

# **ROBO Global**

Robotics & Automation Index

## **Holdings Review**

*As of September 30th, 2015*



**ROBO**  
**GLOBAL**

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# TECHNOLOGY

## Actuation

Actuation is the means by which machines interact with the physical world. For human beings, this mainly refers to our limbs, and in particular, our hands. However, machines are not limited to manipulation. Almost anything that has an effect on the physical world can be made into an actuator. Actuation techniques include electric, hydraulic (compressed fluid), mechanical, and pneumatic (compressed air).

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## Computing

The path from sensing, to processing, to actuation, requires computation. It is analogous to our brain, and is what allows the processing of information to produce actuation. Computing can vary from embedded systems smaller than a fingernail to server-farms implementing sophisticated algorithms.

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## Integration

An autonomous system is made up of many components (sensors, actuators, and computational units), which can be distributed over large spaces. Integration consists of architecting a system – figuring out how to put all of these components together – to achieve the desired objective in a robust, high performance, and cost-efficient way.

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## Processing

Autonomous systems must make decisions at various levels, ranging from basic motion control, to determining the state of the environment they are operating in, to optimally planning actions. Part of this processing is thus making sense of the information received from sensors, but also planning actions in order to achieve a desired objective.

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## Sensing

In order for a system to exhibit autonomy, it must be able to sense its environment, in addition to determining its own internal state. For human beings, these are called exteroception and proprioception. Sensing is important for the same reasons that our exteroceptive senses (sight, sound, etc.), and our proprioceptive senses (ability to know where our limbs are and what they are doing without directly observing them) are important for human beings. For robotic systems, however, we are not limited to the standard senses. Almost anything that can be measured can be made into a sensor.

## APPLICATIONS

### 3D Printing

Traditionally, things are built either by assembling separate parts, or by removing material from a larger work-piece. 3D printing, also called additive manufacturing, adds yet another capability by depositing different types of materials where they are needed. One of its main benefits is the potential for customization that is not economically feasible with traditional techniques.

### Agriculture

Feeding and sustaining the world continues to be one of our most important economic activities. A new generation of autonomous systems is bringing precision and the elimination of rote labor to this domain. For example, precision agriculture offers to greatly reduce costs and our environmental footprint by applying water and fertilizer on an as-needed basis.

### Consumer Products

From interactive robots for entertainment to automating household chores, consumer companies work to make everyday lives easier and more enjoyable. The Internet of Things promises to usher in a new era of interconnectivity. By communicating through the existing internet infrastructure, devices will no longer be isolated islands of limited capabilities. This impact will be particularly pronounced for these types of consumer products, which need to be inexpensive for wide adoption. Through the internet, robotics and automation will finally become broadly affordable to individuals.

### Energy

Exploration, extraction, and maintaining the energy infrastructure require extensive and growing resources. Robotics and automation continues to expand from structured environments, such as warehouses and factories, to unstructured ones, such as outdoors, underground, and underwater. The energy sector will reap the rewards of this transition with lower operational costs.

### Healthcare

As global healthcare costs continue to rise, robotics and automation is poised to provide a countering force to this trend. Through rehabilitation, diagnostics, exoskeletons and elderly care, using robotics and autonomous systems promises to drastically reduce costs, while improving quality of life. In addition, robotics and automation can transcend cost-cutting by using of robots for difficult surgeries and neurological treatments that were previously unfeasible.

### Logistics Automation

The manufacturing of items is incomplete without the material handling and distribution channels that bring the objects to their intended users. The many economic advantages to speedy and error-free distribution, such as operating with low-inventory and being responsive to customer demands, is a significant growth area for robotics and automation, and is continually reducing the costs for end-users, both businesses and consumers.

### Manufacturing

Broadly speaking, this is the main way in which companies take raw materials through a manufacturing process to create products. It is also the earliest successful application for robotics and automation – for example, automobile assembly - and continues to be one of its largest growth areas.

### Surveillance / Security

Removing people from harm's way has always been a main driver for robotics research. Up until recently, it has been difficult for machines to duplicate a human's flexibility and cognitive skills. However, with today's technologies, unmanned aircraft and ground vehicles are now capable of detecting hazardous materials, disposing of bombs, operating in space and performing critical national defense functions (surveillance).

# **TECHNOLOGY**

# Actuation



**ROBO  
GLOBAL**

Ticker	1590	Currency	USD	Date	9/30/15
<b>AirTAC International Group</b>					
Headquarters	Taiwan	Share Price	5.26		
Website	<a href="http://airtac.net">airtac.net</a>	52 Week Range	3.85-351-8.35-143		
Exchange	TSEC	Market Cap (\$B)	0.942		
Industry (GICS)	Industrials	Enterprise Value (\$B)	1.106		
ROBO Global Classification:		YTD Change	(36.30%)		
BW or NBW	Non-Bellwether	PE	19.74		
Tier One	Technology	P/S	3.66		
Tier Two	Actuation	Dividend Yield	2.63%		

### Business Description:

AirTAC International Group manufactures and supplies pneumatic equipment worldwide. It offers control components, such as solenoid, flow control, pneumatic control, and manually/mechanically actuated valves and other valves, as well as ordinary coils and manifolds; actuators, including standard, mini, and compact cylinders, as well as cylinder accessories; and accessories comprising oil buffers, joints, PU hoses, PA tubes, anti-flaming tubes, muffler and other products, and main-pipe filters, as well as air preparation products and accessories. The company also provides technical support services. Its products are used in automotive, machinery manufacturing, metallurgy, electronics, environmental protection, lighting and textile, ceramics, medical equipment, food, and packaging industries. AirTAC International Group was founded in 1988 and is headquartered in Taipei City, Taiwan.

### Robotics & Automation Description:

AirTAC manufactures control components and pneumatic equipment used in the production of robotics. Over 90% of these parts are manufactured in-house. AirTAC holds an approximate 10%-15% market share in China for pneumatic components. Its pneumatic actuators represent the largest portion of its revenue, which has been roughly 40% the last few years.

Fundamentals	2010	2011	2012	2013	2014	1590 2014 Revenue by Geography																					
Sales	\$147	\$186	\$196	\$244	\$264																						
YoY % Change	50%	31%	1%	28%	15%																						
EBITDA	\$53	\$67	\$62	\$88	\$93																						
YoY % Change	54%	28%	2%	35%	14%																						
Net Income	\$36	\$45	\$37	\$57	\$56																						
YoY % Change	126%	30%	(21%)	60%	4%																						
Earnings Per Share	\$0.24	\$0.26	\$0.22	\$0.34	\$0.31																						
YoY % Change	124%	16%	(21%)	58%	(2%)																						
EBITDA Margin %	36%	36%	32%	36%	35%																						
Net % Margin	24%	24%	19%	23%	21%																						
<table> <thead> <tr> <th>Top 5 Comps</th> <th>PE</th> <th>PB</th> <th>P/S</th> <th>EV/EBITDA</th> <th>Div Yield %</th> <th>Analyst Recommendations</th> </tr> </thead> <tbody> <tr> <td>Hiwin Technologies Corp.</td> <td>19.06</td> <td>3.65</td> <td>2.86</td> <td>13.93</td> <td>1.78</td> <td> </td> </tr> <tr> <td>AirTAC International Group</td> <td>19.74</td> <td>3.21</td> <td>3.66</td> <td>13.35</td> <td>2.63</td> <td></td> </tr> </tbody> </table>							Top 5 Comps	PE	PB	P/S	EV/EBITDA	Div Yield %	Analyst Recommendations	Hiwin Technologies Corp.	19.06	3.65	2.86	13.93	1.78		AirTAC International Group	19.74	3.21	3.66	13.35	2.63	
Top 5 Comps	PE	PB	P/S	EV/EBITDA	Div Yield %	Analyst Recommendations																					
Hiwin Technologies Corp.	19.06	3.65	2.86	13.93	1.78																						
AirTAC International Group	19.74	3.21	3.66	13.35	2.63																						



**ROBO  
GLOBAL**

Ticker	2308	Currency	USD	Date	9/30/15
<b>Delta Electronics Inc.</b>					
Headquarters	Taiwan	Share Price	4.67		
Website	<a href="http://delta.com.tw">delta.com.tw</a>	52 Week Range	3.89902-6.49331		
Exchange	TSEC	Market Cap (\$B)	11.39		
Industry (GICS)	Information Technology	Enterprise Value (\$B)	10.84		
ROBO Global Classification:		YTD Change	(18.30%)		
BW or NBW	Non-Bellwether	PE	20.45		
Tier One	Technology	P/S	1.96		
Tier Two	Actuation	Dividend Yield	3.90%		

### Business Description:

Delta Electronics, Inc. is engaged in the research and development, design, manufacture, and sale of electronic control systems, industrial automation, digital display, communication, and consumer electronic products. Its Power Electronics segment offers server, Netcom, workstation, desktop, notebook, LED, display, gaming, industrial, electrical equipment controllers, LCD, and medical power supplies; electronic lighting ballasts; EMI filters; precision motors; fans and fans modules; blowers; mini wind energy shell parts; heat exchangers; optical transceiver, cooling, Bluetooth, and touch panel modules; and RF/wireless, magnetic, networking components, etc. The company's Energy Management segment provides telecom and industrial power systems, uninterruptible power supplies, precision cooling products, photovoltaic inverters, converters for wind energy, medium voltage drives, electric vehicle charging stations, programmable logic controllers, AC motor drives, AC servo motors and drives, brushless DC motors and drives, human machine interfaces, temperature controllers, encoders, machine vision system, computed numerically controllers, etc. Its Smart Green Life segment offers professional digital, home cinema, educational use, portable digital, and game use projectors; digital electronic media; video conference projection systems; digital signage displays; digital display walls; video system integrated solutions; rent service for projection; professional LED lamps; LED indoor lights, components, and modules; new light engines; LED driver modules and optical components; LED control systems; design and construction of lighting application; green energy integration design and architecture; development automatic speech outbound; interactive voice response; voice keyword spotting solution; and speech analysis automation, as well as voice biometrics with language technology, etc. The company was founded in 1971 and is headquartered in Taipei, Taiwan.

### Robotics & Automation Description:

Delta Electronics develops and manufactures industrial robot components and control systems used in automated assembly lines. Delta's industrial automation solutions are machine, process, and factory automation based. Its factory automated solutions include powerful AC motor drives, AC servo drives, programmable logic controllers, human machine interfaces, machine vision systems, and temperature controllers. Its machine automated solutions improve precision and quality in the areas of packaging, machine tools, textiles, elevators, and electronics. Its process automation solutions focus on distribution control and system stability and are most frequently used in water treatment facilities. Delta also has building automation solutions with a focus on energy management.

Fundamentals	2010	2011	2012	2013	2014	2308 2014 Revenue by Geography																																										
Sales	\$5,875	\$5,364	\$5,908	\$5,926	\$6,006																																											
YoY % Change	38%	(5%)	6%	3%	8%																																											
EBITDA	\$777	\$650	\$849	\$932	\$959																																											
YoY % Change	37%	(5%)	22%	7%	14%																																											
Net Income	\$540	\$363	\$508	\$595	\$652																																											
YoY % Change	35%	(30%)	35%	20%	16%																																											
Earnings Per Share	\$0.23	\$0.15	\$0.21	\$0.25	\$0.27																																											
YoY % Change	15%	(17%)	32%	0%	17%																																											
EBITDA Margin %	13%	12%	14%	16%	16%																																											
Net % Margin	9%	7%	9%	10%	11%																																											
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Top 5 Comps	PE	PB	P/S	EV/EBITDA	Div Yield %	Analyst Recommendations																																										
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Samsung Electro-Mechanics Co. Ltd.	7.48	1.07	0.65	7.83	1.17	Sell 1																																										
Delta Electronics Inc.	20.45	4.12	1.96	12.05	3.90																																											



Ticker 6324

Currency USD

Date 9/30/15

### Harmonic Drive Systems Inc.

Headquarters	Japan	Share Price	14.23
Website	<a href="http://hds.co.jp">hds.co.jp</a>	52 Week Range	10.85731-23.5019
Exchange	JASDAQ	Market Cap (\$B)	1.303
Industry (GICS)	Industrials	Enterprise Value (\$B)	1.224
ROBO Global Classification:		YTD Change	(3.84%)
BW or NBW	Non-Bellwether	PE	29.05
Tier One	Technology	P/S	5.78
Tier Two	Actuation	Dividend Yield	1.06%



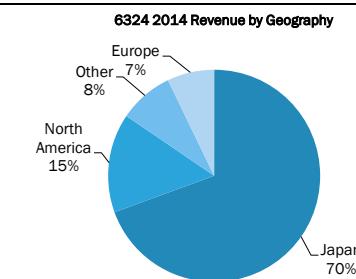
### Business Description:

Harmonic Drive Systems Inc. manufactures and sells mechatronics products and speed reducers. It offers HarmonicDrive that is used for precise motion control; HarmonicPlanetary planetary gear speed reducers; DirectDrive Motors, which are used in semiconductor manufacturing systems, flat panel display manufacturing systems, and optical machines, as well as measurement analytical and test systems; and rotary actuators, including AC and DC servo actuators. The company also provides Servo Driver an AC Servo Driver for open field network; Harmonic Linear actuators that are used in inspection/measuring equipment, optical equipment, semiconductor, and LCD manufacturing systems; BEAM SERVO optical galvano scanner, which provides scanning, random access, and other optimal scanning operations; and Harmonicsyn micro encoders. In addition, it produces cross roller bearings; and sells technical services mechatronics products and reduction gears. Harmonic Drive Systems Inc. was founded in 1970 and is headquartered in Tokyo, Japan.

### Robotics & Automation Description:

Harmonic manufactures speed reducers used in industrial robots, service robots, semiconductor manufacturing equipment, and other precision instruments. HarmonicDrive is a speed reducer developed to take advantage of elasticity in metal and is composed of just 3 components: a wave generator, a flex spline, and a circular spline. It has reduction ratios between 1/30 and 1/320 and can provide the same amount of torque as comparable speed reducers, despite being half as big. Harmonic is also a component and sensor maker. Many of its sensors, rotary actuators, and drives are used in humanoid, service, and industrial robots with articulated or rotary joints, where Harmonic's various bearings fit onto servo drives used in those robots. Sales of robotics-based application products have historically represented roughly 1/3 of the firm's total revenue.

Fundamentals	2011	2012	2013	2014	2015
Sales	\$266	\$245	\$192	\$205	\$216
YoY % Change	82%	(8%)	(10%)	16%	23%
EBITDA	\$77	\$63	\$48	\$57	\$70
YoY % Change	119%	(16%)	(11%)	24%	33%
Net Income	\$36	\$26	\$21	\$29	\$40
YoY % Change	492%	(28%)	(8%)	53%	61%
Earnings Per Share	\$0.39	\$0.28	\$0.23	\$0.32	\$0.44
YoY % Change	492%	(28%)	(8%)	53%	61%
EBITDA Margin %	29%	26%	25%	28%	32%
Net % Margin	13%	11%	11%	14%	19%



Top 5 Comps	PE	PB	P/S	EV/EBITDA	Div Yield %	Analyst Recommendations
Union Tool Co.	16.05	1.00	2.52	6.59	2.29	Buy 1
Tianma Bearing Group Co., Ltd	163.25	1.67	3.40	47.34	0.30	Hold 3
Nissei Plastic Industrial Co., Ltd.	6.73	0.67	0.53	4.20	1.87	
Punch Industry Co., Ltd.	6.49	0.65	0.23	4.13	2.98	
Changzhou Nrb Corporation	63.96	4.28	6.52	37.62	0.72	Sell 0
Harmonic Drive Systems Inc.	29.05	4.32	5.78	15.61	1.06	0 1 2 3 4 No. of analyst recommendations



**ROBO  
GLOBAL**

Ticker	2049	Currency	USD	Date	9/30/15
<b>Hiwin Technologies Corp.</b>					
Headquarters	Taiwan	Share Price	5.31		
Website	<a href="http://hiwin.com.tw">hiwin.com.tw</a>	52 Week Range	4.30865-8.08644		
Exchange	TSEC	Market Cap (\$B)	1.429		
Industry (GICS)	Industrials	Enterprise Value (\$B)	1.778		
ROBO Global Classification:		YTD Change	(31.98%)		
BW or NBW	Bellwether	PE	19.06		
Tier One	Technology	P/S	2.86		
Tier Two	Actuation	Dividend Yield	1.78%		

### Business Description:

Hiwin Technologies Corp. manufactures and sells a range of motion control products under the HIWIN brand name worldwide. It offers ball screws, linear guideways, bearings, robots, linear motor systems, linear actuators, and positioning measurement systems. The company was founded in 1989 and is headquartered in Taichung, Taiwan.

### Robotics & Automation Description:

Hiwin manufactures components used in single-axis industrial robots such as ball screws, linear motors, and linear guideways. Hiwin is one of the few ball-screw manufacturers that can consistently produce at the highest accuracy levels recognized by ISO and DIN standards. The Hiwin KK robot leverages Hiwin's state-of-the-art ball-screw and guideway technology to gain better design accuracy and optimization. The KS series robots are built with a dust proof strip making them ideal for use in clean rooms, semi-conductor design, and various medical applications. The KA series is a lighter weight version of the KK series that is mostly used for industrial automation.

Fundamentals	2010	2011	2012	2013	2014	2049 2014 Revenue by Geography
Sales	\$325	\$522	\$426	\$416	\$475	
YoY % Change	117%	67%	(22%)	1%	21%	
EBITDA	\$92	\$173	\$128	\$115	\$124	
YoY % Change	164%	79%	(27%)	(3%)	26%	
Net Income	\$58	\$126	\$69	\$68	\$76	
YoY % Change	505%	126%	(47%)	1%	19%	
Earnings Per Share	\$0.22	\$0.47	\$0.26	\$0.25	\$0.28	
YoY % Change	477%	125%	(47%)	1%	19%	
EBITDA Margin %	28%	33%	30%	28%	26%	
Net % Margin	18%	24%	16%	16%	16%	
Top 5 Comps	PE	PB	P/S	EV/EBITDA	Div Yield %	Analyst Recommendations
AirTAC International Group	19.74	3.21	3.66	13.35	2.63	Buy 5
Chun Yu Works & Co., Ltd.	24.19	1.04	0.41	13.00	3.60	Hold 7
Tycoons Group Enterprise Co., Ltd.	NM	0.44	0.25	35.53	0.00	
Nitto Seiko Co., Ltd.	9.49	0.49	0.43	3.74	3.05	
Kitagawa Iron Works Co., Ltd.	6.75	0.87	0.47	4.79	1.84	Sell 9
Hiwin Technologies Corp.	<b>19.06</b>	<b>3.65</b>	<b>2.86</b>	<b>13.93</b>	<b>1.78</b>	0 2 4 6 8 10 No. of analyst recommendations

\*Fundamental data provided by S&P Capital IQ



**ROBO  
GLOBAL**

Ticker	IPGP	Currency	USD	Date	9/30/15
<b>IPG Photonics Corporation</b>					
Headquarters	United States	Share Price	75.97		
Website	<a href="http://IPGphotonics.com">IPGphotonics.com</a>	52 Week Range	60.75-102.49		
Exchange	NasdaqGS	Market Cap (\$B)	4.005		
Industry (GICS)	Information Technology	Enterprise Value (\$B)	3.457		
ROBO Global Classification:		YTD Change	1.40%		
BW or NBW	Non-Bellwether	PE	17.55		
Tier One	Technology	P/S	4.73		
Tier Two	Actuation	Dividend Yield	0.00%		

### Business Description:

IPG Photonics Corporation develops and manufactures a range of high-performance fiber lasers, fiber amplifiers, and diode lasers used in various applications, primarily in materials processing worldwide. The company's laser products include low, medium, and high output power lasers; fiber pigtailed packaged diodes and fiber coupled direct diode laser systems; high-energy pulsed lasers, multi-wavelength and tunable lasers, and single-polarization and single-frequency lasers; laser diode chips and packaged laser diodes; and high power optical fiber delivery cables, fiber couplers, beam switches, chillers, scanners, and other accessories. It also provides erbium-doped fiber and Raman amplifiers, and integrated communications systems, which are deployed in broadband networks, such as fiber to the home, fiber to the curb, passive optical networks, and dense wavelength division multiplexing networks; ytterbium and thulium specialty fiber amplifiers and broadband light sources; and single-frequency, linearly polarized, and polarization-maintaining versions of its amplifier products. In addition, the company offers integrated laser systems, industrial grade UV excimer, and diode pumped solid state and picosecond laser micromachining systems; specialized fiber laser systems for material processing applications; and welding seam stepper and picker, a fiber laser welding tool for use in automotive assembly, appliances, rail cars, and other sheet metal fabrication. Its lasers and amplifiers are also used in advanced, communications, and medical applications. The company markets its products to original equipment manufacturers, system integrators, and end users through direct sales force, as well as through agreements with independent sales representatives and distributors. IPG Photonics Corporation was founded in 1990 and is headquartered in Oxford, Massachusetts.

### Robotics & Automation Description:

IPG Photonics specializes in the production of lasers used in a variety of applications spanning the materials processing market. These applications include, cutting, welding, marking, engraving, micro-processing, fine processing, surface treatment, drilling, soldering, annealing, hardening, additive manufacturing and laser assisted machining. The lasers are integrated into multi-axis cutting systems, robots, and scanners that can be programmed to process many types of materials including but not limited to steel, aluminum, brass, copper, glass, ceramic, and plastics. The lasers' low cost, flexibility of use, and high speed are increasing its adoption in processes such as 3-dimensional welding in which the beam is positioned by a robot-guided scanner.

Fundamentals	2010	2011	2012	2013	2014	IPGP 2014 Revenue by Geography																																																	
Sales	\$299	\$474	\$563	\$648	\$770																																																		
YoY % Change	61%	59%	19%	15%	19%																																																		
EBITDA	\$101	\$197	\$236	\$252	\$313																																																		
YoY % Change	128%	76%	18%	12%	23%																																																		
Net Income	\$54	\$118	\$145	\$156	\$200																																																		
YoY % Change	896%	118%	23%	7%	29%																																																		
Earnings Per Share	\$1.16	\$2.49	\$2.87	\$3.02	\$3.85																																																		
YoY % Change	849%	113%	17%	6%	28%																																																		
EBITDA Margin %	34%	41%	42%	39%	41%																																																		
Net % Margin	18%	25%	26%	24%	26%																																																		
<table> <thead> <tr> <th>Top 5 Comps</th> <th>PE</th> <th>PB</th> <th>P/S</th> <th>EV/EBITDA</th> <th>Div Yield %</th> <th>Analyst Recommendations</th> </tr> </thead> <tbody> <tr> <td>Coherent Inc.</td> <td>20.12</td> <td>1.67</td> <td>1.70</td> <td>8.20</td> <td>0.00</td> <td>Buy</td> </tr> <tr> <td>Newport Corp.</td> <td>16.97</td> <td>1.51</td> <td>0.90</td> <td>7.17</td> <td>0.00</td> <td>Hold</td> </tr> <tr> <td>Rofin-Sinar Technologies Inc.</td> <td>19.06</td> <td>1.37</td> <td>1.39</td> <td>8.74</td> <td>0.00</td> <td></td> </tr> <tr> <td>II-VI Incorporated</td> <td>15.31</td> <td>1.35</td> <td>1.33</td> <td>7.82</td> <td>0.00</td> <td></td> </tr> <tr> <td>Han's Laser Technology Industry Group Co., Ltd.</td> <td>26.36</td> <td>4.85</td> <td>3.54</td> <td>21.10</td> <td>1.03</td> <td>Sell</td> </tr> <tr> <td>IPG Photonics Corporation</td> <td>17.55</td> <td>3.45</td> <td>4.73</td> <td>9.78</td> <td>0.00</td> <td></td> </tr> </tbody> </table>							Top 5 Comps	PE	PB	P/S	EV/EBITDA	Div Yield %	Analyst Recommendations	Coherent Inc.	20.12	1.67	1.70	8.20	0.00	Buy	Newport Corp.	16.97	1.51	0.90	7.17	0.00	Hold	Rofin-Sinar Technologies Inc.	19.06	1.37	1.39	8.74	0.00		II-VI Incorporated	15.31	1.35	1.33	7.82	0.00		Han's Laser Technology Industry Group Co., Ltd.	26.36	4.85	3.54	21.10	1.03	Sell	IPG Photonics Corporation	17.55	3.45	4.73	9.78	0.00	
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Ticker JEN      Currency USD      Date 9/30/15

### Jenoptik AG

<b>Headquarters</b>	Germany	<b>Share Price</b>	14.14
<b>Website</b>	<a href="http://jenoptik.com">jenoptik.com</a>	<b>52 Week Range</b>	8.97383-15.05496
<b>Exchange</b>	XTRA	<b>Market Cap (\$B)</b>	0.809
<b>Industry (GICS)</b>	Information Technology	<b>Enterprise Value (\$B)</b>	0.937
<b>ROBO Global Classification:</b>		<b>YTD Change</b>	22.24%
<b>BW or NBW</b>	Non-Bellwether	<b>PE</b>	17.93
<b>Tier One</b>	Technology	<b>P/S</b>	1.16
<b>Tier Two</b>	Actuation	<b>Dividend Yield</b>	1.58%



### Business Description:

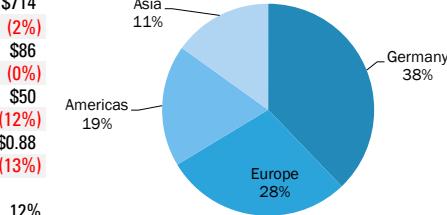
JENOPTIK Aktiengesellschaft operates as a integrated photonics company in Germany and internationally. Its Lasers & Material Processing division offers semiconductor materials, diode lasers, solid-state and fiber lasers, laser machines, and exhausts cleaning systems, as well as integrates these components or systems into laser machines for laser material processing. The company's Optical Systems division provides polymer optics, conventional optics, micro optics, optoelectronic systems, and digital imaging products; and develops and produces integrated optical modules and systems. Its Industrial Metrology division operates as a manufacturer and system provider of high-precision, tactile, and nontactile production metrology. This division offers solutions for a range of measurement tasks, such as testing surfaces, form, and determining dimensional tolerances; and consulting, training, and services, including long-term maintenance contracts. The company's Traffic Solutions division develops, produces, and sells traffic solutions for speed enforcement, red light enforcement, section speed control, and traffic violation processing; and number plate recognition systems, as well as provides traffic services. This division also provides service, support, and training for traffic enforcement; and fact book traffic solutions, as well as publishes professional traffic industry magazines for traffic enforcement. Its Defense & Civil Systems division offers energy systems, optical sensor systems, stabilization systems, aviation subsystems, and radomes and composites for aerospace, security, defense, and transportation industries. The company was founded in 1846 and is headquartered in Jena, Germany.

### Robotics & Automation Description:

Jenoptik manufactures sensors and vision systems used in factory robots. Optical sensors are used; for example, in safety light curtains to avoid accidents. The Hommel-Etamic IPS100 internal test sensor provides for automatic inspection of bore internal surfaces. It checks for and identifies faults such as scratches, cavities, or porosities in cylindrical bores. The Asphero5 process enables fast (~30 minutes) and error free production of high-precision Aspheric (non-spherical) lenses, which used to take days, was manually intensive, and often produced many lenses that had to be thrown out. Its lasers, such as the JENOPTIK-VOTAN® BIM, utilize robotic technology for highly precise (+/- 0.05mm) 3D cutting of metals and plastics. Jenoptik thermographic cameras can automatically detect temperature variations as little as 0.1 degrees Celsius as well as conduct quick, non-contact measurement and visualization of 2D temperature distributions in real-time. Jenoptik also produces robotic SmartCameras for automated traffic solutions such as automatic number plate recognition and red light violations.

Fundamentals	2010	2011	2012	2013	2014
Sales	\$642	\$706	\$771	\$827	\$714
YoY % Change	8%	13%	8%	3%	(2%)
EBITDA	\$74	\$98	\$101	\$97	\$86
YoY % Change	24%	22%	11%	1%	(0%)
Net Income	\$49	\$46	\$66	\$65	\$50
YoY % Change	0%	(3%)	42%	(6%)	(12%)
Earnings Per Share	\$0.87	\$0.80	\$1.16	\$1.14	\$0.88
YoY % Change	0%	259%	36%	(3%)	(13%)
EBITDA Margin %	12%	14%	13%	12%	12%
Net % Margin	8%	7%	9%	8%	7%

JEN 2014 Revenue by Geography



Top 5 Comps	PE	PB	P/S	EV/EBITDA	Div Yield %	Analyst Recommendations
Rofin-Sinar Technologies Inc.	19.06	1.37	1.39	8.74	0.00	Buy 8
Coherent Inc.	20.12	1.67	1.70	8.20	0.00	Hold 5
Newport Corp.	16.97	1.51	0.90	7.17	0.00	
LPKF Laser & Electronics AG	39.70	2.89	1.51	21.88	1.44	
Wincor Nixdorf Aktiengesellschaft	15.84	2.53	0.43	8.82	4.99	Sell 0
Jenoptik AG	17.93	1.77	1.16	10.96	1.58	0 to 10 No. of analyst recommendations



**ROBO  
GLOBAL**

Ticker	179	Currency	USD	Date	9/30/15
<b>Johnson Electric Holdings Ltd.</b>					
Headquarters	Hong Kong	Share Price	3.30		
Website	<a href="http://johnsonelectric.com">johnsonelectric.com</a>	52 Week Range	2.929-3.89028		
Exchange	SEHK	Market Cap (\$B)	2.839		
Industry (GICS)	Industrials	Enterprise Value (\$B)	2.340		
ROBO Global Classification:		YTD Change	(10.51%)		
BW or NBW	Non-Bellwether	PE	13.96		
Tier One	Technology	P/S	1.35		
Tier Two	Actuation	Dividend Yield	1.87%		

### Business Description:

Johnson Electric Holdings Limited, an investment holding company, researches and develops, manufactures, licenses, and sells motion products, control systems, and flexible interconnects in Europe, the People's Republic of China, North America, Asia, South America, and internationally. It provides motion products, including brushless, DC, AC, stepper, piezo, and gear motors; and solenoids, piezo subsystems, starters, pumps, blowers, valves, gearboxes, automotive actuators, haptic motion products, and piezo stages. The company also offers switches and relays comprising automotive switches and subsystems, micro switches, manually operated switches, panel mounted switches, and smart meter relays, as well as energy saving automatic shut off switches. In addition, it provides flex circuits, such as security circuits, electromagnetic interference shielded flexible circuits, flexible printed circuits – copper conductors, flexible printed circuits – printed electronics, and flat flexible cables; and microelectronics. Further, the company is involved in the property holding activities. It serves a range of industries, including automotive, building automation and security, business machines, defense and aerospace, food and beverage, home technologies, HVAC, industrial equipment, medical devices, personal care, power equipment, and power tools. The company was founded in 1959 and is headquartered in Shatin, Hong Kong.

### Robotics & Automation Description:

Johnson Electric Holdings manufactures a wide range of robotics components for robots used in healthcare, home care, and manufacturing. For example, a sealed power switch is used in robotic lawnmowers that can perform in all weather conditions (even while submerged in water). Custom Traction Gearmotors are used to reduce noise output from robotic lawnmowers. Using ceramic motors and non-magnetic actuators from Johnson Medtech's Nanomotion, the neuroArm allows surgeons to conduct microsurgical operations in the brain while the patient is in an MRI. Johnson also provides custom motion and flexible interconnect solutions for semiconductor automation where high speed robotic processing is required for wafer handling.

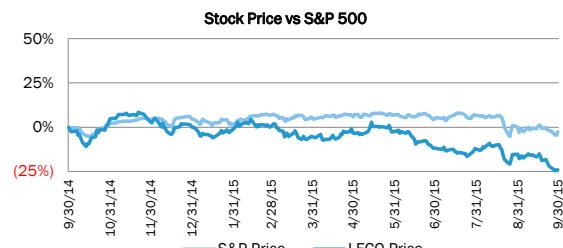
Fundamentals	2011	2012	2013	2014	2015	179 2015 Revenue by Geography																																																	
Sales	\$2,104	\$2,141	\$2,060	\$2,098	\$2,136																																																		
YoY % Change	21%	2%	(4%)	2%	2%																																																		
EBITDA	\$301	\$302	\$274	\$316	\$318																																																		
YoY % Change	20%	1%	(1%)	7%	2%																																																		
Net Income	\$182	\$187	\$191	\$208	\$211																																																		
YoY % Change	136%	3%	2%	9%	1%																																																		
Earnings Per Share	\$0.20	\$0.21	\$0.21	\$0.23	\$0.24																																																		
YoY % Change	136%	4%	3%	9%	2%																																																		
EBITDA Margin %	14%	14%	13%	15%	15%																																																		
Net % Margin	9%	9%	9%	10%	10%																																																		
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Top 5 Comps	PE	PB	P/S	EV/EBITDA	Div Yield %	Analyst Recommendations																																																	
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						0 1 2 3 4 No. of analyst recommendations																																																	



Ticker LECO      Currency USD      Date 9/30/15

### Lincoln Electric Holdings Inc.

Headquarters	United States	Share Price	52.43
Website	<a href="http://lincolnelectric.com">lincolnelectric.com</a>	52 Week Range	52-75.485
Exchange	NasdaqGS	Market Cap (\$B)	3.922
Industry (GICS)	Industrials	Enterprise Value (\$B)	3.824
ROBO Global Classification:		YTD Change	(24.11%)
BW or NBW	Bellwether	PE	15.68
Tier One	Technology	P/S	1.48
Tier Two	Actuation	Dividend Yield	2.21%



### Business Description:

Lincoln Electric Holdings, Inc., through its subsidiaries, designs, manufactures, and sells welding, cutting, and brazing products in the United States, China, and Internationally. The company's welding products comprise arc welding power sources, wire feeding systems, robotic welding packages, fume extraction equipment, consumable electrodes, and fluxes. It also offers computer numeric controlled plasma and oxy-fuel cutting systems, and regulators and torches used in oxy-fuel welding, cutting, and brazing; and consumables used in the brazing and soldering alloys market. The company serves general metal fabrication, power generation and process industry, structural steel construction, heavy equipment fabrication, shipbuilding, automotive, pipe mills and pipelines, and offshore oil and gas exploration and extraction markets. It sells its products directly to users of welding products, as well as through industrial distributors, retailers, and agents. The company was founded in 1895 and is headquartered in Cleveland, Ohio.

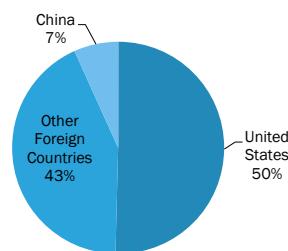
### Robotics & Automation Description:

Lincoln manufactures robotic laser cutting and robotic arc welding systems for a wide array of welding procedures from MIG to spot welding. Lincoln offers both pre-engineered and custom robotic systems that are comprised of turntable systems and specific welding applications respectively. Its mechanized automation systems do not leverage robotics; however, they offer a wide array of options to automate various welding processes. Lincoln also offers orbital welding systems that provide for precise welding control and monitoring capabilities. Lincoln's robotic cutting systems include plasma cutters (Torchmate) and a universal steel fabrication system (PythonX) that can drill, cut, saw, and torch.

### Fundamentals

	2010	2011	2012	2013	2014
Sales	\$2,070	\$2,695	\$2,853	\$2,853	\$2,813
YoY % Change	20%	30%	6%	(0%)	(1%)
EBITDA	\$247	\$364	\$442	\$504	\$527
YoY % Change	25%	29%	18%	9%	1%
Net Income	\$130	\$217	\$257	\$294	\$255
YoY % Change	168%	67%	19%	14%	(13%)
Earnings Per Share	\$1.54	\$2.60	\$3.10	\$3.58	\$3.22
YoY % Change	168%	67%	20%	16%	(10%)
EBITDA Margin %	12%	14%	16%	18%	19%
Net % Margin	6%	8%	9%	10%	9%

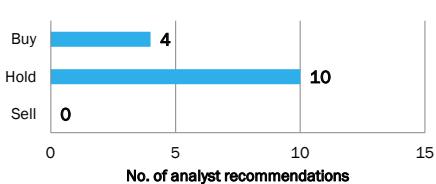
### LECO 2014 Revenue by Geography



### Top 5 Comps

	PE	PB	P/S	EV/EBITDA	Div Yield %	%
Kennametal Inc.	NM	1.47	0.75	7.11	3.21	
Colfax Corporation	14.49	1.15	0.86	8.50	0.00	
The Timken Company	NM	1.72	0.80	5.69	3.78	
Illinois Tool Works Inc.	16.58	5.68	2.24	10.44	2.67	
Crane Co.	14.44	2.50	0.95	7.81	2.83	
<b>Lincoln Electric Holdings Inc.</b>	<b>15.68</b>	<b>3.28</b>	<b>1.48</b>	<b>7.51</b>	<b>2.21</b>	

### Analyst Recommendations





**ROBO  
GLOBAL**

Ticker	6268	Currency	USD	Date	9/30/15
<b>Nabtesco Corporation</b>					
Headquarters	Japan	Share Price	18.15		
Website	<a href="http://nabtesco.com">nabtesco.com</a>	52 Week Range	17.47-19.2-30.52-57.5		
Exchange	TSE	Market Cap (\$B)	2.263		
Industry (GICS)	Industrials	Enterprise Value (\$B)	2.163		
ROBO Global Classification:		YTD Change	(26.06%)		
BW or NBW	Bellwether	PE	15.75		
Tier One	Technology	P/S	1.15		
Tier Two	Actuation	Dividend Yield	2.02%		

### Business Description:

Nabtesco Corporation manufactures and sells equipment in the areas of transportation, industry, livelihood-related fields, and the environment in Japan and internationally. It operates through Precision Equipment, Transport Equipment, Industrial Equipment, and Aircraft & Hydraulic Equipment segments. The company offers precision reduction gear equipment for industrial robots, machine tools, excavators, semiconductor production equipment, and heliostats for solar thermal power generation. It also provides railroad vehicle equipment, including unit brakes, brake operating units, and door operators; and commercial vehicle braking systems, such as brake chambers, air dryers, and hydraulic clutches for commercial vehicles and passenger cars. In addition, the company offers marine vessels equipment consisting of engine remote control systems and electric digital governor systems, as well as marine control systems; and aircraft equipment comprising flight control actuation systems, equipment for landing gear systems, and high voltage electric power distribution units. Further, it provides hydraulic equipment, including sectional type multi-control valves for mini excavators, as well as traveling hydraulic motor for crawlers used in excavators, crawler drills, cranes, and aerial work platforms. Additionally, the company offers automatic doors for regular buildings, industrial doors, and train/railway platform doors under the NABCO brand; and platform screen doors for railway stations, as well as automatic platform gates. It also manufactures automatic measuring equipment, various packaging machines, packaging-related system equipment, and packaging plants; and welfare equipment, such as electric wheelchairs, microprocessor-controlled prosthetic knee joints, and rollators.

Nabtesco Corporation was founded in 2003 and is headquartered in Tokyo, Japan.

### Robotics & Automation Description:

Nabtesco specializes in manufacturing reduction gears for precise movement and torque control in industrial robots. The RV series focuses on acceleration capabilities, have a large number of teeth that mesh simultaneously, are highly rigid despite being compact and light, and are highly resistant to overloads. The RD series focuses on ease of use and the GH series focuses on load transfers. All three series have an emphasis on motion control. In the field of joints of industrial robots, Nabtesco has the world's largest market share at approximately 60%. Reduction gears and other precision equipment represent roughly one third of Nabtesco's total revenue. Additionally, Nabtesco supplies automatic doors for regular buildings, industrial doors, and train/railway platform doors. It holds a 50% world market share in this space.

