

Mentor Graphics Corp.

NASDAQ:MENT

Analyst: Justin Capuano

Sector: Technology

Buy

Price Target: \$29.12

Key Statistics as of 10/3/2016

Market Price:	\$26.24
Industry:	Technical & System Software
Market Cap:	\$2.84B
52-Week Range:	\$16.10-28.09
Beta:	0.96

Catalysts:

- Action taken upon activist fund Elliot Associates regarding its newly acquired 8% stake
- Q3 2017 Earnings Report

Company Description:

Headquartered in Wilsonville, Oregon, Mentor Graphics Corporation (MENT) provides electronic design automation (EDA) and hardware solutions, as well as consulting and customer support services, that enable its customers to develop better products at lower costs. The company sells and licenses its extensive product line and services through a direct sales force, sales representatives and distributors to large enterprises around the world within a diverse set of industries.



Thesis

Mentor Graphics has shown that it has the strength to recover, and to continue its normal trend of steady growth, despite a disappointing FY 2016. Since then, the stock price has already grown over 25%. The EDA industry is on the rise and Mentor is in place to reap the benefits of the potential growth due to its well respected groups of diverse product lines that are in high demand from the top companies of their respective industries. Hedge fund interest and the potential of successful earnings reports provide Mentor with a great amount of upside. Considering these reasons, I am recommending that we hold Mentor Graphics in our portfolio, and potentially buy more shares at \$26.

Industry Outlook

Mentor markets its products and services to a diversified group of sectors to act as a safety net against uncertain fluctuations in the macro environment. The target customer base includes large companies within the communications, computer, consumer electronics, semiconductor, networking, military and aerospace, multimedia, and transportation industries. Companies are coming to the realization that they must optimize their software and hardware electronic components in order to stay relevant in a growing digital age. Due to the large overlap of the semiconductor industry with the other market segments, it is the sector requiring the most attention in regards to projecting future growth within the EDA industry. The semiconductor industry has an expectation of maintaining a 20% compound annual growth rate until the year 2020 due to increasing customer demand for improving efficiency, manufacturing times, and process automation. Mentor, and the EDA industry, will benefit from the certain growth because they design, manufacturer, evaluate, and service the key products driving the semiconductor industry. The EDA industry itself is changing the way it functions from a product standpoint to cater to their customers' demands for innovative products. The traditional EDA product line is changing from typical hardware-software systems to now include embedded software, advanced design packaging, and device-device connectivity components, all products offered by Mentor.

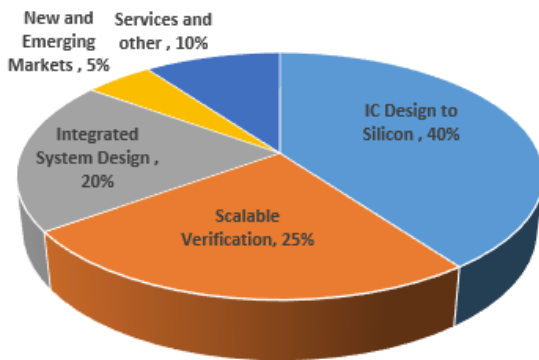
Business Model

Mentor sells its products and support services by a direct sales force located in multiple countries around the world, an internal sales representative group, and through distributors. Revenue is divided in to two categories based on how it is generated: (i) system and software sales and (ii) service and support sales. System and software sales revenue is derived from either a term or perpetual license, depending on the type of product sold. Typically, software sales use term licenses that state a specific time period, an average of 3 year terms according to the Q2 2017 earnings call, and payments are received at fixed terms throughout the time period while revenue is recognized at the time of delivery arrival. Perpetual licenses are issued to customers that purchase certain types of software and emulation hardware to use for the products lifetime and revenues are recognized upon delivery or at fixed terms according to the contract. Service and support revenues are recognized as they are provided to the customer. These services include consulting, training and other professional services as needed by the customer. All customers must undergo an extensive credit review to determine their likelihood of paying fees according to their respective licensing conditions. Mentor usually targets customers with favorable credit histories, increasing the likelihood of solidifying current and future revenues.

