



Minutemen Equity Fund

RESEARCH REPORT

Varian Medical Systems (NYSE: VAR)

April 2015

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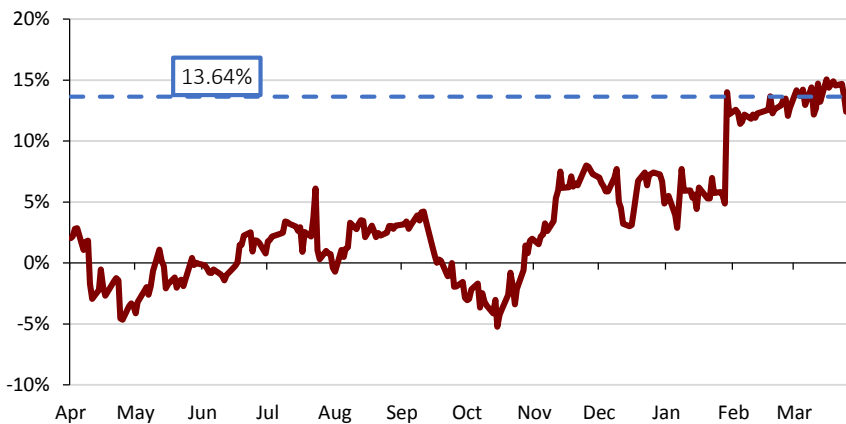
Company Name: Varian Medical Systems

Ticker: NYSE: VAR

Price: \$94.19

Recommendation: BUY

OVERVIEW



Market Cap	9.44B	EV/EBITDA	13.76
P/E TTM	24.52	EV/SALES	2.94
P/E Forward	19.49	Avg. Volume	712,008
P/B	5.89	Beta	0.69
D/E	1.07	Target Price	\$106.66

Investment Rationale

- 1) Varian is an industry leader in the market for radiotherapy devices. It is the world's largest radiotherapy manufacturing company, with 67% market share in terms of installed based for radiotherapy devices in the United States, 40% market share in Asia, 40% in Europe, and 36% in emerging market countries.
- 2) There is a growing demand for Varian's products and services in emerging markets, which we believe will drive revenue growth for the company over the next 3-5 years. A significant portion of Varian's revenue is generated outside of North America, with global revenue representing 54% of revenue in the Oncology Segment, and 70% of revenue in the Imaging Components segment. As Varian looks to expand internationally, it has developed an oncology product specific to emerging market customers that is more price sensitive than most of its radiotherapy devices.
- 3) Varian has been shifting its focus towards services and software products. After several strategic acquisitions and organic growth, Varian has successfully increased its penetration of the service market. Service accounts for 32% of total revenue for the company and 40% of revenue in the Oncology Segment, which is Varian's biggest segment by revenue. Because service and software revenue is recurring and has healthier margins, we see this transition to service and software as a sustainable and strategic move that will better position Varian in the radiotherapy industry.
- 4) Technological innovation is one of the main drivers in the market for radiotherapy devices, and Varian has consistently adapted to provide its clients with the newest and most effective technologies, especially in

regards to proton therapy. The company received FDA approval for a proton therapy product in second quarter of 2014. Varian is the first to market for this breakthrough form of cancer treatment.

Product & Services Breakdown

Varian Medical Systems, Inc. is the world's leading manufacturer of radiotherapy, radiosurgery, proton therapy, and brachytherapy devices, as well as software services for cancer treatment. Varian is also a leading supplier of X-ray imaging components. The company has sold 7,500 radiotherapy machines across the globe, building up majority market share in the industry. The operations of the company are grouped into two reportable segments: Oncology Systems and Imaging Components.