Fundamentals	2011	2012	2013	2014	2015	6268 2015 Revenue by Geography																																										
Sales	\$2,043	\$2,409	\$1,906	\$1,965	\$1,831																																											
YoY % Change	34%	17%	(10%)	13%	9%																																											
EBITDA	\$308	\$366	\$254	\$284	\$259																																											
YoY % Change	46%	21%	(11%)	21%	13%																																											
Net Income	\$162	\$179	\$141	\$145	\$148																																											
YoY % Change	233%	10%	(10%)	13%	18%																																											
Earnings Per Share	\$1.28	\$1.42	\$1.11	\$1.15	\$1.17																																											
YoY % Change	234%	10%	(10%)	13%	19%																																											
EBITDA Margin %	15%	15%	13%	14%	14%																																											
Net % Margin	8%	7%	7%	7%	8%																																											
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Yaskawa Electric Corp.	12.30	1.80	0.75	7.24	1.65	Sell 1																																										
Nabtesco Corporation	15.75	1.87	1.15	7.63	2.02																																											
						No. of analyst recommendations																																										

\*Fundamental data provided by S&P Capital IQ



**ROBO  
GLOBAL**

Ticker	6273	Currency	USD	Date	9/30/15
<b>SMC Corp.</b>					
Headquarters	Japan	Share Price	217.61		
Website	<a href="http://smcworld.com">smcworld.com</a>	52 Week Range	205.99658-327.93252		
Exchange	TSE	Market Cap (\$B)	14.62		
Industry (GICS)	Industrials	Enterprise Value (\$B)	11.28		
ROBO Global Classification:		YTD Change	(18.50%)		
BW or NBW	Non-Bellwether	PE	15.13		
Tier One	Technology	P/S	3.71		
Tier Two	Actuation	Dividend Yield	0.77%		

### Business Description:

SMC Corporation manufactures and sells automatic control equipment, sintered metal filters, and filtration elements in Japan, North America, Europe, Asia, and internationally. The company offers directional control valves, including pilot and direct operated port solenoid valves, serial transmission systems, air operated valves, mechanical/hand valves, and power and port solenoid valves; standard and compact air, water resistant, mechanically jointed and coupled rodless, table, guide, lock, specialty, clamp, stopper, stroke reading, valve mounted, and other cylinders, as well as floating joints, air-hydro units, shock absorbers, and auto switches; and rotary actuators and air grippers. It also provides vacuum ejectors/vacuum pump systems, air suction filters, vacuum pads and regulators, vacuum saving valves, and vacuum flow and other equipment; aftercoolers/air tanks, air dryers, air preparation filters, and related equipment; modular F.R.L. units, regulators, and electro-pneumatic regulators/proportional valves/boosters; lubrication equipment; fittings and tubings; flow control equipment; and silencers/exhaust cleaners, blow guns, and pressure gauges. In addition, the company offers switches and sensors; static electricity elimination equipment; process valves that comprise port valves for fluid control; chemical liquid valves, and fittings and needle valves/tubings; diaphragm pumps; process gas equipment; industrial filters and sintered metal elements; and chillers, thermoelectric baths, and air temperature controllers, as well as temperature control systems for chemical liquids. Further, it provides electric actuators/cylinders; high vacuum and slit valves; hydraulic cylinders and equipment; pneumatic instrumentation equipment; and copper and fluorine-free equipment. The company was formerly known as Shoketsu Kinzoku Kogyo Co., Ltd. and changed its name to SMC Corporation in 1986. SMC Corporation was founded in 1959 and is headquartered in Tokyo, Japan.

### Robotics & Automation Description:

SMC's line of rotary actuators can be used as part of a robot arm and can be combined with servos controlling robot movement. Depending on the configuration, SMC's pneumatic rotary actuator units can achieve arc lengths up to 270 degrees. SMC's air grippers are used with materials handling robots whereby a robot's hand tools can be changed automatically. SMC is now beginning to evolve into an automatic control equipment manufacturer.

Fundamentals	2011	2012	2013	2014	2015	6273 2014 Revenue by Geography
Sales	\$3,923	\$4,148	\$3,430	\$3,840	\$3,818	
YoY % Change	47%	5%	(5%)	22%	16%	
EBITDA	\$1,120	\$1,217	\$945	\$1,144	\$1,178	
YoY % Change	68%	5%	(9%)	31%	19%	
Net Income	\$576	\$719	\$682	\$838	\$913	
YoY % Change	144%	24%	8%	34%	27%	
Earnings Per Share	\$8.40	\$10.49	\$9.95	\$12.38	\$13.58	
YoY % Change	144%	24%	8%	36%	28%	
EBITDA Margin %	29%	29%	28%	30%	31%	
Net % Margin	15%	17%	20%	22%	24%	
Top 5 Comps	PE	PB	P/S	EV/EBITDA	Div Yield %	Analyst Recommendations
THK Co., Ltd.	10.33	0.98	1.08	3.77	2.96	Buy 9
Fanuc Corporation	16.81	2.68	4.69	7.93	5.37	Hold 6
Makita Corporation	19.31	1.73	2.04	8.81	1.63	
Ebara Corp.	9.71	0.87	0.42	4.38	2.73	
NSK Ltd.	9.51	1.30	0.63	5.36	2.95	Sell 2
SMC Corp.	15.13	1.83	3.71	9.27	0.77	0 2 4 6 8 10 No. of analyst recommendations



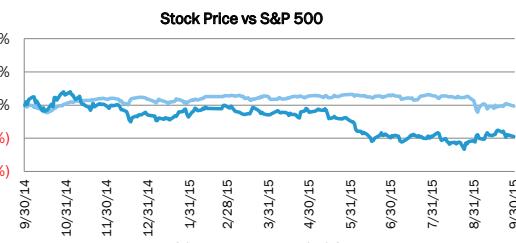
Ticker 1504

Currency USD

Date 9/30/15

### TECO Electric & Machinery Co. Ltd.

Headquarters	Taiwan	Share Price	0.78
Website	<a href="http://teco.com.tw">teco.com.tw</a>	52 Week Range	0.65843-1.05289
Exchange	TSEC	Market Cap (\$B)	1.570
Industry (GICS)	Industrials	Enterprise Value (\$B)	1.355
ROBO Global Classification:		YTD Change	(14.26%)
BW or NBW	Non-Bellwether	PE	15.20
Tier One	Technology	P/S	1.02
Tier Two	Actuation	Dividend Yield	4.26%



### Business Description:

TECO Electric & Machinery Co., Ltd. engages in the manufacture, installation, wholesale, and retail of electronic, telecommunication, and office equipment. It offers low, medium, and high voltage motors; DC/AC frequency inverters; industrial automation systems; electrical power systems and engineering project services; and home-appliances, including window/cabinet air-conditioning units, refrigerators, twin split air-conditioners, aerobic purifying split air-conditioners, inverter air-conditioners, and networking refrigerators. The company also provides AV product line, such as CRT TV, flat-screen TV, LCD-TV, LCOS, plus DVD players, DVR, PVR, AV servers, etc.; air-conditioning equipment and engineering services for air conditioning projects, high-rise water/electric-air conditioning systems, special air conditioning systems for hospitals and precision factories, and clean rooms for semiconductor factories; and central water chilling systems, and packet-type and air-cooled split-type air conditioners. In addition, it offers health insurance cards with an IC chip; information appliances and home gateway products, and system integration services; and documents management, printing, and data processing services. Further, the company distributes motors and home appliances; manufactures switches, busway and related components, NANO material products; repairs electric appliances; provides business management and consulting services; invests in various undertakings; offers fiber optic cables, interconnects, transceivers/media converters, patch cords, and LC connectors and adapters. Additionally, it engages in commodity sales and trading business; manufacturing mechanical equipment, aerogenerators, wheel bays and other components, and wired communication equipment and apparatus; communication network information technology development; the development and sale of software; and real estate business. The company was founded in 1956 and is headquartered in Taipei City, Taiwan.

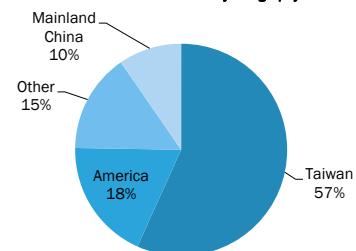
### Robotics & Automation Description:

TECO manufactures and installs various components such as programmable logic controllers, electronic relays, and motors into robotics and automation systems through its Industrial Products, System Automation, Industrial Motor and Applications divisions. TECO develops solutions in industrial automation technology from the manufacturing of DC/AC frequency inverters, and is able to integrate various automation systems in the machine tool, steel, semiconductor plant, TFT plant, and mechanical electronics industries. TECO intends to expand its system automation products to factory, building, and home automation processes. Its AC motor drive F510 series, which is designed to handle very heavy payloads, has won multiple Taiwan Excellence Awards for technological innovation.

### Fundamentals

	2010	2011	2012	2013	2014
Sales	\$1,543	\$1,544	\$1,676	\$1,895	\$1,696
YoY % Change	12%	4%	4%	16%	(5%)
EBITDA	\$176	\$148	\$180	\$203	\$181
YoY % Change	4%	0%	7%	18%	(1%)
Net Income	\$85	\$92	\$106	\$126	\$128
YoY % Change	27%	12%	11%	22%	8%
Earnings Per Share	\$0.05	\$0.05	\$0.06	\$0.07	\$0.06
YoY % Change	27%	11%	11%	19%	3%
EBITDA Margin %	11%	10%	11%	11%	11%
Net % Margin	6%	6%	6%	7%	8%

1504 2013 Revenue by Geography



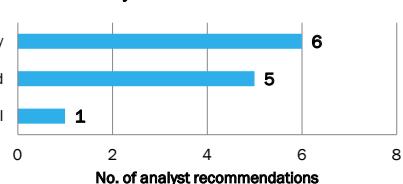
### Top 5 Comps

	PE	PB	P/S	EV/EBITDA	Div Yield %	%
Johnson Electric Holdings Ltd.	13.96	1.52	1.35	7.34	1.87	
Crompton Greaves Limited	NM	2.80	1.00	70.15	0.00	
Welling Holding Limited	5.46	0.83	0.40	1.49	5.86	
Zhongshan Broad-Ocean Motor Co., Ltd.	55.52	4.39	3.76	37.87	2.25	
Hiiwin Technologies Corp.	19.06	3.65	2.86	13.93	1.78	

TECO Electric & Machinery

15.20 1.09 1.02 8.61 4.26

### Analyst Recommendations





**ROBO  
GLOBAL**

Ticker	6481	Currency	USD	Date	9/30/15
<b>THK Co., Ltd.</b>					
Headquarters	Japan	Share Price	15.82		
Website	<a href="http://thk.com">thk.com</a>	52 Week Range	15.20-59.27-93.66		
Exchange	TSE	Market Cap (\$B)	2.002		
Industry (GICS)	Industrials	Enterprise Value (\$B)	1.284		
ROBO Global Classification:		YTD Change	(35.27%)		
BW or NBW	Non-Bellwether	PE	10.33		
Tier One	Technology	P/S	1.08		
Tier Two	Actuation	Dividend Yield	2.96%		

### Business Description:

THK CO., LTD. manufactures and sells machinery components worldwide. The company provides linear motion (LM) guides, LM actuators, spline nuts, LM strokes, cross roller guides, linear ball slides, flat rollers, slide rails, LM guide actuators, ball splines, linear bushes, precision linear packs, cross roller tables, LM rollers, and slide packs. It also offers ball screws, screw nuts, change nuts, double-row angular contact roller rings, cross roller rings, cam followers, roller followers, spherical plain bearings, link balls, rod ends, linear actuator, lubrication accessories, and seismic isolation products. In addition, the company offers transportation equipment-related parts, such as link balls and suspension ball joints. Its products are used in various applications, including machine tools, general industrial machinery, precision instruments, semiconductor and LCD manufacturing equipment, industrial robots, electronic devices, and transport systems, as well as in construction, aerospace, medical and assistive, and other manufacturing industries. THK CO., LTD. was founded in 1971 and is headquartered in Tokyo, Japan.

### Robotics & Automation Description:

THK produces industrial linear motion systems and other components in the manufacturing of positioning, welding, scalar, and double-arm robots. Many of its robots are capable of mimicking human hand and arm mobility. THK's linear motion systems and cross roller rings can reduce the size of robots while increasing their rigidity and operation speed. A combination of LM Guides, ball screws, and linear motor driving systems are used to transfer large glass substrates, produce LCD panels, and to guide automated machine tools. Additionally, THK's LM guides and actuators are used in surgery support robots, which aid doctors in tasks such as setting bones and radiation absorption during radiology. Its SEED (Smart End Effector Devices) won outstanding performance awards in the component category at the Fifth Robot Awards, an event put on by multiple organizations in Japan.

Fundamentals	2011	2012	2013	2014	2015	6481 2015 Revenue by Geography																																																	
Sales	\$2,301	\$2,389	\$1,787	\$1,802	\$1,814																																																		
YoY % Change	65%	0%	(14%)	10%	17%																																																		
EBITDA	\$371	\$368	\$235	\$280	\$336																																																		
YoY % Change	135%	0%	(18%)	19%	27%																																																		
Net Income	\$168	\$153	\$104	\$151	\$189																																																		
YoY % Change	0%	0%	(22%)	59%	46%																																																		
Earnings Per Share	\$1.31	\$1.19	\$0.82	\$1.20	\$1.49																																																		
YoY % Change	0%	0%	(22%)	60%	46%																																																		
EBITDA Margin %	16%	15%	13%	16%	19%																																																		
Net % Margin	7%	6%	6%	8%	10%																																																		
<table> <thead> <tr> <th>Top 5 Comps</th> <th>PE</th> <th>PB</th> <th>P/S</th> <th>EV/EBITDA</th> <th>Div Yield %</th> <th>Analyst Recommendations</th> </tr> </thead> <tbody> <tr> <td>SMC Corp.</td> <td>15.13</td> <td>1.83</td> <td>3.71</td> <td>9.27</td> <td>0.77</td> <td>Buy 3</td> </tr> <tr> <td>Amada Holdings Co., Ltd.</td> <td>16.24</td> <td>0.81</td> <td>1.16</td> <td>6.33</td> <td>3.52</td> <td>Hold 11</td> </tr> <tr> <td>Nabtesco Corporation</td> <td>15.75</td> <td>1.87</td> <td>1.15</td> <td>7.63</td> <td>2.02</td> <td></td> </tr> <tr> <td>DMG Mori Co., Ltd.</td> <td>4.17</td> <td>1.03</td> <td>0.83</td> <td>6.82</td> <td>1.72</td> <td></td> </tr> <tr> <td>Nachi-Fujikoshi Corp.</td> <td>11.23</td> <td>1.23</td> <td>0.57</td> <td>5.71</td> <td>2.02</td> <td>Sell 4</td> </tr> <tr> <td>THK Co., Ltd.</td> <td>10.33</td> <td>0.98</td> <td>1.08</td> <td>3.77</td> <td>2.96</td> <td>0 5 10 15 No. of analyst recommendations</td> </tr> </tbody> </table>							Top 5 Comps	PE	PB	P/S	EV/EBITDA	Div Yield %	Analyst Recommendations	SMC Corp.	15.13	1.83	3.71	9.27	0.77	Buy 3	Amada Holdings Co., Ltd.	16.24	0.81	1.16	6.33	3.52	Hold 11	Nabtesco Corporation	15.75	1.87	1.15	7.63	2.02		DMG Mori Co., Ltd.	4.17	1.03	0.83	6.82	1.72		Nachi-Fujikoshi Corp.	11.23	1.23	0.57	5.71	2.02	Sell 4	THK Co., Ltd.	10.33	0.98	1.08	3.77	2.96	0 5 10 15 No. of analyst recommendations
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# Computing



**ROBO  
GLOBAL**

Ticker	TSEC:6166	Currency	USD	Date	9/30/15
<b>ADLINK Technology, Inc.</b>					
Headquarters	Taiwan	Share Price	2.76		
Website	<a href="http://adlinktech.com">adlinktech.com</a>	52 Week Range	1.87066-3.4379		
Exchange	NYSE	Market Cap (\$B)	0.553		
Industry (GICS)	Information Technology	Enterprise Value (\$B)	0.527		
ROBO Global Classification:		YTD Change	32.93%		
BW or NBW	Non-Bellwether	PE	29.03		
Tier One	Technology	P/S	2.09		
Tier Two	Computing	Dividend Yield	1.91%		

### Business Description:

ADLINK Technology, Inc. provides embedded computing products and services to the test and measurement, automation and process control, gaming, communications, medical, network security, and transportation industries worldwide. The company offers data acquisition (DAQ) products, such as USB, general purpose, high performance, and PCI express products, as well as analog output products, digital I/O cards, timers/counters, load cell measurement devices, and DAQ software and utility. It also provides PXI controllers and chassis products, PXI/PXIe instruments and modules, digitizers/oscilloscopes, dynamis signal analyzers, and arbitrary waveform generators and switches; GPIB bus interface cards and bus expansion products; motion control products, such as DSP-based controllers, pulse train motion controllers, distributed motion controllers and I/O products, encoders and triggers, and etherCAT master controllers and slave systems; and industrial communications and remote I/O products. In addition, the company offers vision systems, smart cameras, and frame grabbers/video capture cards; smart embedded management agent cloud products; AdvancedTCA blades and platforms, and MC/RTM products; CompactPCI/PlusLO products, computer-on-modules; VPX blades and graphics cards/modules; PC/104 products that provide unmatched fanless operations; rugged COTS computer systems; handheld computers and tablet PCs; and medical computers and displays, industrial panel PCs, Smart touch computers, and Smart panels. Further, it provides expandable and integrated fanless embedded computers, Internet of Things gateway products, IPC systems, chassis products, passive backplanes, and peripherals; industrial mother boards and single board computers; embedded flash storage products; media cloud servers; and network security appliances. Additionally, the company offers professional consulting and OEM services. ADLINK Technology, Inc. was founded in 1995 and is headquartered in New Taipei, Taiwan.

### Robotics & Automation Description:

ADLINK's product line includes machine automation systems, machine vision systems, and automated test and measurement equipment. With the acquisition of Ampro Computers and LiPPERT Embedded Computers, ADLINK also provides a wide range of rugged and industrial product lines including single board computers, COMs and systems. ADLINK's measurement and automation product segment are used in industrial I/O control, motion control, digital imaging, data acquisition, and modular instrument applications.

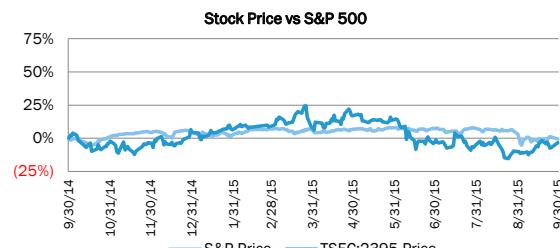
Fundamentals	2010	2011	2012	2013	2014	TSEC:6166 2013 Revenue by Geography
Sales	\$157	\$165	\$192	\$217	\$254	
YoY % Change	72%	9%	12%	16%	24%	
EBITDA	\$28	\$23	\$17	\$23	\$28	
YoY % Change	67%	4%	6%	15%	27%	
Net Income	\$21	\$14	\$7	\$14	\$19	
YoY % Change	264%	(31%)	(53%)	112%	42%	
Earnings Per Share	\$0.11	\$0.07	\$0.04	\$0.07	\$0.09	
YoY % Change	260%	(31%)	(53%)	96%	42%	
EBITDA Margin %	18%	14%	9%	10%	11%	
Net % Margin	13%	8%	3%	6%	7%	
Top 5 Comps	PE	PB	P/S	EV/EBITDA	Div Yield %	Analyst Recommendations
Ennoconn Corporation	29.96	9.14	2.56	22.08	1.89	Buy 4
Advantech Co. Ltd.	27.98	6.84	3.82	20.97	2.67	Hold 3
Portwell, Inc.	5.78	1.17	0.70	5.37	8.45	
Axiomtek Co., Ltd.	15.59	3.66	1.18	9.41	6.13	
IBASE Technology Inc.	13.00	2.17	1.23	9.66	0.98	Sell 2
ADLINK Technology, Inc.	29.03	5.12	2.09	17.67	1.91	0 1 2 3 4 5 No. of analyst recommendations



Ticker TSEC:2395      Currency USD      Date 9/30/15

### Advantech Co. Ltd.

<b>Headquarters</b>	Taiwan	<b>Share Price</b>	6.83
<b>Website</b>	<a href="http://advantech.com">advantech.com</a>	<b>52 Week Range</b>	5.7044-8.43523
<b>Exchange</b>	NYSE	<b>Market Cap (\$B)</b>	4.313
<b>Industry (GICS)</b>	Information Technology	<b>Enterprise Value (\$B)</b>	4.040
<b>ROBO Global Classification:</b>		<b>YTD Change</b>	(4.05%)
<b>BW or NBW</b>	Non-Bellwether	<b>PE</b>	27.98
<b>Tier One</b>	Technology	<b>P/S</b>	3.82
<b>Tier Two</b>	Computing	<b>Dividend Yield</b>	2.67%



### Business Description:

Advantech Co., Ltd manufactures and sells embedded computing boards, industrial automation products, applied computers, and industrial computers in Taiwan and internationally. It offers computer on modules, single board computers (SBC), industrial and semi-industrial motherboards, RISC computing platforms, fan less embedded box PCs, digital signage players, display systems, embedded modules and software, embedded IOT solutions, and gaming platform solutions, as well as MI/O extension SBCs, modules, and chassis. The company also provides automation software and controllers, human machine interfaces, machine automation, embedded automation computers, power and energy systems, data acquisition and communication systems, remote I/O modules, building automation systems, and panel PCs; and controllers, switches, and substation controllers, as well as WebAccess+ solutions. In addition, it offers modular and server-grade IPCs, advanced video solutions, and compact PCI and VPX blades and boards; intelligent RFID and video platforms, and transportation systems; network platforms, blades, and adapters; and pre-configured systems, and slot SBCs and backplanes, as well as industrial computer chassis and peripherals, motherboards, and storage and communication systems. Further, the company provides medical carts and computers, patient and healthcare infotainment terminals, medical tablets, intelligent power systems, medical computing platforms, and clinical monitors; digital logistics products, such as industrial mobile and portable computers, and mobile computing platforms; and interactive digital signages, and self-service touch computers. Additionally, it offers customized design and other services; repair, technical support, and warranty services; investment and management services; and offers POS systems, industrial electronic equipment, LCD touch panels, and USB cables. The company was founded in 1981 and is headquartered in Taipei City, Taiwan.

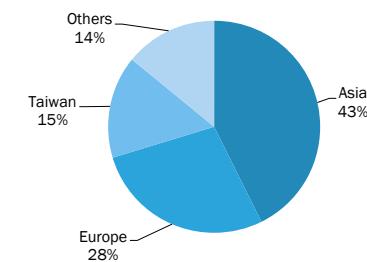
### Robotics & Automation Description:

Founded in 1983, Advantech is a leader in providing trusted, innovative embedded and automation products and solutions with offices in 21 countries worldwide. Advantech offers a wide variety of robotics and automation technologies including automation software, human machine interfaces, automation controllers, embedded automation computers, and building automation systems.

### Fundamentals

	2010	2011	2012	2013	2014
Sales	\$790	\$853	\$948	\$1,026	\$1,126
YoY % Change	50%	12%	7%	11%	17%
EBITDA	\$133	\$149	\$148	\$172	\$192
YoY % Change	48%	8%	9%	16%	14%
Net Income	\$104	\$117	\$119	\$137	\$155
YoY % Change	74%	17%	(2%)	18%	20%
Earnings Per Share	\$0.17	\$0.19	\$0.20	\$0.22	\$0.25
YoY % Change	74%	17%	(4%)	17%	19%
EBITDA Margin %	17%	17%	16%	17%	17%
Net % Margin	13%	14%	13%	13%	14%

TSEC:2395 2013 Revenue by Geography

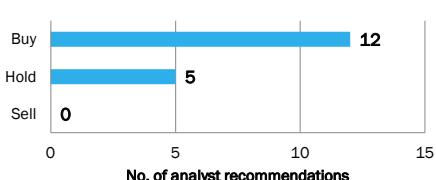


### Top 5 Comps

	PE	PB	P/S	EV/EBITDA	Div Yield %
ADLINK Technology, Inc.	29.03	5.12	2.09	17.67	1.91
Enncoconn Corporation	29.96	9.14	2.56	22.08	1.89
Asia Vital Components Co., Ltd.	10.98	1.12	0.37	6.19	3.94
Elitechgroup computer Systems Co. Ltd.	10.09	0.79	0.25	1.75	25.71
Chicony Electronics Co., Ltd.	12.62	2.64	0.61	8.71	6.10

Advantech Co. Ltd. 27.98 6.84 3.82 20.97 2.67

### Analyst Recommendations





**ROBO  
GLOBAL**

Ticker	ATML	Currency	USD	Date	9/30/15
<b>Atmel Corporation</b>					
Headquarters	United States	Share Price	8.07		
Website	atmel.com	52 Week Range	5.84-10.5		
Exchange	NasdaqGS	Market Cap (\$B)	3.391		
Industry (GICS)	Information Technology	Enterprise Value (\$B)	3.260		
ROBO Global Classification:		YTD Change	(3.87%)		
BW or NBW	Non-Bellwether	PE	101.06		
Tier One	Technology	P/S	2.50		
Tier Two	Computing	Dividend Yield	1.98%		

### Business Description:

Atmel Corporation designs, develops, manufactures, and sells semiconductor integrated circuit products primarily in the United States, Asia, Europe, South Africa, and Central and South America. It operates in four segments: Microcontroller, Nonvolatile Memory, Automotive, and Multi-Market and Other. The Microcontroller segment provides various proprietary and non-proprietary architectures, such as AVR 8-bit and 32-bit, ARM-based, Atmel's 8051 8-bit, and low power radio and SOC products, as well as capacitive touch products, including maXTouch and QTouch. The Nonvolatile Memory segment offers electrically erasable programmable read-only and erasable programmable read-only memory devices, as well as secure cryptographic products. The Automotive segment provides devices for automotive electronics, including products using radio frequency technology. The Multi-Market and Other segment offers application specific integrated circuits for customers in the medical, consumer, and security markets; and aerospace products designed for satellite and other markets in which radiation-hardened devices are required. The company sells its products directly, as well as through distributors to original equipment manufacturers. Atmel Corporation was founded in 1984 and is headquartered in San Jose, California.

### Robotics & Automation Description:

Atmel manufactures microcontrollers that enable communication between and embed intelligence into machines. Its microcontrollers are optimized for low power, high-speed connectivity, data bandwidth, and rich interface support. These microcontrollers can also support seamless integration of capacitive touch technology to implement buttons, sliders, and wheels. Its maXTouch products combine touch sensing with advanced algorithms that enable the ability to discern wanted from unwanted touches and therefore, the ability to ignore any unwanted touches. Its QTouch devices utilize "proximity sensing" allowing the user to integrate multiple touch features within one device. The AVR picoPower technology optimizes power consumption, allows devices to make intelligent decisions, and transmit data between one another. The microcontroller segment has historically produced roughly 60% of the firm's revenue.

Fundamentals	2010	2011	2012	2013	2014	ATML 2013 Revenue by Geography
Sales	\$1,644	\$1,803	\$1,432	\$1,386	\$1,413	
YoY % Change	35%	10%	(21%)	(3%)	2%	
EBITDA	\$293	\$448	\$161	\$146	\$173	
YoY % Change	76%	25%	(34%)	(4%)	13%	
Net Income	\$423	\$315	\$30	(\$22)	\$32	
YoY % Change	0%	(26%)	(90%)	0%	0%	
Earnings Per Share	\$0.92	\$0.69	\$0.07	(\$0.05)	\$0.08	
YoY % Change	0%	(24%)	(90%)	0%	0%	
EBITDA Margin %	18%	25%	11%	11%	12%	
Net % Margin	26%	17%	2%	(2%)	2%	
Top 5 Comps	PE	PB	P/S	EV/EBITDA	Div Yield %	Analyst Recommendations
Cypress Semiconductor Corporation	NM	1.01	1.70	NM	5.16	
Altera Corp.	38.79	4.56	8.31	27.22	1.44	Buy 3
Maxim Integrated Products, Inc.	47.04	4.15	4.11	12.19	3.59	Hold 12
Linear Technology Corporation	19.03	6.13	6.69	11.76	2.97	
Xilinx Inc.	18.60	4.15	4.82	11.16	2.92	Sell 1
Atmel Corporation	101.06	3.91	2.50	18.17	1.98	0 5 10 15 No. of analyst recommendations



Ticker HOLI      Currency USD      Date 9/30/15

### HollySys Automation Technologies, Ltd.

<b>Headquarters</b>	China	<b>Share Price</b>	17.48
<b>Website</b>	<a href="http://hollysys.com">hollysys.com</a>	<b>52 Week Range</b>	15.12-27.055
<b>Exchange</b>	NasdaqGS	<b>Market Cap (\$B)</b>	1.020
<b>Industry (GICS)</b>	Information Technology	<b>Enterprise Value (\$B)</b>	0.819
<b>ROBO Global Classification:</b>		<b>YTD Change</b>	(28.45%)
<b>BW or NBW</b>	Non-Bellwether	<b>PE</b>	10.86
<b>Tier One</b>	Technology	<b>P/S</b>	1.93
<b>Tier Two</b>	Computing	<b>Dividend Yield</b>	0.00%



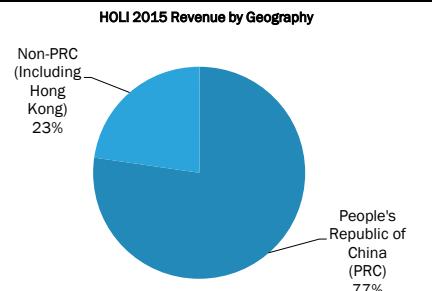
### Business Description:

Hollysys Automation Technologies Ltd. provides automation and control technologies and products to customers in industrial, railway, subway, nuclear power, and mechanical and electronic industries in China, Southeast Asia, India, Europe, and the Middle East. The company offers a suite of industrial automation solutions comprising third-party hardware-centric products, such as instrumentation and actuators; proprietary software-centric distributed control systems/programmable logic controllers; and valued-added software packages that include real-time management information system, HolliAS asset management system, operator training system, HolliAS batch application package, HolliAS advanced process control package, and safety instrumentation system, as well as HOLLiAS-NMS DCS, a proprietary nuclear power non-safety automation and control system. It also provides train control center that monitors route condition, track status, train schedules, distance between trains, and the working status of other function devices, as well as generates control instructions and commands. In addition, the company offers automation train protection that operates as a train over-speed protection mechanism; supervisory control and data acquisition system, an open software platform; and subway supervisory and control platform. Additionally, the company engages in research and development activities; manufactures and sells medical automation equipment; and provides integrated automation products and services, mechanical and electrical solutions, and integrated construction installation services. The company was formerly known as HLS Systems International Ltd. and changed its name to Hollysys Automation Technologies Ltd. in July 2009. Hollysys Automation Technologies Ltd. was founded in 1993 and is headquartered in Beijing, the People's Republic China.

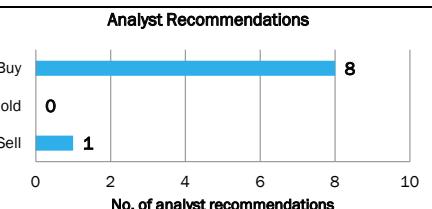
### Robotics & Automation Description:

HollySys Automation Technologies' industrial automation segment is broken down into the process automation business and the factory automation business. The process automation business primarily services the clean energy sector, in particular power plants, turbine systems, and more recently, alternative energy solutions. Its product offering includes Distributed Control Systems (DCS) such as the HOLLiAS DCS platform and Programmable Logic Controllers (PLC). Its factory automation business primarily produces PLC for both small and large scale operations and are best suited for sequencing, process, transmission, and motion control. Its transport automation business focuses mainly on railway automation for both high speed trains and subways. The high-speed rail signaling system has two main products, an on-board Automatic Train Protection (ATP) and a ground-based Train Control Center (TCC), which work in conjunction to provide real-time data to the train so it knows exactly what is expected in terms of speed, slope, or turn before it enters the next radio block. The process and factory automation businesses account for roughly 60% of HollySys revenues and the transportation automation business accounts for roughly 30%.

Fundamentals	2011	2012	2013	2014	2015
Sales	\$263	\$322	\$349	\$521	\$531
YoY % Change	51%	22%	9%	49%	2%
EBITDA	\$49	\$73	\$67	\$111	\$145
YoY % Change	51%	39%	(2%)	42%	22%
Net Income	\$41	\$56	\$52	\$70	\$97
YoY % Change	61%	36%	(8%)	34%	39%
Earnings Per Share	\$0.76	\$1.01	\$0.93	\$1.20	\$1.65
YoY % Change	50%	35%	(9%)	29%	35%
EBITDA Margin %	19%	23%	19%	21%	27%
Net % Margin	16%	17%	15%	13%	18%



Top 5 Comps	PE	PB	P/S	EV/EBITDA	Div Yield %	Analyst Recommendations
Chongqing ChuanYi Automation Co. Ltd.	33.69	3.05	1.64	32.05	0.88	Buy 8
China Railway Signal & Communication Corporation Limited	15.02	4.92	1.69	16.19	0.00	Hold 0
Zhuzhou CSR Times Electric Co., Ltd.	19.45	4.57	4.06	15.34	0.85	
Zoomlion Heavy Industry Science and Te	NM	0.96	1.68	130.10	1.00	
Yokogawa Electric Corp.	15.12	1.43	0.77	6.54	1.20	Sell 1





**ROBO  
GLOBAL**

Ticker	MCHP	Currency	USD	Date	9/30/15
<b>Microchip Technology Inc.</b>					
Headquarters	United States	Share Price	43.09		
Website	<a href="http://microchip.com">microchip.com</a>	52 Week Range	36.92-52.44		
Exchange	NasdaqGS	Market Cap (\$B)	9.095		
Industry (GICS)	Information Technology	Enterprise Value (\$B)	9.428		
ROBO Global Classification:		YTD Change	(4.48%)		
BW or NBW	Non-Bellwether	PE	23.34		
Tier One	Technology	P/S	4.03		
Tier Two	Computing	Dividend Yield	3.32%		

### Business Description:

Microchip Technology Incorporated develops, manufactures, and sells semiconductor products for various embedded control applications. The company offers microcontrollers, such as 8-bit, 16-bit, and 32-bit microcontrollers under the PIC brand name; and 16-bit dsPIC digital signal controllers, as well as provides microcontrollers for automotive networking, computing, lighting, power supplies, wireless communication, and wireless audio applications. It also offers development tools that enable system designers to program PIC microcontrollers for specific applications; analog, interface, and mixed signal products comprising power management, linear, mixed-signal, high-voltage, thermal management, RF, drivers, safety and security, USB, Ethernet, wireless, and other interface products; and memory products consisting of serial electrically erasable programmable read-only memory, serial flash memories, parallel flash memories, and serial SRAM memories for the production of very small footprint devices. In addition, the company licenses its SuperFlash embedded flash and Smartbits one time programmable NVM technologies to foundries, integrated device manufacturers, and design partners for use in the manufacture of microcontroller products, gate array, RF, and analog products that require embedded non-volatile memory, as well as provides engineering services. It serves automotive, communications, computing, consumer, office automation, telecommunication, aerospace, medical, and industrial control markets. The company sells its products through a network of direct sales personnel and distributors in the Americas, Europe, and Asia. Microchip Technology Incorporated was founded in 1989 and is headquartered in Chandler, Arizona.

### Robotics & Automation Description:

Microchip manufactures microcontrollers used to embed intelligence into machines for medical, home, automotive, power monitoring, wireless, illumination, temperature, and other motor control applications. Automotive products developed by Microchip enable solutions to reduce fuel consumption with lower emissions. Microchip's battery management products offer advanced features to maximize battery operating life. Microchip offers a broad portfolio of touch solutions for that make it easy for designers to integrate touch-sensing interfaces. These touch-sensing interfaces are also integrated with various medical devices. Additionally, Microchips microcontrollers can withstand temperatures up to 150 degrees Celsius. UBM Tech's 2014 Embedded Market Survey of design engineers once again ranked Microchip #1 for 8, 16, and 32-bit MCUs, as well as DSPs, in response to the question, "Which chip family would you consider for your next project?"

Fundamentals	2011	2012	2013	2014	2015	MCHP 2015 Revenue by Geography																																																								
Sales	\$1,487	\$1,383	\$1,582	\$1,931	\$2,147																																																									
YoY % Change	57%	(7%)	14%	22%	11%																																																									
EBITDA	\$583	\$503	\$500	\$670	\$732																																																									
YoY % Change	65%	(9%)	15%	24%	9%																																																									
Net Income	\$419	\$337	\$127	\$395	\$369																																																									
YoY % Change	93%	(20%)	(62%)	210%	(7%)																																																									
Earnings Per Share	\$2.24	\$1.76	\$0.65	\$1.99	\$1.84																																																									
YoY % Change	90%	(25%)	(62%)	194%	(9%)																																																									
EBITDA Margin %	39%	36%	32%	35%	34%																																																									
Net % Margin	28%	24%	8%	20%	17%																																																									
<b>Top 5 Comps</b> <table> <thead> <tr> <th></th> <th>PE</th> <th>PB</th> <th>P/S</th> <th>EV/EBITDA</th> <th>Div Yield %</th> <th></th> <th>Analyst Recommendations</th> </tr> </thead> <tbody> <tr> <td>Linear Technology Corporation</td> <td>19.03</td> <td>6.13</td> <td>6.69</td> <td>11.76</td> <td>2.97</td> <td>Buy</td> <td>7</td> </tr> <tr> <td>Xilinx Inc.</td> <td>18.60</td> <td>4.15</td> <td>4.82</td> <td>11.16</td> <td>2.92</td> <td>Hold</td> <td>8</td> </tr> <tr> <td>Maxim Integrated Products, Inc.</td> <td>47.04</td> <td>4.15</td> <td>4.11</td> <td>12.19</td> <td>3.59</td> <td></td> <td></td> </tr> <tr> <td>Analog Devices, Inc.</td> <td>25.30</td> <td>3.49</td> <td>5.39</td> <td>12.67</td> <td>2.84</td> <td></td> <td></td> </tr> <tr> <td>Advanced Micro Devices, Inc.</td> <td>NM</td> <td>NM</td> <td>0.29</td> <td>111.21</td> <td>0.00</td> <td>Sell</td> <td>0</td> </tr> <tr> <td>Microchip Technology Inc.</td> <td>23.34</td> <td>4.16</td> <td>4.03</td> <td>12.92</td> <td>3.32</td> <td></td> <td></td> </tr> </tbody> </table>								PE	PB	P/S	EV/EBITDA	Div Yield %		Analyst Recommendations	Linear Technology Corporation	19.03	6.13	6.69	11.76	2.97	Buy	7	Xilinx Inc.	18.60	4.15	4.82	11.16	2.92	Hold	8	Maxim Integrated Products, Inc.	47.04	4.15	4.11	12.19	3.59			Analog Devices, Inc.	25.30	3.49	5.39	12.67	2.84			Advanced Micro Devices, Inc.	NM	NM	0.29	111.21	0.00	Sell	0	Microchip Technology Inc.	23.34	4.16	4.03	12.92	3.32		
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\*Fundamental data provided by S&P Capital IQ



**ROBO  
GLOBAL**

Ticker 6503

Currency USD

Date 9/30/15

### Mitsubishi Electric Corporation

Headquarters	Japan	Share Price	9.10
Website	<a href="http://mitsubishielectric.com">mitsubishielectric.com</a>	52 Week Range	8.87794-14.34835
Exchange	TSE	Market Cap (\$B)	19.54
Industry (GICS)	Industrials	Enterprise Value (\$B)	18.53
ROBO Global Classification:		YTD Change	(24.62%)
BW or NBW	Non-Bellwether	PE	9.83
Tier One	Technology	P/S	0.53
Tier Two	Computing	Dividend Yield	2.48%



### Business Description:

Mitsubishi Electric Corporation manufactures and sells electrical and electronic products and systems worldwide. The company's Energy and Electric Systems segment offers turbine generators, nuclear power plant and power electronics equipment, motors, transformers, circuit breakers, gas insulated switches, switch control and display devices, surveillance-system control and security systems, locomotive and rolling stock electrical equipment, elevators, escalators, building security and management systems, and particle beam treatment systems. Its Industrial Automation Systems segment provides programmable logic and computerized numerical controllers, inverters, servomotors, human-machine interface, hoists, magnetic switches, time and power meters, uninterruptible power supply, industrial fans, electrical-discharge and laser processing machines, industrial robots, clutches, automotive electrical equipment, car electronics and mechatronics, and car multimedia. The company's Information and Communication Systems segment offers wireless and wired communications systems, surveillance cameras, satellite communication and radar equipment, antennas, missile and fire control systems, broadcasting and information systems equipment, data transmission devices, network security systems, and systems integration products. Its Electronic Devices segment provides power modules, high-frequency devices, and optical and LCD devices. The company's Home Appliances segment offers LCD televisions, air conditioners, air-to-water heat pump boilers, refrigerators, electric fans, ventilators, photovoltaic power generation and hot water supply systems, LED and fluorescent lamps, indoor lighting, compressors, chillers, dehumidifiers, air purifiers, showcases, cleaners, rice cookers, microwave ovens, and IH cooking heaters. Its Others segment provides procurement, logistics, real estate, advertising, finance, and other services. The company was founded in 1921 and is headquartered in Tokyo, Japan.