Product Differentiation

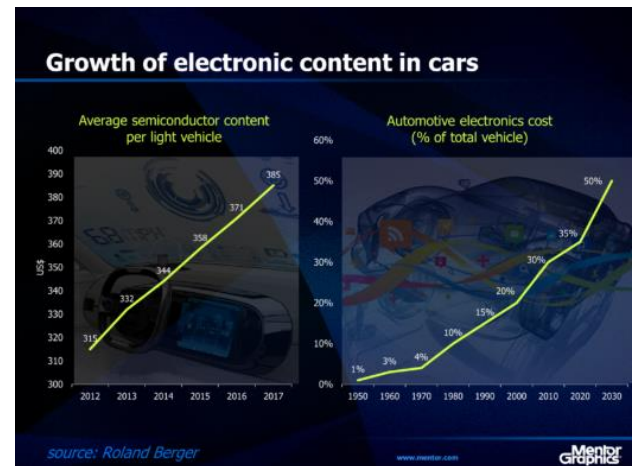
Mentor has a multitude of product lines and services that focus on providing engineers with solutions to their increasingly complex electronic design challenges and reducing time to market schedules. The product line is broken down in to five distinct categories: Integrated Circuit Design to Silicon, Scalable Verification, Integrated System Design, New and Emerging Markets, and Services and Other.

Percent of Total Revenue



While Mentor offers a diverse set of products, I want to focus on the main product lines that will impact future earnings. Processing chip manufacturers are struggling to maintain desirable cost-effective yields on their products as printed circuit boards and integrated circuits become more complex due to increases in processing chip capacities. Mentor offers the Calibre tool family to meet the needs of these manufacturers. The Calibre tool family, the main driver for 40% of the total revenue and has shown a significant increase in bookings year over year, is the industry standard in regards to testing the design, performance, and capabilities of integrated circuits. The next product family is the Veloce scalable verification line. Veloce has superior simulation and virtualization capabilities. It is a hardware emulation system, running up to 1000 times faster than a typical software system that Mentor offers, that tests the functionality and timing of electric circuits before they are manufactured through a debugging and verification process. Veloce is the clear industry leader in the chip design networking market and, due to a major order in Q2 of 2017, is showing potential to become an impactful player in the growing Internet Cloud landscape. George Hinckley, president of Mentor, stated in the Q2 earnings report that the revenue generated from Veloce was the main driving force behind a successful second quarter in the 2017 fiscal year. Now focusing on a product within the new and emerging category, the Embedded Systems product line has potential for tremendous upside growth. The Embedded Systems product line focuses on connecting, analyzing, testing electronic components, mainly in automobiles. Today, car makers are implementing more electronic components and software than any other consumer based manufacturer. Mentor has developed a partnership with AUTOSAR, the worldwide group of manufacturers, suppliers, and other electronic companies that are currently paving the way for the

next generation of automobiles. According to the exhibit below, the future of cars is electric. Car companies will be able to analyze live data from internet connected components within the car. Currently, the revenue generated from the partnership with AUTOSAR is flat at 5% of total revenue, but the potential for growth is profound.



Financials and Ratios

Historically, Mentor has shown year over year revenue growths between 6% and 7%, towards the low end when compared to competitors. However, in FY 2016, they experienced a decline in revenue of 5% and poor guidance on future revenue growth, missing all estimates and shooting the stock price down almost 25% at its lowest point. While an unattractive selling point for the stock, it is important to understand Mentor's business model and the macro environment regarding the EDA industry. It is extremely common for tech companies to acquire smaller firms to fulfill its strategic needs. According to the Q2 2017 earnings call, through Q3 and Q4 of FY 2016, a few of Mentor's major customer were going through the M&A process and were delaying decisions to continue using Mentor's products due to uncertainties with what products will meet their future needs upon closing the M&A deals. This resulted in a dramatic decrease in bookings and contract renewals, effectively destroying revenues for Mentor. In the first two quarters of FY 2017, Mentor renegotiated contracts with the newly merged companies to secure revenue streams, as bookings in Q2 alone for the emulation product line added an additional 20 contract signings, 4 coming from new companies. Recovering from the dismal FY 2016, Mentor shows guidance of a conservative 3% growth in FY 2017 and up to 5% in FY 2018. Historically,

Mentor has displayed tremendous gross profit margins, averaging around 83% year over year, ranking in the top tier of its competitors. This is a result of strategically controlling operating costs to remain within a consistent range of 66% to 70% of sales. While constructing a DuPont Analysis of the ROIC/WACC ratio, it is apparent that the EDA industry has been destroying value over time, but still adds more value than Mentor as seen in the table below. This may seem like a disadvantage for Mentor, but it may actually be an opportunity that will allow for Mentor to grow.