Varian's largest business segment is Oncology Systems, which designs, manufactures, sells, and services hardware and software products for cancer treatment. Revenues from this segment represented 77% of revenue in fiscal 2014. Products in this segment include linear accelerators, brachytherapy after-loaders, treatment simulation, and verification equipment, as well as information management, treatment planning, and imaging processing software. Varian's UNIQUE medical linear accelerator is the most price sensitive of its products and was developed specifically for customers in emerging markets. Over the last few years, Varian made several acquisitions and strategic partnerships to improve its service offerings in the Oncology Segment. In April of 2014, Varian integrated software acquired from Velocity Medical Solutions, LLC into its existing products to aggregate treatment and imaging data, which helps physicians make more informed treatment decisions. Varian also successfully integrated dose calculation software into its operations. Acquired in July of 2014 from Transpire, Inc., the software helps to improve image guidance tools and deliver higher-precision radiotherapy. In 2012, Varian formed a partnership with Siemens, which allows the Company to integrate its software into Siemens' linear accelerator machines, giving the Company more exposure to the service market and Siemens' market share.

The Imaging Components business segment designs, manufactures, sells, and services X-ray imaging components. Revenues from this segment represented 22% of total revenue for 2014. These components are sold to large imaging system original equipment manufacturer (OEM) customers that incorporate them into imaging systems. Varian also sells X-ray tubes, CT scanners, radiographic imaging, special procedures, and mammography to small OEM customers, independent service companies, and directly to end-users for replacement purposes. In addition, Varian sells security and inspection products to OEM customers who incorporate these imaging components into their inspection systems.

Varian Medical Systems reports its proton therapy business and research center revenues under "Other," which represented 1% of revenue in fiscal 2014. Its Varian Particle Therapy (VPT) business develops, designs, manufactures, sells, and services products and systems for delivering proton therapy for the treatment of cancer. The current focus of these operations is the commercialization of the ProBeam proton therapy systems, which received FDA clearance in the second quarter of 2014. Varian is working to improve its clinical

utility and reduce its cost of treatment per patient. In 2014, 2013, and 2012, Varian booked three, zero, and two proton therapy product orders. The Ginzton Technology Center (GTC) is Varian's scientific research facility that develops proprietary technology to enhance current business and explores new areas of business. This segment is specifically researching chemical and biological agents that work with radiation therapies to improve treatment outcomes.

Sales Process

Varian has several different ways of selling its products to customers around the world.

Oncology:

In the U.S. and Canada, Varian sells directly to customers like surgeons, radiation oncologists, university research and community hospitals, healthcare agencies, physician's offices, and cancer care clinics. Worldwide, the Company employs a combination of both direct sales and independent distributors. Varian will also occasionally participate in public tenders to win business.

Imaging:

Varian utilizes both direct sales and independent distributors to sell their medical and industrial imaging products to government agencies and both large and small OEM customers.

Other:

Varian's sales specialists work with the Oncology sales group to sell the products and services in the "Other" segment directly to customers. Customers include government-sponsored hospitals and research institutions, who will participate in public tenders to purchase equipment.

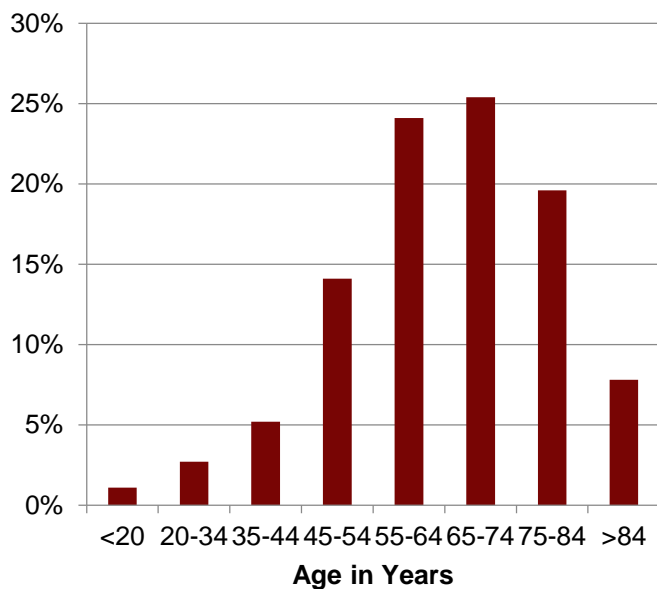
Industry Analysis

The radiotherapy industry has a market cap of \$5.88 billion and is projected to grow at a compound annual growth rate of 3.2% through 2018. Radiation therapy is used by almost 67% of cancer patients in the United States.