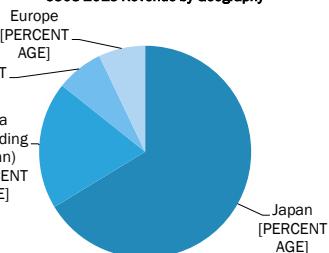
### Robotics & Automation Description:

Mitsubishi manufactures robotics components, including programmable logic controllers (PLC), inverters, servomotors, human-machine interfaces, motors, computerized numerical controllers, laser processing machines, and full scale industrial robots. Its industrial robots are capable of managing heavier loads, both in terms of weight and functionality. More recent models are now equipped with collision detection functionality. Its PLC are equipped with a multiple CPU function that allows multiple CPUs to be mounted simultaneously. This capability allows for system configurations that match the scale and objectives of the production site. The PLC are also used to facilitate human-machine interfaces. The industrial automation systems segment produces roughly 25% of Mitsubishi's total revenue.

### Fundamentals

	2011	2012	2013	2014	2015
Sales	\$44,330	\$44,432	\$38,054	\$39,526	\$36,028
YoY % Change	9%	(0%)	(2%)	14%	6%
EBITDA	\$4,315	\$4,356	\$2,152	\$3,396	\$3,949
YoY % Change	21%	(2%)	(5%)	18%	12%
Net Income	\$1,503	\$1,360	\$738	\$1,491	\$1,956
YoY % Change	340%	(10%)	(38%)	121%	53%
Earnings Per Share	\$0.70	\$0.63	\$0.34	\$0.69	\$0.91
YoY % Change	340%	(10%)	(38%)	121%	53%
EBITDA Margin %	10%	10%	6%	9%	11%
Net % Margin	3%	3%	2%	4%	5%

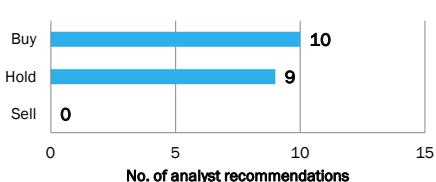
6503 2015 Revenue by Geography



### Top 5 Comps

	PE	PB	P/S	EV/EBITDA	Div Yield %	%
Fujitsu Limited	9.42	1.41	0.23	5.12	1.54	Buy 10
Toshiba Corporation	NM	1.16	0.19	9.07	0.00	Hold 9
Hitachi Ltd.	9.72	0.96	0.29	6.37	2.00	
ABB Ltd.	16.40	2.81	1.10	8.10	4.18	
Panasonic Corporation	13.84	1.43	0.36	3.87	1.66	
Mitsubishi Electric	9.83	1.25	0.53	4.41	2.48	

### Analyst Recommendations





**ROBO  
GLOBAL**

Ticker	7732	Currency	USD	Date	9/30/15
<b>Topcon Corporation</b>					
Headquarters	Japan	Share Price	13.04		
Website	<a href="http://topcon.co.jp">topcon.co.jp</a>	52 Week Range	12.52767-26.97624		
Exchange	TSE	Market Cap (\$B)	1.408		
Industry (GICS)	Information Technology	Enterprise Value (\$B)	1.800		
ROBO Global Classification:		YTD Change	(39.50%)		
BW or NBW	Non-Bellwether	PE	21.33		
Tier One	Technology	P/S	1.30		
Tier Two	Computing	Dividend Yield	1.54%		

### Business Description:

Topcon Corporation develops, produces, and sells smart infrastructure, positioning, and eye care products worldwide. Its positioning products include GNSS (GPS) receivers, machine control systems, precision agriculture systems, and IT site management solutions. The company's eye care products comprise 3D optical coherence tomography systems, retinal cameras, ophthalmic digital image filing systems, auto refractometers/auto kerato-refractometers, slit lamps, computerized tonometers, lens edgers and meters, and ophthalmic laser photocoagulators. Its infrastructure products consists motorized robotic total stations, imaging stations, mobile mapping systems, 3D laser scanners, data collectors, theodolites, levels/digital levels, self-leveling construction lasers, pipe lasers, and asset management systems. The company was formerly known as Tokyo Optical Co., Ltd. and changed its name to Topcon Corporation in 1989. Topcon Corporation was founded in 1932 and is headquartered in Tokyo, Japan.

### Robotics & Automation Description:

Topcon develops global positioning systems with laser optical instruments used in driverless cars, precision agriculture, construction, and other various applications. Its positioning division accounts for roughly 35-40% of the total firm revenue. Its Global Navigation Satellite Systems (GNSS) include high-speed precision grading, hybrid GNSS positioning systems with sub-centimeter accuracy, and advanced crop sensing and nutrition application control. With the addition of Sitelink3D Enterprise, real-time site management can be performed from any location and shared amongst multiple users throughout the whole production process. Topcon's millimeter level GPS technology allows for paving and finish grading of the highest precision. It's mobile mapping systems can capture and integrate 360 degree video with positional information while driving, generate 3D computer graphics of roadside features, and overlay 3D computer graphics on the video image.

Fundamentals	2011	2012	2013	2014	2015	7732 2014 Revenue by Geography																																																	
Sales	\$1,237	\$1,199	\$1,033	\$1,133	\$1,071																																																		
YoY % Change	8%	(4%)	(2%)	20%	10%																																																		
EBITDA	\$86	\$83	\$108	\$168	\$180																																																		
YoY % Change	2%	(7%)	12%	30%	19%																																																		
Net Income	(\$16)	(\$45)	\$5	\$58	\$72																																																		
YoY % Change	0%	0%	0%	1067%	45%																																																		
Earnings Per Share	(\$0.17)	(\$0.48)	\$0.06	\$0.54	\$0.67																																																		
YoY % Change	0%	0%	0%	908%	45%																																																		
EBITDA Margin %	7%	7%	10%	15%	17%																																																		
Net % Margin	(1%)	(4%)	1%	5%	7%																																																		
<table> <thead> <tr> <th>Top 5 Comps</th> <th>PE</th> <th>PB</th> <th>P/S</th> <th>EV/EBITDA</th> <th>Div Yield %</th> <th>Analyst Recommendations</th> </tr> </thead> <tbody> <tr> <td>HORIBA, Ltd.</td> <td>13.97</td> <td>1.45</td> <td>1.13</td> <td>6.16</td> <td>1.61</td> <td>Buy 2</td> </tr> <tr> <td>Carl Zeiss Meditec AG</td> <td>29.33</td> <td>2.74</td> <td>2.08</td> <td>15.49</td> <td>1.60</td> <td>0</td> </tr> <tr> <td>Renishaw plc</td> <td>12.04</td> <td>3.40</td> <td>2.97</td> <td>8.66</td> <td>2.31</td> <td>0</td> </tr> <tr> <td>Nikon Corporation</td> <td>31.90</td> <td>1.00</td> <td>0.66</td> <td>5.33</td> <td>1.11</td> <td></td> </tr> <tr> <td>Amano Corp.</td> <td>13.69</td> <td>1.17</td> <td>0.93</td> <td>4.85</td> <td>2.91</td> <td></td> </tr> <tr> <td>Topcon Corporation</td> <td>21.33</td> <td>2.62</td> <td>1.30</td> <td>10.44</td> <td>1.54</td> <td>0 No. of analyst recommendations</td> </tr> </tbody> </table>							Top 5 Comps	PE	PB	P/S	EV/EBITDA	Div Yield %	Analyst Recommendations	HORIBA, Ltd.	13.97	1.45	1.13	6.16	1.61	Buy 2	Carl Zeiss Meditec AG	29.33	2.74	2.08	15.49	1.60	0	Renishaw plc	12.04	3.40	2.97	8.66	2.31	0	Nikon Corporation	31.90	1.00	0.66	5.33	1.11		Amano Corp.	13.69	1.17	0.93	4.85	2.91		Topcon Corporation	21.33	2.62	1.30	10.44	1.54	0 No. of analyst recommendations
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**ROBO  
GLOBAL**

Ticker	6841	Currency	USD	Date	9/30/15
<b>Yokogawa Electric Corp.</b>					
Headquarters	Japan	Share Price	10.41		
Website	<a href="http://yokogawa.com">yokogawa.com</a>	52 Week Range	10.00-543-13.78043		
Exchange	TSE	Market Cap (\$B)	2.682		
Industry (GICS)	Information Technology	Enterprise Value (\$B)	2.676		
ROBO Global Classification:		YTD Change	(6.45%)		
BW or NBW	Non-Bellwether	PE	15.12		
Tier One	Technology	P/S	0.77		
Tier Two	Computing	Dividend Yield	1.20%		

### Business Description:

Yokogawa Electric Corporation provides various products based on its measurement, control, and information technologies in Japan, Asia, Europe, North America, the Middle East, and internationally. It operates in three segments: Industrial Automation and Control Business, Test and Measurement Business, and Other Businesses. The Industrial Automation and Control Business segment develops distributed control systems for monitoring and controlling processes in various production facilities. Its products include production control and management, safety instrumented, quality, asset, and energy management systems; differential pressure/pressure transmitters, flow meters, analyzers, recorders, and programmable controllers; and energy saving, alternate energy, security, and IT solutions. This segment offers its products to oil, chemical, natural gas, electric power, iron and steel, pulp and paper, pharmaceutical, food, and other industries. The Test and Measurement Business segment offers various measuring instruments for the development and production of electrical equipment, electronics, automobiles, and other products. Its products comprise waveform and optical communication measuring instruments; signal generators; LCD drivers; cytological discovery systems; and confocal scanner for observation of live cells, as well as measuring instruments for electric power, temperature, and pressure. The Other Businesses segment provides aviation, marine, and hydrological and meteorological equipment, as well as flat-panel displays, engine meters, and other instruments for aviation use; and marine navigation equipment, such as gyrocompasses and autopilot systems. The company was formerly known as Yokogawa Electric Works Ltd. and changed its name to Yokogawa Electric Corporation in 1986. Yokogawa Electric Corporation was founded in 1915 and is headquartered in Tokyo, Japan.

### Robotics & Automation Description:

Yokogawa manufactures measurement control systems, sensors, programmable logic controllers, and other components used in automation. Yokogawa multi-variable control provides predictive control using process cross-correlation, which is proven to increase throughput, save energy, and reduce quality giveaway. The VigilantPlant Services™ solutions suite enhances productivity, ensures safety, and optimizes a variety of processes. Plant Resource Manager (PRM™) is a software package that is capable of centrally managing large amounts of data from plant monitoring and control devices and manufacturing equipment. The industrial automation and control business generates the majority of the total firm revenue (roughly 80%).

Fundamentals	2011	2012	2013	2014	2015	6841 2015 Revenue by Geography																																																	
Sales	\$3,930	\$4,061	\$3,693	\$3,773	\$3,382																																																		
YoY % Change	3%	3%	4%	12%	4%																																																		
EBITDA	\$301	\$356	\$339	\$383	\$369																																																		
YoY % Change	8%	26%	1%	13%	6%																																																		
Net Income	(\$81)	\$72	\$156	\$120	\$144																																																		
YoY % Change	0%	0%	147%	(16%)	40%																																																		
Earnings Per Share	(\$0.31)	\$0.28	\$0.61	\$0.47	\$0.56																																																		
YoY % Change	0%	0%	147%	(16%)	40%																																																		
EBITDA Margin %	8%	9%	9%	10%	11%																																																		
Net % Margin	(2%)	2%	4%	3%	4%																																																		
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# Integration



**ROBO  
GLOBAL**

Ticker	ABBN	Currency	USD	Date	9/30/15
<b>ABB Ltd.</b>					
Headquarters	Switzerland	Share Price	17.64		
Website	<a href="http://abb.com">abb.com</a>	52 Week Range	16.88771-22.84807		
Exchange	SWX	Market Cap (\$B)	39.16		
Industry (GICS)	Industrials	Enterprise Value (\$B)	42.29		
ROBO Global Classification:		YTD Change	(18.54%)		
BW or NBW	Bellwether	PE	16.40		
Tier One	Technology	P/S	1.10		
Tier Two	Integration	Dividend Yield	4.18%		

### Business Description:

ABB Ltd provides power and automation technologies for utility and industrial customers worldwide. The company's Discrete Automation and Motion segment provides motors, generators, variable speed drives, programmable logic controllers, robots and robotics, solar inverters, wind converters, rectifiers, and excitation systems, as well as power quality and protection solutions, electric vehicle fast charging infrastructure solutions, components and subsystems for railways, and related services for discrete automation, process industries, transportation, and utilities. Its Low Voltage Products segment provides protection, control, and measurement for electrical installations; enclosures, switchboards, electronics, and electromechanical devices for industrial machines and plants; products for wiring and cable management, cable protection systems, power connection, and safety; and building control systems for home and building automation. The company's Process Automation segment develops and sells control and plant optimization systems, automation products and solutions, and industry-specific application services for the oil, gas, petrochemicals, metals and minerals, marine and turbocharging, pulp and paper, chemical and pharmaceuticals, and power industries. Its Power Products segment offers circuit breakers, switchgears, and capacitors, as well as instrument, power, distribution, and traction transformers for electrical and other infrastructure utilities, as well as industrial and commercial customers. The company's Power Systems segment provides transmission and distribution systems, as well as power plant automation and electrification solutions, including monitoring and control products, software and services, and components for power generation, transmission and distribution utilities, and other infrastructure utilities, as well as other industrial and commercial enterprises. ABB Ltd was founded in 1883 and is headquartered in Zurich, Switzerland.

### Robotics & Automation Description:

ABB's Discrete Automation and Motion (DAM) division sells products, applications, solutions and related services that help customers increase industrial productivity and energy efficiency. The stand-alone Robotics unit which is a part of the DAM division contributes roughly 5% of total revenues and has installed over 250,000 robots across the globe. These robots are capable of handling payloads up to as much as 500kg (~1,100 lbs). ABB recently introduced Integrated Force Control sensing technology that allows robots to operate much like a human hand would. The DAM division has grown at a 16% CAGR over 2009-2013 and currently contributes 28% of divisional EBITDA. The Process Automation division supplies systems and products to control and automate production processes as well as reduce energy usage. The PA division has grown at a 2% CAGR over 2009-2013 and currently contributes 19% of divisional EBITDA.

Fundamentals	2010	2011	2012	2013	2014	ABBN 2011 Revenue by Geography
Sales	\$31,589	\$37,990	\$39,336	\$41,848	\$39,830	
YoY % Change	(1%)	20%	4%	6%	(5%)	
EBITDA	\$4,573	\$5,538	\$5,240	\$5,705	\$5,483	
YoY % Change	0%	19%	(0%)	5%	(6%)	
Net Income	\$2,561	\$3,168	\$2,704	\$2,787	\$2,594	
YoY % Change	(12%)	24%	(15%)	3%	(7%)	
Earnings Per Share	\$1.12	\$1.38	\$1.18	\$1.21	\$1.13	
YoY % Change	(12%)	24%	(15%)	4%	(9%)	
EBITDA Margin %	14%	15%	13%	14%	14%	
Net % Margin	8%	8%	7%	7%	7%	
Top 5 Comps	PE	PB	P/S	EV/EBITDA	Div Yield %	Analyst Recommendations
Alstom SA	NM	2.07	1.39	35.77	0.00	Buy 8
Schneider Electric SE	16.57	1.40	1.10	9.21	3.84	Hold 11
Siemens Aktiengesellschaft	11.48	1.89	0.88	8.95	4.15	Sell 10
Mitsubishi Electric Corporation	9.83	1.25	0.53	4.41	2.48	
Atlas Copco AB	18.76	5.71	2.45	11.73	2.98	
ABB Ltd.	16.40	2.81	1.10	8.10	4.18	0 5 10 15 No. of analyst recommendations



**ROBO  
GLOBAL**

Ticker	ROK	Currency	USD	Date	9/30/15
<b>Rockwell Automation Inc.</b>					
Headquarters	United States	Share Price	101.47		
Website	<a href="http://rockwellautomation.com">rockwellautomation.com</a>	52 Week Range	98.55-127.05		
Exchange	NYSE	Market Cap (\$B)	13.60		
Industry (GICS)	Industrials	Enterprise Value (\$B)	12.95		
ROBO Global Classification:		YTD Change	(8.75%)		
BW or NBW	Bellwether	PE	15.86		
Tier One	Technology	P/S	2.12		
Tier Two	Integration	Dividend Yield	2.56%		

### Business Description:

Rockwell Automation, Inc. provides industrial automation power, control, and information solutions. The company operates through two segments, Architecture & Software and Control Products & Solutions. The Architecture & Software segment provides control platforms, including controllers, electronic operator interface devices, electronic input/output devices, communication and networking products, and industrial computers that perform multiple control disciplines and monitoring of applications, such as discrete, batch and continuous process, drives control, motion control, and machine safety control. This segment also offers software products that include configuration and visualization software used to operate and supervise control platforms, process control software, and manufacturing execution software to enhance manufacturing productivity and meet regulatory requirements; and other products comprising rotary and linear motion control products, and sensors and machine safety components. The Control Products & Solutions provides low and medium voltage electro-mechanical and electronic motor starters, motor and circuit protection devices, AC/DC variable frequency drives, push buttons, signaling devices, termination and protection devices, relays, timers, and condition sensors; and various packaged solutions, such as configured drives and motor control centers to automation and information solutions. This segment also offers total life-cycle support services, including technical support and repair, asset management, training, predictive and preventative maintenance, and safety and network consulting. The company serves food and beverage, transportation, oil and gas, metals, mining, and life sciences industries through independent distributors and direct sales force in the United States, Canada, Europe, the Middle East, Africa, the Asia Pacific, and Latin America. Rockwell Automation, Inc. was founded in 1903 and is headquartered in Milwaukee, Wisconsin.

### Robotics & Automation Description:

Rockwell is one of the largest suppliers of industrial automation software and programmable logic controllers (PLC). Its PLC are designed primarily to integrate various discrete and continuous processes. ControlLogix® is a universal system that is used to program and integrate robotic motion, control, and sequencing functions. Additionally it can be used for part defect detection, the ability to identify and remove the part from the assembly line, as well as other pick-and-place functions. PlantPax® has similar capabilities for process controls; however, it offers more flexibility for increased customization. Its GuardPLC™ Controller family is ideal for sensing speed, direction, zero-speed, temperature, pressure, and flow applications. Rockwell also specializes in producing microcontrollers and nano-controllers.

Fundamentals	2010	2011	2012	2013	2014	ROK 2014 Revenue by Geography
Sales	\$4,857	\$6,000	\$6,259	\$6,352	\$6,624	
YoY % Change	12%	24%	4%	1%	4%	
EBITDA	\$735	\$1,029	\$1,164	\$1,145	\$1,318	
YoY % Change	22%	23%	6%	2%	7%	
Net Income	\$464	\$698	\$737	\$756	\$827	
YoY % Change	110%	50%	6%	3%	9%	
Earnings Per Share	\$3.26	\$4.88	\$5.20	\$5.43	\$5.98	
YoY % Change	99%	57%	7%	4%	10%	
EBITDA Margin %	15%	17%	19%	18%	20%	
Net % Margin	10%	12%	12%	12%	12%	
Top 5 Comps	PE	PB	P/S	EV/EBITDA	Div Yield %	Analyst Recommendations
Emerson Electric Co.	12.34	3.35	1.30	7.32	4.26	Buy 8
Hubbell Inc.	15.93	2.55	1.44	8.72	2.64	Hold 13
Danaher Corp.	23.44	2.42	2.97	12.63	0.63	
Roper Technologies, Inc.	23.75	3.14	4.38	14.31	0.64	
Franklin Electric Co., Inc.	21.80	2.17	1.29	11.18	1.43	Sell 3
Rockwell Automation Inc.	<b>15.86</b>	<b>5.32</b>	<b>2.12</b>	<b>9.48</b>	<b>2.56</b>	0 5 10 15 No. of analyst recommendations

\*Fundamental data provided by S&P Capital IQ



**ROBO  
GLOBAL**

Ticker	SU	Currency	USD	Date	9/30/15
<b>Schneider Electric SE</b>					
Headquarters	France	Share Price	55.81		
Website	<a href="http://schneider-electric.com">schneider-electric.com</a>	52 Week Range	54.20-456-84.02-433		
Exchange	ENXTPA	Market Cap (\$B)	32.05		
Industry (GICS)	Industrials	Enterprise Value (\$B)	39.71		
ROBO Global Classification:		YTD Change	(17.49%)		
BW or NBW	Non-Bellwether	PE	16.57		
Tier One	Technology	P/S	1.10		
Tier Two	Integration	Dividend Yield	3.84%		

### Business Description:

Schneider Electric S.E. provides integrated energy management solutions to energy and infrastructure, industries, data centers and networks, buildings, and residential markets worldwide. It operates through four segments: Buildings & Partner, Infrastructure, Industry, and IT. The company offers automation and control solutions; medium voltage switchgears, transformers, and energy automation products; electrical products, such as circuit breakers, switches, meters, enclosures, and switchboards; installation systems, and control products and solutions; building management and security systems; and critical power and cooling systems. It also provides solar solutions for photovoltaic integration and connection, including power conversion, electrical distribution, monitoring, supervision, and technical support; critical information products for weather-sensitive businesses; smart grid solutions; cybersecurity solutions; transaction management and market intelligence solutions; energy products and solutions; environmental products; and electrical educational solutions, as well as low voltage power, and building automation products and solutions. In addition, the company offers field services comprising electric distribution, industrial automation, critical power and cooling, and building management services; professional services, such as IT consulting and integration, and energy management services; and training services. Schneider Electric S.E. was founded in 1836 and is headquartered in Rueil Malmaison, France.

### Robotics & Automation Description:

Schneider manufactures robotics components primarily used in industrial robots geared towards process automation and motion control. Schneider also integrates the installation of customized automation systems that allow for remote monitoring and control. Its customized automation and control products include programmable relays, motion controllers / starters / coordinators, speed drives, and human-machine interfaces. Its robotics components include motor speed controller units, switches, and HVAC sensors. Additionally, Schneider provides substation automation, protection, monitoring, and control solutions for energy distribution from LV substations to EHV transmission grid solutions. Schneider ranks #1 in low voltage and building automation, #1 in grid automation and medium voltage, #2 in discrete industrial automation, and #4 in factory automation worldwide.

Fundamentals	2010	2011	2012	2013	2014	SU 2014 Revenue by Geography
Sales	\$26,255	\$29,029	\$31,572	\$32,214	\$30,187	
YoY % Change	24%	14%	7%	(2%)	7%	
EBITDA	\$4,656	\$4,656	\$5,186	\$5,013	\$4,510	
YoY % Change	24%	8%	8%	(3%)	7%	
Net Income	\$2,306	\$2,329	\$2,390	\$2,600	\$2,349	
YoY % Change	109%	4%	1%	4%	3%	
Earnings Per Share	\$4.42	\$4.33	\$4.40	\$4.72	\$4.11	
YoY % Change	98%	1%	0%	(1%)	(6%)	
EBITDA Margin %	18%	16%	16%	16%	15%	
Net % Margin	9%	8%	8%	8%	8%	
Top 5 Comps	PE	PB	P/S	EV/EBITDA	Div Yield %	Analyst Recommendations
ABB Ltd.	16.40	2.81	1.10	8.10	4.18	
Astom SA	NM	2.07	1.39	35.77	0.00	Buy 14
Siemens Aktiengesellschaft	11.48	1.89	0.88	8.95	4.15	Hold 9
Legrand SA	23.33	3.50	2.69	13.21	2.32	
Emerson Electric Co.	12.34	3.35	1.30	7.32	4.26	Sell 1
Schneider Electric SE	<b>16.57</b>	<b>1.40</b>	<b>1.10</b>	<b>9.21</b>	<b>3.84</b>	0 5 10 15 No. of analyst recommendations



**ROBO  
GLOBAL**

Ticker	SIE	Currency	USD	Date	9/30/15
<b>Siemens Aktiengesellschaft</b>					
Headquarters	Germany	Share Price	88.78		
Website	<a href="http://siemens.com">siemens.com</a>	52 Week Range	86.78-118.63	9/30/15	
Exchange	DB	Market Cap (\$B)	74.15		
Industry (GICS)	Industrials	Enterprise Value (\$B)	94.05		
ROBO Global Classification:		YTD Change	(15.37%)		
BW or NBW	Non-Bellwether	PE	11.48		
Tier One	Technology	P/S	0.88		
Tier Two	Integration	Dividend Yield	4.15%		

### Business Description:

Siemens Aktiengesellschaft operates as an electronics and electrical engineering company worldwide. The company's Power and Gas segment offers gas and steam turbines, generators, compressors, and power plant solutions for gas-fired plants, as well as solutions for power plant I and C, electrical systems, and IT solutions. Its Wind Power and Renewables segment provides wind turbines; and implements turnkey projects for small hydropower plants. The company's Power Generation Services segment offers service support, maintenance, repairs, replacements, modernizations, and upgrades for gas, steam, and wind turbines, as well as generators, power plants, and compressors; and remote monitoring and diagnostics services. Its Energy Management segment provides facilities and systems for the low-voltage and distribution power grid level, smart grid and energy automation solutions, power supply for industrial plants, and high-voltage transmission systems. The company's Building Technologies segment offers fire safety, security, building automation, heating, ventilation, and air conditioning solutions, as well as energy management products and services. Its Mobility segment provides operation management systems for rail and road traffic with solutions for airport logistics, postal automation, and traction power supply, as well as rail vehicles for mass transit, regional, and long-distance service. The company's Digital Factory segment offers integrated hardware, software, and technology-based services for manufacturing companies. Its Process Industries and Drives segment offers automation, drive technology, industrial software, and services. The company also provides commercial finance, insurance, asset management, project and structured finance, venture capital, and treasury services; and medical imaging, laboratory diagnostic, and healthcare IT solutions, as well as holds equity investments. Siemens Aktiengesellschaft was founded in 1847 and is headquartered in Munich, Germany.

### Robotics & Automation Description:

Siemens provides robot-assisted imaging systems in healthcare through its Syngo imaging software and is developing a robot nurse for lab work, surgeries, and rehab centers. Robot-assisted imaging systems are used in spinal fusion, radiography, ultrasounds, tomography, fluoroscopy, and mammography procedures. With Syngo Dynamics, one can rapidly read multi-modality images and create reports for cardiovascular patients in real-time. Siemens also provides imaging systems for robots used in car factories and manufacturing systems. Its "Totally Integrated Automation" uses open system architecture covering the entire production process and offers maximum cooperation across all automation components. Siemens also offers building automation solutions for efficient energy management, monitoring, and optimization.

Fundamentals	2010	2011	2012	2013	2014	SIE 2014 Revenue by Geography	Europe, C.I.S., Africa, Middle East (Excluding Germany) 42%																																																																															
Sales	\$93,510	\$97,527	\$99,396	\$99,404	\$90,768	Asia, Australia 17%																																																																																
YoY % Change	(2%)	5%	7%	(5%)	(2%)	United States 20%																																																																																
EBITDA	\$13,170	\$13,405	\$11,457	\$9,984	\$10,267	Germany 28%																																																																																
YoY % Change	6%	9%	0%	(8%)	3%																																																																																	
Net Income	\$5,297	\$7,696	\$5,331	\$5,798	\$6,781																																																																																	
YoY % Change	70%	47%	(27%)	3%	25%																																																																																	
Earnings Per Share	\$6.10	\$8.81	\$6.09	\$6.87	\$8.04																																																																																	
YoY % Change	77%	54%	(30%)	(7%)	30%																																																																																	
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# Processing



**ROBO  
GLOBAL**

Ticker	CGNX	Currency	USD	Date	9/30/15
<b>Cognex Corporation</b>					
Headquarters	United States	Share Price	34.37		
Website	cognex.com	52 Week Range	32.35-52.4799		
Exchange	NasdaqGS	Market Cap (\$B)	2.993		
Industry (GICS)	Information Technology	Enterprise Value (\$B)	2.708		
ROBO Global Classification:		YTD Change	(16.84%)		
BW or NBW	Bellwether	PE	21.21		
Tier One	Technology	P/S	5.36		
Tier Two	Processing	Dividend Yield	0.81%		

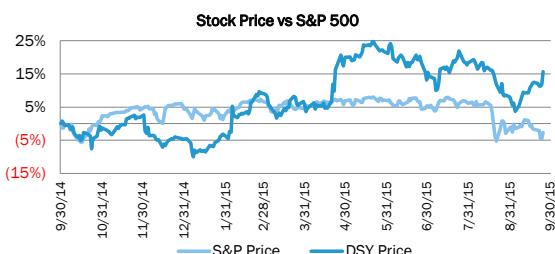
### Business Description:

Cognex Corporation provides machine vision products that capture and analyze visual information in order to automate tasks primarily in manufacturing processes. It develops, manufactures, and markets modular vision systems and ID products that are used to automate the manufacture and tracking of discrete items, such as cellular phones, aspirin bottles, and automobile wheels by locating, identifying, inspecting, and measuring them during the manufacturing or distribution process. The company sells its products through direct sales force, as well as through a network of integration and distribution partners worldwide. Cognex Corporation was founded in 1981 and is headquartered in Natick, Massachusetts.

### Robotics & Automation Description:

Cognex has 2 primary robotics divisions, the Modular Vision Systems (MVSD) and Surface Inspection Systems (SISD). Historically, the MVSD division has generated nearly 90% of Cognex's revenue. Cognex automation equipment includes machine builders/suppliers, robotic systems integrators, and line builders, which are designed to perform with the highest reliability at high production speeds and are optimized to operate in the tightest of spaces. Guiding robots with machine vision is an enabling technology for flexible manufacturing, allowing production lines to readily accommodate product changes. Cognex is the machine vision systems leader by most installed systems (150,000+), largest engineering group (over 250 engineers in R&D and sales), patents (281 with 183 pending), and sales volume.

Fundamentals	2010	2011	2012	2013	2014	CGNX 2014 Revenue by Geography
Sales	\$291	\$322	\$324	\$354	\$486	
YoY % Change	65%	11%	1%	9%	37%	
EBITDA	\$86	\$95	\$94	\$97	\$156	
YoY % Change	79%	14%	0%	10%	35%	
Net Income	\$61	\$70	\$68	\$74	\$121	
YoY % Change	0%	14%	(3%)	8%	65%	
Earnings Per Share	\$0.77	\$0.83	\$0.79	\$0.85	\$1.40	
YoY % Change	0%	8%	(5%)	6%	64%	
EBITDA Margin %	29%	30%	29%	28%	32%	
Net % Margin	21%	22%	21%	21%	25%	
Top 5 Comps	PE	PB	P/S	EV/EBITDA	Div Yield %	Analyst Recommendations
FARO Technologies Inc.	22.62	1.74	1.78	11.87	0.00	Buy 4
MTS Systems Corporation	19.33	3.53	1.60	10.55	2.00	Hold 3
FEI Company	25.63	2.95	3.25	12.09	1.64	
Zebra Technologies Corporation	NM	4.19	1.36	16.34	0.00	
GSI Group Inc.	NM	1.87	1.16	8.62	0.00	
Cognex Corporation	21.21	3.77	5.36	14.74	0.81	0

Ticker	DSY	Currency	USD	Date	9/30/15
<b>Dassault Systems SA</b>					
Headquarters	France	Share Price	73.66		
Website	<a href="http://3ds.com">3ds.com</a>	52 Week Range	51.44-80.81-81.46-86.67		
Exchange	ENXTPA	Market Cap (\$B)	18.57		
Industry (GICS)	Information Technology	Enterprise Value (\$B)	17.30		
ROBO Global Classification:		YTD Change	30.59%		
BW or NBW	Non-Bellwether	PE	49.26		
Tier One	Technology	P/S	6.35		
Tier Two	Processing	Dividend Yield	0.65%		
 <p>The chart shows the stock price of Dassault Systems (DSY) relative to the S&amp;P 500 index from September 30, 2014, to September 30, 2015. The Y-axis represents percentage change, ranging from -15% to 25%. The X-axis shows dates from 9/30/14 to 9/30/15. The S&amp;P Price (blue line) starts at approximately 15% and fluctuates between 5% and 15%. The DSY Price (red line) starts at approximately 10% and shows a significant peak around 25% in early 2015, followed by a decline.</p>					

### Business Description:

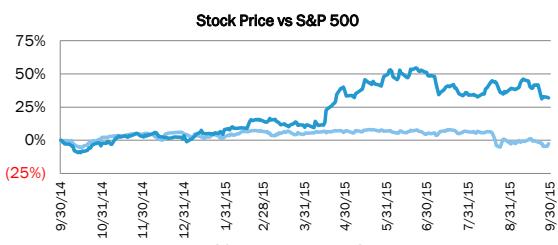
Dassault Systèmes SA provides software applications and services worldwide. The company offers SOLIDWORKS for design, simulation, technical documentation, and data management; CATIA, an engineering, design, and systems engineering software; GEOVIA, which models and simulates the earth; and BIOVIA that provides a scientific collaborative environment for biological, chemical, and materials experiences. It also offers SIMULIA, a simulation software solution; and DELMIA that helps businesses to re-imagine their planning, management, and optimization of industrial operations. In addition, the company provides 3DVIA solutions, including 3DVIA Home, an omnichannel space planning solution, which allows home improvement retailers and brand manufacturers to design the ideal kitchen, bathroom, or storage area; and 3DVIA Store, which enables retailers to test and optimize store design concepts, as well as 3DVIA solutions enables consumers to design and plan home projects in a social way. In addition, the company provides ENOVIA that offers collaborative enterprise business process applications; 3DEXCITE software, solutions, and imagery services; EXALEAD that enables organizations to gather, align, and enrich big data; and NETVIBES dashboard, which enables enterprises to identify and manage everything on real-time personalized dashboards. Further, it provides consulting services in methodology for design, deployment and support services, and training and engineering services. It serves companies in aerospace and defense, transportation and mobility, marine and offshore, industrial equipment, high- tech, architecture, engineering and construction, consumer goods - retail, consumer packaged goods - retail, life sciences, energy, process and utilities, financial and business services, and natural resources industrial sectors through direct sales force and value-added resellers. The company was founded in 1981 and is headquartered in Vélizy-Villacoublay, France.

### Robotics & Automation Description:

Dassault produces technology that enables advanced virtual design, which facilitates manufacturing via 3D printing technology and other methods. Dassault's 3DEXPERIENCE Platform produces advanced virtual technology that allows businesses to digitally define and simulate products, as well as the processes and resources required to manufacture them. Its SOLIDWORKS technology enables designers and engineers to make an easy transition from 2D drafting to a 3D environment. CAITA is a 3D product design solution that goes beyond the standard capabilities of 3D computer aided design by allowing various departments to collaborate on the design of 3D products from start to finish. Its GEOVIA product can model and simulate the earth's response to climate change to improve natural resource sustainability.

Fundamentals	2010	2011	2012	2013	2014	DSY 2014 Revenue by Geography																																																	
Sales	\$2,097	\$2,316	\$2,674	\$2,845	\$2,777																																																		
YoY % Change	25%	14%	14%	2%	11%																																																		
EBITDA	\$594	\$714	\$785	\$830	\$696																																																		
YoY % Change	27%	14%	15%	2%	8%																																																		
Net Income	\$296	\$376	\$441	\$485	\$353																																																		
YoY % Change	30%	31%	16%	5%	(17%)																																																		
Earnings Per Share	\$1.24	\$1.55	\$1.79	\$1.94	\$1.41																																																		
YoY % Change	27%	28%	14%	4%	(17%)																																																		
EBITDA Margin %	28%	31%	29%	29%	25%																																																		
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<table border="1"> <thead> <tr> <th>Top 5 Comps</th> <th>PE</th> <th>PB</th> <th>P/S</th> <th>EV/EBITDA</th> <th>Div Yield %</th> <th>Analyst Recommendations</th> </tr> </thead> <tbody> <tr> <td>Sage Group plc</td> <td>27.34</td> <td>6.09</td> <td>4.01</td> <td>15.40</td> <td>2.43</td> <td>Buy</td> </tr> <tr> <td>Autodesk, Inc.</td> <td>NM</td> <td>5.25</td> <td>3.95</td> <td>45.18</td> <td>0.00</td> <td>Hold</td> </tr> <tr> <td>Cap Gemini S.A.</td> <td>21.65</td> <td>2.19</td> <td>1.16</td> <td>10.24</td> <td>1.51</td> <td></td> </tr> <tr> <td>Gemalto NV</td> <td>26.97</td> <td>2.17</td> <td>1.78</td> <td>12.14</td> <td>0.72</td> <td>Sell</td> </tr> <tr> <td>SAP SE</td> <td>22.51</td> <td>3.33</td> <td>3.61</td> <td>12.07</td> <td>1.90</td> <td></td> </tr> <tr> <td>Dassault Systemes SA</td> <td>49.26</td> <td>5.23</td> <td>6.35</td> <td>24.44</td> <td>0.65</td> <td>7.5 8 8.5 9 9.5 No. of analyst recommendations</td> </tr> </tbody> </table>							Top 5 Comps	PE	PB	P/S	EV/EBITDA	Div Yield %	Analyst Recommendations	Sage Group plc	27.34	6.09	4.01	15.40	2.43	Buy	Autodesk, Inc.	NM	5.25	3.95	45.18	0.00	Hold	Cap Gemini S.A.	21.65	2.19	1.16	10.24	1.51		Gemalto NV	26.97	2.17	1.78	12.14	0.72	Sell	SAP SE	22.51	3.33	3.61	12.07	1.90		Dassault Systemes SA	49.26	5.23	6.35	24.44	0.65	7.5 8 8.5 9 9.5 No. of analyst recommendations
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Ticker	E2V	Currency	USD	Date	9/30/15
<b>e2v Technologies plc</b>					
<b>Headquarters</b>	United Kingdom	<b>Share Price</b>	3.43		
<b>Website</b>	<a href="http://e2technologies.com">e2technologies.com</a>	<b>52 Week Range</b>	2.2008-4.05538		
<b>Exchange</b>	LSE	<b>Market Cap (\$B)</b>	0.744		
<b>Industry (GICS)</b>	Information Technology	<b>Enterprise Value (\$B)</b>	0.751		
<b>ROBO Global Classification:</b>		<b>YTD Change</b>	31.02%		
<b>BW or NBW</b>	Non-Bellwether	<b>PE</b>	20.96		
<b>Tier One</b>	Technology	<b>P/S</b>	2.19		
<b>Tier Two</b>	Processing	<b>Dividend Yield</b>	2.25%		

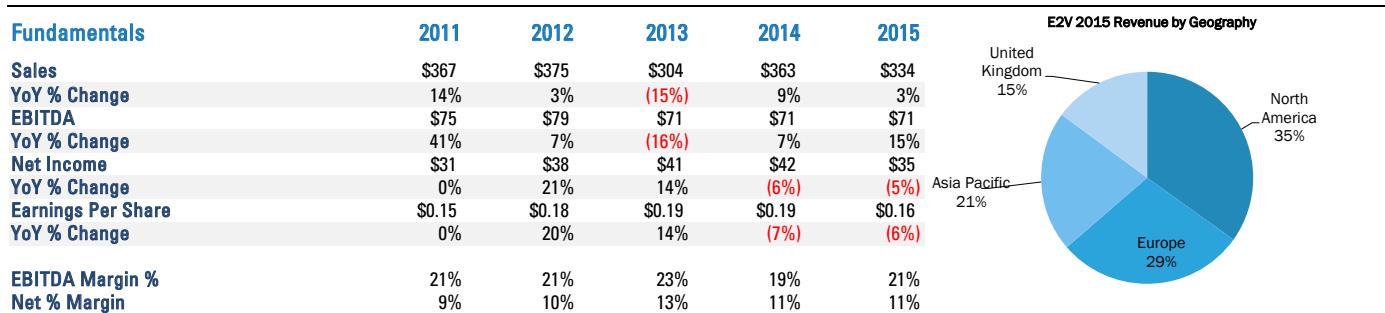


### Business Description:

e2v technologies plc designs and manufactures technology for high performance systems and equipment in the United Kingdom, North America, Europe, the Asia Pacific, and internationally. It operates through three divisions: Imaging, RF Power, and Semiconductors. The Imaging division offers imaging sensors, cameras, and subsystems, such as complementary metal oxide semiconductor (CMOS) dental intra-oral X-ray sensors and high resolution three dimensional imaging systems for ophthalmology based on charge coupled device and CMOS sensor technology; high sensitivity, low noise, and high speed imaging sensors; area array sensors for use in automatic data collection systems, including 2D barcode reading; and thermal imaging cameras for customers across a range of applications in the automation, healthcare, environment, and discovery markets. This division also provides space qualified imaging sensors and arrays for space science and astronomy applications, as well as sensors for earth observation satellites. The RF Power division offers radio frequency power systems used for the generation of X-rays for the treatment of cancer; electronic countermeasure protection of defense assets on land, at sea, and in the air; and RF devices for radar for commercial shipping, healthcare, defense, and other applications, such as industrial heating, industrial and dielectric welding, lasers, cargo screening, and processing of bulk materials. The Semiconductors division provides various products for use in civil, space, and defense applications; analogue to digital, and digital to analogue data converters for space and radio frequency communications; surface-mount technology components made by various original device manufacturer, including redesigned end-of-life military specification integrated circuits. The company was incorporated in 2002 and is based in Chelmsford, the United Kingdom.