ROIC /WACC		
	<i>History</i>	<i>LFY</i>
MENT	0.85	0.41
Competitors	1.28	1.16

For Mentor, it is apparent that the cause of a lower ROIC is due to its lack of revenue growth in recent years, specifically in FY 2016. Compared to the industry average, Mentor derives fewer dollars of revenue for every employee that it hires. Mentor has a history of returning \$0.22 for every employee, yet the last fiscal year returned only \$0.19, compared to industry average of \$0.26 and \$0.26 respectively. At the bottom level, Mentor needs to use its employees in a more efficient manor in order drive more sales. There is room for growth due as described in the Q2 2017 earnings call and if Mentor reaches their potential, they will end up creating value and be able to compete with its peers.

Important Dates and Catalysts

During the last week of September 2016, the activist hedge fund Elliot Associates doubled its stake in Mentor to 8% of all common shares. The disclosure of this information to the public caused the stock price to jump around 7% in a single trading day. Despite missing the initial catalyst, Elliot Associates still has potential to make a major impact on Mentor. The activist fund is known for taking large stakes in extremely undervalued tech companies and then search for ways to increase shareholders value by opening lines of communication with the board of directors for the companies that they have ownership in. Based on Elliot's past, they attempt to increase shareholder's wealth by actively searching for acquirers to buy the company, recommending acquisition prospects that will provide growth within the company, and by providing recommendations for improving current strategies to improve operations. As of today, they have opened dialogue with the Board but their agenda is unknown. Their presence as shareholders should have investors expecting high returns in the future. The dismal FY 2016 Earnings Report had a tremendous impact on stock price. Since then, the price has returned to the high in 2016 of around \$27, a growth of over 25%. The main catalysts for this amount of growth have been the quarterly earnings reports and calls for Q1 and Q2 for FY 2017. Each report has displayed a guidance of revenue growth, and has shown better than expected revenues and contract signings. Mentor gave guidance of only a 3% growth in revenue for Q3, a conservative value that can seemingly be beaten by the actual revenue, potentially having a direct positive impact on the stock price.

Summary

Even though Mentor is in the middle of the pack compared to its peers both in size and financially, it is in a position to experience growth similar to its former upward trends. Its superior products and prospects for the EDA industry to experience tremendous year over year growth are both positive indicators for Mentor Graphics. Now, its performance relies on how well it can maintain growth in revenue, its ability to continue reducing operating costs, and the catalyst that is Elliot Associates.

Mentor Graphics Corp.
(MENT)

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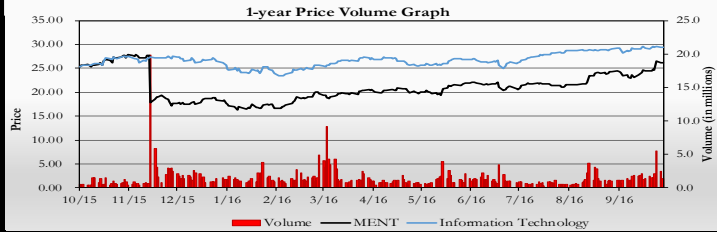
NEUTRAL

Analysis by Justin Capuano
10/7/2016

Current Price: **\$26.47**
Dividend Yield: **0.8%**

Intrinsic Value: **\$26.26**
Target Price: **\$29.12**

Target 1 year Return: **10.85%**
Probability of Price Increase: **75.6%**

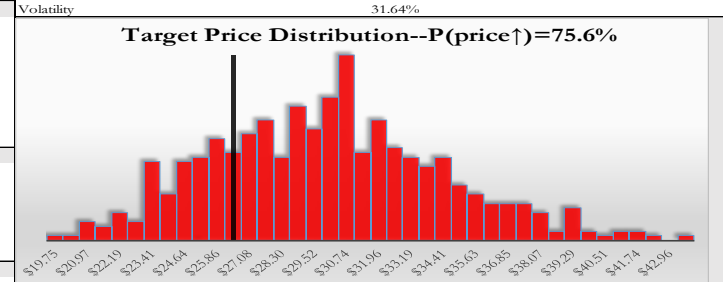


Description	
Mentor Graphics Corporation provides electronic design automation software and hardware solutions to design, analyze, and test electro-mechanical systems, electronic hardware, and embedded systems software worldwide.	
General Information	
Sector	Information Technology
Industry	Software
Last Guidance	November 3, 2015
Next earnings date	November 19, 2016
Estimated Country Risk Premium	6.72%
Effective Tax rate	21%
Effective Operating Tax rate	21%