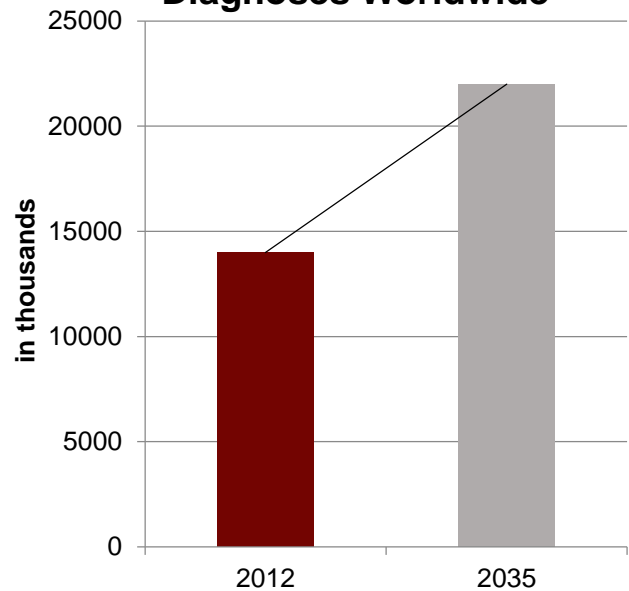
One of the biggest drivers of the expansion of the radiotherapy market is the aging demographic, given that almost 70% of newly diagnosed cancer cases are diagnosed in patients between the ages of 58 and 84.

The number of new cancer cases diagnosed annually will also drive growth in this industry and is projected to increase from 14.1 million in 2012 to over 20 million in 2025, according to the World Health Organization, as diagnoses increase in low and middle income countries.

Cancer Cases by Age in U.S.