### Robotics & Automation Description:

E2V produces imaging technology implemented on robots. Its Complementary Metal Oxide Semiconductor (CMOS) image sensors are used in the space and defense industries and come with features such as high radiation tolerance and low power consumption. Charge Coupled Device (CCD) imaging sensors provide the best performance when low noise levels and uniformity are critical at low speeds. The Argus® division is responsible for developing thermal imaging solutions. L3Vision™ is an advanced Electron Multiplying (EM) imaging technology that offers nighttime surveillance and other vision capabilities in poorly lit areas. Optical Coherence Tomography (OCT) is a non-invasive optical imaging technique that uses near-infrared light for various eye care diagnostics. The AviiVA, DiviNA, and ELiiXA camera families address a very broad range of applications including food sorting, flat panel display inspection, PCB inspection, solar cell inspection, railway inspection, etc.



Top 5 Comps	PE	PB	P/S	EV/EBITDA	Div Yield %	Analyst Recommendations
Oxford Instruments plc	NM	2.65	0.86	10.21	2.23	
Comtech Telecommunications Corp.	14.51	0.83	1.09	3.88	5.82	Buy 3
Chemring Group plc	NM	1.46	1.21	16.46	1.84	Hold 2
TT Electronics plc	NM	1.21	0.40	12.02	4.14	
Hill & Smith Holdings PLC	27.14	3.12	1.18	9.89	2.56	Sell 0
e2v Technologies plc	<b>20.96</b>	<b>2.92</b>	<b>2.19</b>	<b>10.45</b>	<b>2.25</b>	0 No. of analyst recommendations



Ticker FARO      Currency USD      Date 9/30/15

### FARO Technologies Inc.

<b>Headquarters</b>	United States	<b>Share Price</b>	35.00
<b>Website</b>	faro.com	<b>52 Week Range</b>	32.95-65.63
<b>Exchange</b>	NasdaqGS	<b>Market Cap (\$B)</b>	0.608
<b>Industry (GICS)</b>	Information Technology	<b>Enterprise Value (\$B)</b>	0.453
<b>ROBO Global Classification:</b>		<b>YTD Change</b>	(44.16%)
<b>BW or NBW</b>	Bellwether	<b>PE</b>	22.62
<b>Tier One</b>	Technology	<b>P/S</b>	1.78
<b>Tier Two</b>	Processing	<b>Dividend Yield</b>	0.00%



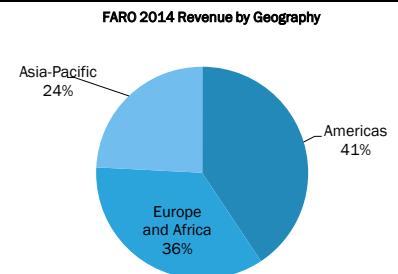
### Business Description:

FARO Technologies, Inc., together with its subsidiaries, designs, develops, manufactures, markets, and supports software driven, three-dimensional (3-D) measurement, imaging, and realization systems for manufacturing, industrial, architecture, surveying, building construction, and law enforcement applications. The company offers FaroArm, a combination of six or seven-axis, articulated measurement arm, a computer, and computer-aided measurement (CAM2) software programs; and FARO Laser ScanArm, a FaroArm equipped with a hard probe and non-contact laser line probe to measure products without touching them, as well as offers a seven-axis contact/non-contact measurement device with an integrated laser scanner. It also provides FARO Gage, a combination of an articulated arm device with a computer and software; FARO Laser Tracker Vantage that combines a laser measurement tool, a computer, and CAM2 software programs; FARO 3D Imager AMP, a non-contact 3D imager for collecting millions of points to generate infinitely-focused fringe patterns; and FARO Focus3D to measure and collect a cloud of data points. In addition, the company offers FARO Freestyle3D, a high-precision, handheld scanner that documents rooms, structures, and objects in 3-D, as well as creates high-definition point clouds; and FARO Software, a proprietary CAD-based measurement and laser scanner software. Further, it provides CAM2 Measure 10 to complete measurement jobs; FARO CAM2 Smartinspect, a CAM2 solution for measuring geometry and building dimensions; FARO SCENE software to deliver a scan processing solution; and FARO Forensics software for law enforcement officers, firefighters, and loss control engineers. The company sells its products through direct sales and distributors in the United States, Brazil, Mexico, Germany, Switzerland, the United Kingdom, France, Italy, Singapore, Japan, China, and India. FARO Technologies, Inc. was founded in 1981 and is headquartered in Lake Mary, Florida.

### Robotics & Automation Description:

Faro's laser trackers and measuring arms enable the automation of inspection processes, faster and more accurate measurements of 3D and other complex objects, detailed 3D documentation, robot and machine repairs, and robot and machine recalibration convenience. Many of these tools are also used in accident reconstruction, crime scene analysis, virtual simulation, and reverse engineering applications. The CAM2 software has remote measurement capabilities that can be done in real-time, which includes the automatic compensation for temperature variations that could potentially impact measurement accuracy. Through the use of Faro's QuickTools programming, users can automate and replicate the measurement of multiple parts.

Fundamentals	2010	2011	2012	2013	2014
Sales	\$192	\$254	\$273	\$292	\$342
YoY % Change	30%	33%	8%	7%	17%
EBITDA	\$23	\$40	\$39	\$37	\$45
YoY % Change	41%	27%	4%	8%	17%
Net Income	\$11	\$23	\$23	\$22	\$34
YoY % Change	0%	111%	(2%)	(6%)	56%
Earnings Per Share	\$0.69	\$1.42	\$1.36	\$1.26	\$1.95
YoY % Change	0%	104%	(4%)	(7%)	54%
EBITDA Margin %	12%	16%	14%	13%	13%
Net % Margin	6%	9%	8%	7%	10%



Top 5 Comps	PE	PB	P/S	EV/EBITDA	Div Yield %	Analyst Recommendations
Cognex Corporation	21.21	3.77	5.36	14.74	0.81	Buy 2
Newport Corp.	16.97	1.51	0.90	7.17	0.00	Hold 7
MTS Systems Corporation	19.33	3.53	1.60	10.55	2.00	
GSI Group Inc.	NM	1.87	1.16	8.62	0.00	
3D Systems Corporation	NM	1.01	1.88	27.07	0.00	Sell 0
<b>FARO Technologies Inc.</b>	<b>22.62</b>	<b>1.74</b>	<b>1.78</b>	<b>11.87</b>	<b>0.00</b>	0 2 4 6 8 No. of analyst recommendations



**ROBO  
GLOBAL**

Ticker	FLIR	Currency	USD	Date	9/30/15
<b>FLIR Systems, Inc.</b>					
<b>Headquarters</b>	United States	<b>Share Price</b>	27.99		
<b>Website</b>	<a href="http://flir.com">flir.com</a>	<b>52 Week Range</b>	26.344-34.46		
<b>Exchange</b>	NasdaqGS	<b>Market Cap (\$B)</b>	3.925		
<b>Industry (GICS)</b>	Information Technology	<b>Enterprise Value (\$B)</b>	3.731		
<b>ROBO Global Classification:</b>		<b>YTD Change</b>	(13.37%)		
<b>BW or NBW</b>	Non-Bellwether	<b>PE</b>	17.81		
<b>Tier One</b>	Technology	<b>P/S</b>	2.54		
<b>Tier Two</b>	Processing	<b>Dividend Yield</b>	1.57%		

### Business Description:

FLIR Systems, Inc. designs, manufactures, and markets thermal imaging, visible-light imaging systems, locator systems, measurement and diagnostic systems, and threat-detection solutions worldwide. The company operates in six segments: Surveillance, Instruments, OEM and Emerging Markets, Maritime, Security, and Detection. The Surveillance segment develops and manufactures enhanced imaging and recognition solutions for various military, law enforcement, public safety, and other government customers for the protection of borders, troops, and public welfare. The Instruments segment develops and manufactures devices that image, measure, and assess thermal energy, gases, and other environmental elements for industrial, commercial, and scientific applications. The OEM and Emerging Markets segment develops and manufactures thermal imaging camera cores and components that are utilized by third parties to create thermal and other types of imaging systems. The segment also develops and manufactures intelligent traffic systems, and hand-held and weapon-mounted thermal imaging systems for use by consumers and law enforcement. The Maritime segment develops and manufactures electronics and imaging instruments for the recreational and commercial maritime market. The Detection segment develops and manufactures sensor instruments and integrated platform solutions for the detection, identification, and suppression of chemical, biological, radiological, nuclear, and explosives threats for military force protection, homeland security, and commercial applications. The Security segment develops and manufactures cameras and video recording systems for use in commercial, critical infrastructure, and home security applications. The company markets its products to commercial and government customers. FLIR Systems, Inc. was founded in 1978 and is headquartered in Wilsonville, Oregon.

### Robotics & Automation Description:

Flir produces vision technology that is integrated into various machines, security systems, and other automated architectures such as process monitoring, quality control, fire detection, and other safety applications. FLIR thermal imagers offer fully integrated thermal imaging and measurement solutions for applications such as process development and optimization, industrial process monitoring, product verification, quality assurance, safety applications, etc. "Smart" thermal imagers and software can alert operators to impending equipment failures and security breaches 24/7. Flir also offers optical gas imaging cameras that can quickly identify harmful, invisible gas leaks from a distance without having to halt any production processes. Flir has the #1 global market share in infrared detector cores, thermography equipment, and do-it-yourself security systems. Additionally, it is #4 in military infrared equipment. Thermal systems currently represents over 50% of Flir's revenue.

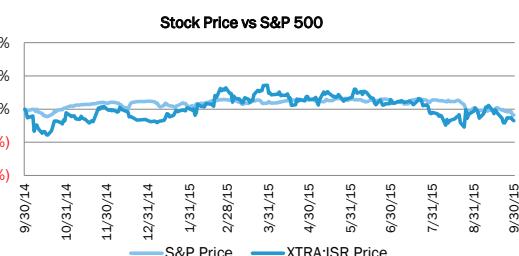
Fundamentals	2010	2011	2012	2013	2014	FLIR 2013 Revenue by Geography																																																	
Sales	\$1,388	\$1,544	\$1,405	\$1,496	\$1,531																																																		
YoY % Change	21%	11%	(9%)	6%	2%																																																		
EBITDA	\$425	\$437	\$365	\$331	\$333																																																		
YoY % Change	17%	9%	(12%)	0%	2%																																																		
Net Income	\$248	\$221	\$222	\$177	\$200																																																		
YoY % Change	8%	(11%)	0%	(20%)	13%																																																		
Earnings Per Share	\$1.59	\$1.40	\$1.47	\$1.24	\$1.42																																																		
YoY % Change	7%	(11%)	7%	(17%)	14%																																																		
EBITDA Margin %	31%	28%	26%	22%	22%																																																		
Net % Margin	18%	14%	16%	12%	13%																																																		
<table> <thead> <tr> <th>Top 5 Comps</th> <th>PE</th> <th>PB</th> <th>P/S</th> <th>EV/EBITDA</th> <th>Div Yield %</th> <th>Analyst Recommendations</th> </tr> </thead> <tbody> <tr> <td>Rockwell Collins Inc.</td> <td>16.11</td> <td>5.26</td> <td>2.07</td> <td>10.77</td> <td>1.61</td> <td>Buy</td> </tr> <tr> <td>Zhejiang Dahua Technology Co., Ltd.</td> <td>34.90</td> <td>7.11</td> <td>4.95</td> <td>31.08</td> <td>0.30</td> <td></td> </tr> <tr> <td>Checkpoint Systems Inc.</td> <td>NM</td> <td>1.04</td> <td>0.50</td> <td>4.79</td> <td>0.00</td> <td>Hold</td> </tr> <tr> <td>FEI Company</td> <td>25.63</td> <td>2.95</td> <td>3.25</td> <td>12.09</td> <td>1.64</td> <td></td> </tr> <tr> <td>Furuno Electric Co., Ltd.</td> <td>NM</td> <td>0.67</td> <td>0.28</td> <td>5.67</td> <td>1.02</td> <td>Sell</td> </tr> <tr> <td>FLIR Systems, Inc.</td> <td>17.81</td> <td>2.40</td> <td>2.54</td> <td>10.64</td> <td>1.57</td> <td>0 2 4 6 8</td> </tr> </tbody> </table>						Top 5 Comps	PE	PB	P/S	EV/EBITDA	Div Yield %	Analyst Recommendations	Rockwell Collins Inc.	16.11	5.26	2.07	10.77	1.61	Buy	Zhejiang Dahua Technology Co., Ltd.	34.90	7.11	4.95	31.08	0.30		Checkpoint Systems Inc.	NM	1.04	0.50	4.79	0.00	Hold	FEI Company	25.63	2.95	3.25	12.09	1.64		Furuno Electric Co., Ltd.	NM	0.67	0.28	5.67	1.02	Sell	FLIR Systems, Inc.	17.81	2.40	2.54	10.64	1.57	0 2 4 6 8	No. of analyst recommendations
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Ticker XTRA:ISR      Currency USD      Date 9/30/15

### Isra Vision AG.

<b>Headquarters</b>	Germany	<b>Share Price</b>	55.83
<b>Website</b>	<a href="http://isravision.com">isravision.com</a>	<b>52 Week Range</b>	42.43067-74.43781
<b>Exchange</b>	XTRA	<b>Market Cap (\$B)</b>	0.244
<b>Industry (GICS)</b>	Information Technology	<b>Enterprise Value (\$B)</b>	0.271
<b>ROBO Global Classification:</b>		<b>YTD Change</b>	8.52%
<b>BW or NBW</b>	Non-Bellwether	<b>PE</b>	15.89
<b>Tier One</b>	Technology	<b>P/S</b>	2.01
<b>Tier Two</b>	Processing	<b>Dividend Yield</b>	0.78%



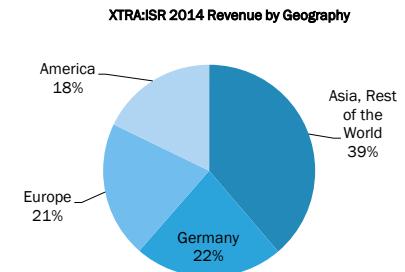
### Business Description:

ISRA VISION AG, together with its subsidiaries, provides surface inspection and image processing systems worldwide. The company operates in two segments, Industrial Automation and Surface Vision. It offers robot vision solutions, such as 2D and 2 ½D robot vision, mono 3D, 3D shape matching, 3D photogrammetry, 3D stereosensor, 3D stereosystems, 3D area profile scans, 3D shape scan point cloud, 3D visual servo, and 3D adapted uncalibrated robot automation; and surface vision products, including panels and sheets, painted finishes, and patterned finishes. The company also provides quality inspection solutions comprising modular can inspection products, automated code identification systems, bead and seam inspection systems, completeness and quality inspection systems, and products for real-time three dimensional paint inspection, as well as versatile intelligence for vision automation; and in line gauging solutions consisting of sensor systems, gauging package, and quality database Q-VIS. The company also provides ISRA BrainWARE, a software for intelligent machine vision systems that integrate scientific know-how and complex system design. It serves automobile industry, machine tool manufacturers, automation industry, general industry, plant and system manufacturers, and the OEM market; and flat glass, solar, foil, nonwovens, metal, paper, and printing industries. The company was formerly known as ISRA VISION SYSTEMS AG and changed its name to ISRA VISION AG in November 2006. ISRA VISION AG was founded in 1985 and is headquartered in Darmstadt, Germany.

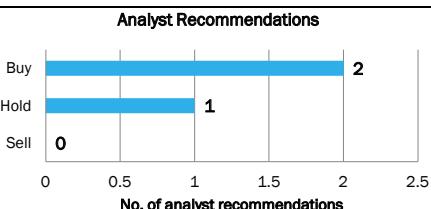
### Robotics & Automation Description:

ISRA manufactures 2D and 3D vision components and software to enable robot and automation machine guidance in picking, placing, and inspecting items. MONO3D enables 3D robot guidance using just one camera that can precisely define a 3D object's dimensions. Its predecessor, LOCMES (Location Measurement Sensor), required at least two cameras plus other peripheral equipment to accomplish this. The 2D robot vision system is typically used for item identification and position recognition. ISRA also has a 2-1/2D robot vision that is essentially the same as the 2D system only it provides information about an object's height. Its more recent developments include automatic conveyor synchronization (Visual Servoing) using its 3D vision systems and robot learning capabilities called AURA (Adapted Uncalibrated Robot Automation). ISRA also offers surface vision solutions that focus mainly on inspection and quality control.

Fundamentals	2010	2011	2012	2013	2014
Sales	\$88	\$101	\$108	\$121	\$129
YoY % Change	12%	16%	12%	7%	14%
EBITDA	\$15	\$18	\$20	\$24	\$26
YoY % Change	14%	17%	13%	8%	16%
Net Income	\$9	\$12	\$14	\$16	\$16
YoY % Change	7%	31%	18%	8%	13%
Earnings Per Share	\$2.18	\$2.81	\$3.13	\$3.57	\$3.75
YoY % Change	6%	30%	17%	8%	13%
EBITDA Margin %	17%	18%	19%	20%	20%
Net % Margin	11%	12%	13%	13%	13%



Top 5 Comps	PE	PB	P/S	EV/EBITDA	Div Yield %	Analyst Recommendations
Basler AG	17.44	3.28	1.63	12.33	1.63	Buy 2
Perceptron, Inc.	NM	1.17	0.94	20.79	0.00	
Key Technology, Inc.	NM	1.18	0.70	246.91	0.00	Hold 1
Cognex Corporation	21.21	3.77	5.36	14.74	0.81	
Gefran SpA	NM	0.48	0.26	8.42	0.00	Sell 0





**ROBO  
GLOBAL**

Ticker	DB:LEO	Currency	USD	Date	9/30/15
<b>LEONI AG</b>					
Headquarters	Germany	Share Price	52.98		
Website	<a href="http://leoni.com">leoni.com</a>	52 Week Range	50.67574-63.60136		
Exchange	DB	Market Cap (\$B)	1.730		
Industry (GICS)	Consumer Discretionary	Enterprise Value (\$B)	2.214		
ROBO Global Classification:		YTD Change	(3.90%)		
BW or NBW	Non-Bellwether	PE	14.76		
Tier One	Technology	P/S	0.36		
Tier Two	Processing	Dividend Yield	2.53%		

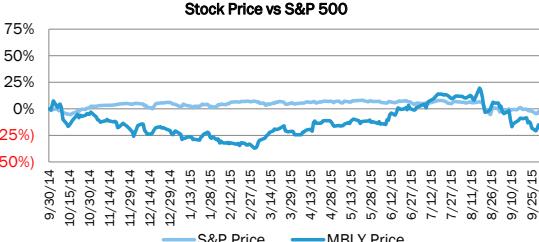
### Business Description:

LEONI AG provides wires, optical fibers, cables, and cable systems; and related services for applications in the automotive and other industries worldwide. It operates in two segments, Wire & Cable Solutions, and Wiring Systems. The Wire & Cable Solutions segment develops, manufactures, and sells wires, strands, tapes, and optical fibers for cable production; electrical and electromechanical components; Lyonese wares for textiles; and cables, conductors, and cable systems for the automotive and electrical appliance industries, data and communications technology, professional multimedia segment, health care sector, automation and process technology, machinery and plant engineering, industrial plants, solar industry, and infrastructure projects. It also provides services in the field of irradiation cross linking; and produces fiber optic cables based on glass and polymer fiber. The Wiring Systems segment develops, produces, and sells wiring systems and ready-to-install cable harnesses for passenger cars and commercial vehicles; and manufactures conventional cable harnesses, pre-formed cable harnesses, plastic molded components, and electronic wiring system components; and ready-to-connect single cables with matching connectors and fixings. The company was formerly known as Leonische Drahtwerke AG and changed its name to LEONI AG in 1999. LEONI AG was founded in 1569 and is headquartered in Nuremberg, Germany.

### Robotics & Automation Description:

Leoni produces integrated wiring and vision systems used in robotics, mainly fiber optic cables. For industrial robotics, it provides dresspacks with pneumatic, hydraulic, and electrical components, as well as sensor technology and vision solutions, such as tool calibration and seam tracking. Leoni also produces calibration tools for welding robots to detect and correct for the slightest variations of a production process. Leoni Vision Solutions are regularly used for robot guidance and difficult machine vision inspection, assembly, and verification applications. Additionally, it is leveraging its robotics programming to branch into medical technology with the launch of "Orion" in 2014 for high precision patient positioning and treatment.

Fundamentals	2010	2011	2012	2013	2014	DB:LEO 2014 Revenue by Geography
Sales	\$3,963	\$4,809	\$5,022	\$5,395	\$4,967	
YoY % Change	37%	25%	3%	3%	5%	
EBITDA	\$329	\$467	\$428	\$417	\$372	
YoY % Change	82%	31%	(1%)	0%	4%	
Net Income	\$90	\$202	\$207	\$145	\$139	
YoY % Change	0%	132%	1%	(33%)	9%	
Earnings Per Share	\$3.03	\$6.49	\$6.32	\$4.45	\$4.25	
YoY % Change	0%	121%	(4%)	(33%)	9%	
EBITDA Margin %	8%	10%	9%	8%	7%	
Net % Margin	2%	4%	4%	3%	3%	
Top 5 Comps	PE	PB	P/S	EV/EBITDA	Div Yield %	Analyst Recommendations
Hella KGaA Hueck & Co.	13.16	1.89	0.58	4.61	2.40	Buy 12
ElringKlinger AG	11.05	1.37	0.77	7.28	3.20	Hold 4
Continental Aktiengesellschaft	15.10	3.18	1.02	7.72	1.71	Sell 3
Grammer AG	7.58	0.91	0.16	2.84	3.76	
Saf-Holland SA	13.20	1.98	0.52	7.28	2.71	
LEONI AG	<b>14.76</b>	<b>1.57</b>	<b>0.36</b>	<b>6.50</b>	<b>2.53</b>	0 5 10 15 No. of analyst recommendations

Ticker	MBLY	Currency	USD	Date	9/30/15
<b>Mobileye N.V.</b>					
Headquarters	Israel	Share Price	45.48		
Website	<a href="http://mobileye.com">mobileye.com</a>	52 Week Range	32.41-64.4799		
Exchange	NYSE	Market Cap (\$B)	9.905		
Industry (GICS)	Information Technology	Enterprise Value (\$B)	9.707		
ROBO Global Classification:		YTD Change	12.13%		
BW or NBW	Non-Bellwether	PE	NM		
Tier One	Technology	P/S	78.81		
Tier Two	Processing	Dividend Yield	0.00%		
 <p>The graph shows the performance of Mobileye's stock price relative to the S&amp;P 500 index from September 30, 2014, to September 25, 2015. The Y-axis represents percentage change from -50% to 75%. The X-axis lists dates from 9/30/14 to 9/25/15. The S&amp;P Price (blue line) starts at approximately 0% and remains relatively flat with minor fluctuations. The MBLY Price (red line) starts at approximately 0%, dips slightly, and then trends upwards, ending around 10% above the S&amp;P Price by the end of the period.</p>					

### Business Description:

Mobileye N.V., together with its subsidiaries, designs and develops software and related technologies for camera-based advanced driver assistance systems primarily in Israel. It operates through two segments, Original Equipment Manufacturing and After Market. The company offers proprietary software algorithms and EyeQ chips that perform detailed interpretations of the visual field to anticipate possible collisions with other vehicles, pedestrians, cyclists, animals, debris, and other obstacles; and detect roadway markings, such as lanes, road boundaries, barriers, and related items, as well as identify and read traffic signs and traffic lights. It serves original equipment manufacturers, tier 1 system integrators, fleets and fleet management systems providers, insurance companies, leasing companies, and others through distributors and resellers. Mobileye N.V. was founded in 1999 and is headquartered in Jerusalem, Israel.

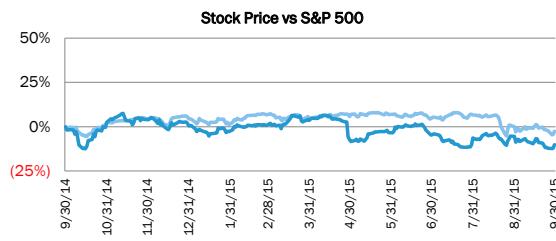
### Robotics & Automation Description:

Mobileye develops vision based Advanced Driver Assistance Systems that give advanced collision warnings to drivers in order to avoid car accidents. Using sophisticated vision algorithms, Mobileye collision avoidance technology is able to 'interpret' a scene in real-time and provide drivers with an immediate evaluation based on its analysis. Automakers are now adopting this technology into their rapidly expanding safety feature applications.

Fundamentals	2010	2011	2012	2013	2014	MBLY 2014 Revenue by Geography																																		
Sales	\$14	\$19	\$40	\$81	\$144																																			
YoY % Change	0%	0%	110%	102%	77%																																			
EBITDA	\$0	(\$11)	(\$0)	\$17	(\$12)																																			
YoY % Change	0%	0%	128%	114%	77%																																			
Net Income	(\$9)	(\$13)	(\$0)	\$20	(\$30)																																			
YoY % Change	0%	0%	0%	0%	0%																																			
Earnings Per Share	\$0.00	(\$0.33)	(\$0.00)	(\$6.03)	(\$0.15)																																			
YoY % Change	0%	0%	0%	0%	0%																																			
EBITDA Margin %	0%	(56%)	(1%)	21%	(8%)																																			
Net % Margin	(65%)	(70%)	(0%)	25%	(21%)																																			
<table border="1"> <thead> <tr> <th>Top 5 Comps</th> <th>PE</th> <th>PB</th> <th>P/S</th> <th>EV/EBITDA</th> <th>Div Yield %</th> <th>Analyst Recommendations</th> </tr> </thead> <tbody> <tr> <td>Sapiens International Corporation N.V.</td> <td>32.93</td> <td>3.05</td> <td>3.30</td> <td>22.01</td> <td>1.30</td> <td>Buy  </td> </tr> <tr> <td>Shenzhen Tianyuan DIC Information Technology Co., Ltd.</td> <td>75.22</td> <td>3.33</td> <td>3.11</td> <td>74.62</td> <td>0.15</td> <td>11  </td> </tr> <tr> <td>Linedata Services SA</td> <td>12.49</td> <td>1.91</td> <td>1.35</td> <td>7.13</td> <td>2.17</td> <td>Hold  </td> </tr> <tr> <td></td> <td>36.15</td> <td>2.62</td> <td>1.02</td> <td>15.96</td> <td>0.00</td> <td>2  </td> </tr> </tbody> </table>						Top 5 Comps	PE	PB	P/S	EV/EBITDA	Div Yield %	Analyst Recommendations	Sapiens International Corporation N.V.	32.93	3.05	3.30	22.01	1.30	Buy	Shenzhen Tianyuan DIC Information Technology Co., Ltd.	75.22	3.33	3.11	74.62	0.15	11	Linedata Services SA	12.49	1.91	1.35	7.13	2.17	Hold		36.15	2.62	1.02	15.96	0.00	2
Top 5 Comps	PE	PB	P/S	EV/EBITDA	Div Yield %	Analyst Recommendations																																		
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	36.15	2.62	1.02	15.96	0.00	2																																		

PSI Aktiengesellschaft für Produkte und Systeme der Informationstechnologie

Ticker	NATI	Currency	USD	Date	9/30/15
<b>National Instruments Corporation</b>					
Headquarters	United States	Share Price	27.79		
Website	<a href="http://ni.com">ni.com</a>	52 Week Range	26.51-33.46		
Exchange	NasdaqGS	Market Cap (\$B)	3.581		
Industry (GICS)	Information Technology	Enterprise Value (\$B)	3.158		
ROBO Global Classification:		YTD Change	(10.61%)		
BW or NBW	Non-Bellwether	PE	29.02		
Tier One	Technology	P/S	2.87		
Tier Two	Processing	Dividend Yield	2.73%		



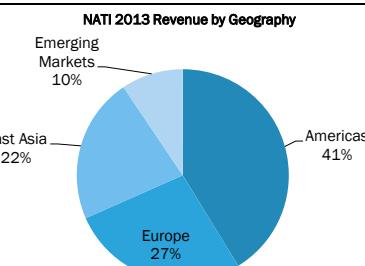
### Business Description:

National Instruments Corporation designs, manufactures, and sells systems to engineers and scientists worldwide. It provides LabVIEW, a system design software for measurement, automation, and control; LabVIEW Real-Time and LabVIEW FPGA, which are software add-ons to LabVIEW; LabVIEW Communications System Design Suite; LabWindows/CVI for creating test and control applications; and Measurement Studio consisting of measurement and automation add-on libraries, and additional tools for programmers. The company also offers a suite of software products, such as NI TestStand to test and measure applications in a manufacturing environment; NI VeriStand software to configure real-time testing applications; NI DIAdem, which provides users configuration-based technical data management, analysis, and report generation tools to mine and analyze data; NI InsightCM Enterprise for monitoring critical and ancillary rotating equipment; and NI Multisim circuit design software. In addition, it provides hardware products and related driver software, such as data acquisition, PXI chassis and controllers, modular instruments, image acquisition, motion control, distributed I/O, industrial communications interfaces, embedded control hardware/software, general purpose interface bus interfaces, and VME extension for instrumentation controllers. Further, the company offers NI education platform comprising software, hardware, and courseware for students; software and hardware products for teaching; hardware and software maintenance services; and training and certification services. It serves various industries and applications, including advanced research, automotive, automated test equipment, consumer electronics, commercial aerospace, computers and electronics, continuous process manufacturing, education, government/defense, medical research/pharmaceutical, power/energy, semiconductors, telecommunications, and others. The company was founded in 1976 and is headquartered in Austin, Texas.

### Robotics & Automation Description:

National Instruments develops robotics software systems such as LabVIEW and machine vision technologies. The NI LabVIEW graphical programming language makes it easy to program complex robotics applications by utilizing a sense-think-act process for sensor communication, obstacle avoidance, path planning, kinematics, steering, etc. The NI LabVIEW graphical system design platform is enabling new applications for industrial robots by integrating measurements, vision, robot control, and human machine interfaces into one, easy-to-use environment. By combining the capabilities of LabVIEW with add-ons provided by partners such as ImagingLab, one can quickly interface to the robot controller of leading industrial arm manufacturers such as Denso, Kuka, and Mitsubishi.

Fundamentals	2010	2011	2012	2013	2014	NATI 2013 Revenue by Geography
Sales	\$873	\$1,024	\$1,144	\$1,173	\$1,244	
YoY % Change	29%	17%	12%	3%	6%	
EBITDA	\$155	\$149	\$168	\$153	\$203	
YoY % Change	33%	16%	10%	0%	7%	
Net Income	\$109	\$94	\$90	\$81	\$126	
YoY % Change	539%	(14%)	(4%)	(11%)	57%	
Earnings Per Share	\$0.93	\$0.79	\$0.74	\$0.65	\$0.99	
YoY % Change	526%	(15%)	(6%)	(12%)	55%	
EBITDA Margin %	18%	15%	15%	13%	16%	
Net % Margin	12%	9%	8%	7%	10%	
<b>Top 5 Comps</b>						Analyst Recommendations
Keysight Technologies, Inc.	15.54	4.72	1.81	8.88	0.00	Buy
Itron, Inc.	NM	1.94	0.64	12.33	0.00	3
FARO Technologies Inc.	22.62	1.74	1.78	11.87	0.00	Hold
Pegasystems Inc.	63.14	6.21	3.02	21.97	0.49	1





Ticker	NUAN	Currency	USD	Date	9/30/15
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### Nuance Communications, Inc.

Headquarters	United States	Share Price	16.37
Website	<a href="http://nuance.com">nuance.com</a>	52 Week Range	13.2-18.96
Exchange	NasdaqGS	Market Cap (\$B)	5.071
Industry (GICS)	Information Technology	Enterprise Value (\$B)	6.738
ROBO Global Classification:		YTD Change	14.72%
BW or NBW	Non-Bellwether	PE	NM
Tier One	Technology	P/S	2.71
Tier Two	Processing	Dividend Yield	0.00%



### Business Description:

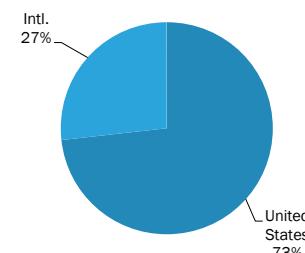
Nuance Communications, Inc. provides voice and language solutions for businesses and consumers worldwide. It offers hosted and on-premise solutions and services that provide platforms to generate and distribute clinical documentation through the use of dictation and transcription features; clinical documentation improvement programs; and speech recognition solutions for radiology, cardiology, pathology, and related specialties enabling healthcare providers to dictate, edit, and sign reports without manual transcription. The company also offers mobile and consumer solutions comprising voice control and text-to-speech solutions; dictation applications; text input; mobile messaging services; and Web search and voicemail-to-text services for use in phones, cars, tablets, desktop and portable computers, televisions, smart watches, personal navigation devices, and other consumer electronics. In addition, it provides customer service business intelligence and authentication solutions that utilize technologies, such as speech recognition, natural language understanding, dialog management, text-to-speech, voice biometrics, and virtual assistants and analytics for the telecommunications, financial services, travel, entertainment, and government sectors to support, understand, and communicate with customers. Further, the company offers document imaging, print management, and PDF solutions to printer manufacturers, home offices, small businesses, and enterprise customers; and software development toolkits to independent software vendors, as well as licenses its software to printer manufacturers. Nuance Communications, Inc. markets and sells its products through direct sales force and a network of resellers, and its e-commerce Website. The company was formerly known as ScanSoft, Inc. and changed its name to Nuance Communications, Inc. in October 2005. Nuance Communications, Inc. was founded in 1992 and is headquartered in Burlington, Massachusetts.

### Robotics & Automation Description:

Nuance develops speech recognition, voice biometrics, and imaging software that facilitate human interaction with machines. Its speech recognition software enables automation of self-service phone calls by creating more natural human-like conversations. In healthcare, it can automatically convert clinician dictations into formatted documents. Voice biometrics can essentially replace PINs and other passwords with that of the user's voice by authenticating hundreds of unique vocal characteristics. Dragon Voicemail, Dragon Missed Call Messenger, and Dragon API are various tools that turn voice messages into text messages or emails within minutes of being recorded. OmniPage Capture SDK has robust imaging, OCR recognition, and PDF capabilities as well as optical text recognition technology, intelligent character recognition, and zonal recognition. Lastly, Dragon PDF enables quick and easy paper file to PDF conversion and the ability to convert PDFs to different formats.

Fundamentals	2010	2011	2012	2013	2014
Sales	\$1,119	\$1,319	\$1,652	\$1,855	\$1,923
YoY % Change	18%	18%	25%	12%	4%
EBITDA	\$239	\$213	\$320	\$240	\$183
YoY % Change	20%	15%	27%	4%	(1%)
Net Income	<span style="color:red;">(\$19)</span>	\$38	\$207	<span style="color:red;">(\$115)</span>	<span style="color:red;">(\$150)</span>
YoY % Change	0%	0%	442%	0%	0%
Earnings Per Share	<span style="color:red;">(\$0.07)</span>	\$0.13	\$0.67	<span style="color:red;">(\$0.37)</span>	<span style="color:red;">(\$0.47)</span>
YoY % Change	0%	0%	433%	0%	0%
EBITDA Margin %	21%	16%	19%	13%	10%
Net % Margin	<span style="color:red;">(2%)</span>	3%	13%	<span style="color:red;">(6%)</span>	<span style="color:red;">(8%)</span>

NUAN 2014 Revenue by Geography



Top 5 Comps	PE	PB	P/S EV/EBITDA	Div Yield %	Analyst Recommendations
Red Hat, Inc.	69.07	9.62	6.93	35.28	0.00
Adobe Systems Incorporated	83.91	5.99	8.99	35.72	0.00
Synopsys Inc.	30.58	2.29	3.27	15.21	0.00
Citrix Systems, Inc.	40.97	4.99	3.53	15.79	0.00





**ROBO  
GLOBAL**

Ticker	TRMB	Currency	USD	Date	9/30/15
<b>Trimble Navigation Limited</b>					
Headquarters	United States	Share Price	16.42		
Website	<a href="http://trimble.com">trimble.com</a>	52 Week Range	15.9-31.035		
Exchange	NasdaqGS	Market Cap (\$B)	4.220		
Industry (GICS)	Information Technology	Enterprise Value (\$B)	4.732		
ROBO Global Classification:		YTD Change	(38.13%)		
BW or NBW	Non-Bellwether	PE	33.58		
Tier One	Technology	P/S	1.84		
Tier Two	Processing	Dividend Yield	0.00%		

### Business Description:

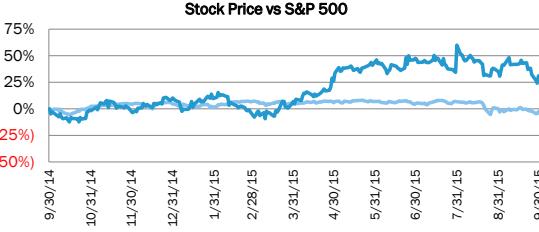
Trimble Navigation Limited provides technology solutions to enhance the work processes of office and mobile field professionals worldwide. The company's Engineering and Construction segment offers field and office software for route selection and design; systems to guide and control construction equipment; systems to monitor, track, and manage assets, equipment, and workers; software to share and communicate data; 3D conceptual design and modeling software; BIM software for design, construction, and maintenance; integrated site layout and measurement systems; application products; integrated workplace management services software; capital program and facility management solutions; and field based data collection systems and software, communications systems, and back-office software. Its Field Solutions segment provides guidance and positioning, and automated application systems; and information management solutions, as well as systems to collect authoritative field data and integrate that data into GIS databases. The company's Mobile Solutions segment offers fleet and transportation management, analytics, routing, mapping, and reporting solutions; and work management and scheduling, and worker safety and mobility solutions. Its Advanced Devices segment supplies global navigation satellite system modules (GNSS), licensing and complementary technologies, and GNSS-integrated sub-system solutions; GPS receivers and embedded modules; emergency search and rescue, and natural resource management products; precision products; and ultrahigh frequency radio frequency identification reader modules, and finished/fixed-position RFID readers and design services. The company also provides food traceability and quality inspection software-as-a-service products. It primarily serves agriculture, architecture, civil engineering, construction, environmental management, and natural resources industries. The company was founded in 1978 and is headquartered in Sunnyvale, California.