Market Data	
Market Capitalization	\$2,862.89
Daily volume (mil)	1.55
Shares outstanding (mil)	108.16
Diluted shares outstanding (mil)	113.88
% shares held by institutions	102%
% shares held by investments Managers	76%
% shares held by hedge funds	17%
% shares held by insiders	8.64%
Short interest	8.26%
Days to cover short interest	7.30
52 week high	\$28.09
52-week low	\$16.10
Levered Beta	0.55
Volatility	31.64%

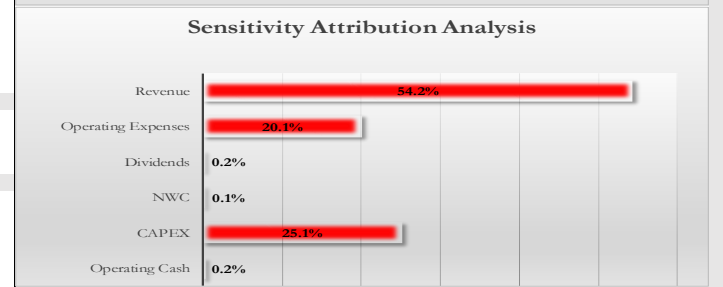
Past Earning Surprises		
Quarter ending	Revenue	EBITDA
7/31/2015	12.16%	56.95%
10/31/2015	-4.44%	-22.60%
1/31/2016	0.38%	9.23%
4/30/2016	3.33%	-88.91%
7/31/2016	3.69%	-30.18%
Mean	3.02%	-15.10%
Standard error	2.7%	24.0%

Peers	
Ansys, Inc.	
Synopsys Inc.	
PTC Inc.	
Cadence Design Systems Inc.	
Fair Isaac Corporation	
Teradyne Inc.	
Tyler Technologies, Inc.	
Guidewire Software, Inc.	

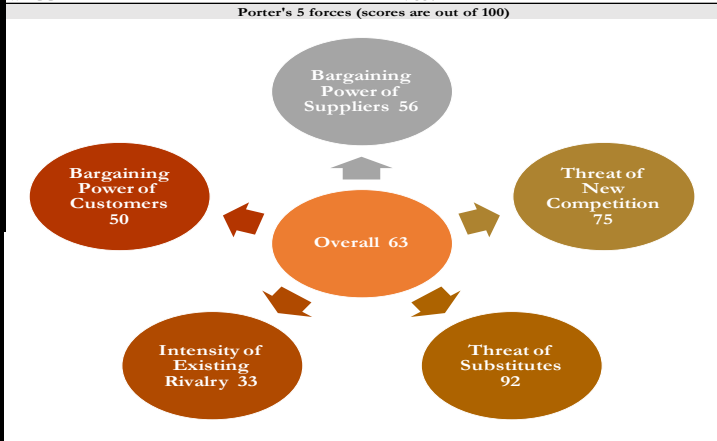


Management		Position	
Rhines, Walden	Chairman and Chief Executive	2.37% per annum over 6y	
Hinckley, Gregory	President, Chief Financial O	2.2% per annum over 6y	
Freed, Dean	Vice President, General Coun	-100% per annum over 2y	
Derrick, Brian	Vice President of Corporate	3.05% per annum over 6y	
Ellow, Michael	Senior Vice President of Wor	-1.11% per annum over 2y	
Trebing, Richard	Chief Accounting Officer and	N/M	

Total compensations growth		Total return to shareholders	
2.37% per annum over 6y		2.35% per annum over 6y	
2.2% per annum over 6y		2.35% per annum over 6y	
-100% per annum over 2y		-2.55% per annum over 2y	
3.05% per annum over 6y		2.35% per annum over 6y	
-1.11% per annum over 2y		-2.55% per annum over 2y	
N/M		N/M	