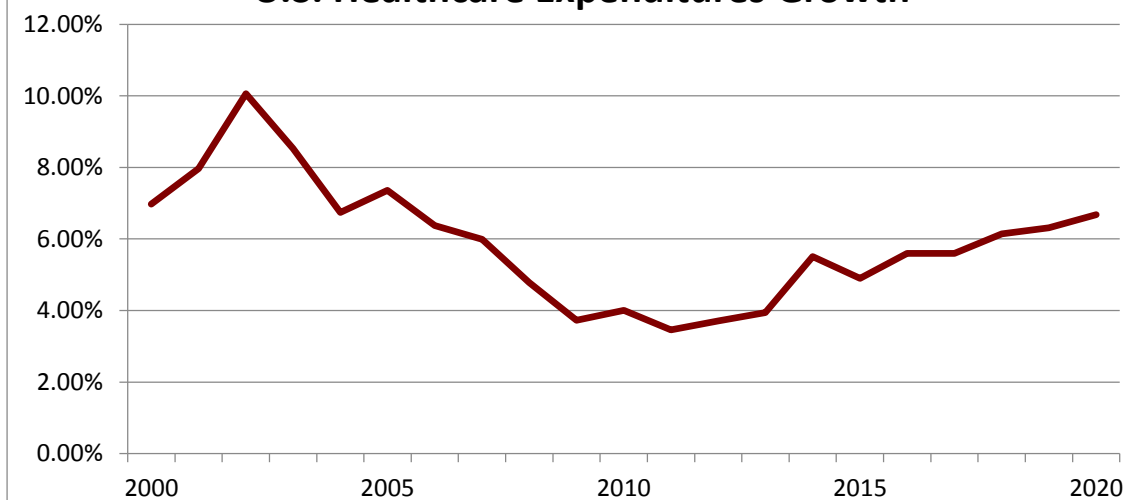


Annual New Cancer Diagnoses Worldwide

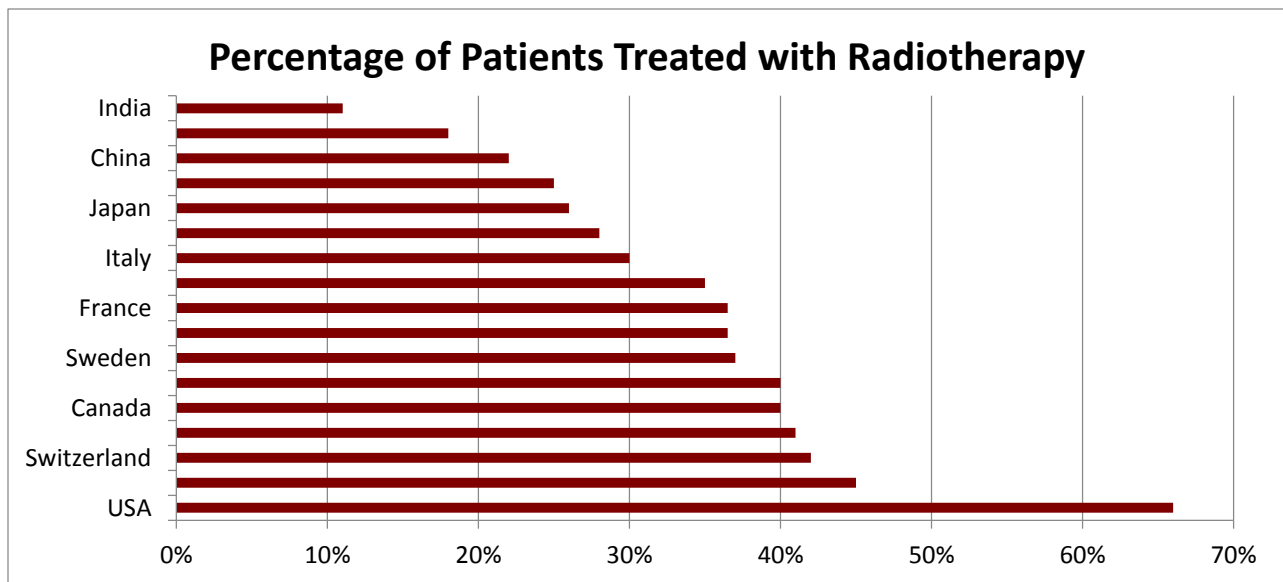


Another important driver for the industry is healthcare expenditures. IBISworld projects healthcare expenditure growth to increase over the next 3-5 years at an average of around 5-6%. This expansion in healthcare spending will come from federal funding of healthcare services, driven by the Affordable Care Act, which has allowed people more access to healthcare. Improving economic conditions are also driving healthcare expenditures. After the recession, many Varian customers had to cut capital expenditure budgets for equipment like radiotherapy machines, but the strengthening economy has increased budgets for clinics, hospitals, and private institutions over the next 3-5 years.

U.S. Healthcare Expenditures Growth



Emerging markets are particularly underequipped to deal with the growing number of cancer patients in these countries. As low to middle income countries gain more access to westernized cancer diagnostic facilities and technologies, cancer diagnoses rates are rising. There is a widening gap between the number of currently installed radiotherapy devices and the number of devices demanded. According to the Journal of Radiation Oncology Biology and Physics in 2014, radiotherapy is required in more than half of new cancer patients, and it is estimated that greater than 9,000 additional treatment machines will be required by 2020 in low and middle income countries. To put that demand in context, Varian has sold 7,500 radiotherapy devices, which means that while Varian has built up majority market share, worldwide penetration is still low. The demand for 80% of those treatment machines will come from emerging market countries. China, India, and Brazil are estimated to require 3,800, 1,200, and 400 additional treatment machines by 2020.



Technological advancements have helped to improve the precision and applicability of radiotherapy, increasing the use of radiotherapy to treat a broader range of cancer cases. Advancements in hardware and software are also allowing for newer, higher standards of care. Proton therapy is the newest innovation in the market for radiotherapy, which allows for more precision in administering radiotherapy and reduces the risk of damaging healthier tissue.