### Robotics & Automation Description:

Trimble develops GPS systems and navigation technology that guide and help automated machinery such as tractors and bulldozers. Its imaging software transforms geospatial data into information used to increase productivity and improve decision-making within survey, engineering and GIS service companies, governments, utilities and transportation authorities. Utilizing Trimble operated VRS technology, centimeter level accuracy is available on demand, anywhere within the reference station network. Trimble UAS Aerial Imaging Solutions is being used to perform boundary & topographic surveys, site & route planning, progress monitoring, volume determination, and vegetation health and disaster analysis. Trimble's 4D Control Systems support over 20 different types of sensors including position sensors, total station, strain meter, data logger, tiltmeters, and weather station data.

Fundamentals	2010	2011	2012	2013	2014	TRMB 2013 Revenue by Geography																																			
Sales	\$1,294	\$1,644	\$2,040	\$2,288	\$2,396																																				
YoY % Change	15%	27%	24%	12%	5%																																				
EBITDA	\$213	\$284	\$387	\$463	\$469																																				
YoY % Change	21%	30%	27%	16%	7%																																				
Net Income	\$104	\$151	\$191	\$219	\$214																																				
YoY % Change	63%	45%	27%	15%	(2%)																																				
Earnings Per Share	\$0.43	\$0.61	\$0.76	\$0.85	\$0.82																																				
YoY % Change	62%	43%	23%	14%	(4%)																																				
EBITDA Margin %	16%	17%	19%	20%	20%																																				
Net % Margin	8%	9%	9%	10%	9%																																				
<table border="1"> <thead> <tr> <th>Top 5 Comps</th> <th>PE</th> <th>PB</th> <th>P/S</th> <th>EV/EBITDA</th> <th>Div Yield %</th> <th>Analyst Recommendations</th> </tr> </thead> <tbody> <tr> <td>Garmin Ltd.</td> <td>25.66</td> <td>2.14</td> <td>2.40</td> <td>8.08</td> <td>5.69</td> <td>Buy  </td> </tr> <tr> <td>Adobe Systems Incorporated</td> <td>83.91</td> <td>5.99</td> <td>8.99</td> <td>35.72</td> <td>0.00</td> <td>4  </td> </tr> <tr> <td>Deere &amp; Company</td> <td>11.38</td> <td>3.14</td> <td>0.81</td> <td>12.96</td> <td>3.24</td> <td>Hold  </td> </tr> <tr> <td>Hexagon AB</td> <td>22.48</td> <td>2.61</td> <td>3.43</td> <td>16.34</td> <td>1.28</td> <td>8  </td> </tr> </tbody> </table>						Top 5 Comps	PE	PB	P/S	EV/EBITDA	Div Yield %	Analyst Recommendations	Garmin Ltd.	25.66	2.14	2.40	8.08	5.69	Buy	Adobe Systems Incorporated	83.91	5.99	8.99	35.72	0.00	4	Deere & Company	11.38	3.14	0.81	12.96	3.24	Hold	Hexagon AB	22.48	2.61	3.43	16.34	1.28	8	
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# Sensing

Ticker	IMMR	Currency	USD	Date	9/30/15
<b>Immersion Corporation</b>					
Headquarters	United States	Share Price	11.23		
Website	<a href="http://immersion.com">immersion.com</a>	52 Week Range	7.195-13.9		
Exchange	NasdaqGS	Market Cap (\$B)	0.316		
Industry (GICS)	Information Technology	Enterprise Value (\$B)	0.244		
ROBO Global Classification:		YTD Change	18.59%		
BW or NBW	Non-Bellwether	PE	93.54		
Tier One	Technology	P/S	5.41		
Tier Two	Sensing	Dividend Yield	0.00%		
 <p>The chart shows the Stock Price vs S&amp;P 500 from 9/30/14 to 9/30/15. The Y-axis ranges from -50% to 75%. The S&amp;P Price (blue line) starts at approximately -25% in September 2014 and trends upwards to about 10% by September 2015. The IMMR Price (red line) starts at approximately -50% in September 2014 and trends upwards to about 50% by September 2015, generally tracking above the S&amp;P Price.</p>					

### Business Description:

Immersion Corporation, an intellectual property and software licensing company, creates, designs, develops, and licenses technologies in North America, Europe, Asia, and internationally. It provides haptic technologies and software that allow people to use their sense of touch when operating various digital devices. The company offers TouchSense Core software for incorporation into mobile devices, video console gaming systems, consumer electronics, medical simulation and surgical robotic systems, and automotive controls; and TouchSense Engage, a suite of design tools and software development kits to design and integrate tactile effects into mobile games, ads, and videos. Immersion Corporation licenses TouchSense software to original equipment manufacturers or their suppliers. The company also licenses its customers to implement the licensed software in their products. In addition, it offers turn-key engineering and integration services, design kits for prototyping, authoring tools, application programming interfaces, and platform independent solutions; and develops hardware and software technologies that are compatible with industry standards. The company sells its products through a direct sales force. Immersion Corporation was founded in 1993 and is headquartered in San Jose, California.

### Robotics & Automation Description:

Haptics is the Greek word for "touch". Immersion specializes in haptics, which are integrated into robotics to enable the user to "touch" or "feel" what is actually happening remotely. Immersion implements haptic feedback into robotic surgical systems that can transform the physician's user experience by enabling identification of different tissue structures, preventing tissue damage, insuring correct suture placement, and decreasing the amount of time needed to complete the operation. These vibrations are managed and controlled by embedded software and can be integrated into device user interfaces and applications via the embedded control software APIs. Haptics are also present in consumer products such as smart phones, tablets, and video game controllers to create a more realistic and confident user experience. These devices typically leverage Immersion's TouchSense® Force Feedback System, while TouchSense is typically used to provide haptic effects in larger objects or in more extreme environments.

Fundamentals	2010	2011	2012	2013	2014	IMMR 2014 Revenue by Geography														
Sales	\$31	\$31	\$32	\$47	\$53															
YoY % Change	12%	(2%)	5%	48%	12%															
EBITDA	(\$3)	(\$1)	(\$6)	\$4	\$7															
YoY % Change	45%	(26%)	7%	60%	13%															
Net Income	(\$6)	(\$3)	(\$7)	\$40	\$4															
YoY % Change	0%	0%	0%	0%	(90%)															
Earnings Per Share	(\$0.21)	(\$0.12)	(\$0.26)	\$1.42	\$0.15															
YoY % Change	0%	0%	0%	0%	(90%)															
EBITDA Margin %	(9%)	(2%)	(19%)	9%	12%															
Net % Margin	(19%)	(11%)	(22%)	85%	8%															
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Top 5 Comps</th> <th>PE</th> <th>PB</th> <th>P/S</th> <th>EV/EBITDA</th> <th>Div Yield %</th> <th>Analyst Recommendations</th> </tr> </thead> <tbody> <tr> <td>Digimarc Corporation</td> <td>NM</td> <td>5.28</td> <td>9.52</td> <td>NM</td> <td>0.00</td> <td>Buy   Hold   6</td> </tr> </tbody> </table>							Top 5 Comps	PE	PB	P/S	EV/EBITDA	Div Yield %	Analyst Recommendations	Digimarc Corporation	NM	5.28	9.52	NM	0.00	Buy   Hold   6
Top 5 Comps	PE	PB	P/S	EV/EBITDA	Div Yield %	Analyst Recommendations														
Digimarc Corporation	NM	5.28	9.52	NM	0.00	Buy   Hold   6														

Ticker	6861	Currency	USD	Date	9/30/15
<b>Keyence Corporation</b>					
Headquarters	Japan	Share Price	444.31		
Website	<a href="http://keyence.co.jp">keyence.co.jp</a>	52 Week Range	356.28681-585.45957		
Exchange	TSE	Market Cap (\$B)	26.94		
Industry (GICS)	Information Technology	Enterprise Value (\$B)	21.22		
ROBO Global Classification:		YTD Change	(1.13%)		
BW or NBW	Bellwether	PE	25.13		
Tier One	Technology	P/S	9.24		
Tier Two	Sensing	Dividend Yield	0.38%		



### Business Description:

Keyence Corporation, together with its subsidiaries, develops, manufactures, and sells industrial automation and inspection equipment worldwide. It offers photoelectric, fiber optic, laser, inductive proximity, positioning, and vision sensors, as well as network communication units used for multi-purpose applications, including presence/absence and part differentiation. The company also provides measurement sensors, such as laser triangulation, laser profile, optical and 2D optical micrometer, scanning confocal laser, confocal interference displacement, contact displacement, and LVDT sensors, as well as image and 3D measurement systems for use in turnkey automated optical measurement systems applications. In addition, it offers safety products comprising safety light curtains and scanners, and e-stop controllers to protect operators from machine hazards; and pressure, flow, and temperature sensors, as well as analog sensor controllers for monitoring equipment processes. Further, the company provides static eliminators and ionizers, which protect workers, machinery, and products from the damaging effects of electrostatic charge; vision systems, vision sensors, and auto ID products for use in code readers and vision systems applications; and PLC and other controls that are used for machine control applications. Additionally, it offers green, hybrid, fiber, YVO4, and CO2 laser markers, as well as industrial inkjet printers; and digital, 3D laser scanning, high-speed, and fluorescence microscopes, as well as wide-area 3D measuring systems for industrial and life science applications. The company's products are used in various industries, including construction/steel/paper manufacturing; medical devices; appliances and home; logistics; automotive; industrial equipment; environmental infrastructure; and semiconductor. Keyence Corporation was founded in 1972 and is headquartered in Osaka, Japan.

### Robotics & Automation Description:

Keyence's 2 primary segments include automation products and inspection products. Automation products are primarily sensors, laser markers, and safety light curtains that are used to detect the presence or absence of parts, accurately and quickly make markings and other inscriptions on objects, and to eliminate static. Inspection products are primarily barcode readers, microscopes, and various forms of machine vision to perform quality control inspections such as the ability to determine whether or not manufactured parts are an exact match to design specifications.

Fundamentals	2012	2012	2013	2014	2015	6861 2014 Revenue by Geography
Sales	\$2,385	\$2,555	\$2,280	\$2,587	\$2,778	
YoY % Change	8%	0%	9%	22%	26%	
EBITDA	\$1,126	\$1,196	\$1,070	\$1,309	\$1,491	
YoY % Change	7%	0%	8%	25%	29%	
Net Income	\$696	\$750	\$707	\$839	\$1,007	
YoY % Change	5%	0%	16%	27%	41%	
Earnings Per Share	\$11.47	\$12.37	\$11.66	\$13.83	\$16.60	
YoY % Change	5%	0%	16%	27%	41%	
EBITDA Margin %	47%	47%	47%	51%	54%	
Net % Margin	29%	29%	31%	32%	36%	
<b>Top 5 Comps</b>	<b>PE</b>	<b>PB</b>	<b>P/S EV/EBITDA</b>	<b>Div Yield %</b>		<b>Analyst Recommendations</b>
SMC Corp.	15.13	1.83	3.71	9.27	0.77	Buy
Makita Corporation	19.31	1.73	2.04	8.81	1.63	9
Yokogawa Electric Corp.	15.12	1.43	0.77	6.54	1.20	Hold
Shimadzu Corporation	25.03	2.38	1.56	13.20	0.82	3



**ROBO  
GLOBAL**

Ticker	6645	Currency	USD	Date	9/30/15
<b>OMRON Corporation</b>					
Headquarters	Japan	Share Price	29.94		
Website	<a href="http://omron.com">omron.com</a>	52 Week Range	29.31-47.49-27.548		
Exchange	TSE	Market Cap (\$B)	6.504		
Industry (GICS)	Information Technology	Enterprise Value (\$B)	5.664		
ROBO Global Classification:		YTD Change	(34.22%)		
BW or NBW	Bellwether	PE	13.19		
Tier One	Technology	P/S	0.91		
Tier Two	Sensing	Dividend Yield	2.57%		

### Business Description:

OMRON Corporation manufactures and sells automation components, equipment, and systems worldwide. Its Industrial Automation Business segment offers control equipment for factory automation, including vision and fiber sensors, temperature controllers, programmable logic controllers, inverters, servomotors, and servo drivers; safety laser scanners; air cleaning units, ionizers, and air thermal sensors; and printed circuit board inspection systems. The company's Electronic and Mechanical Components Business segment provides relays and switches; connectors; facial image sensing technologies that are used to recognize people's faces; and sensor/modules, including printer toner sensors and power supply units for amusement devices. Its Automotive Electronic Components Business segment offers transmitter key and engine start systems; power window switches, door locks, and windshield wipers; and electric power steering controllers. The company's Social Systems Solution and Service Business segment provides automated ticket gates and vending machines, traffic signal controllers, and remote monitoring systems, as well as environmental solutions. Its Healthcare Business segment offers healthcare and medical devices for home use, including sleep sensors, blood pressure monitors, body composition monitors, blood glucose meters, thermometers, and activity monitors; and medical devices for professional use, such as spot check monitors and non-invasive vascular activity monitors screening devices. The company's Other segment provides PV inverters for solar power generation systems; LCD backlights; and micro electrical mechanical system absolute pressure sensors; and industrial embedded computers and electronic systems, as well as uninterruptible power supply units. The company was formerly known as OMRON Tateisi Electronics Co. and changed its name to OMRON Corporation in January 1990. OMRON Corporation was founded in 1933 and is headquartered in Kyoto, Japan.

### Robotics & Automation Description:

Omron's industrial automation segment manufactures sensors, switches, relays, and control components for use in factory automation and robot work cells. Its sensing products include proximity, displacement, measurement, photoelectric, and fiber that detect changes in production sites and help predict and/or prevent future events. Its switches are designed to kick into action once an object reaches a specific location or step in assembly. Its control components operate via cam positioners, timers, temperature controllers, and other various input/output devices. Additionally, Omron now combines its control and sensing technologies with its expertise in labor safety to create enhanced safety with improved productivity and efficiency.

Fundamentals	2011	2012	2013	2014	2015	6645 2014 Revenue by Geography																																			
Sales	\$7,456	\$7,517	\$6,905	\$7,508	\$7,061																																				
YoY % Change	18%	0%	5%	19%	10%																																				
EBITDA	\$824	\$734	\$714	\$905	\$958																																				
YoY % Change	26%	(2%)	6%	23%	12%																																				
Net Income	\$323	\$199	\$321	\$449	\$518																																				
YoY % Change	661%	(39%)	84%	53%	35%																																				
Earnings Per Share	\$1.47	\$0.90	\$1.46	\$2.04	\$2.37																																				
YoY % Change	661%	(39%)	84%	53%	35%																																				
EBITDA Margin %	11%	10%	10%	12%	14%																																				
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Ticker	RSW	Currency	USD	Date	9/30/15
<b>Renishaw plc</b>					
Headquarters	United Kingdom	Share Price	30.51		
Website	<a href="http://renishaw.com">renishaw.com</a>	52 Week Range	23.00-68-40.44-64		
Exchange	LSE	Market Cap (\$B)	2.220		
Industry (GICS)	Information Technology	Enterprise Value (\$B)	2.092		
ROBO Global Classification:		YTD Change	2.86%		
BW or NBW	Non-Bellwether	PE	12.04		
Tier One	Technology	P/S	2.97		
Tier Two	Sensing	Dividend Yield	2.31%		
 <p>The chart shows the stock price of Renishaw plc (RSW) relative to the S&amp;P 500 index from September 30, 2014, to September 30, 2015. The Y-axis represents the percentage change in price, ranging from -25% to 75%. The X-axis shows dates from 9/30/14 to 9/30/15. The S&amp;P Price (blue line) starts at approximately 10% and remains relatively flat. The RSW Price (red line) starts at approximately 10%, dips slightly, and then trends upwards, reaching about 40% by the end of the period.</p>					

### Business Description:

Renishaw plc designs, manufactures, and sells precision metrology and inspection equipment, and products for the healthcare sector worldwide. The company operates in two segments, Metrology and Healthcare. It offers metrology products, including machine tool probe systems, co-ordinate measuring machine products, stylus for probe systems, performance testing products, gauging products, laser measurement and surveying systems, fixtures, position encoders, additive manufacturing systems, and vacuum casting machines. The company also provides healthcare products comprising dental scanners, dental computer-aided design software, dental structures manufacturing services, craniomaxillofacial custom-made implants, neurosurgical planning software, neurosurgical implants, neurosurgical accessories, Raman microscopes, hybrid Raman systems, turnkey Raman analysis, and diagnostic systems. In addition, it offers travel agency services; manufactures and sells surgical robots for neurosurgical applications; designs and procures application-specific integrated circuits; and develops and sells software solutions; and supplies dimensional measurement products and services. The company's products are used in agriculture, automotive, aerospace, construction, power generation, medical, consumer products, and resource exploration applications. Renishaw plc was founded in 1973 and is headquartered in Wotton-under-Edge, the United Kingdom.

### Robotics & Automation Description:

Renishaw manufactures robots and systems for dentistry and stereotactic neurosurgery as well as components commonly used in robotics focused on factory automation. Its stereotactic neurosurgery robots are used for electrode implantation procedures for deep brain stimulation (DBS), and stereoelectroencephalography (SEEG), as well as stereotactic applications in neuron-endoscopy, biopsy, and other research applications. The Neuromate provides consistent, rapid, precise targeting and reduces clinical complication rates during stereotactic procedures. Its dentistry systems focus on digital imaging and scanning automation with 3D crown design capabilities. Its factory automation robotics components include those used for metrology, positioning, and additive manufacturing. Its additive manufacturing techniques include vacuum casting, injection molding, and laser melting. Laser melting is also utilized in most of Renishaw's dental product offering, mainly crowns and bridges. Renishaw also produces incremental optical encoders, laser interferometer encoders, magnetic encoders and absolute optical encoders that are used to ensure accurate linear and rotary control in various robotics applications.

Fundamentals	2011	2012	2013	2014	2015	RSW 2015 Revenue by Geography																																			
Sales	\$464	\$521	\$527	\$608	\$778	UK and Ireland 6%																																			
YoY % Change	59%	15%	5%	2%	39%	North & South America 20%																																			
EBITDA	\$148	\$152	\$136	\$140	\$250	Cont. Europe 29%																																			
YoY % Change	83%	10%	3%	(3%)	55%	Far East 54%																																			
Net Income	\$106	\$109	\$103	\$147	\$192																																				
YoY % Change	203%	5%	(3%)	27%	41%																																				
Earnings Per Share	\$1.46	\$1.50	\$1.41	\$2.03	\$2.63																																				
YoY % Change	203%	5%	(3%)	27%	41%																																				
EBITDA Margin %	32%	29%	26%	23%	32%																																				
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**ROBO  
GLOBAL**

Ticker	TDY	Currency	USD	Date	9/30/15
<b>Teledyne Technologies Inc.</b>					
Headquarters	United States	Share Price	90.30		
Website	<a href="http://teledyнетechnologies.com">teledyнетechnologies.com</a>	52 Week Range	88.92-111.81		
Exchange	NYSE	Market Cap (\$B)	3.195		
Industry (GICS)	Industrials	Enterprise Value (\$B)	3.899		
ROBO Global Classification:		YTD Change	(12.11%)		
BW or NBW	Non-Bellwether	PE	16.06		
Tier One	Technology	P/S	1.38		
Tier Two	Sensing	Dividend Yield	0.00%		



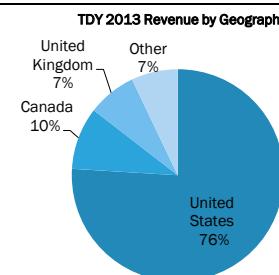
### Business Description:

Teledyne Technologies Incorporated provides instrumentation, digital imaging products and software, aerospace and defense electronics, and engineered systems in the United States, Canada, the United Kingdom, and internationally. The company's Instrumentation segment provides monitoring and control instruments for marine, environmental, industrial, and other applications, as well as electronic test and measurement equipment; and power and communications connectivity devices for distributed instrumentation systems and sensor networks deployed in mission critical, harsh environments. Its Digital Imaging segment designs, develops, and manufactures image sensors and digital cameras for industrial, scientific, medical, and professional applications, as well as hardware and software for image processing products in industrial and medical applications; provides manufacturing services for micro electro-mechanical systems, complementary metal-oxide semiconductors, and integrated circuit products; and offers light detection and ranging systems, as well as provides focal plane arrays, sensors, subsystems, imaging process algorithms, and infrared camera systems. The company's Aerospace and Defense Electronics segment offers electronic components and subsystems and communications products, such as defense electronics; harsh environment interconnects; data acquisition and communications equipment for aircraft; components and subsystems for wireless and satellite communications; and general aviation batteries. Its Engineered Systems segment offers systems engineering and integration, advanced technology development, and manufacturing solutions for defense, space, environmental, and energy applications, as well as designs and manufactures hydrogen/oxygen gas generators, thermoelectric and electrochemical energy solutions, and small turbine engines. Teledyne Technologies Incorporated was founded in 1960 and is headquartered in Thousand Oaks, California.

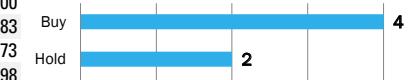
### Robotics & Automation Description:

Teledyne manufactures components for underwater, ground, and aerial unmanned devices and systems. Teledyne Imaging Sensors (TIS) is primarily engaged in the design, development, and production of high performance infrared and visible sensor subsystems used in space missions, long range terrestrial surveillance, and targeting and astronomy applications. It is expanding to make X-ray detectors for dental and surgical radiography. Teledyne's acoustic Doppler current profilers measure water in motion and motion in water; combining that data with its multibeam sonar and LIDAR solutions. Its avionics systems have provided "intelligence in flight" to the world's major aircraft manufacturers and airlines helping improve flight safety, efficiency, and maintenance. Ultrahigh-resolution and multispectral image sensors are used in satellites and aerial photography for environmental and earth observation.

Fundamentals	2010	2011	2012	2013	2014	TDY 2013 Revenue by Geography
Sales	\$1,644	\$1,942	\$2,127	\$2,339	\$2,394	
YoY % Change	(0%)	18%	10%	10%	2%	
EBITDA	\$224	\$294	\$323	\$355	\$393	
YoY % Change	4%	32%	15%	15%	6%	
Net Income	\$121	\$255	\$164	\$185	\$218	
YoY % Change	6%	112%	(36%)	13%	18%	
Earnings Per Share	\$3.33	\$6.97	\$4.47	\$4.96	\$5.87	
YoY % Change	3%	17%	14%	12%	18%	
EBITDA Margin %	14%	15%	15%	15%	16%	
Net % Margin	7%	13%	8%	8%	9%	



Top 5 Comps	PE	PB	P/S EV/EBITDA	Div Yield %	Analyst Recommendations
Esterline Technologies Corp.	17.76	1.37	1.13	9.49	0.00
Curtiss-Wright Corporation	17.53	2.08	1.34	9.19	0.83
B/E Aerospace Inc.	51.90	38.22	1.71	13.69	1.73
Woodward, Inc.	14.78	2.30	1.30	9.35	0.98



# APPLICATIONS

# 3D Printing



Ticker	DDD	Currency	USD	Date	9/30/15
<b>3D Systems Corporation</b>					
Headquarters	United States	Share Price	11.55		
Website	<a href="http://3dsystems.com">3dsystems.com</a>	52 Week Range	10.85-46.15		
Exchange	NYSE	Market Cap (\$B)	1.293		
Industry (GICS)	Information Technology	Enterprise Value (\$B)	1.145	(25%)	
ROBO Global Classification:		YTD Change	(64.86%)	(50%)	
BW or NBW	Non-Bellwether	PE	NM	(75%)	
Tier One	Application	P/S	1.88	(100%)	
Tier Two	3D Printing	Dividend Yield	0.00%		

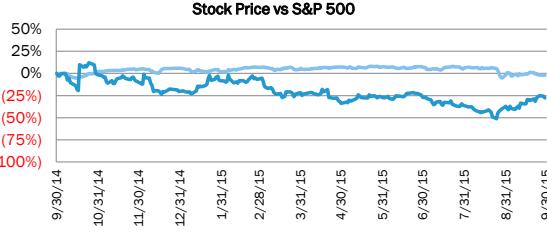
### Business Description:

3D Systems Corporation, through its subsidiaries, operates as a provider of 3D printing centric design-to-manufacturing solutions in the Americas, Germany, and the Asia-Pacific, as well as other European, the Middle East, and African countries. The company's 3D printers transform data input from the format generated by 3D design software, CAD software, or 3D scanning and sculpting devices to printed parts using integrated, engineered plastic, metal, nylon, rubber, wax, and composite print materials. It offers stereolithography, selective laser sintering, direct metal, multi-jet, color jet, and film transfer imaging printers, as well as plastic jet printing 3D printers. The company also blends, packages, and sells proprietary, consumable, engineered plastic, nylon, metal, and composite materials for use in printers under the Accura, DuraForm, CastForm, LaserForm, and VisiJet brand names. In addition, it provides software packages and design tools for reverse engineering, inspection, and haptic design packages; CAD and CAM software packages designed for the manufacturing industry; and 3D scanners and perceptual devices. Further, the company offers pre-sale and post-sale services comprising applications development and custom engineered production solutions; and installation, warranty, and maintenance services, as well as proprietary software printer drivers. It primarily serves manufacturers of automotive, aerospace, computer, electronic, defense, education, consumer, energy, and healthcare products, as well as original equipment manufacturers, government agencies, universities and other educational institutions, independent service bureaus, and individual consumers. The company sells its products and services through its direct sales force, sales agents, resellers, and distributors. 3D Systems Corporation was founded in 1986 and is headquartered in Rock Hill, South Carolina.

### Robotics & Automation Description:

3D Systems streamlines the design process of complex products using additive layer printing and manufacturing methodologies. It is likely to be instrumental in the future development of new production techniques and will lead to increased automation. 3D Systems' various custom printing solutions enable customers to rapidly create highly complex and customizable parts in large quantities with minimal manual intervention. Its production processes include QuickCut™ CNC machining, Quick Sheet Metal™, QuickMold™ Tooling, injection mold tooling, and metal die casting. In the late 1980s and early 1990's, 3D Systems invented and commercialized 3D printing with its Stereolithography (SLA) printer, Selective Laser Sintering (SLS), the Color-Jet-Printing (CJP) class of 3D printers, and Multi-Jet-Printing (MJP) printers. Rapidform integrates scan data processing, mesh optimization, auto surfacing, and computer aided design to a single tool.

Fundamentals	2010	2011	2012	2013	2014	DDD 2014 Revenue by Geography
Sales	\$160	\$230	\$354	\$513	\$654	
YoY % Change	42%	44%	53%	45%	27%	
EBITDA	\$28	\$45	\$80	\$110	\$80	
YoY % Change	49%	47%	66%	48%	19%	
Net Income	\$20	\$35	\$39	\$44	\$12	
YoY % Change	1735%	81%	10%	13%	(74%)	
Earnings Per Share	\$0.28	\$0.47	\$0.48	\$0.45	\$0.11	
YoY % Change	2005%	68%	2%	(7%)	(76%)	
EBITDA Margin %	17%	19%	23%	21%	12%	
Net % Margin	12%	15%	11%	9%	2%	
Top 5 Comps	PE	PB	P/S	EV/EBITDA	Div Yield %	Analyst Recommendations
Stratasys Ltd.	NM	0.59	1.74	24.14	0.00	Buy   3
Electronics for Imaging, Inc.	69.76	2.54	2.52	18.58	0.00	Hold   15
Roland DG Corporation	16.34	1.69	0.64	4.65	2.35	
Silicon Graphics International Corp.	NM	2.57	0.26	NM	0.00	

Ticker	ARCM	Currency	USD	Date	9/30/15
<b>Arcam AB</b>					
Headquarters	Sweden	Share Price	17.55		
Website	<a href="http://arcam.se">arcam.se</a>	52 Week Range	10.99517-23.4206		
Exchange	OM	Market Cap (\$B)	0.360		
Industry (GICS)	Industrials	Enterprise Value (\$B)	0.309		
ROBO Global Classification:		YTD Change	1.55%		
BW or NBW	Non-Bellwether	PE	41.59		
Tier One	Application	P/S	5.81		
Tier Two	3D Printing	Dividend Yield	0.00%		
 <p>The chart shows the performance of Arcam's stock price relative to the S&amp;P 500 index from September 30, 2014, to September 30, 2015. The Y-axis represents percentage change from -100% to 50%. The X-axis shows dates from 9/30/14 to 9/30/15. The S&amp;P Price (blue line) starts at approximately 0% and remains relatively flat. The ARCM Price (red line) starts at approximately 0%, drops sharply to about -25% in October 2014, and then fluctuates between -25% and -50% throughout the period.</p>					

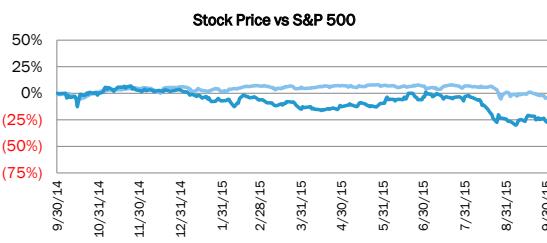
### Business Description:

Arcam AB (publ) provides additive manufacturing solutions for the production of metal components. The company offers Arcam Q10, an electron beam melting (EBM) machine for the industrial production of orthopedic implants; Arcam Q20 to manufacture wide range of aerospace-related components, such as turbine blades and structural airframe components; and Arcam A2X to process titanium alloys and materials that require elevated process temperatures, such as titanium aluminide. It also provides software; metal powders; powder handling auxiliary equipment, including explosion-protected vacuum cleaners, powder handling trolleys, and powder recovery systems; and service and application support, and training services. The company serves orthopedic implant and aerospace industries through its retailers, and a network of agents and distributors in the United States, Europe, and Asia. It has a strategic partnership with GKN Aerospace to develop and industrialize additive processes. Arcam AB (publ) was founded in 1997 and is headquartered in Mölndal, Sweden.

### Robotics & Automation Description:

Arcam leverages additive manufacturing and electron beam melting (EBM) to enable more cost effective and advanced manufacturing capabilities. Arcam's products primarily serve aerospace and orthopedic implant firms, which represent roughly half of its total revenue. EBM enables Arcam to produce light-weight products with a buy-to-fly ratio close to 1.0 for aerospace firms. (The buy-to-fly ratio compares the raw material weight to the final weight of the product itself) This enables weight reduction, cooling, and heating optimization of various components. In the orthopedic implant space, Arcam focuses mainly on joint reconstruction. In 2013, Arcam entered into a strategic alliance with DiSanto, an orthopedic implant manufacturer, to enhance its knowledge and a greater industry-wide acceptance of additive manufacturing. Arcam also utilizes these techniques to focus on producing items with high input costs (such as titanium and cobalt chrome), whereas most of its competition is in the plastics space. Utilizing the Arcam LayerQamTM, one can view the production process retroactively to verify production quality and any variation amongst the individual layers. The Arcam EBM Multi Beam technology allows for the control of multiple beams at the same time.

Fundamentals	2010	2011	2012	2013	2014	ARCM 2014 Revenue by Geography
Sales	\$14	\$17	\$22	\$31	\$43	
YoY % Change	19%	20%	26%	36%	70%	
EBITDA	\$0	\$1	\$2	\$2	\$4	
YoY % Change	15%	21%	37%	(13%)	41%	
Net Income	\$0	\$1	\$2	\$2	\$7	
YoY % Change	0%	202%	171%	3%	271%	
Earnings Per Share	\$0.02	\$0.05	\$0.16	\$0.15	\$0.40	
YoY % Change	0%	275%	169%	(5%)	222%	
EBITDA Margin %	3%	4%	10%	8%	8%	
Net % Margin	2%	5%	10%	8%	17%	
**Estimated Revenue Breakdown for 2014**						
Top 5 Comps	PE	PB	P/S	EV/EBITDA	Div Yield %	Analyst Recommendations
SLM Solutions Group AG	NM	2.82	5.87	106.51	0.00	
Svejsemaskinfabrikken Migetronic A/S	21.82	0.79	0.34	9.31	5.00	Buy
The ExOne Company	NM	0.97	2.38	NM	0.00	Hold
Voxeljet AG	NM	1.12	3.47	NM	0.00	

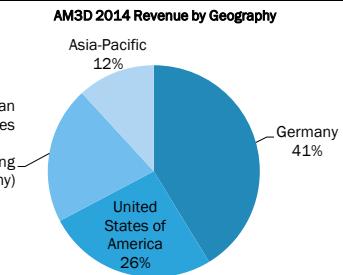
Ticker	AM3D	Currency	USD	Date	9/30/15
<b>SLM Solutions Group AG</b>					
Headquarters	Germany	Share Price	16.52		
Website	<a href="http://slm-solutions.de">slm-solutions.de</a>	52 Week Range	15.18-66.25-23.10-027		
Exchange	XTRA	Market Cap (\$B)	0.296		
Industry (GICS)	Industrials	Enterprise Value (\$B)	0.239		
ROBO Global Classification:		YTD Change	(23.32%)		
BW or NBW	Non-Bellwether	PE	NM		
Tier One	Application	P/S	5.87		
Tier Two	3D Printing	Dividend Yield	0.00%		
 <p>The chart shows the performance of AM3D relative to the S&amp;P 500 from September 30, 2014, to September 30, 2015. The Y-axis represents percentage change from -75% to 50%. The S&amp;P 500 price (blue line) starts at approximately -25% and trends upwards to about 0%. The AM3D price (red line) starts at approximately -25%, dips to a low of about -75% in early 2015, and then recovers to end at about -25%.</p>					

### Business Description:

SLM Solutions Group AG provides metal-based additive manufacturing technology worldwide. The company operates in two segments, Selective Laser Melting (SLM) and Rapid Prototyping (RP). The SLM segment is involved in the assembly, marketing, and sale of metal-based additive manufacturing systems. This segment also offers accessories and consumables, as well as other services, such as machine maintenance. The RP segment provides vacuum casting systems, metal casting systems, and related services comprising order production of prototypes and small manufacturing series. This segment also offers metal powders, including stainless steel, tool steel, aluminum, titanium, cobalt-chromium, Inconel, and super alloys for various applications. The company's machines portfolio comprise SLM 280HL for the industrial series manufacturing of medium-sized components; SLM 125HL for production of small workpieces, as well as used in medical applications and technology, or in research and development; and SLM 500HL, a laser melting system that provides a build chamber of 500 x 280 x 325 mm and a powerful double/multi laser technology. SLM Solutions Group AG serves aerospace, energy, healthcare, and automotive manufacturing sectors. The company is headquartered in Lübeck, Germany.

### Robotics & Automation Description:

SLM Solutions specializes in metal 3D printing. Typically used for small series parts and prototypes, SLM has historically been involved in the casting systems but has focused on selective melting technology in recent years. The company's customers are mainly derived from the automotive, education, aerospace, and medical industries.

Fundamentals	2011	2012	2013	2014	AM3D 2014 Revenue by Geography	
Sales	\$16	\$0	\$30	\$44		
YoY % Change	0%	0%	0%	66%		
EBITDA	\$2	\$0	\$2	\$3		
YoY % Change	0%	0%	0%	67%		
Net Income	\$1	(S0)	(S1)	(S6)		
YoY % Change	0%	0%	0%	0%		
Earnings Per Share	\$0.00	\$0.00	(S0.04)	(S0.36)		
YoY % Change	0%	0%	0%	0%		
EBITDA Margin %	10%	0%	7%	8%		
Net % Margin	3%	0%	(2%)	(14%)		
 <p>The pie chart illustrates the geographical distribution of AM3D's 2014 revenue. Germany accounts for 41% of revenue, followed by the United States of America at 26%, Asia-Pacific at 12%, and European Countries (EU, Excluding Germany) at 21%.</p>						
Top 5 Comps	PE	PB	P/S	EV/EBITDA	Div Yield %	Analyst Recommendations
Arcam AB	41.59	3.33	5.81	42.75	0.00	Buy
Tex Holdings plc	7.68	0.75	0.19	3.33	5.56	6
Schumag Aktiengesellschaft	5.78	1.83	0.22	1.81	0.00	Hold   1
Nantong Metalforming Equipment Co., Ltd.	NM	4.83	10.91	209.84	0.08	



**ROBO  
GLOBAL**

Ticker	SSYS	Currency	USD	Date	9/30/15
<b>Stratasys Ltd.</b>					
Headquarters	United States	Share Price	26.49		
Website	<a href="http://stratasys.com">stratasys.com</a>	52 Week Range	25.31-125		
Exchange	NasdaqGS	Market Cap (\$B)	1.378		
Industry (GICS)	Information Technology	Enterprise Value (\$B)	1.053	(25%)	
ROBO Global Classification:		YTD Change	(68.13%)	(50%)	
BW or NBW	Non-Bellwether	PE	NM	(75%)	
Tier One	Application	P/S	1.74	(100%)	
Tier Two	3D Printing	Dividend Yield	0.00%		



### Business Description:

Stratasys Ltd. provides additive manufacturing (AM) solutions for the creation of parts used in the processes of designing and manufacturing products; and for the direct manufacture of end parts. Its AM systems utilize its patented fused deposition modeling and inkjet-based PolyJet technologies to enable the production of prototypes, tools used for production and manufactured goods directly from three-dimensional (3D) CAD files or other 3D content. The company offers entry-level desktop 3D printers for idea and design development, a range of systems for rapid prototyping, and production systems for direct digital manufacturing under the Dimension, Objet, Fortus, Polyjet, SolidScape, and MakerBot brands. It also offers 3D printing consumable materials, including 3D Polyjet/fused deposition modeling cartridge-based materials, smooth curvature printing inkjet-based materials, and non-color digital materials for use with its systems, as well as provides related services. In addition, the company provides customer support, basic warranty, and extended support programs; leases or rents 3D printers and 3D production systems; and produces prototypes and end-use parts for customers from a customer-provided CAD file. The company also operates Thingiverse, an online community for sharing downloadable, digital 3D designs; and GrabCAD Community for mechanical engineers and designers. Its products and services are used in aerospace, automotive, consumer electronics, dental, jewelry, and other industries. The company sells its products through a network of resellers and independent sales agents worldwide. Stratasys Ltd. was founded in 1989 and is headquartered in Eden Prairie, Minnesota.

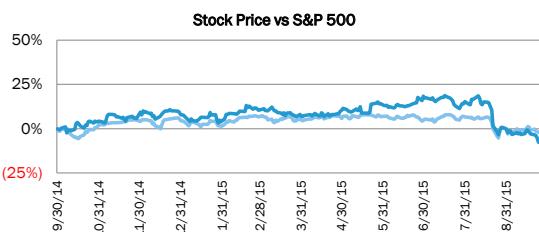
### Robotics & Automation Description:

Stratasys is one of the world leaders in 3D printing technology. The main applications of its 3D printing technology include concept modeling, prototyping, finishing (i.e. sealing/polishing), and the production of various end-use parts. Its 3D printers are divided into four categories: Idea, Design, Production, and the recently launched, Dental. Stratasys leverages advanced 3D printing technologies such as polyjet technology, fused deposition modeling (FDM), and wax deposition modeling (WDM). PolyJet 3D printing is similar to inkjet printing, but instead of jetting drops of ink onto paper, the PolyJet 3D Printers jet layers of curable liquid photopolymer onto a build tray where thin layers accumulate and eventually develop into a precise 3D object. FDM is a clean, simple to use, additive manufacturing technique whereby parts are built layer-by-layer by heating thermoplastic material to a semi-liquid state and extruding it according to computer-controlled paths. WDM technology works similar to that of Polyjet except it utilizes wax-like materials.

