$16.94