Financial Analysis

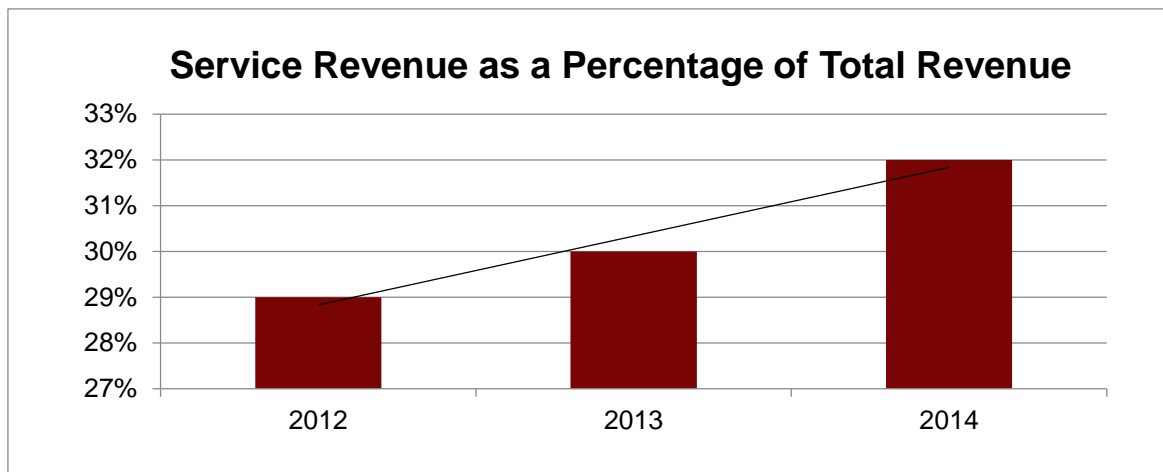
The Company has more than doubled sales in the last decade from \$1.4 million in 2005 to \$3 billion in 2014 at a CAGR of around 5%. In the last year, total revenues increased 3.7% across the Company, and gross margin improved by 11%, as the company worked to cut costs. Revenues in the Oncology Systems segment increased by 4% worldwide, mostly due to an increase in sales of hardware products. Oncology Segment revenues were up 12% in emerging markets and 17% in the Asia Pacific region. Revenues in the Imaging Components segment increased 3% in fiscal 2014, mainly due to an increase in X-ray flat panel products. In the Other category, which includes proton therapy devices, revenue was down 6% due to a decrease in proton therapy product revenues. Management projects an annualized sales growth rate of 5% over the next 5 years.

Gross margin in the Oncology segment decreased by 0.4% in 2014 for several reasons. The decrease was partially due to the 2.3% excise tax on medical devices mandated by the Affordable Care Act, but it was also due to a shift away from product sales in developed markets to sales in emerging markets that caused pricing pressure, as these customers typically demand lower-priced products. The Imaging Component segment gross margin increased by 5%, mainly due to increased flat panel sales, which are higher margin products. We anticipate that gross margins will remain depressed for the next couple years, as the Company caters to a newer customer base and works to become more cost effective with its lower priced products. We don't see this as a cause for concern since Varian has established itself as a "fast follower," which has allowed it to be more cost-effective than competitors and have superior knowledge about the market.

Gross orders, which include all new orders for the period adjusted for revisions to existing orders, in both the Oncology segment and the Imaging Components segment have been growing steadily year over year. Oncology Systems gross orders grew 5% in 2014, and Imaging Components gross orders grew by 8% in 2014. The company has also been growing its backlog, which includes projects that are considered valid but for which revenues have not yet been recognized. Varian grew its backlog by 45% in the last four years from \$2.2 billion in 2010 to \$3.2 billion in 2014. Management anticipates 48-53% of the backlog will be converted to revenue in fiscal 2015.

Backlog				
2010	2011	2012	2013	2014
\$2.2B	\$2.5B	\$2.8B	\$2.9B	\$3.2B

More recently, the company has been growing its service and software business, mainly in its Oncology Segment. In 2012, service represented 36% of revenues for the Oncology Segment, which has since grown to 40% in 2014, and service as a percentage of total revenues for the company has grown from 29% in 2012 to 32% in 2014. This shift will lead to healthier margins, since service gross margins are 55%, compared to 36% for the product segment.