Fundamentals	2010	2011	2012	2013	2014	SSYS 2014 Revenue by Geography
Sales	\$123	\$156	\$215	\$484	\$750	Other 1%
YoY % Change	24%	27%	38%	125%	55%	Asia Pacific 20%
EBITDA	\$26	\$40	\$49	\$80	\$102	North America 54%
YoY % Change	32%	35%	33%	106%	67%	EMEA 25%
Net Income	\$9	\$21	\$8	(\$27)	(\$119)	
YoY % Change	128%	120%	(59%)	0%	0%	
Earnings Per Share	\$0.46	\$0.98	\$0.37	(\$0.64)	(\$2.39)	
YoY % Change	120%	116%	(62%)	0%	0%	
EBITDA Margin %	21%	26%	23%	17%	14%	
Net % Margin	8%	13%	4%	(6%)	(16%)	

Top 5 Comps	PE	PB	P/S EV/EBITDA	Div Yield %	Analyst Recommendations
3D Systems Corporation	NM	1.01	1.88	27.07	0.00
Electronics for Imaging, Inc.	69.76	2.54	2.52	18.58	0.00
Riso Kagaku Corporation	13.33	1.19	0.96	5.91	2.96
Mimaki Engineering Co., Ltd.	8.06	1.27	0.37	4.95	0.80

# Agriculture

Ticker	DE	Currency	USD	Date	9/30/15
<b>Deere &amp; Company</b>					
Headquarters	United States	Share Price	74.00		
Website	<a href="http://deere.com">deere.com</a>	52 Week Range	73.37-98.23		
Exchange	NYSE	Market Cap (\$B)	24.28		
Industry (GICS)	Industrials	Enterprise Value (\$B)	58.19		
ROBO Global Classification:		YTD Change	(16.36%)		
BW or NBW	Non-Bellwether	PE	11.38		
Tier One	Application	P/S	0.81		
Tier Two	Agriculture	Dividend Yield	3.24%		
					

### Business Description:

Deere & Company, together with its subsidiaries, manufactures and distributes agriculture and turf, and construction and forestry equipment worldwide. The company's Agriculture and Turf segment provides agriculture and turf equipment, and related service parts, including large, medium, and utility tractors; loaders; combines; corn pickers, cotton and sugarcane harvesters, and related front-end equipment and sugarcane loaders; and tillage, seeding, and application equipment, including sprayers, nutrient management, and soil preparation machinery. This segment also provides hay and forage equipment comprising self-propelled forage harvesters and attachments, balers, and mowers; riding lawn equipment and walk-behind mowers, golf course equipment, utility vehicles, and commercial mowing equipment; integrated agricultural management systems technology and solutions; and other outdoor power products. Its Construction and Forestry segment provides backhoe loaders; crawler dozers and loaders; four-wheel-drive loaders; excavators; motor graders; articulated dump trucks; landscape loaders; skid-steer loaders; and log skidders, feller bunchers, log loaders, log forwarders, log harvesters, and related attachments that are used in construction, earthmoving, material handling, and timber harvesting applications. The company's Financial Services segment finances sales and leases of new and used agriculture and turf equipment, and construction and forestry equipment. This segment also provides wholesale financing to dealers of the foregoing equipment; finances retail revolving charge accounts; and offers crop risk-mitigation products and extended equipment warranties. The company markets its products primarily through independent retail dealer networks and retail outlets. Deere & Company was founded in 1837 and is headquartered in Moline, Illinois.

### Robotics & Automation Description:

John Deere has a small product offering of autonomous machinery such as mowers and various farm equipment. The Flex-wing series of automatic mowers are ideal for moving uneven lawn surfaces and are equipped with pneumatic tires to reduce downward pressure on the ground and telescoping wings to adjust cutting height. Its line of automated farm equipment includes self-propelled sprayers that can reach speeds of up to 20 mph on farm fields and 30 mph on roads. John Deere also offers an automation software solution called John Deere FarmSight™, an integrated wireless technology platform that enables machine and logistics optimization through the use of automation, machine sensors, and machine to machine communication.

Fundamentals	2010	2011	2012	2013	2014	DE 2014 Revenue by Geography																																		
Sales	\$26,005	\$32,013	\$36,157	\$37,795	\$36,067																																			
YoY % Change	13%	23%	13%	5%	(5%)																																			
EBITDA	\$4,179	\$5,311	\$5,900	\$6,817	\$6,264																																			
YoY % Change	31%	24%	12%	11%	(10%)																																			
Net Income	\$1,865	\$2,800	\$3,065	\$3,537	\$3,162																																			
YoY % Change	114%	50%	9%	15%	(11%)																																			
Earnings Per Share	\$4.40	\$6.71	\$7.72	\$9.18	\$8.71																																			
YoY % Change	111%	52%	15%	19%	(5%)																																			
EBITDA Margin %	16%	17%	16%	18%	17%																																			
Net % Margin	7%	9%	8%	9%	9%																																			
<table border="1"> <thead> <tr> <th>Top 5 Comps</th> <th>PE</th> <th>PB</th> <th>P/S EV/EBITDA</th> <th>Div Yield %</th> <th>Analyst Recommendations</th> </tr> </thead> <tbody> <tr> <td>CNH Industrial N.V.</td> <td>15.26</td> <td>1.21</td> <td>0.30</td> <td>12.28</td> <td>3.42</td> <td>Buy  </td> </tr> <tr> <td>AGCO Corporation</td> <td>15.05</td> <td>1.28</td> <td>0.50</td> <td>6.35</td> <td>1.03</td> <td>4  </td> </tr> <tr> <td>Caterpillar Inc.</td> <td>11.16</td> <td>2.30</td> <td>0.75</td> <td>8.35</td> <td>4.71</td> <td>Hold  </td> </tr> <tr> <td>PACCAR Inc.</td> <td>11.67</td> <td>2.56</td> <td>0.93</td> <td>8.58</td> <td>1.84</td> <td>13  </td> </tr> </tbody> </table>						Top 5 Comps	PE	PB	P/S EV/EBITDA	Div Yield %	Analyst Recommendations	CNH Industrial N.V.	15.26	1.21	0.30	12.28	3.42	Buy	AGCO Corporation	15.05	1.28	0.50	6.35	1.03	4	Caterpillar Inc.	11.16	2.30	0.75	8.35	4.71	Hold	PACCAR Inc.	11.67	2.56	0.93	8.58	1.84	13	
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PACCAR Inc.	11.67	2.56	0.93	8.58	1.84	13																																		

# Consumer Products



Ticker	IRBT	Currency	USD	Date	9/30/15
<b>iRobot Corporation</b>					
Headquarters	United States	Share Price	29.14		
Website	<a href="http://irobot.com">irobot.com</a>	52 Week Range	27.55-38.1		
Exchange	NasdaqGS	Market Cap (\$B)	0.870		
Industry (GICS)	Consumer Discretionary	Enterprise Value (\$B)	0.646		
ROBO Global Classification:		YTD Change	(16.07%)		
BW or NBW	Bellwether	PE	24.51		
Tier One	Application	P/S	1.52		
Tier Two	Consumer Products	Dividend Yield	0.00%		

### Business Description:

iRobot Corporation designs, builds, and markets robots for the consumer, defense and security, telemedicine, and mobile video collaboration markets worldwide. The company operates through two segments, Home Robots, and Defense and Security Robots. It provides consumer products, such as floor vacuuming, automatic floor mopping, floor scrubbing, and pool and gutter cleaning robots. The company also offers defense and security products, including tactical ground robots comprising the combat-tested 510 PackBot; the 310 SUGV robots; the 110 FirstLook small, light, and throwable robots; and the 710 Kobra multi-purpose robots for carrying heavy payloads, as well as remote presence products, such as telemedicine and video collaboration robots. iRobot Corporation sells its products through chain stores and other national retailers; its on-line store; and distributors and resellers, as well as to the U.S. military and other government agencies. The company was founded in 1990 and is headquartered in Bedford, Massachusetts.

### Robotics & Automation Description:

iRobot manufactures household cleaning robots, remote presence robots for video conferencing, and bomb disposal robots for the government. The vast majority (over 80%) of its business is focused on household cleaning robots. Presently iRobot has approximately an 80% share of the North American robotic vacuum cleaner market and 65% internationally. Its visual simultaneous localization and mapping enables autonomous navigation using efficiency algorithms and specialized cameras to create a map of the space in which the vacuum operates. iRobot also produces jamming robots that create movement using multi-function materials and shape-changing designs that allow the robot to conform to almost any surface and then become firm and rigid as it grasps an object. Jamming robots are ideal for fitting into tight or inaccessible areas. iRobot's line of military robots includes the iRobot FirstLook®, a small, light, throwable robot for special operations, the iRobot PackBot® for reconnaissance and bomb disposal, and the iRobot Warrior®, a large robot for carrying heavy payloads.

Fundamentals	2010	2011	2012	2013	2014	IRBT 2014 Revenue by Geography																												
Sales	\$401	\$466	\$436	\$487	\$557																													
YoY % Change	34%	16%	(6%)	12%	14%																													
EBITDA	\$40	\$64	\$36	\$46	\$65																													
YoY % Change	59%	43%	(7%)	14%	17%																													
Net Income	\$26	\$40	\$17	\$28	\$38																													
YoY % Change	666%	58%	(57%)	60%	37%																													
Earnings Per Share	\$1.00	\$1.50	\$0.63	\$0.97	\$1.28																													
YoY % Change	638%	50%	(58%)	54%	33%																													
EBITDA Margin %	10%	14%	8%	9%	12%																													
Net % Margin	6%	9%	4%	6%	7%																													
<table border="1"> <thead> <tr> <th>Top 5 Comps</th> <th>PE</th> <th>PB</th> <th>P/S</th> <th>EV/EBITDA</th> <th>Div Yield %</th> <th>Analyst Recommendations</th> </tr> </thead> <tbody> <tr> <td>3D Systems Corporation</td> <td>NM</td> <td>1.01</td> <td>1.88</td> <td>27.07</td> <td>0.00</td> <td>Buy  </td> </tr> <tr> <td>Stratasys Ltd.</td> <td>NM</td> <td>0.59</td> <td>1.74</td> <td>24.14</td> <td>0.00</td> <td>Hold  </td> </tr> <tr> <td>Neato Robotics, Inc.</td> <td>0.00</td> <td>0.00</td> <td>0.00</td> <td>0.00</td> <td>0.00</td> <td>6   4</td> </tr> </tbody> </table>						Top 5 Comps	PE	PB	P/S	EV/EBITDA	Div Yield %	Analyst Recommendations	3D Systems Corporation	NM	1.01	1.88	27.07	0.00	Buy	Stratasys Ltd.	NM	0.59	1.74	24.14	0.00	Hold	Neato Robotics, Inc.	0.00	0.00	0.00	0.00	0.00	6   4	
Top 5 Comps	PE	PB	P/S	EV/EBITDA	Div Yield %	Analyst Recommendations																												
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**Ticker** ENXTPA:PARRO    **Currency** USD    **Date** 9/30/15

### Parrot S.A.

Headquarters	France	Share Price	48.68
Website	<a href="http://parrot.com">parrot.com</a>	52 Week Range	16.51694-56.14642
Exchange	ENXTPA	Market Cap (\$B)	0.591
Industry (GICS)	Information Technology	Enterprise Value (\$B)	0.519
ROBO Global Classification:		YTD Change	105.08%
BW or NBW	Non-Bellwether	PE	NM
Tier One	Application	P/S	1.94
Tier Two	Consumer Products	Dividend Yield	0.00%



### Business Description:

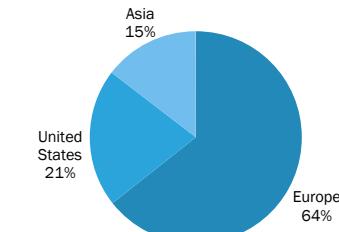
Parrot S.A. designs, develops, and markets consumer technology products for smartphones and tablets worldwide. The company offers a range of products in the areas of drones, automotive, and connected devices. It provides retail, commercial, and civil drones; handsfree kits and infotainment products; Bluetooth, digital music, and infotainment solutions; audio products; plug and play products; and connected devices and toys. The company also offers hardware and software solutions; technical support services, including system design and integration; and after-sales maintenance, such as software updates, compatibility testing with new handsets, etc. It sells its products through distribution networks and online, as well as directly to manufacturers and their original equipment manufacturer providers. Parrot S.A. was founded in 1994 and is headquartered in Paris, France.

### Robotics & Automation Description:

Parrot is one of the leading names in the consumer drone market with nearly one million drones sold world wide. The company's product line sports compact drones with built in cameras, waypoint autonomous navigation, proximity sensors, and attachments that enable hybrid flying and ground vehicles. Parrot is also beginning to delve into the commercial markets with subsidiaries senseFly, Pix4D, MicaSense, Delair Tech, Airinov, and EOS innovation serving the surveillance, mapping, and agriculture markets.

Fundamentals	2010	2011	2012	2013	2014
Sales	\$324	\$322	\$370	\$324	\$295
YoY % Change	43%	2%	13% <span style="color:red">(16%)</span>	4%	
EBITDA	\$47	\$51	\$48	\$17	\$11
YoY % Change	51%	10%	8% <span style="color:red">(17%)</span>	9%	
Net Income	\$37	\$37	\$32	\$2	<span style="color:red">(\$3)</span>
YoY % Change	191%	3% <span style="color:red">(15%)</span>	<span style="color:red">(94%)</span>	0%	
Earnings Per Share	\$2.90	\$2.89	\$2.54	\$0.17	<span style="color:red">(\$0.25)</span>
YoY % Change	189%	2% <span style="color:red">(15%)</span>	<span style="color:red">(93%)</span>	0%	
EBITDA Margin %	15%	16%	13%	5%	4%
Net % Margin	12%	12%	9%	1%	<span style="color:red">(1%)</span>

ENXTPA:PARRO 2014 Revenue by Geography



Top 5 Comps	PE	PB	P/S	EV/EBITDA	Div Yield %	Analyst Recommendations
Comtech Telecommunications Corp.	14.51	0.83	1.09	3.88	5.82	
Motorola Solutions, Inc.	NM	7.79	2.62	11.47	1.99	Buy 1
Nokia Corporation	14.37	2.48	1.65	10.15	2.29	Hold 0
SAXA Holdings, Inc.	NM	0.60	0.29	3.82	1.36	

# Energy

Ticker	FTI	Currency	USD	Date	9/30/15
<b>FMC Technologies, Inc.</b>					
Headquarters	United States	Share Price	31.00		
Website	<a href="http://fmctechnologies.com">fmctechnologies.com</a>	52 Week Range	27.94-57.87		
Exchange	NYSE	Market Cap (\$B)	7.113		
Industry (GICS)	Energy	Enterprise Value (\$B)	7.830		
ROBO Global Classification:		YTD Change	(33.82%)		
BW or NBW	Non-Bellwether	PE	12.24		
Tier One	Application	P/S	0.96		
Tier Two	Energy	Dividend Yield	0.00%		

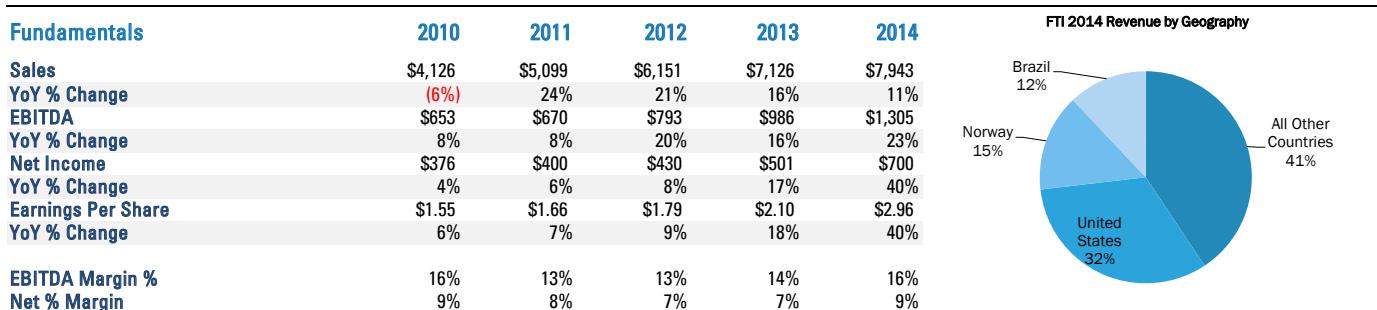


### Business Description:

FMC Technologies, Inc. provides technology solutions for the energy industry worldwide. The company operates through Subsea Technologies, Surface Technologies, and Energy Infrastructure segments. The Subsea Technologies segment offers subsea systems for the offshore production of crude oil and natural gas; and well access and flow management services, including installation and workover tools, service technicians for installation assistance, and field support services. This segment also provides electric and hydraulic work-class remotely operated vehicle, tether-management, launch and recovery, remote manipulator arms, and modular control systems for subsea applications, as well as support services, such as product training, pilot simulator training, spare parts, technical assistance, and logistics support; and offers multiphase and wetgas meters with applications for oil and gas recovery, early water detection, and reservoir optimization. The Surface Technologies segment offers wellhead systems for standard and custom-engineered applications; fluid control products for the well completion and stimulation activities; and flowback services, cased hole electric wireline and slickline services, specialty logging services, pressure transient analysis, and well optimization services. The Energy Infrastructure segment provides measurement products for applications, such as custody transfer, fiscal measurement, and batch loading and deliveries, as well as design, engineering, project management, training, commissioning, and aftermarket services; fluid loading and transfer systems for ship-to-ship loading and offloading operations; systems that separate production flows from wells into oil, gas, sand, and water; and automation, control, and information technology services. The company serves lubricant, petroleum, fuel blending, additive and chemical, and oil and gas industries. FMC Technologies, Inc. was founded in 2000 and is headquartered in Houston, Texas.

### Robotics & Automation Description:

FMC Technologies is a leading supplier in the energy industry providing oil service equipment to major energy companies across the globe. Products range from subsea systems to material handling systems that help to automate and simplify the process. FMC's remotely operated vehicle (ROV) systems provide industry leading performance. Fully integrated systems consist of the ROVs with installed manipulator systems, tether management systems (TMS), launch and recovery systems (LARS), and control vans. FMC's ROV systems also feature automated control modes such as StationKeep™, AutoDisplacement™, and AutoTrack™, which provide precision and stability for performing intervention tasks.



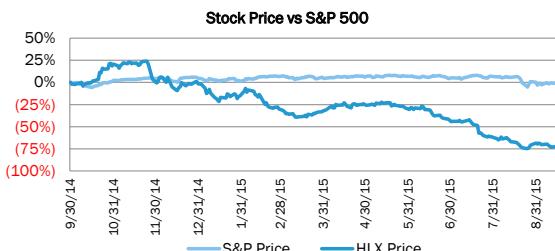
Top 5 Comps	PE	PB	P/S EV/EBITDA	Div Yield %	Analyst Recommendations
Cameron International Corporation	50.48	2.66	1.20	8.22	0.00
National Oilwell Varco, Inc.	8.22	0.77	0.78	4.25	4.89
Baker Hughes Incorporated	87.13	1.28	1.06	7.24	1.31
Superior Energy Services, Inc.	NM	0.58	0.48	3.27	2.53



**Ticker** HLX      **Currency** USD      **Date** 9/30/15

### Helix Energy Solutions Group, Inc.

Headquarters	United States	Share Price	4.79
Website	<a href="http://helixesg.com">helixesg.com</a>	52 Week Range	4.57-27.7
Exchange	NYSE	Market Cap (\$B)	0.507
Industry (GICS)	Energy	Enterprise Value (\$B)	0.803
ROBO Global Classification:		YTD Change	(77.93%)
BW or NBW	Non-Bellwether	PE	5.04
Tier One	Application	P/S	0.56
Tier Two	Energy	Dividend Yield	0.00%



### Business Description:

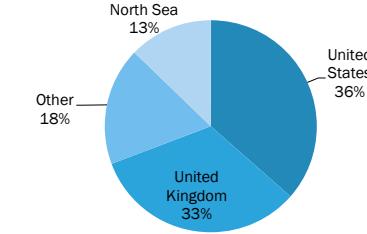
Helix Energy Solutions Group, Inc., together with its subsidiaries, provides specialty services to the offshore energy industry primarily in the Gulf of Mexico, North Sea, the Asia Pacific, and West Africa regions. The company operates through four segments: Well Intervention, Robotics, Production Facilities, and Subsea Construction. It engineers, manages, and conducts well construction, intervention, and abandonment operations in water depths ranging from 200 to 10,000 feet; and operates remotely operated vehicles (ROVs), trenchers, and ROVdrills for offshore construction, maintenance, and well intervention services. The company offers production services, such as inspection, repair, and maintenance of production structures, trees, jumpers, risers, pipelines, and subsea equipment; well intervention services; life of field support services; intervention engineering services. It also provides reclamation and remediation services; plugging and abandonment services; pipeline abandonment services; and site inspection services. In addition, the company engages in the installation of subsea pipelines, flowlines, control umbilicals, manifold assemblies, and risers; burial of pipelines; installation and tie-in of riser and manifold assembly; commissioning, testing, and inspection; and cable and umbilical lay and connection. Further, it offers oil and natural gas processing services to oil and natural gas companies; and fast response system services. The company's customers primarily include independent oil and gas producers and suppliers, pipeline transmission companies, alternative (renewable) energy companies, and offshore engineering and construction firms. The company was formerly known as Cal Dive International, Inc. and changed its name to Helix Energy Solutions Group, Inc. in March 2006. Helix Energy Solutions Group, Inc. was incorporated in 1979 and is headquartered in Houston, Texas.

### Robotics & Automation Description:

Helix has been actively involved in robotics for over 25 years. Helix Energy Solutions' marine contracting business unit is Canyon Offshore. As of April 2013, Canyon operated 51 ROVs and trenching systems including heavy work-class systems, trenching and geotechnical systems, and five chartered ROV support vessels. Its ROVs are used for tasks such as umbilical flowline trenching, geotechnical coring, tooling and intervention services, and other subsea project management services. Although its ROVs primarily serve the oil and gas sector, Helix also supports renewable energy, subsea mining, and other specialty services. Helix charters its ROV support vessels, ensuring a modern fleet that can expand and contract based on regional requirements. Revenues attributed to robotics has historically accounted for approximately 40% of Helix's total revenue.

Fundamentals	2010	2011	2012	2013	2014
Sales	\$774	\$702	\$846	\$877	\$1,107
YoY % Change	(47%)	(9%)	21%	4%	26%
EBITDA	\$153	\$152	\$212	\$246	\$345
YoY % Change	(54%)	(7%)	45%	15%	32%
Net Income	(\$127)	\$130	(\$46)	\$110	\$195
YoY % Change	0%	0%	0%	0%	77%
Earnings Per Share	(\$1.22)	\$1.23	(\$0.44)	\$1.04	\$1.85
YoY % Change	0%	0%	0%	0%	80%
EBITDA Margin %	20%	22%	25%	28%	31%
Net % Margin	(16%)	19%	(5%)	13%	18%

HLX 2014 Revenue by Geography

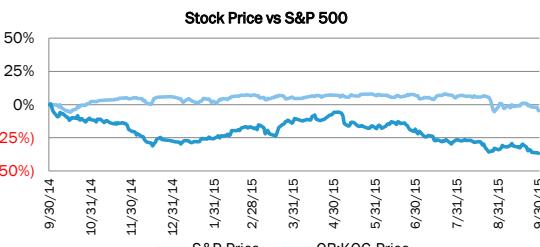


Top 5 Comps	PE	PB	P/S	EV/EBITDA	Div Yield %
Hornbeck Offshore Services, Inc.	4.91	0.34	0.81	4.77	0.00
Dril-Quip, Inc.	11.02	1.71	2.43	6.10	0.00
Key Energy Services Inc.	NM	0.08	0.06	29.98	0.00
Basic Energy Services, Inc.	NM	0.51	0.11	4.67	0.00

Analyst Recommendations



Ticker	OB:KOG	Currency	USD	Date	9/30/15
<b>Kongsberg Gruppen ASA</b>					
Headquarters	Norway	Share Price	14.41		
Website	<a href="http://kongsberg.com">kongsberg.com</a>	52 Week Range	13.65-23.19-33.59		
Exchange	OB	Market Cap (\$B)	1.721		
Industry (GICS)	Industrials	Enterprise Value (\$B)	2.317		
ROBO Global Classification:		YTD Change	0.00%		
BW or NBW	Non-Bellwether	PE	17.24		
Tier One	Application	P/S	0.88		
Tier Two	Energy	Dividend Yield	3.46%		



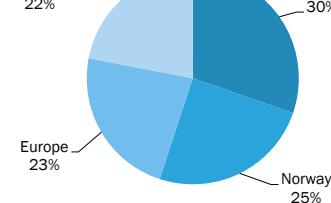
### Business Description:

Kongsberg Gruppen ASA, together with its subsidiaries, provides technology systems and solutions to customers in the oil and gas, merchant marine, and defense and aerospace industries. The company operates through four segments: Kongsberg Maritime, Kongsberg Defence Systems, Kongsberg Protech Systems, and Kongsberg Oil & Gas Technologies. The Kongsberg Maritime segment provides products and systems for positioning, navigation, and automation for commercial vessels and offshore installations, as well as products and systems for seabed surveys, surveillance, training simulators and fishing vessels, and fisheries research. The Kongsberg Defense Systems segment supplies defense and space-related systems for command and weapon control, weapon guidance and surveillance, communications solutions, and missiles. The Kongsberg Protech Systems segment offers Protector Remote Weapon Station, a weapon guidance system to protect military personnel in armored vehicles. The Kongsberg Oil & Gas Technologies segment supplies high-tech solutions to the oil and gas industry, including engineer services, underwater solutions, and decision making systems for various phases of the lifetime of a field, from exploration and early phase engineering to field development and production. It primarily operates in Norway, rest of Europe, North America, South America, and Asia. Kongsberg Gruppen ASA was founded in 1624 and is headquartered in Kongsberg, Norway.

### Robotics & Automation Description:

Kongsberg provides a variety of industries and defense organizations with software and hardware tools for automation and unmanned-guidance. Kongsberg Protech Systems is the world's leading supplier of Remote Weapon Stations. Kongsberg Integrated Tactical Systems (KITS) provides C4I CORTEX, a solution that ties subsystems and sensors together by using an open standard infrastructure and a common operator interface for each control position. The Missile Systems Division has technology for automatic missile control and mission simulation. Kongsberg also designs autonomous underwater vehicles (AUV) and positioning systems for Navy operations and oceanographic data collection.

Fundamentals	2010	2011	2012	2013	2014	OB:KOG 2014 Revenue by Geography
Sales	\$2,663	\$2,537	\$2,811	\$2,687	\$2,212	
YoY % Change	12%	(2%)	3%	4%	1%	
EBITDA	\$421	\$396	\$405	\$345	\$252	
YoY % Change	13%	11%	14%	0%	1%	
Net Income	\$257	\$240	\$235	\$202	\$117	
YoY % Change	82%	(4%)	(9%)	(6%)	(29%)	
Earnings Per Share	\$2.14	\$2.00	\$1.96	\$1.68	\$0.97	
YoY % Change	82%	(4%)	(9%)	(6%)	(29%)	
EBITDA Margin %	16%	16%	14%	13%	11%	
Net % Margin	10%	9%	8%	8%	5%	
<b>Top 5 Comps</b>						Analyst Recommendations
Akastor ASA	NM	0.34	0.16	8.67	0.00	Buy
Aker Solutions	7.77	1.37	0.24	4.16	4.93	6
Meggitt PLC	19.77	1.83	2.34	12.30	2.89	Hold
Subsea 7 SA	NM	0.46	0.46	2.05	0.00	

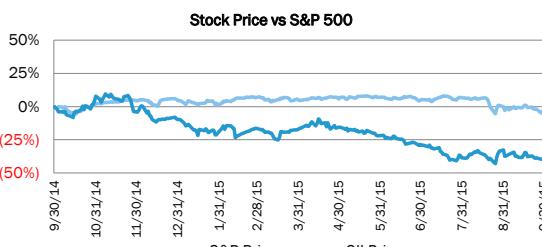




**Ticker** OII **Currency** USD **Date** 9/30/15

### Oceaneering International, Inc.

Headquarters	United States	Share Price	39.28
Website	<a href="http://oceaneering.com">oceaneering.com</a>	52 Week Range	37-72.19
Exchange	NYSE	Market Cap (\$B)	3.843
Industry (GICS)	Energy	Enterprise Value (\$B)	4.446
ROBO Global Classification:		YTD Change	(33.21%)
BW or NBW	Bellwether	PE	11.13
Tier One	Application	P/S	1.15
Tier Two	Energy	Dividend Yield	2.75%



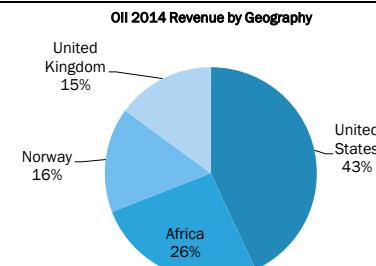
### Business Description:

Oceaneering International, Inc. provides engineered services and products primarily to the offshore oil and gas industry worldwide. The company's Remotely Operated Vehicles (ROVs) segment offers submersible vehicles for drilling support in the oil and gas industry; and subsea hardware installation, construction, pipeline inspection, survey and facilities inspection, maintenance, and repair services. As of December 31, 2014, this segment owned a fleet of 336 ROVs. Its Subsea Products segment constructs various subsea hardware products comprising subsea umbilicals utilizing thermoplastic hoses and steel tubes; tooling, and ROV tooling and work packages; production control equipment; blowout preventer control systems; installation and workover control systems; clamp connectors; pipeline connectors and repair systems; subsea and topside control valves; and subsea chemical injection valves. The company's Subsea Projects segment performs subsea oilfield hardware installation and inspection, maintenance, and repair services; serves deepwater projects and shallow water projects; and performs subsea intervention and hardware installation services, such as subsea well tie-backs, pipeline/flow line tie-ins and repairs, pipeline crossings, umbilical and other subsea equipment installations, and subsea intervention, as well as inspection, maintenance, and repair services. Its Asset Integrity segment offers asset integrity services to enhance the reliability and safety of their facilities onshore and offshore, as well as third-party inspections to customers in the oil and gas, petrochemical, and power generation industries; and first-pass integrity evaluation and assessment, and nondestructive testing services for the oil and gas industry. The company's Advanced Technologies segment provides project management, engineering services, and equipment for applications in non-oilfield markets. Oceaneering International, Inc. was founded in 1964 and is based in Houston, Texas.

### Robotics & Automation Description:

Oceaneering manufactures remotely operated underwater vehicles (ROV) that are mainly used in offshore drilling operations. Oceaneering has over 300 Work Class ROVs and is the world's largest ROV systems manufacturer. The ROVs aid in tasks such as drilling support, subsea hardware installation and construction, pipeline inspections and surveys, and subsea production & facility maintenance. The ROVs are piloted by a microprocessor-based control system through fiber optic cables and typically a crew of three technicians. Oceaneering operated about 35% of ROVs worldwide and held a market share of roughly 60% at the end of 2013, which is nearly triple that of the next closest competitor. Over the last few years, ROVs composed about 30% of Oceaneering's revenue and 45% of operating income.

Fundamentals	2010	2011	2012	2013	2014
Sales	\$1,917	\$2,193	\$2,783	\$3,287	\$3,660
YoY % Change	5%	14%	27%	18%	11%
EBITDA	\$463	\$486	\$605	\$747	\$858
YoY % Change	8%	8%	23%	22%	12%
Net Income	\$201	\$236	\$289	\$372	\$428
YoY % Change	6%	18%	23%	29%	15%
Earnings Per Share	\$1.83	\$2.18	\$2.68	\$3.43	\$4.02
YoY % Change	7%	18%	23%	29%	17%
EBITDA Margin %	24%	22%	22%	23%	23%
Net % Margin	10%	11%	10%	11%	12%



Top 5 Comps	PE	PB	P/S EV/EBITDA	Div Yield %	Analyst Recommendations
Superior Energy Services, Inc.	NM	0.58	0.48	3.27	2.53
FMC Technologies, Inc.	12.24	2.74	0.96	6.35	0.00
Cameron International Corporation	50.48	2.66	1.20	8.22	0.00
Forum Energy Technologies, Inc.	8.41	0.76	0.72	5.43	0.00

# Healthcare

Ticker	ARAY	Currency	USD	Date	9/30/15
<b>Accuray Incorporated</b>					
Headquarters	United States	Share Price	5.00		
Website	<a href="http://accuray.com">accuray.com</a>	52 Week Range	4.87-10.01		
Exchange	NasdaqGS	Market Cap (\$B)	0.398		
Industry (GICS)	Healthcare	Enterprise Value (\$B)	0.457		
ROBO Global Classification:		YTD Change	(33.84%)		
BW or NBW	Bellwether	PE	NM		
Tier One	Application	P/S	1.03		
Tier Two	Healthcare	Dividend Yield	0.00%		
 <p>The chart shows the performance of Accuray's stock price relative to the S&amp;P 500 index from September 30, 2014, to September 30, 2015. The Y-axis represents percentage change from -50% to 50%. The S&amp;P Price (blue line) starts at approximately 0% and remains relatively flat. The ARAY Price (red line) starts at approximately 0%, dips slightly, and then trends upwards, peaking around 25% in early 2015 before declining towards the end of the period.</p>					

### Business Description:

Accuray Incorporated designs, develops, and sells radiosurgery and radiation therapy systems for the treatment of tumors in the body. It offers the CyberKnife System, a robotic stereotactic radiosurgery and stereotactic body radiation therapy system used for the treatment of various types of cancer and tumors in the body. The company's CyberKnife System automatically tracks, detects, and corrects for tumor and patient movement in real-time during the procedure, as well as enables delivery of precise, high dose radiation while patients breathe normally. It also offers the TomoTherapy System, which consists of an integrated and versatile radiation therapy system used for the treatment of a range of cancer types. The company markets its products in the United States directly, as well as through a sales agent and group purchasing organizations; and directly and through distributors and sales agents in Europe, Japan and other countries of Asia, South America, and internationally to hospitals and stand-alone treatment facilities. Accuray Incorporated was incorporated in 1990 and is headquartered in Sunnyvale, California.

### Robotics & Automation Description:

Accuracy makes use of image-guided robotic systems to deliver radiation to specific treatment areas. CyberKnife® was first launched in 2001 and has since performed over 100,000 procedures. The most recent model (M6) has shown a 20% speed improvement over its predecessor and is the only robotic platform capable of both radiosurgery and full body radiation therapy. The TomoTherapy® System can parse a beam of radiation into smaller pieces and deliver it from any direction to optimize the amount of radiation the tumor receives while minimizing the impact to the surrounding healthy tissue.

Fundamentals	2011	2012	2013	2014	2015	ARY 2015 Revenue by Geography																																			
Sales	\$222	\$409	\$316	\$369	\$380																																				
YoY % Change	0%	84%	(23%)	17%	3%																																				
EBITDA	(\$20)	(\$24)	(\$46)	\$2	(\$7)																																				
YoY % Change	3%	28%	(29%)	46%	2%																																				
Net Income	(\$27)	(\$72)	(\$103)	(\$35)	(\$40)																																				
YoY % Change	0%	0%	0%	0%	0%																																				
Earnings Per Share	(\$0.44)	(\$1.02)	(\$1.41)	(\$0.47)	(\$0.51)																																				
YoY % Change	0%	0%	0%	0%	0%																																				
EBITDA Margin %	(9%)	(6%)	(15%)	1%	(2%)																																				
Net % Margin	(12%)	(18%)	(33%)	(10%)	(11%)																																				
<table border="1"> <thead> <tr> <th>Top 5 Comps</th> <th>PE</th> <th>PB</th> <th>P/S</th> <th>EV/EBITDA</th> <th>Div Yield %</th> <th>Analyst Recommendations</th> </tr> </thead> <tbody> <tr> <td>Thoratec Corp.</td> <td>89.90</td> <td>5.09</td> <td>7.16</td> <td>45.29</td> <td>0.00</td> <td>Buy</td> </tr> <tr> <td>Cynosure, Inc.</td> <td>21.12</td> <td>1.77</td> <td>2.07</td> <td>13.33</td> <td>0.00</td> <td></td> </tr> <tr> <td>Cyberonics Inc.</td> <td>28.38</td> <td>5.39</td> <td>5.30</td> <td>12.79</td> <td>0.00</td> <td>Hold</td> </tr> <tr> <td>ABIOMED, Inc.</td> <td>32.86</td> <td>12.56</td> <td>14.93</td> <td>75.21</td> <td>0.00</td> <td></td> </tr> </tbody> </table>						Top 5 Comps	PE	PB	P/S	EV/EBITDA	Div Yield %	Analyst Recommendations	Thoratec Corp.	89.90	5.09	7.16	45.29	0.00	Buy	Cynosure, Inc.	21.12	1.77	2.07	13.33	0.00		Cyberonics Inc.	28.38	5.39	5.30	12.79	0.00	Hold	ABIOMED, Inc.	32.86	12.56	14.93	75.21	0.00		
Top 5 Comps	PE	PB	P/S	EV/EBITDA	Div Yield %	Analyst Recommendations																																			
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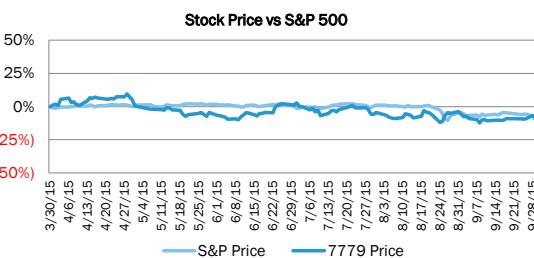
Ticker 7779

Currency USD

Date 9/30/15

### CYBERDYNE Inc.

Headquarters	Japan	Share Price	11.80
Website	<a href="http://cyberdyne.jp">cyberdyne.jp</a>	52 Week Range	9.92609-16.13981
Exchange	TSE	Market Cap (\$B)	2.398
Industry (GICS)	Healthcare	Enterprise Value (\$B)	2.210
ROBO Global Classification:		YTD Change	(9.42%)
BW or NBW	Bellwether	PE	NM
Tier One	Application	P/S	NM
Tier Two	Healthcare	Dividend Yield	0.00%



### Business Description:

CYBERDYNE Inc. engages in the research, development, production, sale, lease, and maintenance of robot suits. The company offers its equipments and systems in various areas, such as medical/welfare; rehabilitation/care personnel support; assistance for human body functions of elderly/disabled people; rescue supports in disaster sites; entertainment; and heavy labor supports in factories and plants. Its products include HAL for medical use, living support, care support, and labour support; other HAL series products; HAL peripherals that are assistive devices used with HAL for lower limb; TableInterface, a multi-touch display device; and cleaning robots that take an elevator by itself, and cleans floors of an office building and others. The company also provides HAL Therapy, a medical service to provide medical treatments for functional improvement of patients with cerebral, nervous, spinal cord injury, and cerebral embolism; and training courses. CYBERDYNE Inc. is headquartered in Tsukuba, Japan.

### Robotics & Automation Description:

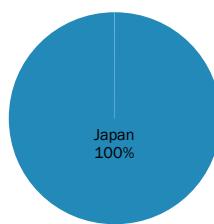
Cyberdyne produces robots that are intended to aid, enable, and enhance human mobility. Cyberdyne's HAL is a robotic device that enables automatic motion assistance for those with little or minimal use of their lower extremities. It is the only robotic remedial device that can teach the brain how to move one's legs. Cyberdyne also offers single joint robotics that are intended to provide support to knee and elbow joints for use in intensive exercise and weighs only a few pounds. HAL for Whole Body enables an individual to lift extremely heavy payloads that would typically require the use of a forklift or other comparable device. HAL for Disaster Recovery comes equipped with a radiation shielding jacket, a vital sensing system, is made of titanium, and can be put on and removed in a matter of minutes. Cyberdyne also produces a line of cleaning robots that can automatically navigate multiple floors of an office building at all hours of the day. This enables cleaning to be carried out without the need for man power, lighting, or heating/air conditioning.