Profitability		MENT (LTM)		MENT (5 years historical average)		Industry (LTM)	
ROIC	4.9%	16.46%	12.14%	16.6%	16.6%	12.14%	16.6%
NOPAT Margin	14%	0.37	0.51	0.73	0.73	0.37	0.51
Revenue/Invested Capital	0.37	4.8%	18.74%	13.27%	13.27%	4.8%	18.74%
ROE	4.8%	12%	30.39%	15.0%	15.0%	4.8%	18.74%
Adjusted net margin	12%	0.40	0.62	0.89	0.89	0.40	0.62
Revenue/Adjusted Book Value	0.40	Invested Funds		MENT (LTM)		MENT (5 years historical average)	
		8.8%	9.9%	55%	55%	8.8%	9.9%
		7.9%	8.8%	N/A	N/A	7.9%	8.8%
		4.4%	5.2%	-28%	-28%	4.4%	5.2%
		99.5%	62%	62%	62%	99.5%	62%
Capital Structure		MENT (LTM)		MENT (5 years historical average)		Industry (LTM)	
Total Debt/Common Equity (LTM)	0.16	0.16	0.12	3.00%	3.00%	0.16	0.12
Cost of Existing Debt	6.47%	6.80%	3.00%	3.00%	3.00%	6.47%	3.00%
Estimated Cost of new Borrowing	3.73%	3.82%	3.00%	3.00%	3.00%	3.73%	3.00%
CGFS Risk Rating	BB	BB	BB	BB	BB	BB	BB
Unlevered Beta (LTM)	0.48	0.83	1.20	1.20	1.20	0.48	0.83
WACC	7.33%	9.52%	11.84%	11.84%	11.84%	7.33%	9.52%



Porter's 5 forces (scores are out of 100)		Valuation	
Period	Revenue growth	NOPAT margin	ROIC/WACC
Base Year	-13.6%	13.5%	0.67
7/31/2017	4.2%	14.9%	0.76
7/31/2018	6.2%	15.6%	0.83
7/31/2019	5.9%	16.2%	0.90
7/31/2020	5.7%	16.9%	0.97
7/31/2021	5.5%	17.2%	1.03
7/31/2022	5.2%	17.2%	1.06
7/31/2023	5.0%	17.1%	1.09
7/31/2024	4.8%	17.0%	1.11
7/31/2025	4.5%	16.9%	1.14
7/31/2026	4.3%	16.8%	1.17
Continuing Period	4.1%	16.6%	1.19
Period	Invested Capital	Net Claims	Price per share
Base Year	\$1,711.87	\$387.90	\$26.33
7/31/2017	\$2,159.34	\$73.50	\$29.33
7/31/2018	\$2,528.78	-\$253.97	\$32.56
7/31/2019	\$2,848.73	-\$594.22	\$35.93
7/31/2020	\$3,039.44	-\$994.97	\$39.81
7/31/2021	\$3,012.89	-\$1,371.35	\$43.44
7/31/2022	\$2,956.06	-\$1,764.39	\$47.16
7/31/2023	\$2,923.35	-\$2,171.80	\$50.95
7/31/2024	\$2,901.97	-\$2,594.09	\$54.82
7/31/2025	\$2,887.56	-\$3,031.71	\$58.75
7/31/2026	\$2,876.79	-\$3,485.06	\$62.75
Continuing Period			

Invested Capital		Net Claims	
Base Year	\$1,711.87	\$387.90	\$26.33
7/31/2017	\$2,159.34	\$73.50	\$29.33
7/31/2018	\$2,528.78	-\$253.97	\$32.56
7/31/2019	\$2,848.73	-\$594.22	\$35.93
7/31/2020	\$3,039.44	-\$994.97	\$39.81
7/31/2021	\$3,012.89	-\$1,371.35	\$43.44
7/31/2022	\$2,956.06	-\$1,764.39	\$47.16
7/31/2023	\$2,923.35	-\$2,171.80	\$50.95
7/31/2024	\$2,901.97	-\$2,594.09	\$54.82
7/31/2025	\$2,887.56	-\$3,031.71	\$58.75
7/31/2026	\$2,876.79	-\$3,485.06	\$62.75
Continuing Period			