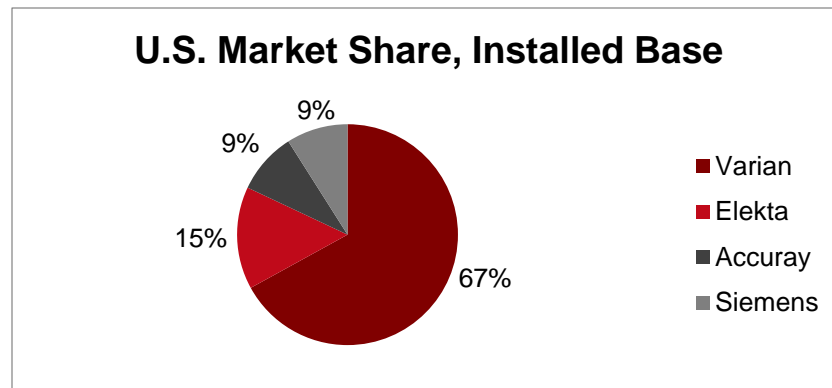


In Q1 of 2015, Varian beat top and bottom line estimates. Total revenues were up 4%. Oncology Systems orders were up 5%, largely driven by 17% growth in the Asia Pacific market and 12% growth in emerging markets. Imaging Components orders were up 34%, which was mainly due to orders for panels that increased by 65%. The company also recognized \$9 million in revenue from the sale of its proton therapy products. The company's backlog increased by a healthy 13%. While earnings were down by \$130 million, this was largely due to an initial increase in expenses due to a restructuring charge, which management projects will increase SG&A by \$12 million in fiscal 2015.

Competition

Varian is the market leader in the radiotherapy market with an untouchable market share of around 67%, in terms of installed based in the United States. It has 40% market share in Asia, 40% in Europe, and 36% in emerging markets.

We believe its strategic partnership with Siemens will allow Varian to capture up to 9% more market share, as Siemens' current installed base is up for reinstallation over the next 5 years.



It trades at a slight discount compared to its main competitor, Elekta, with a P/E of 22.66, compared to 29.96 for Elekta. Its EV/EBITDA is 13.32x, compared to Elekta's 18.65x.

Management & Ownership

Dow R. Wilson was appointed President and CEO of Varian Medical Systems on September 29th, 2012. Wilson joined the company in 2005 and has held various management positions prior to his appointment as CEO. Prior to joining Varian, Wilson worked for General Electric in various management positions for 18 years. Wilson received his MBA from Dartmouth's Tuck School of Business. More than two-thirds of Wilson's salary is from stocks and options, ensuring that his incentives are aligned with those of Varian's shareholders.

Elisha W. Finney was appointed Executive Vice President of Finance and CFO in February 2012. During her 25 years with Varian, Finney held many positions, including Treasurer, Corporate Vice President, and Corporate Senior Vice President. Finney has a BBA in risk management and insurance from the University of Georgia and an MBA from Golden Gate University. More than 50% of Finney's compensation is from stocks and options.

Over 93% of Varian is held by institutions, including the Vanguard Group, State Street, Generation Investment Management, Veritas Investment Management, and Loomis Sayles & Co.

Risks & Mitigates

- 1) Varian is implementing a restructuring program in 2015 that will cause an initial increase in SG&A of around \$12 million. Short-term, this will negatively impact the company's bottom line, but Varian successfully completed a similar program in 2013, and we have accounted for this expected increase in SG&A in our model.
- 2) The company is positioned to benefit from healthcare reform, but there is an element of uncertainty concerning the Affordable Care Act. Almost 50% of all new cancer diagnoses are made in patients ages 62 or older, which is the age at which Americans are able to enroll in Medicare and Medicaid programs, so much of Varian's success is dependent upon whether patients are able to gain access to these programs to reduce the cost of treatment. Federal funding for Medicare and Medicaid has been steadily increasing since 2012 and is projected to grow to 8% by 2020. The other side of the coin is that an increase in Medicare and Medicaid enrollment could decrease the margins for physicians, healthcare agencies, and cancer clinics. Since these entities represent a significant portion of Varian's customers, a decrease in margins for providing oncology care could negatively impact Varian's top and bottom lines.
- 3) In the radiotherapy market, regulation is a determining factor in future revenue growth for products. This is especially a concern in emerging markets, where the technology that Varian is introducing is brand new in many of these markets. We believe that the urgent, growing need for over 9,000 linear accelerators in emerging markets will allow these products to pass regulation and be installed to serve these patients in need, especially since these devices have been used in the US for centuries.