### Fundamentals

2014

2015

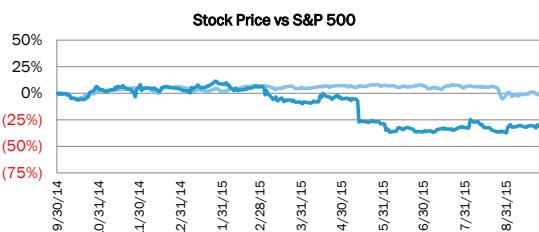
7779 2015 Revenue by Geography



Sales	\$4	\$5
YoY % Change	0%	38%
EBITDA	(\$9)	(\$13)
YoY % Change	0%	29%
Net Income	(\$7)	(\$8)
YoY % Change	0%	0%
Earnings Per Share	(\$0.04)	(\$0.04)
YoY % Change	0%	0%
EBITDA Margin %	(214%)	(248%)
Net % Margin	(151%)	(145%)

### Top 5 Comps

	PE	PB	P/S	EV/EBITDA	Div Yield %	Analyst Recommendations
Ekso Bionics Holdings, Inc.	NM	8.57	15.82	NM	0.00	Buy
ReWalk Robotics Ltd.	NM	2.77	17.54	NM	0.00	3
Rex Bionics Plc	NM	0.46	27.73	NM	0.00	Hold
Second Sight Medical Products, Inc.	NM	7.56	28.46	NM	0.00	

Ticker	EKTA B	Currency	USD	Date	9/30/15
<b>Elekt AB</b>					
Headquarters	Sweden	Share Price	6.63		
Website	<a href="http://elektab.com">elektab.com</a>	52 Week Range	5.98924-10.87002		
Exchange	OM	Market Cap (\$B)	2.529		
Industry (GICS)	Healthcare	Enterprise Value (\$B)	2.935		
ROBO Global Classification:		YTD Change	(30.18%)		
BW or NBW	Non-Bellwether	PE	38.03		
Tier One	Application	P/S	1.89		
Tier Two	Healthcare	Dividend Yield	0.90%		
 <p>The chart shows the stock price of EKTA B compared to the S&amp;P 500 from September 30, 2014, to September 30, 2015. The Y-axis represents the percentage change from 0% to 50%. The X-axis shows dates from 9/30/14 to 9/30/15. The S&amp;P Price (blue line) starts at approximately 25% and remains relatively stable. The EKTA B Price (red line) starts at approximately 25%, drops to about 75% by early 2015, and then recovers to around 25% by the end of the period.</p>					

### Business Description:

Elekt AB (publ) develops and sells clinical solutions for the treatment of cancer and brain disorders worldwide. The company offers Leksell Gamma Knife, a system for cranial stereotactic radiosurgery; the Extend system for utilization of Leksell Gamma Knife Perfexion; and Leksell Stereotactic System for neurosurgery and biopsies. Its neuroscience solutions comprise Gamma Knife radiosurgery for the treatment of brain disorders; stereotactic neurosurgery; and surgical navigation accessories, as well as Elekt Neuromag TRIUX, a magnetoencephalography platform. The company also provides oncology treatment solutions, such as Precise Treatment System, a digital treatment system; Elekt Axesse, a stereotactic radiation therapy system; Elekt Compact, a gateway to RT for oncology centers; Elekt Synergy system that visualizes tumor targets and normal tissue, and their movement between and during fractions; treatment planning systems; oncology information systems solutions; Versa HD, a linear accelerator; and Elekt Infinity system for volumetric arc modulated therapy, as well as various treatment techniques. In addition, it offers brachytherapy solutions that include afterloading platforms; real-time prostate solutions; Oncentra Brachy, a radiotherapy treatment planning system; Esteya for treating skin cancer; and applicators. Further, the company provides software products, including MOSAIQ oncology information system; Oncology Informatics/Data Alliances that streamlines the flow of information in the cancer care team; medical oncology software; Clarity Soft Tissue Visualization, a software for radiation therapy; and METRIQ, a cancer registry data solution. It also offers installation and implementation, service and support, remote, upgrades and accessories, and financial solutions, as well as training, education, and consultative services. It primarily serves hospitals and academic institutions. The company was founded in 1972 and is headquartered in Stockholm, Sweden.

### Robotics & Automation Description:

Elekt produces robots for high-precision radiation treatment and patient positioning. Elekt's Automatic Positioning System (APS) is a refined robotic system that makes minimal adjustments to the patient's head position to optimize the radiation dose. The 3D-Arm™ provides a stable and precise positioning platform for minimally invasive surgical procedures. The HexaPOD System is a unique, fully robotic patient positioning system with six degrees of freedom to correct for any misalignments detected by X-ray. Elekt also has a variety of software packages such as MOSAIQ, ANALYTIQ™, and METRIQ that create an efficient clinical environment in which all activities related to patient care from diagnosis and treatment to follow-up are as streamlined as possible. Additionally, Elekt specializes in image technology that can conduct, control, and monitor ultrasound scans from outside the treatment room. In 2013, Elekt introduced Versa, one of the most highly advanced linear accelerators in the medical industry to handle a wide range of cancer treatments.

Fundamentals	2011	2012	2013	2014	2015	EKTA B 2014 Revenue by Geography
Sales	\$1,312	\$1,346	\$1,594	\$1,643	\$1,298	
YoY % Change	7%	14%	14%	3%	1%	
EBITDA	\$260	\$294	\$352	\$315	\$149	
YoY % Change	8%	15%	13%	(3%)	(7%)	
Net Income	\$171	\$182	\$207	\$176	\$66	
YoY % Change	23%	19%	9%	(14%)	(52%)	
Earnings Per Share	\$0.46	\$0.48	\$0.54	\$0.46	\$0.17	
YoY % Change	21%	18%	9%	(15%)	(52%)	
EBITDA Margin %	20%	22%	22%	19%	12%	
Net % Margin	13%	14%	13%	11%	5%	

Top 5 Comps	PE	PB	P/S EV/EBITDA	Div Yield %	Analyst Recommendations
William Demant Holding A/S	22.26	4.95	3.08	16.49	0.00
GN Store Nord A/S	27.48	3.33	2.44	13.41	0.75
Sonoval Holding AG	23.44	4.53	4.13	16.05	1.63
Getinge AB	27.39	2.41	1.56	11.57	1.50



Ticker	ISRG	Currency	USD	Date	9/30/15
<b>Intuitive Surgical, Inc.</b>					
Headquarters	United States	Share Price	459.58		
Website	<a href="http://intuitivesurgical.com">intuitivesurgical.com</a>	52 Week Range	449.34-564.8571		
Exchange	NasdaqGS	Market Cap (\$B)	17.01		
Industry (GICS)	Healthcare	Enterprise Value (\$B)	15.45		
ROBO Global Classification:		YTD Change	(13.11%)		
BW or NBW	Bellwether	PE	34.23		
Tier One	Application	P/S	7.43		
Tier Two	Healthcare	Dividend Yield	0.00%		



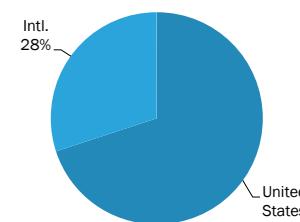
### Business Description:

Intuitive Surgical, Inc. designs, manufactures, and markets da Vinci surgical systems, and related instruments and accessories in the United States, Europe, and Asia. Its da Vinci surgical system translates a surgeon's natural hand movements, which are performed on instrument controls at a console, into corresponding micro-movements of instruments positioned inside the patient through small incisions or ports. The da Vinci surgical system comprise a surgeon's console, a patient-side cart, a 3-D vision system, da Vinci skills simulator, and Firefly fluorescence imaging product that enable surgeons to perform various surgical procedures, including gynecologic, urologic, general, cardiothoracic, and head and neck surgical procedures. The company also manufactures EndoWrist instruments consisting of forceps, scissors, electrocautery, scalpels, and other surgical tools, which incorporate wrist joints for natural dexterity for various surgical procedures. In addition, it offers da Vinci single-site instruments and accessories that allow da Vinci Si surgical systems to work through a single incision; and EndoWrist One vessel sealers that are wristed single-use instruments intended for bipolar coagulation and mechanical transection of vessels up to 7 mm in diameter and tissue bundles that fit in the jaws of the instrument. Further, the company provides EndoWrist stapler 45 instruments, which are wristed stapling instruments intended for resection, transection and/or creation of anastomoses in general, gynecologic, and urologic surgery, as well as sells various accessory products, including sterile drapes for ensuring a sterile field during surgery, replacement 3-D stereo endoscopes, camera heads, light guides, and other items used in conjunction with the da Vinci surgical system. Intuitive Surgical, Inc. markets its products directly and through distributors. The company was founded in 1995 and is headquartered in Sunnyvale, California.

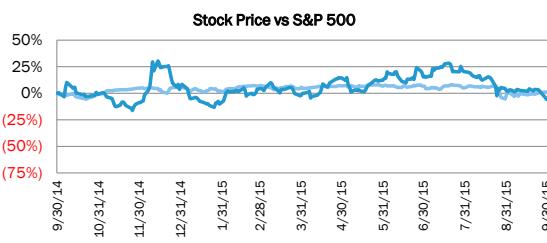
### Robotics & Automation Description:

Intuitive manufactures the da Vinci line of surgical robots that are capable of performing various procedures through a single incision point as small as half a millimeter. These surgical robots have 3DHD vision, which is capable producing images at 10x normal magnification. In 2013, the da Vinci surgical system generated revenues of \$835MM (37.5% of total revenue) and performed over 500,000 procedures worldwide. Da Vinci and other minimally invasive surgical procedures now represent nearly 90% of all prostatectomy procedures (up from 4% in 2003) and 19% of hysterectomy procedures (up from 1% in 2005) in the US. Today there are nearly 3,000 da Vinci systems in use worldwide with approximately 2/3 of them located in the US. Intuitive Surgical's EndoWrist Instruments provide dexterity greater than that of the human hand (7 degrees of freedom and 90 degrees of articulation), precision, and control.

Fundamentals	2010	2011	2012	2013	2014	ISRG 2014 Revenue by Geography
Sales	\$1,413	\$1,757	\$2,179	\$2,244	\$2,116	
YoY % Change	34%	24%	24%	3%	(6%)	
EBITDA	\$596	\$741	\$936	\$920	\$702	
YoY % Change	37%	24%	23%	2%	(11%)	
Net Income	\$382	\$495	\$657	\$671	\$419	
YoY % Change	64%	30%	33%	2%	(38%)	
Earnings Per Share	\$9.74	\$12.63	\$16.50	\$17.12	\$11.35	
YoY % Change	60%	30%	30%	5%	(34%)	
EBITDA Margin %	42%	42%	43%	41%	33%	
Net % Margin	27%	28%	30%	30%	20%	



Top 5 Comps	PE	PB	P/S	EV/EBITDA	Div Yield %	Analyst Recommendations
Edwards Lifesciences Corp.	35.44	6.67	6.27	21.85	0.00	
CR Bard Inc.	41.12	8.34	4.12	13.48	0.52	Buy
Teleflex Incorporated	30.73	2.69	2.86	14.53	1.09	Hold
Zimmer Biomet Holdings, Inc.	47.69	1.89	3.46	16.14	0.94	5

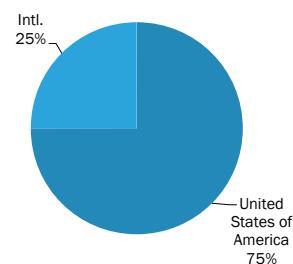
Ticker	MZOR	Currency	USD	Date	9/30/15
<b>Mazor Robotics Ltd.</b>					
Headquarters	Israel	Share Price	5.43		
Website	<a href="http://mazorst.com">mazorst.com</a>	52 Week Range	4.74357-7.51575		
Exchange	TASE	Market Cap (\$B)	0.230		
Industry (GICS)	Healthcare	Enterprise Value (\$B)	0.193		
ROBO Global Classification:		YTD Change	(12.45%)		
BW or NBW	Non-Bellwether	PE	NM		
Tier One	Application	P/S	9.95		
Tier Two	Healthcare	Dividend Yield	0.00%		
					

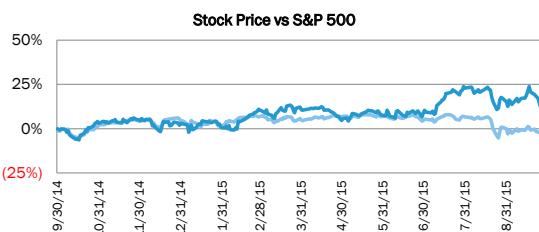
### Business Description:

Mazor Robotics Ltd., together with its subsidiaries, engages in the development, production, marketing, and servicing of medical devices for supporting surgical procedures in the fields of orthopedics and neurosurgery in the United States, Europe, and Asia. The company operates in the field of image guided surgery and computer assisted surgery that enables the use of surgical instruments with high precision and minimal invasiveness. It offers Renaissance surgical guidance system that transforms spine surgery from freehand procedures to guided procedures. The company was formerly known as Mazor Surgical Technologies Ltd. and changed its name to Mazor Robotics Ltd. in 2010. Mazor Robotics Ltd. was founded in 2000 and is headquartered in Caesarea, Israel.

### Robotics & Automation Description:

Mazor manufactures the Robotic Renaissance™ and SpineAssist surgical guidance systems. Mazor Robotics Renaissance™ Guidance System has been used in thousands of spine procedures worldwide ranging from minimally-invasive surgery to scoliosis and other complex spinal deformity cases with accuracy down to the millimeter. Before surgery begins, a CT scan of the patient's spine is uploaded to Renaissance software to create a detailed 3D model of the patient's spine. This enables accurate visualization of the patient's spinal anatomy/ condition and enables the creation of a customized surgical plan in a virtual 3D environment. When compared to traditional spine surgery procedures, patients who used Mazor technology experienced 99% accuracy, saw their average hospital stay decrease by 27%, and complication rates reduced by 48%. The Renaissance Brain Module AANS is used for brain procedures including biopsies and Deep Brain Stimulation (DBS) with 360 degrees of freedom.

Fundamentals	2010	2011	2012	2013	2014	MZOR 2014 Revenue by Geography
Sales	\$4	\$6	\$12	\$20	\$21	
YoY % Change	164%	49%	106%	62%	6%	
EBITDA	(\$5)	(\$7)	(\$4)	(\$7)	(\$14)	
YoY % Change	208%	34%	131%	69%	7%	
Net Income	(\$6)	(\$8)	(\$7)	(\$21)	(\$15)	
YoY % Change	0%	0%	0%	0%	0%	
Earnings Per Share	(\$0.29)	(\$0.36)	(\$0.29)	(\$0.57)	(\$0.37)	
YoY % Change	0%	0%	0%	0%	0%	
EBITDA Margin %	(129%)	(122%)	(30%)	(33%)	(68%)	
Net % Margin						
						
Top 5 Comps	PE	PB	P/S	EV/EBITDA	Div Yield %	Analyst Recommendations
Medtronic plc	31.08	1.79	3.48	15.98	2.27	Buy
AxoGen, Inc.	NM	NM	4.13	NM	0.00	2
Stryker Corporation	38.58	4.17	3.62	13.20	1.47	Hold
Elektta AB	38.03	3.11	1.89	17.76	0.90	2

Ticker	QGEN	Currency	USD	Date	9/30/15
<b>Qiagen NV</b>					
Headquarters	Netherlands	Share Price	25.80		
Website	<a href="http://qiagen.com">qiagen.com</a>	52 Week Range	20.73-28.53		
Exchange	NasdaqGS	Market Cap (\$B)	6.005		
Industry (GICS)	Healthcare	Enterprise Value (\$B)	6.690		
ROBO Global Classification:		YTD Change	9.97%		
BW or NBW	Non-Bellwether	PE	58.57		
Tier One	Application	P/S	4.57		
Tier Two	Healthcare	Dividend Yield	0.00%		
 <p>The chart shows the performance of QGEN relative to the S&amp;P 500 index from September 30, 2014, to September 30, 2015. The Y-axis represents percentage change, ranging from -25% to 50%. The X-axis shows dates from 9/30/14 to 9/30/15. The S&amp;P Price (blue line) starts at approximately 10% and remains relatively flat. The QGEN Price (red line) starts at approximately 10%, dips to about -10% in early 2015, and then recovers to end at approximately 20%.</p>					

### Business Description:

QIAGEN N.V. provides sample to insight solutions that transform biological samples into valuable molecular insights worldwide. It offers sample technologies to isolate, purify, and stabilize nucleic acids and proteins in plasmid deoxyribonucleic acid (DNA) purification, ribonucleic acid purification and stabilization, genomic and viral nucleic acid purification, DNA cleanup after polymerase chain reaction (PCR) and sequencing, and library preparation for sequencing applications; and assay technologies to detect molecular targets. The company also offers ingenuity variant analysis, a cloud-based platform to evaluate data generated by NGS technologies; CLC cancer research workbench, a cancer-focused informatics solution; and GeneGlobe, a Web-based portal that enables researchers to search and select from pre-designed and custom PCR assay kits and NGS assay panels. In addition, it provides co-development, technology licenses and patent sales, and custom services, such as whole genome amplification services, DNA sequencing, and non-cGMP DNA production. Further, the company offers instrumentation systems for laboratories to perform nucleic acid sample preparation, assay setup, target detection, and interpretation of genomic information. Its automation platforms include QIAasympathy, a modular system; EZ1 Advanced XL for automated nucleic acid purification; QIAcube, a sample processing instrument; QIAcube HT for automated nucleic acid purification; Rotor-Gene Q, a rotary real-time PCR cycler system; PyroMark, a high-resolution detection platform; QIAgility, a compact benchtop instrument; QIAxcel for nucleic acid separation; and ESEQuant Tube Scanners. The company serves molecular diagnostics, applied testing, pharma, and academia customers. It has collaboration agreement with Astellas Pharma Inc., AstraZeneca PLC, Eli Lilly and Company, Exosome Diagnostics Inc., and Novartis AG. QIAGEN N.V. was founded in 1986 and is headquartered in Venlo, the Netherlands.

### Robotics & Automation Description:

Qiagen manufactures lab robots used in the DNA purification, pre-sequencing, next-generation gene sequencing, and Assay technologies. Assay refers to various analytic laboratory procedures such as those in medicine, biology, and genetics. QIAGEN offers instruments such as the QIAasympathy for automating the full range of laboratory procedures, from the initial sample preparation to the final test results. Its automation products focus on optimizing sample preparation, automating assay set-up, and real-time DNA quantification. Its automation and instrumentation systems account for 10-15% of its total net sales and presently has over 1,000 QIAasympathy systems installed worldwide.

Fundamentals	2010	2011	2012	2013	2014	QGEN 2014 Revenue by Geography																																			
Sales	\$1,087	\$1,170	\$1,254	\$1,302	\$1,345																																				
YoY % Change	8%	8%	7%	4%	3%																																				
EBITDA	\$338	\$355	\$397	\$366	\$385																																				
YoY % Change	6%	7%	7%	4%	5%																																				
Net Income	\$144	\$96	\$130	\$69	\$117																																				
YoY % Change	5%	(33%)	35%	(47%)	69%																																				
Earnings Per Share	\$0.62	\$0.41	\$0.55	\$0.30	\$0.50																																				
YoY % Change	(6%)	(33%)	35%	(46%)	66%																																				
EBITDA Margin %	31%	30%	32%	28%	29%																																				
Net % Margin	13%	8%	10%	5%	9%																																				
<table border="1"> <thead> <tr> <th>Top 5 Comps</th> <th>PE</th> <th>PB</th> <th>P/S</th> <th>EV/EBITDA</th> <th>Div Yield %</th> <th>Analyst Recommendations</th> </tr> </thead> <tbody> <tr> <td>Illumina Inc.</td> <td>53.68</td> <td>14.18</td> <td>12.13</td> <td>34.01</td> <td>0.00</td> <td>Buy</td> </tr> <tr> <td>PerkinElmer Inc.</td> <td>31.70</td> <td>2.46</td> <td>2.31</td> <td>17.16</td> <td>0.61</td> <td>6</td> </tr> <tr> <td>Gerresheimer AG</td> <td>29.47</td> <td>3.75</td> <td>1.55</td> <td>10.36</td> <td>1.15</td> <td>Hold</td> </tr> <tr> <td>Bruker Corporation</td> <td>46.95</td> <td>3.63</td> <td>1.65</td> <td>12.72</td> <td>0.00</td> <td>14</td> </tr> </tbody> </table>						Top 5 Comps	PE	PB	P/S	EV/EBITDA	Div Yield %	Analyst Recommendations	Illumina Inc.	53.68	14.18	12.13	34.01	0.00	Buy	PerkinElmer Inc.	31.70	2.46	2.31	17.16	0.61	6	Gerresheimer AG	29.47	3.75	1.55	10.36	1.15	Hold	Bruker Corporation	46.95	3.63	1.65	12.72	0.00	14	
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Ticker	TECN	Currency	USD	Date	9/30/15
<b>Tecan Group Ltd.</b>					
Headquarters	Switzerland	Share Price	140.51		
Website	<a href="http://tecan.com">tecan.com</a>	52 Week Range	91.19771-145.93681		
Exchange	SWX	Market Cap (\$B)	1.608		
Industry (GICS)	Healthcare	Enterprise Value (\$B)	1.439		
ROBO Global Classification:		YTD Change	21.42%		
BW or NBW	Non-Bellwether	PE	33.02		
Tier One	Application	P/S	3.59		
Tier Two	Healthcare	Dividend Yield	1.09%		



### Business Description:

Tecan Group Ltd. provides laboratory instruments and automated workflow solutions for pharmaceutical and biotechnology companies, government research institutions and universities, diagnostic laboratories, and various applied markets. The company operates in two segments, Life Sciences Business and Partnering Business. It develops, produces, and distributes automation solutions, including instruments, software packages, numerous configurable modules, and special application knowhow, as well as consulting, services, and consumables. The company offers liquid handling platforms, which are used to pipette fluids with optimum precision and automate laborious and repetitive manual procedures; a range of bioanalytical instruments, such as microplate readers and washers that allows reactions to be monitored or analytes to be measured; and immunoassays for life science research and routine clinical diagnostics. It also develops and manufactures original equipment manufacturer instruments and components; and supplies laboratory instrument manufacturers with various components, such as precision pumps, valves, robotic arms, and development software under the Carvo brand. In addition, the company offers dedicated automation solutions comprising Dako Omnis, which is used in tissue-based cancer diagnostics; platform-based automation solutions; and pipette tips that acts as a component of a validated workflow solution, as well as detection instruments. Further, it provides ORTHO VISION analyzer, a diagnostics instrument that is used for blood typing; and determining other blood parameters. Tecan Group Ltd. distributes its products through its own market organization and distributors in approximately 50 countries worldwide. The company was founded in 1980 and is headquartered in Männedorf, Switzerland.

### Robotics & Automation Description:

Tecan is the market leader in laboratory automation and offers liquid handling and robotics applications within the life science and diagnostic markets. Tecan's Carvo® brand is the market leader in lab automation components such as robotic arms and precision pumps. Tecan offers Freedom EVO®-based end-to-end process automation, in particular, for mass spectrometry sample preparation. Freedom EVO® workstations can automate a diverse range of applications including primary and secondary screening, cell growth and maintenance, nucleic acid sample preparation, hit picking, library management, and sample weighing. The Freedom EVOLyzer® offers a validated solution for automation of microplate-based chromogenic ELISAs, which has gained much interest among lab managers seeking to automate ELISA processes. The automated barcode scanning and the advanced sample tracking capabilities of Freedom EVOware® provide exceptional process security.

Fundamentals	2010	2011	2012	2013	2014	TECN 2014 Revenue by Geography
Sales	\$397	\$403	\$427	\$436	\$402	Asia 15%
YoY % Change	4%	2%	4%	(1%)	3%	Other Europe 44%
EBITDA	\$68	\$61	\$64	\$69	\$65	North America 41%
YoY % Change	1%	3%	3%	(4%)	4%	
Net Income	\$17	\$51	\$46	\$51	\$40	
YoY % Change	(67%)	194%	(11%)	8%	(12%)	
Earnings Per Share	\$1.66	\$4.73	\$4.28	\$4.67	\$3.65	
YoY % Change	(3%)	(7%)	(6%)	6%	(13%)	
EBITDA Margin %	17%	15%	15%	16%	16%	
Net % Margin	4%	13%	11%	12%	10%	

Top 5 Comps	PE	PB	P/S	EV/EBITDA	Div Yield %	Analyst Recommendations
Straumann Holding AG	50.19	7.79	5.84	19.99	1.34	Buy
Sonova Holding AG	23.44	4.53	4.13	16.05	1.63	
Gerresheimer AG	29.47	3.75	1.55	10.36	1.15	Hold
Lonza Group Ltd	32.19	3.42	1.78	12.64	1.96	



Ticker	TRXC	Currency	USD	Date	9/30/15
<b>TransEnterix, Inc.</b>					
Headquarters	United States	Share Price	2.26		
Website	<a href="http://transenterix.com">transenterix.com</a>	52 Week Range	1.4-4.87		
Exchange	NYSE	Market Cap (\$B)	0.226		
Industry (GICS)	Healthcare	Enterprise Value (\$B)	0.165		
ROBO Global Classification:		YTD Change	(22.34%)		
BW or NBW	Non-Bellwether	PE	NM		
Tier One	Application	P/S	NM		
Tier Two	Healthcare	Dividend Yield	0.00%		

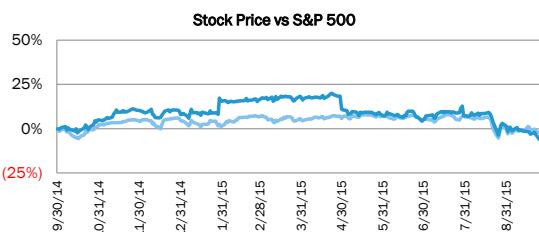
### Business Description:

TransEnterix, Inc., a medical device company, focuses on the development and commercialization of a robotic assisted surgical system in the United States and internationally. The company develops SurgiBot System, a single-incision, patient-side robotic-assisted surgery system. The SurgiBot System comprises of SurgiBot Base, a reusable robotic base that provides the platform of the system; the EndoDrive, a single port, surgical access device for abdominal surgery; and the Positioning Arm, a reusable arm that supports and repositions the SurgiBot Base at the operating table. The company also develops and manufactures flexible and rigid laparoscopic surgical instruments that are used in abdominal surgery, such as scissors, graspers, clip appliers, flexible energy device, and suction and irrigation instruments. TransEnterix, Inc. is headquartered in Morrisville, North Carolina.

### Robotics & Automation Description:

TransEnterix is focused on the development of robotics and flexible instruments to improve minimally invasive surgery by addressing the economic and clinical challenges associated with current laparoscopic and robotic solutions. The company is focused on the development and commercialization of the SurgiBot System, a minimally invasive surgical system that is designed to be operated through a single surgical incision. The company purchased SOFAR S.p.A and the ALF-X surgical robot system September 2015.

Fundamentals	2011	2012	2013	2014	TRXC 2014 Revenue by Geography	
Sales	\$2	\$2	\$1	\$0		
YoY % Change	0%	30%	(32%)	(72%)		
EBITDA	(\$15)	(\$13)	(\$21)	(\$38)		
YoY % Change	0%	0%	0%	0%		
Net Income	(\$17)	(\$15)	(\$28)	(\$38)		
YoY % Change	0%	0%	0%	0%		
Earnings Per Share	(\$18.59)	(\$14.31)	(\$2.23)	(\$0.64)		
YoY % Change	0%	0%	0%	0%		
EBITDA Margin %	(943%)	(632%)	(1451%)	(8803%)		
Net % Margin	(1046%)	(729%)	(1982%)	(9390%)		
Top 5 Comps	PE	PB	P/S	EV/EBITDA	Div Yield %	Analyst Recommendations
Intuitive Surgical, Inc.	34.23	4.48	7.43	20.60	0.00	Buy
Medtronic plc	31.08	1.79	3.48	15.98	2.27	7
Boston Scientific Corporation	NM	3.35	3.01	15.09	0.00	Hold
Edwards Lifesciences Corp.	35.44	6.67	6.27	21.85	0.00	

Ticker	VAR	Currency	USD	Date	9/30/15
<b>Varian Medical Systems, Inc.</b>					
Headquarters	United States	Share Price	73.78		
Website	<a href="http://varian.com">varian.com</a>	52 Week Range	71.07-96.67		
Exchange	NYSE	Market Cap (\$B)	7.283		
Industry (GICS)	Healthcare	Enterprise Value (\$B)	6.769		
ROBO Global Classification:		YTD Change	(14.72%)		
BW or NBW	Non-Bellwether	PE	17.90		
Tier One	Application	P/S	2.40		
Tier Two	Healthcare	Dividend Yield	0.00%		
					

### Business Description:

Varian Medical Systems, Inc. designs, manufactures, sells, and services medical devices and software products for treating cancer and other medical conditions in the United States. The company operates in two segments, Oncology Systems and Imaging Components. The Oncology Systems segment provides hardware and software products for treating cancer with radiotherapy, stereotactic radiotherapy, stereotactic body radiotherapy, stereotactic radiosurgery, and brachytherapy. Its products include linear accelerators, brachytherapy afterloaders, treatment simulation and verification equipment, and accessories; and information management, treatment planning, and image processing software. This segment serves university research and community hospitals, private and governmental institutions, healthcare agencies, physicians' offices, and cancer care clinics. The Imaging Components segment provides X-ray imaging components to large imaging system original equipment manufacturers (OEMs) for use in radiographic or fluoroscopic imaging, mammography, special procedures, computed tomography, and industrial applications; and X-ray tubes and flat panel digital image detectors to small OEMs, independent service companies, and end-users for filmless X-ray imaging. This segment also offers Linatron X-ray accelerators, imaging processing software, and image detection products for security and inspection purposes, such as cargo screening at ports and borders, and nondestructive examination in various applications. Varian Medical Systems, Inc. also provides products and systems for delivering proton therapy; and develops various technologies in the areas of digital X-ray imaging, volumetric and functional imaging, and improved X-ray sources. The company was formerly known as Varian Associates, Inc. and changed its name to Varian Medical Systems, Inc. in April 1999. Varian Medical Systems, Inc. was founded in 1948 and is headquartered in Palo Alto, California.

### Robotics & Automation Description:

Varian develops technology used to automate aspects of radiation treatment and image detection technology. Its RapidArc technology improves dose conformity by delivering treatments 2-8 times faster than its existing dynamic treatments today and increases precision by delivering a sculpted 3D dose distribution with a single 360-degree rotation. Its Dynamic Targeting IGRT technology accounts for motion to ensure that the patient is in the same position at every treatment session by providing high-resolution 3D images to pinpoint tumor sites, adjust patient positioning, and complete a treatment all within the allotted treatment window. Varian's PaxScan line of ultra-fast, flat-panel digital X-ray image detectors are used to capture X-ray images (up to 60 per second) and instantly display them on computer screens, which eliminates the need for film and film processing.

Fundamentals	2010	2011	2012	2013	2014	VAR 2014 Revenue by Geography																																			
Sales	\$2,357	\$2,597	\$2,807	\$2,943	\$3,050	Rest of The World 4%																																			
YoY % Change	6%	10%	8%	5%	4%	Asia 23%																																			
EBITDA	\$585	\$641	\$655	\$678	\$659	North America 43%																																			
YoY % Change	7%	11%	5%	4%	4%	EMEA 30%																																			
Net Income	\$360	\$399	\$427	\$438	\$404																																				
YoY % Change	13%	11%	7%	3%	(8%)																																				
Earnings Per Share	\$2.96	\$3.42	\$3.83	\$4.04	\$3.88																																				
YoY % Change	12%	16%	9%	6%	(4%)																																				
EBITDA Margin %	25%	25%	23%	23%	22%																																				
Net % Margin	15%	15%	15%	15%	13%																																				
<table border="1"> <thead> <tr> <th>Top 5 Comps</th> <th>PE</th> <th>PB</th> <th>P/S</th> <th>EV/EBITDA</th> <th>Div Yield %</th> <th>Analyst Recommendations</th> </tr> </thead> <tbody> <tr> <td>Hologic Inc.</td> <td>84.04</td> <td>4.92</td> <td>4.14</td> <td>14.61</td> <td>0.00</td> <td>Buy  </td> </tr> <tr> <td>Edwards Lifesciences Corp.</td> <td>35.44</td> <td>6.67</td> <td>6.27</td> <td>21.85</td> <td>0.00</td> <td>Buy  </td> </tr> <tr> <td>Intuitive Surgical, Inc.</td> <td>34.23</td> <td>4.48</td> <td>7.43</td> <td>20.60</td> <td>0.00</td> <td>Hold  </td> </tr> <tr> <td>Sirona Dental Systems Inc.</td> <td>28.63</td> <td>4.06</td> <td>4.52</td> <td>17.41</td> <td>0.00</td> <td>6   3</td> </tr> </tbody> </table>						Top 5 Comps	PE	PB	P/S	EV/EBITDA	Div Yield %	Analyst Recommendations	Hologic Inc.	84.04	4.92	4.14	14.61	0.00	Buy	Edwards Lifesciences Corp.	35.44	6.67	6.27	21.85	0.00	Buy	Intuitive Surgical, Inc.	34.23	4.48	7.43	20.60	0.00	Hold	Sirona Dental Systems Inc.	28.63	4.06	4.52	17.41	0.00	6   3	
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# Logistics Automation



**Ticker CGCBV**      **Currency USD**      **Date 9/30/15**

### Cargotec Corporation

Headquarters	Finland	Share Price	27.28
Website	<a href="http://cargotec.com">cargotec.com</a>	52 Week Range	22.95631-41.70526
Exchange	HLSE	Market Cap (\$B)	1.761
Industry (GICS)	Industrials	Enterprise Value (\$B)	2.625
ROBO Global Classification:		YTD Change	(4.34%)
BW or NBW	Non-Bellwether	PE	11.79
Tier One	Application	P/S	0.43
Tier Two	Logistics Automation	Dividend Yield	2.25%



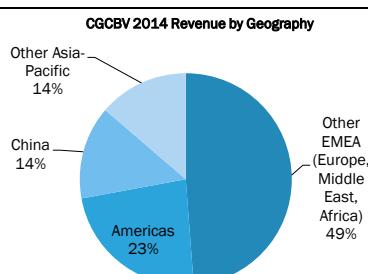
### Business Description:

Cargotec Corporation provides cargo and load handling solutions worldwide. It operates in three segments: MacGregor, Kalmar, and Hiab. The company offers hatch covers, lashing systems, cranes, RoRo cargo and passenger access equipment, self-unloading systems, winches, steering gears, compressors, and deck handling equipment for ships; linkspans, shore ramps, and passenger gangways for ports and terminals; and solutions for subsea load handling, anchor handling, and towing and mooring operations. It also provides container and cargo handling equipment, such as straddle and shuttle carriers, terminal tractors, yard cranes, ship-to-shore cranes, reachstackers, empty container handlers, and forklift trucks; and related automation, software, and integration solutions, as well as Navis terminal operating systems, Bromma spreaders, and Siwertell bulk handling systems. In addition, the company offers on-road load handling products comprising loader cranes, forestry and recycling cranes, demountables, truck-mounted forklifts, and tail lifts, which are used in business areas that comprise construction, infrastructure, distribution, forestry, landscaping and agriculture, warehousing, waste and recycling, and defense. The company serves maritime transportation and offshore industries; and transportation companies, local municipalities and national governments, fleet operators, single truck owners, rental companies, and truck manufacturers. Cargotec Corporation is headquartered in Helsinki, Finland.

### Robotics & Automation Description:

Cargotec specializes in port automation with its application of unmanned container-handling technology. The SmartPort and Terminal Operating System provide for real time inventory management, optimize the flow of cranes and container handlers, and can automatically register container arrivals/departures to reduce turnaround time. Cargotec offers an Automatic Crane Stacking System for container handling and Automatic Straddle Carriers for connecting and stacking. It also offers Launch and Recovery Systems (LARS) for robots and other automated equipment for the safe handling of Remote Underwater Vehicles. MacGregor recently built a new offshore crane that enables three-dimensional motion compensation and Kalmar introduced a new generation of reachstackers for improved safety, productivity, and ergonomics.

Fundamentals	2010	2011	2012	2013	2014
Sales	\$3,453	\$4,078	\$4,387	\$4,381	\$4,064
YoY % Change	(0%)	22%	6%	(4%)	6%
EBITDA	\$261	\$352	\$277	\$268	\$252
YoY % Change	24%	26%	(4%)	(8%)	9%
Net Income	\$99	\$193	\$117	\$75	\$86
YoY % Change	2294%	100%	(40%)	(38%)	30%
Earnings Per Share	\$1.62	\$3.15	\$1.92	\$1.23	\$1.34
YoY % Change	2319%	100%	(40%)	(39%)	25%
EBITDA Margin %	8%	9%	6%	6%	6%
Net % Margin	3%	5%	3%	2%	2%



Top 5 Comps	PE	PB	P/S	EV/EBITDA	Div Yield %	Analyst Recommendations
Konecranes Plc	18.36	3.01	0.62	10.05	4.70	Buy
Kone Oyj	21.31	8.83	2.21	13.40	3.53	8
Metsø Corporation	6.35	1.94	0.81	4.45	5.65	Hold
Wärtsilä Oyj Abp	17.69	3.52	1.42	11.70	3.24	3



**ROBO  
GLOBAL**

**Ticker** TSE:6383

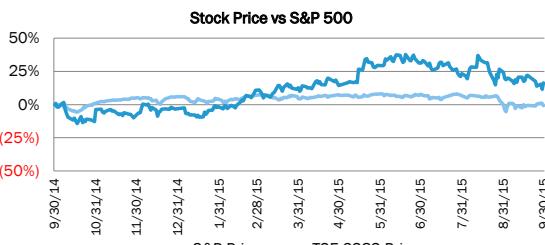
**Currency** USD

**Date**

9/30/15

### Daifuku Co., Ltd.

Headquarters	Japan	Share Price	13.66
Website	<a href="http://daifuku.com">daifuku.com</a>	52 Week Range	8.96981-17.32159
Exchange	TSE	Market Cap (\$B)	1.474
Industry (GICS)	Industrials	Enterprise Value (\$B)	1.523
ROBO Global Classification:		YTD Change	20.58%
BW or NBW	Non-Bellwether	PE	17.66
Tier One	Application	P/S	0.65
Tier Two	Logistics Automation	Dividend Yield	1.53%



### Business Description:

Daifuku Co., Ltd., together with its subsidiaries, provides consulting, engineering, design, manufacture, installation, and after-sales services for logistics systems and material handling equipment in Japan and internationally. The company offers manufacturing and distribution products, including pallet and heavy load storage systems, small/medium and light load storage products, sorting and picking systems, conveyor and vehicle systems, and containers and carts. It also provides cleanroom transport and storage systems for semiconductor and flat panel display manufacturing fabs, including overhead monorail systems, stockers, lifters, advanced transport systems, automated storage systems, and overhead monorail clean space carriers and the rail guided systems; and automotive products, which include electrified monorail, chainless conveyor, chain conveyor, engine testing, and paint systems. In addition, the company offers airport products, such as conveyor, tilt tray sorter, baggage tray, destination coded vehicle, in-line baggage screening, and Webb-view baggage handling control systems; and lifestyle products comprising car wash machines and bowling equipment. Further, it provides electronic products, including industrial computers, extension boards, networking products, and other electronic devices; solar power measurement systems, hospital bedside information terminals, and non-contact power supply systems; and measurement control and communication devices, computer embedded products, and wireless LAN and system integration products. The company was formerly known as Daifuku Machinery Works Co., Ltd. Daifuku Co., Ltd. was founded in 1937 and is headquartered in Osaka, Japan.