Valuation

Discounted Cash Flow Analysis														
Varian Medical Devices (NYSE: VAR)														
Sector:		Healthcare		Industry:		Radiotherapy Devices		March 10, 2015						

Model Assumptions				Model Assumptions (Projections)											
Product Revenue		8.65%	1.70%	2.58%	1.36%	4%	Oncology Revenue (% YoY Growth)	3%	4%	5%	5%	4%	4%	3%	
Service Revenue		15.3%	28.2%	10.5%	8.9%	16%	Imaging Revenue (% YoY Growth)	11%	3%	3%	2%	2%	2%	2%	
Revenue	10%	8%	5%	4%	7%	Other Revenue (% YoY Growth)	30%	6%	2%	2%	3%	3%	4%	3%	
Cost of Product Rev (% of Product Rev)	58%	58%	63%	63%	63%	61%	Revenue (% YoY Growth)	5%	5%	5%	5%	4%	4%	4%	
Service Revenue COGS (% of Service Rev)	48%	43%	43%	45%	47%	57%	COGS (% of Revenue)	58%	58%	58%	58%	58%	58%	58%	
COGS	56%	56%	57%	58%	57%	57%	SG&A Expenses (% of Revenue)	15%	15%	20%	20%	18%	16%	16%	
SG&A Expenses	14%	15%	15%	15%	15%	15%	R&D Expenses (% of Revenue)	7%	8%	10%	10%	11%	11%	12%	
R&D Expenses	7%	7%	7%	7%	8%	7%	OpExp (% of Revenue)	22%	24%	30%	30%	29%	27%	28%	
OpExp	21%	21%	21%	22%	24%	22%	Depreciation & Amortization	2%	2%	2%	2%	2%	2%	2%	
Depreciation & Amortization	2%	2%	2%	2%	2%	2%	Capital Expenditures (% of Revenue)	3%	3%	3%	3%	3%	2%	2%	
Capital Expenditures (% of Revenue)	3%	3%	3%	3%	3%	3%	Working Capital (% of Revenue)	15%	15%	15%	15%	15%	15%	15%	
Working Capital (% of Revenue)	12%	14%	14%	16%	16%	14%	Tax Rate (% of EBIT)	29%	30%	31%	31%	31%	31%	31%	
Tax Rate (% of EBIT)	31%	31%	28%	29%	30%	30%									

(\$ in thousands, fiscal year end Dec. 31)		
Cost of Equity (CAPM)		7.59%
Risk Free Rate (10 yr Treasury Rate)		2.22%
Market Return Rate		10.0%
Beta		0.69
Cost of Debt		1.28%
Revolving Line of Credit		
Term Loan	\$ 425,000	1.28%
Bonds	\$ -	0.00%
WACC		7.21%
Current Shares Outstanding		100,072
Current Price		87.48
Total Debt		525,000.0
Market Value of Equity		8,754,281.1
Tax Rate		31.0%
Terminal Value		8,703,372
Last year projected FCF		355,642
LT CF Growth Rate		3.0%
WACC Discount Rate		7.21%
Gordon Growth Method		
WACC		7.21%
SUM FCF		1,646,149
Terminal Value		8,703,372
Enterprise Value		10,349,521
Net Debt		-324,275
Equity Value		10,673,796
Shares Outstanding		100,072
Share Price	\$	106.66
Upside		21.9%
Total NPV		10,349,521
EV/2019 EBITDA		11.80037966