### Robotics & Automation Description:

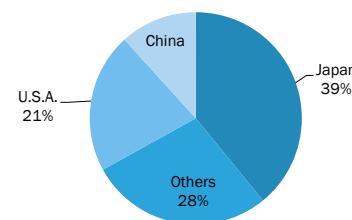
Daifuku specializes in material handling and automation. Daifuku's manufacturing and distribution division integrates AS/RS, sorter, picking, and conveying systems in factories and distribution centers of various industries – electronic, medical & pharmaceutical, food & beverage, transport & warehousing. The material handling systems improve production efficiency and distribution control by reducing lead time, improving delivery accuracy, eliminating receiving inspection, supporting EDI (electronic data interchange), and managing goods. In the cleanroom division Daifuku supplies numerous cleanroom transport & storage systems essential in manufacturing semiconductor, flat panel display (FPD) such as LCD/Plasma. Finally, in the automotive division Daifuku's automated systems are used in pressing, welding, painting, assembly, parts storage and supply, and engine testing.

### Fundamentals

2011 2012 2013 2014 2015

Sales	\$1,922	\$2,403	\$2,148	\$2,349	\$2,228
YoY % Change	3%	24%	2%	20%	11%
EBITDA	\$67	\$98	\$124	\$166	\$166
YoY % Change	6%	18%	14%	27%	10%
Net Income	\$3	\$15	\$47	\$75	\$82
YoY % Change	(74%)	355%	263%	74%	27%
Earnings Per Share	\$0.03	\$0.13	\$0.43	\$0.68	\$0.74
YoY % Change	(73%)	359%	263%	66%	21%
EBITDA Margin %	3%	4%	6%	7%	7%
Net % Margin	0%	1%	2%	3%	4%

TSE:6383 2014 Revenue by Geography



### Top 5 Comps

PE PB P/S EV/EBITDA Div Yield %

Nabtesco Corporation	15.75	1.87	1.15	7.63	2.02
Yokogawa Electric Corp.	15.12	1.43	0.77	6.54	1.20
Amada Holdings Co., Ltd.	16.24	0.81	1.16	6.33	3.52
Glory Ltd.	13.76	0.89	0.80	5.31	1.92

### Analyst Recommendations





Ticker	JBТ	Currency	USD	Date	9/30/15
<b>John Bean Technologies Corporation</b>					
Headquarters	United States	Share Price	38.25		
Website	<a href="http://jbtcorporation.com">jbtcorporation.com</a>	52 Week Range	27.02-39.25		
Exchange	NYSE	Market Cap (\$B)	1.116		
Industry (GICS)	Industrials	Enterprise Value (\$B)	1.254		
ROBO Global Classification:		YTD Change	16.40%		
BW or NBW	Non-Bellwether	PE	24.71		
Tier One	Application	P/S	1.11		
Tier Two	Logistics Automation	Dividend Yield	0.94%		



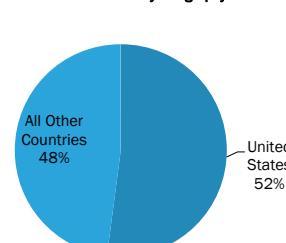
### Business Description:

John Bean Technologies Corporation designs, manufactures, tests, and services products and systems for food processing and air transportation industries. It operates through JBT FoodTech and JBT AeroTech segments. The company provides protein processing equipment for use in mixing/grinding, injecting, marinating, tumbling, portioning, coating, frying, and freezing meat, seafood, and poultry, as well as ready-to-eat meals, fruits, vegetables, dairy, and bakery products; and liquid foods processing equipment for filling, closing, and sterilization of fruits, vegetables, soups, sauces, dairy, pet food products, and ready-to-eat meals in various packages, as well as to extract, concentrate, and aseptically process citrus, tomato and other fruits, vegetables, and juices. It also offers automatic guided vehicles for use in material handling in the food and beverage, manufacturing, warehouse, automotive, hospital, and printing industries. In addition, the company provides mobile air transportation equipment, such as commercial and military cargo loading, aircraft deicing, aircraft towing, and ground aircraft power and cooling systems; and airport gate equipment for passenger boarding, as well as maintenance services for airport equipment, systems, and facilities. It offers food processing solutions for multi-national and regional industrial food processing companies, as well as air transportation solutions to airport authorities, passenger airlines, airfreight and ground handling companies, and military forces through direct sales force, independent distributors, and sales representatives in the United States and internationally. John Bean Technologies Corporation is headquartered in Chicago, Illinois.

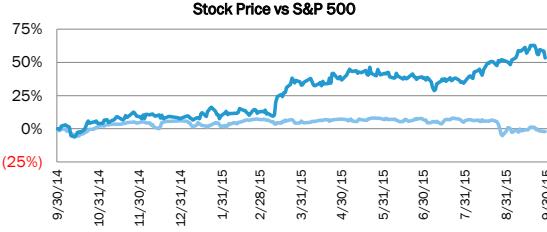
### Robotics & Automation Description:

JBT manufactures Automatic Guided Vehicles (AGV) that facilitate efficient material handling, most commonly automatic movement of pallets. JBT's AGV experience includes over 450 systems and 4,000 AGVs that are designed for long term, trouble free operation in the most demanding environments such as warehouses with extremely narrow aisles and very high storage racks and those that handle dangerous chemicals. Additionally, they are equipped with safety sensors to detect objects in their path. The modular AGV design provides a standard vehicle platform, which can be customized to meet any automated material handling challenge, transport a variety of load types, and interface with existing plant and material handling equipment such as conveyors, racking, stands, and many other types of equipment. JBT manufactures all of its AGV's in-house and is the only AGV supplier that owns and maintains laser guidance technology.

Fundamentals	2010	2011	2012	2013	2014	JBT 2014 Revenue by Geography
Sales	\$880	\$956	\$917	\$934	\$984	
YoY % Change	5%	9%	(4%)	2%	5%	
EBITDA	\$93	\$88	\$84	\$83	\$101	
YoY % Change	5%	0%	(2%)	1%	12%	
Net Income	\$37	\$31	\$36	\$33	\$31	
YoY % Change	14%	(18%)	19%	(9%)	(7%)	
Earnings Per Share	\$1.32	\$1.06	\$1.24	\$1.13	\$1.04	
YoY % Change	13%	(19%)	20%	(9%)	(10%)	
EBITDA Margin %	11%	9%	9%	9%	10%	
Net % Margin	4%	3%	4%	4%	3%	



Top 5 Comps	PE	PB	P/S	EV/EBITDA	Div Yield %	Analyst Recommendations
SPX Corporation	7.32	0.28	0.11	4.64	12.58	Buy   1
Chart Industries Inc.	8.10	0.65	0.52	4.42	0.00	Hold   3
Marel hf	23.25	2.34	1.28	11.71	0.32	
Cognex Corporation	21.21	3.77	5.36	14.74	0.81	

Ticker	KARN	Currency	USD	Date	9/30/15
<b>Kardex AG</b>					
Headquarters	Switzerland	Share Price	66.00		
Website	<a href="http://kardex.com">kardex.com</a>	52 Week Range	39.42854-71.63705		
Exchange	SWX	Market Cap (\$B)	0.510		
Industry (GICS)	Industrials	Enterprise Value (\$B)	0.406		
ROBO Global Classification:		YTD Change	39.35%		
BW or NBW	Non-Bellwether	PE	17.96		
Tier One	Application	P/S	1.47		
Tier Two	Logistics Automation	Dividend Yield	3.57%		
 <p>The chart shows the performance of KARN relative to the S&amp;P 500 from September 30, 2014, to September 30, 2015. The Y-axis represents percentage change from 0% to 75%. The X-axis shows dates from 9/30/14 to 9/30/15. The S&amp;P Price (blue line) starts at approximately 10% and remains relatively flat. The KARN Price (red line) starts at approximately 10%, dips slightly, and then trends upwards, ending at approximately 55%.</p>					

### Business Description:

Kardex AG manufactures and sells automated storage solutions and materials handling systems worldwide. The company operates in two segments, Kardex Remstar and Kardex Mlog. It offers a range of storing solutions, including dynamic storage systems, and turnkey systems and high-bay warehouses; material flow management solutions; handling and automation solutions, such as automated storage and retrieval machines, conveyor systems, vertical and horizontal systems, and warehouse management solutions; and a range of office technology solutions and products that assist companies in managing various quantities of documents. The company is headquartered in Zurich, Switzerland.

### Robotics & Automation Description:

Kardex manufactures automated storage solutions and materials handling systems such as storage and retrieval machines, conveyor systems, turnkey systems, and material flow systems. Turnkey system solutions are suitable for moderate storage volumes, as well as hazardous materials, and can be integrated into existing buildings and warehouses. The turnkey MCompact modular pallet storage system requires approximately 40% less floor space than a conventional forklift truck operation. Its conveyor offerings include continuous conveyors, monorails, and transfer units. MSpacer technology can significantly reduce the amount of unused storage space in high-bay warehouses. Power Pick Global software navigates orders through the fulfillment process, which provides for efficient product picking as well as simultaneous filling of multiple orders.

Fundamentals	2010	2011	2012	2013	2014	KARN 2014 Revenue by Geography																																			
Sales	\$477	\$597	\$639	\$550	\$373	Asia/Paci c 6%																																			
YoY % Change	4%	29%	5%	(18%)	(23%)	Americas 13%																																			
EBITDA	\$12	\$28	\$49	\$50	\$41	Middle East and Africa 3%																																			
YoY % Change	(7%)	27%	20%	(5%)	(10%)																																				
Net Income	(\$12)	\$4	\$28	\$43	\$29																																				
YoY % Change	0%	0%	613%	47%	(24%)																																				
Earnings Per Share	(\$2.18)	\$0.62	\$3.65	\$5.62	\$3.73																																				
YoY % Change	0%	0%	483%	47%	(25%)																																				
EBITDA Margin %	2%	5%	8%	9%	11%																																				
Net % Margin	(3%)	1%	4%	8%	8%																																				
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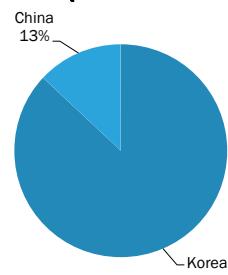
Ticker	KOSDAQ:A056190	Currency	USD	Date	9/30/15
<b>SFA Engineering Corporation</b>					
Headquarters	South Korea	Share Price	38.01		
Website	sfa.co.kr	52 Week Range	33.78464-48.56542		
Exchange	KOSDAQ	Market Cap (\$B)	0.663		
Industry (GICS)	Information Technology	Enterprise Value (\$B)	0.391		
ROBO Global Classification:		YTD Change	(9.37%)		
BW or NBW	Non-Bellwether	PE	20.83		
Tier One	Application	P/S	1.52		
Tier Two	Logistics Automation	Dividend Yield	0.00%		
 <p>The chart shows the performance of SFA's stock price relative to the S&amp;P 500 index from September 30, 2014, to September 30, 2015. The Y-axis represents percentage change, ranging from -25% to 50%. The X-axis shows dates from 9/30/14 to 9/30/15. The blue line represents the S&amp;P Price, which starts at approximately 0% and fluctuates between 0% and 25% throughout the period.</p>					

### Business Description:

SFA Engineering Corporation manufactures and sells material handling systems, and process and precision equipment in Korea and internationally. The company offers display equipment, such as liquid crystal display manufacturing equipment, organic light emitting diode manufacturing equipment, and PDP manufacturing equipment; solar cell manufacturing equipment; semiconductor equipment; and vacuum equipment, including nuclear fusion equipments and aerospace equipment. It also provides module, film, printing electronic, automobile parts manufacturing, heavy industrial, test, AGV/LGV, packaging/loading, and distribution automation equipment; FA systems; FPD manufacturing, inspection, solar cell deposition, and secondary cell manufacturing equipment; and logistics consulting services. The company was founded in 1998 and is headquartered in Hwaseong, South Korea.

### Robotics & Automation Description:

SFA produces automated guided vehicles (AGV) for automated storage retrieval, materials handling and packaging, and clean-room systems. The AGV use a laser guided navigation system and can handle payloads of up to 5,000 kg (~11,000 pounds). The I-FORK is an automated forklift for transportation of products in a distribution warehouse and to transport products between processes during assembly. Its material handling systems are capable of sorting, picking, and transporting equipment and other products. Its clean-room systems are used for distributing LCD, PDP, OLED, and semiconductor equipment.

Fundamentals	2010	2011	2012	2013	2014	KOSDAQ:A056190 2014 Revenue by Geography
Sales	\$584	\$673	\$477	\$453	\$380	
YoY % Change	109%	19%	(35%)	(6%)	(13%)	
EBITDA	\$62	\$100	\$74	\$69	\$51	
YoY % Change	181%	51%	(15%)	(8%)	(34%)	
Net Income	\$49	\$76	\$67	\$60	\$38	
YoY % Change	204%	62%	(20%)	(12%)	(35%)	
Earnings Per Share	\$2.76	\$4.32	\$3.83	\$3.42	\$2.16	
YoY % Change	204%	62%	(19%)	(11%)	(35%)	
EBITDA Margin %	11%	15%	16%	15%	13%	
Net % Margin	8%	11%	14%	13%	10%	
 <p>The pie chart illustrates the geographical distribution of SFA's 2014 revenue. Korea accounts for 87% of the revenue, while China accounts for 13%.</p>						
Top 5 Comps	PE	PB	P/S	EV/EBITDA	Div Yield %	Analyst Recommendations
LG Display Co., Ltd.	5.34	0.67	0.28	1.82	2.21	Buy
Espec Corp.	12.33	0.76	0.78	4.24	2.25	
Viscom AG	18.11	2.57	1.81	11.39	7.41	Hold
OHT Inc.	0.00	0.00	0.00	0.00	0.00	

# Manufacturing

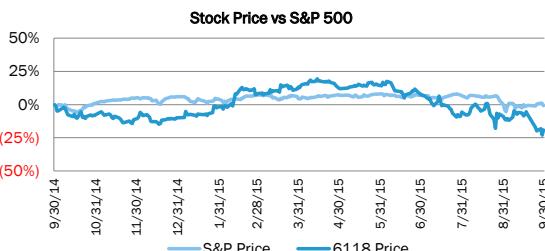
Ticker 6118

Currency USD

Date 9/30/15

### Aida Engineering, Ltd.

Headquarters	Japan	Share Price	8.21
Website	<a href="http://aida.co.jp">aida.co.jp</a>	52 Week Range	7.81726-12.52767
Exchange	TSE	Market Cap (\$B)	0.505
Industry (GICS)	Industrials	Enterprise Value (\$B)	0.304
ROBO Global Classification:		YTD Change	(10.06%)
BW or NBW	Non-Bellwether	PE	9.40
Tier One	Application	P/S	0.78
Tier Two	Manufacturing	Dividend Yield	3.05%



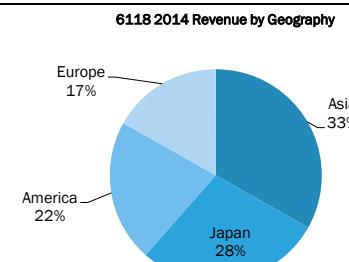
### Business Description:

Aida Engineering, Ltd. manufactures and sells press machines, auto-processing lines, industrial robots, auto-conveyors, and dies in Japan, Asia, the Americas, and Europe. The company provides multi-purpose servo presses, precision forming presses, multi-purpose presses, mid-size and large presses, high speed automatic presses, cold forging presses, conveyance equipment, coil feeders, and tooling dies. It also provides press automation equipment, such as feeder equipment, transfer robots, product removal systems, etc. In addition, the company offers various services, such as troubleshooting/spare parts, retrofit/modernization, routine inspection, and overhaul/machine relocation. It primarily serves automotive and consumer electronics industries. The company was formerly known as Aida Ironworks and changed its name to Aida Engineering, Ltd. in 1970. Aida Engineering, Ltd. was founded in 1917 and is headquartered in Sagamihara, Japan.

### Robotics & Automation Description:

Aida develops automation equipment and control software to complement its offering of presses. Aida designed and developed the "Autohand" robot in 1968 to replicate the dexterity of the human hand. Aida's press automation solutions include material handling robots, coil feeders, and servo transfer units. Its material handling robots allow for the simultaneous production of two different parts or products, optimization of factory floor space, and the ability to carry out multiple processes on a single press machine. The coil feeders can handle materials of a number of different widths with auto-thread, auto-rewind, and programmable speed control capabilities. Its servo presses enable metalforming processes that weren't previously possible with conventional mechanical stamping presses. Most recently, Aida has begun producing servo presses that enable electronic collaboration of metalforming data to standardize production and a zigzag feeder model designed to significantly boost material yield (and thus lower cost and scrap).

Fundamentals	2011	2012	2013	2014	2015
Sales	\$495	\$634	\$614	\$676	\$641
YoY % Change	17%	27%	11%	20%	10%
EBITDA	\$35	\$43	\$54	\$76	\$80
YoY % Change	196%	26%	18%	31%	15%
Net Income	\$15	\$34	\$40	\$50	\$52
YoY % Change	0%	131%	34%	35%	21%
Earnings Per Share	\$0.23	\$0.57	\$0.67	\$0.81	\$0.84
YoY % Change	0%	141%	33%	33%	21%
EBITDA Margin %	7%	7%	9%	11%	12%
Net % Margin	3%	5%	7%	7%	8%



Top 5 Comps	PE	PB	P/S	EV/EBITDA	Div Yield %	Analyst Recommendations
Takeuchi Mfg. Co., Ltd.	11.23	2.10	1.39	6.87	0.67	Buy
OSG Corp.	18.96	2.10	1.98	7.95	1.82	2
Oiles Corporation	12.69	1.00	0.95	5.60	2.82	Hold
Hitachi Zosen Fukui Corporation	6.25	0.93	0.47	1.61	3.60	0



**ROBO  
GLOBAL**

Ticker	ATA	Currency	USD	Date	9/30/15
<b>ATS Automation Tooling Systems Inc.</b>					
Headquarters	Canada	Share Price	9.64		
Website	<a href="http://atsautomation.com">atsautomation.com</a>	52 Week Range	8.88-33.12-12.39-18.85		
Exchange	TSX	Market Cap (\$B)	0.891		
Industry (GICS)	Industrials	Enterprise Value (\$B)	1.034		
ROBO Global Classification:		YTD Change	(16.71%)		
BW or NBW	Non-Bellwether	PE	30.02		
Tier One	Application	P/S	1.18		
Tier Two	Manufacturing	Dividend Yield	0.00%		

### Business Description:

ATS Automation Tooling Systems Inc. provides factory automation solutions worldwide. It engages in planning, designing, building, commissioning, and servicing automated manufacturing and assembly systems, including automation products and test solutions. The company's products comprise ATS Supertrak, a modular conveyor system; ATS850 clean room conveyor for applications requiring reliability, cleanliness, and non-contact queuing; ATS OmniTrak; LogiTrack automated electrified monorail for transporting heavy workloads through assembly operations; and sortimat Birkman, a feeder technology for sorting, transporting, and separating parts. It also offers Sortimat Clearliner, a tray handler for clean room requirement; Sortimat Workliner tray handling technology; ATS Cortex system, a vision device that reduces integration time with standardized hardware and software; ATS SmartVision software, a PC-based vision system; and ATS Flexsys laser system, a laser solution for reproducible laser processing in automated assembly lines. In addition, the company provides pre and post automation solutions; and technical support, knowledge transfer and training, line moves, and modelling services. Further, it offers tube filling and cartoning machinery for the pharmaceutical and personal care industries. The company serves life sciences, chemicals, consumer products, electronics, food, beverage, transportation, energy, and oil and gas industries. ATS Automation Tooling Systems Inc. was founded in 1978 and is headquartered in Cambridge, Canada.

### Robotics & Automation Description:

ATS specializes in clean room and industrial automation. ATS SmartVision™ technology uses programmable software to control virtually any camera and lighting system and perform high-precision part and defect identification, measurement, sorting, and robotic guidance. ATS automation platforms include pneumatic driven machines for highly controlled motions, robotic cells for vision-guided pick and place applications, vision systems for robot guidance, object inspection, and feedback of other information, dial indexers, and programmable conveyors. Programmable conveyors have the ability to make decisions based on particular conditions and ATS has integrated them with many of its automated guided vehicles. Its automated aseptic production systems are typically used in clean rooms and to manage contamination risk. ATS uses dial indexers to transport products between various test and assembly stations. ATS also offers a web-based automation performance monitoring tool (ATS OEE Toolkit™) to determine any faults in the production process and the overall effectiveness of the automation equipment.

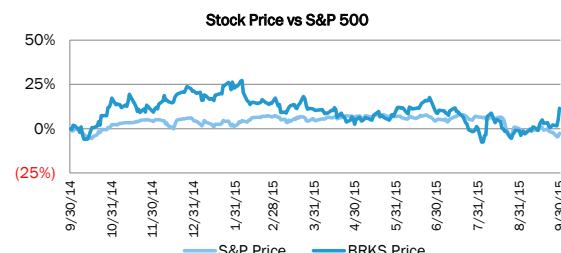
Fundamentals	2011	2012	2013	2014	2015	ATA 2015 Revenue by Geography
Sales	\$500	\$597	\$581	\$619	\$739	
YoY % Change	(16%)	23%	(1%)	16%	37%	
EBITDA	\$47	\$68	\$66	\$69	\$85	
YoY % Change	59%	38%	(4%)	21%	35%	
Net Income	(\$88)	(\$60)	\$15	\$56	\$43	
YoY % Change	0%	0%	0%	314%	(12%)	
Earnings Per Share	(\$1.01)	(\$0.68)	\$0.17	\$0.63	\$0.48	
YoY % Change	130%	57%	(9%)	20%	(24%)	
EBITDA Margin %	9%	11%	11%	11%	11%	
Net % Margin	(18%)	(10%)	3%	9%	6%	
<b>Top 5 Comps</b>						<b>Analyst Recommendations</b>
Magna International Inc.	11.01	2.33	0.60	5.80	1.84	Buy   Hold   7   1



**Ticker** BRKS      **Currency** USD      **Date** 9/30/15

### Brooks Automation, Inc.

<b>Headquarters</b>	United States	<b>Share Price</b>	11.71
<b>Website</b>	<a href="http://brooks.com">brooks.com</a>	<b>52 Week Range</b>	9.67-13.48
<b>Exchange</b>	NasdaqGS	<b>Market Cap (\$B)</b>	0.790
<b>Industry (GICS)</b>	Information Technology	<b>Enterprise Value (\$B)</b>	0.657
<b>ROBO Global Classification:</b>		<b>YTD Change</b>	(8.16%)
BW or NBW	Non-Bellwether	PE	106.22
Tier One	Application	P/S	1.49
Tier Two	Manufacturing	Dividend Yield	3.42%



### Business Description:

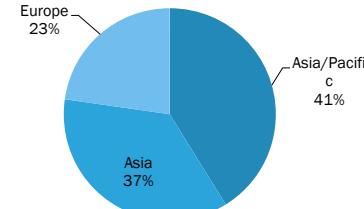
Brooks Automation, Inc. provides automation and cryogenic solutions for semiconductor manufacturing and life sciences markets. The company's Brooks Product Solutions segment provides a range of products and solutions that enable enhanced throughput and yield in controlled operating environments. This segment offers atmospheric and vacuum robots, robotic modules, and tool automation systems that provide precision handling and clean wafer environments, as well as vacuum pumping and thermal management solutions used to create and control critical process vacuum applications. Its Brooks Global Services segment provides a range of support services, including repair services, diagnostic support services, and installation services to enable the customers to enhance process tool uptime and productivity. This segment also offers spare parts to end-user customers for the enhancement of customer tool productivity. The company's Brooks Life Science Systems segment provides automated sample management systems for automated cold sample storage, equipment for sample preparation and handling, consumables, and parts and support services to a range of life science customers, including pharmaceutical companies, biotechnology companies, national laboratories, research institutes, and research hospitals. Brooks Automation, Inc. markets its products through its direct sales organizations in Asia, Europe, the Middle East, and North America. It has a strategic collaboration agreement with Chart Industries, Inc. to develop and distribute automated cryogenic storage solutions. The company was founded in 1978 and is headquartered in Chelmsford, Massachusetts.

### Robotics & Automation Description:

Brooks designs and integrates automation technology for use in semiconductor and other cleanroom manufacturing. Its core market is composed primarily of "Semi and Adjacent" (SAM) systems and subsystems. Such systems and subsystems include robotics handlers for precise movement of silicon wafers, cryogenic vacuum pumps that create extremely intense vacuums (10-9 torr) at freezing cold temperatures, (-250 degrees Celsius or -400 Fahrenheit), and other various vacuum instruments that can create clean rooms up to 10,000 times more sterile than typical operating rooms. SAM represents roughly 80% of Brooks' total revenue and in 2011 Brooks held an approximate 30% market share in the SAM space, which includes being the market leader in wafer level factory automation, front-end tool automation, vacuum system automation, and cryogenic pumps. Brooks launched Brooks Life Science Systems in 2011 to specialize in automated sample management and bio-storage. Automated sample management includes sample acquisition, storage and retrieval of samples, (that leverages automated robotic systems), quality control checks, and information management.

Fundamentals	2010	2011	2012	2013	2014
Sales	\$593	\$688	\$489	\$422	\$483
YoY % Change	171%	16%	(29%)	(14%)	14%
EBITDA	\$68	\$99	\$35	\$18	\$33
YoY % Change	1014%	34%	(29%)	(14%)	25%
Net Income	\$60	\$130	\$137	(\$2)	\$31
YoY % Change	0%	118%	5%	0%	0%
Earnings Per Share	\$0.94	\$2.02	\$2.10	(\$0.03)	\$0.47
YoY % Change	0%	116%	0%	0%	0%
EBITDA Margin %	11%	14%	7%	4%	7%
Net % Margin	10%	19%	28%	(1%)	6%

BRKS 2014 Revenue by Geography



Top 5 Comps	PE	PB	P/S EV/EBITDA	Div Yield %	Analyst Recommendations
Advanced Energy Industries, Inc.	NM	4.14	1.86	10.42	0.00
Cabot Microelectronics Corporation	16.13	2.26	2.15	7.55	0.00
MKS Instruments, Inc.	13.79	1.58	2.17	7.75	2.03
Xcerra Corporation	10.83	1.23	0.85	5.63	0.00





**ROBO  
GLOBAL**

Ticker	6622	Currency	USD	Date	9/30/15
<b>DAIHEN Corporation</b>					
Headquarters	Japan	Share Price	4.71		
Website	<a href="http://daihen.co.jp">daihen.co.jp</a>	52 Week Range	2.8229-6.00493		
Exchange	TSE	Market Cap (\$B)	0.601		
Industry (GICS)	Industrials	Enterprise Value (\$B)	0.729		
ROBO Global Classification:		YTD Change	(7.39%)		
BW or NBW	Non-Bellwether	PE	10.26		
Tier One	Application	P/S	0.57		
Tier Two	Manufacturing	Dividend Yield	1.42%		

### Business Description:

DAIHEN Corporation manufactures and sells power products, welding machines and industrial robots, and advanced components for semiconductor manufacturing equipment in Japan. It offers power products, such as pole-mounted and pad-mounted transformers, automatic voltage regulators, integrated vacuum section switches, section switch substations, power equipment remote monitoring systems, supervoltage transformers, shunt reactors, and top-runner oil-immersed and molded transformers. The company's welding and mechatronic products include welding and cutting machines, and welding robots; and advanced components comprise clean transfer robots, such as wafer handling and LCD substrates handling robots for atmospheric and vacuum environments, as well as RF components, including RF generators, RF automatic matching units, CW microwave generators, and microwave auto tuners. The company also provides luminaire stabilizers, calorifiers, housing equipment, control and telecommunications equipment, and fuses and power distribution equipment parts; ballasts for discharge lamps; and material handling equipment for semiconductor and flat panel manufacturing systems and software. In addition, it engages in hot charge and welding works; plate working and metal processing activities; the installation, maintenance, and inspection of welding machines, cutting machines, and industrial robots; manufacturing, processing, and coating transformer parts; the provision of contract services for the design, manufacturing, and sale of electrical equipment and related administrative work; and the management of sports facilities. Further, it offers freight transportation, warehousing, and cargo handling contract services; and installs, inspects, repairs, and remodels transformers and switchgear systems.

The company was formerly known as Osaka Transformer Co., Ltd. and changed its name to DAIHEN Corporation in December 1985. DAIHEN Corporation was founded in 1919 and is headquartered in Osaka, Japan.

### Robotics & Automation Description:

DAIHEN manufactures arc welding robots and torches as well as corresponding peripherals used in factory automation such as sensors, controllers, and positioners. The majority of its robotics sales are in its welding and mechatronics segment, which represents roughly one-third of DAIHEN's revenue. Its welding robots offering includes standard cable type and through-arm cable type. Robotic sensors are used for positional deviation detection, arc tracking, and groove detection. Robotic positioners include the Tilt-Turn which can be synchronized with arc welding robots to ensure optimal weld positioning. The FD11 is DAIHEN's most advanced robot controller in terms of electrical efficiency, weight/size efficiency, and required maintenance. DAIHEN also offers a line of clean robots in its advanced components segment, which are used for wafer and LCD handing.

Fundamentals	2011	2012	2013	2014	2015	6622 2014 Revenue by Geography																																			
Sales	\$1,112	\$1,128	\$970	\$1,061	\$1,017	North America 2%																																			
YoY % Change	15%	1%	(2%)	20%	12%	Asia 19%																																			
EBITDA	\$106	\$96	\$76	\$102	\$108	Japan 77%																																			
YoY % Change	11%	(1%)	1%	20%	15%	Other Regions 2%																																			
Net Income	\$28	\$25	\$25	\$32	\$48																																				
YoY % Change	54%	(8%)	11%	40%	77%																																				
Earnings Per Share	\$0.21	\$0.20	\$0.19	\$0.25	\$0.38																																				
YoY % Change	54%	(8%)	12%	41%	77%																																				
EBITDA Margin %	9%	9%	8%	10%	11%																																				
Net % Margin	2%	2%	3%	3%	5%																																				
<table border="1"> <thead> <tr> <th>Top 5 Comps</th> <th>PE</th> <th>PB</th> <th>P/S</th> <th>EV/EBITDA</th> <th>Div Yield %</th> <th>Analyst Recommendations</th> </tr> </thead> <tbody> <tr> <td>Nissin Electric Co. Ltd.</td> <td>14.98</td> <td>1.03</td> <td>0.72</td> <td>5.51</td> <td>1.90</td> <td>Buy</td> </tr> <tr> <td>Nitto Kogyo Corporation</td> <td>11.60</td> <td>1.12</td> <td>0.76</td> <td>3.72</td> <td>3.35</td> <td>1</td> </tr> <tr> <td>Takaoka Toko Co., Ltd.</td> <td>20.33</td> <td>0.48</td> <td>0.19</td> <td>4.47</td> <td>3.68</td> <td>Hold</td> </tr> <tr> <td>Kyosan Electric Manufacturing Co., Ltd.</td> <td>22.66</td> <td>0.52</td> <td>0.32</td> <td>9.14</td> <td>3.13</td> <td>2</td> </tr> </tbody> </table>						Top 5 Comps	PE	PB	P/S	EV/EBITDA	Div Yield %	Analyst Recommendations	Nissin Electric Co. Ltd.	14.98	1.03	0.72	5.51	1.90	Buy	Nitto Kogyo Corporation	11.60	1.12	0.76	3.72	3.35	1	Takaoka Toko Co., Ltd.	20.33	0.48	0.19	4.47	3.68	Hold	Kyosan Electric Manufacturing Co., Ltd.	22.66	0.52	0.32	9.14	3.13	2	
Top 5 Comps	PE	PB	P/S	EV/EBITDA	Div Yield %	Analyst Recommendations																																			
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Kyosan Electric Manufacturing Co., Ltd.	22.66	0.52	0.32	9.14	3.13	2																																			

Ticker	6902	Currency	USD	Date	9/30/15
<b>Denso Corp.</b>					
Headquarters	Japan	Share Price	42.06		
Website	<a href="http://denso.co.jp">denso.co.jp</a>	52 Week Range	37.58717-54.68744		
Exchange	TSE	Market Cap (\$B)	33.45		
Industry (GICS)	Consumer Discretionary	Enterprise Value (\$B)	34.45		
ROBO Global Classification:		YTD Change	(10.90%)		
BW or NBW	Non-Bellwether	PE	15.25		
Tier One	Application	P/S	0.92		
Tier Two	Manufacturing	Dividend Yield	2.38%		



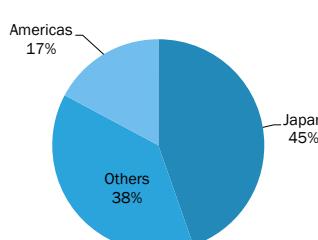
### Business Description:

DENSO Corporation supplies automotive technology, systems, and components for automakers worldwide. The company develops and manufactures powertrain control systems, including engine control components, system control components, diesel injection products, gasoline injection products, engine electrical systems, and EHV components; thermal systems comprising thermal systems, climate, cooling, and heating products; and information and safety systems, such as information and communications products, driving assist and safety products, and electric control components. It also offers electronics products, electronics devices, and relays; and windshield wiper systems, windshield washer systems, power window and seat motors, power sliding door motors, power steering motors, and other automotive motors, as well as motors for engine control systems. In addition, the company provides industrial systems, such as automatic ID data capture devices, factory automation products, and spot coolers and heaters, as well as cooling units for electronic devices. Further, it develops and produces CO2 refrigerant heat-pump water heaters, automatic faucets, central air conditioners, and home energy management systems. The company was founded in 1949 and is headquartered in Kariya, Japan.

### Robotics & Automation Description:

DENSO is the market leader in the small assembly robot segment for automobiles with more than 37,000 DENSO robots installed worldwide. DENSO develops and manufactures engine control systems, including turbo-charging controls as well as fuel injection products for increased fuel efficiency. Tandem Solenoid (TS) starters, lithium-ion battery packs, and cold storage evaporators help reduce fuel consumption in idle-stop systems. The i-ART common rail system measures injection pressure in real time. Additionally, DENSO is expanding its human-machine interface products to improve their pre-existing safety based technologies.

Fundamentals	2011	2012	2013	2014	2015	6902 2014 Revenue by Geography
Sales	\$37,790	\$38,280	\$38,016	\$39,786	\$35,918	
YoY % Change	5%	1%	14%	14%	5%	
EBITDA	\$4,609	\$4,134	\$4,712	\$5,600	\$4,614	
YoY % Change	13%	(7%)	32%	32%	0%	
Net Income	\$1,726	\$1,084	\$1,929	\$2,792	\$2,153	
YoY % Change	95%	(38%)	103%	58%	(10%)	
Earnings Per Share	\$2.14	\$1.34	\$2.41	\$3.51	\$2.70	
YoY % Change	95%	(38%)	104%	59%	(10%)	
EBITDA Margin %	12%	11%	12%	14%	13%	
Net % Margin	5%	3%	5%	7%	6%	
<b>Top 5 Comps</b>						Analyst Recommendations
Aisin Seiki Co., Ltd.	14.95	0.96	0.37	4.56	2.50	Buy
Calsonic Kansei Corporation	10.71	1.18	0.24	4.23	1.12	11
Toyota Industries Corporation	14.63	0.73	0.81	9.53	1.94	Hold
Delphi Automotive PLC	16.92	8.73	1.33	9.23	1.32	7



**Ticker** 6954

**Currency** USD

**Date** 9/30/15

**Fanuc Corporation**

<b>Headquarters</b>	Japan	<b>Share Price</b>	152.96
<b>Website</b>	<a href="http://fanuc.co.jp">fanuc.co.jp</a>	<b>52 Week Range</b>	147.28359-238.65203
<b>Exchange</b>	TSE	<b>Market Cap (\$B)</b>	29.92
<b>Industry (GICS)</b>	Industrials	<b>Enterprise Value (\$B)</b>	22.43
<b>ROBO Global Classification:</b>		<b>YTD Change</b>	(8.17%)
BW or NBW	Bellwether	PE	16.81
Tier One	Application	P/S	4.69
Tier Two	Manufacturing	Dividend Yield	5.37%


**Business Description:**

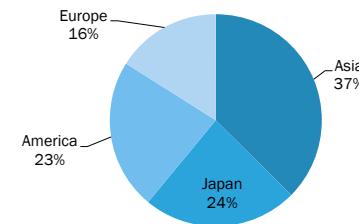
Fanuc Corporation manufactures and sells machinery worldwide. The company offers CNC series, servo motors, lasers, robots, compact machining centers, electric injection molding machines, wire-cut electric discharge machines, and super nano machines. Fanuc Corporation was founded in 1956 and is headquartered in Yamanashi Prefecture, Japan.

**Robotics & Automation Description:**

Fanuc's robotics divisions include the ROBOT division and ROBOMACHINE division. The ROBOT division produces hardware, software, and intelligence robot components designed for high performance, productivity, and reliability. ROBOMACHINE's products include robot drills, robot arc welders, Roboshot (an electric injection molder), Robocut (wire-cutting electric discharge machines), and Robonano (ultra precision machines). Through 2013, Fanuc's cumulative robot production surpassed 330,000 units, up from just under 200,000 in 2007, and 100,000 in 2001.

**Fundamentals**
**2011**   **2012**   **2013**   **2014**   **2015**

<b>Sales</b>	\$5,385	\$6,534	\$5,291	\$4,381	\$6,082
<b>YoY % Change</b>	76%	21%	(7%)	(10%)	62%
<b>EBITDA</b>	\$2,451	\$2,880	\$2,152	\$1,773	\$2,663
<b>YoY % Change</b>	136%	16%	(13%)	(7%)	69%
<b>Net Income</b>	\$1,450	\$1,684	\$1,279	\$1,078	\$1,730
<b>YoY % Change</b>	220%	16%	(13%)	(8%)	87%
<b>Earnings Per Share</b>	\$7.41	\$8.61	\$6.54	\$5.51	\$8.84
<b>YoY % Change</b>	227%	16%	(13%)	(8%)	87%
<b>EBITDA Margin %</b>	46%	44%	41%	40%	44%
<b>Net % Margin</b>	27%	26%	24%	25%	28%

**6954 2014 Revenue by Geography**

**Top 5 Comps**
**PE**   **PB**   **P/S**   **EV/EBITDA**   **Div Yield %**

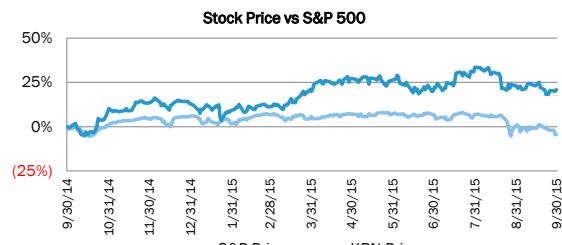
SMC Corp.	15.13	1.83	3.71	9.27	0.77
NSK Ltd.	9.51	1.30	0.63	5.36	2.95
NTN Corp.	9.44	1.00	0.36	6.01	2.04
THK Co., Ltd.	10.33	0.98	1.08	3.77	2.96

**Analyst Recommendations**




**ROBO  
GLOBAL**

Ticker	KRN	Currency	USD	Date	9/30/15
<b>Krones AG</b>					
Headquarters	Germany	Share Price	105.02		
Website	<a href="http://krones.com">krones.com</a>	52 Week Range	70.67686-119.02238		
Exchange	XTRA	Market Cap (\$B)	3.317		
Industry (GICS)	Industrials	Enterprise Value (\$B)	3.011		
ROBO Global Classification:		YTD Change	16.52%		
BW or NBW	Bellwether	PE	20.28		
Tier One	Application	P/S	0.97		
Tier Two	Manufacturing	Dividend Yield	1.33%		



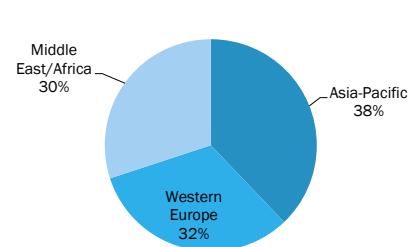
### Business Description:

Krones AG plans, develops, and manufactures machinery and systems for the fields of process technology, filling and packaging technology, and intralogistics in Germany and internationally. The company operates through three segments: Machines and Lines for Product Filling and Decoration, Machines and Lines for Beverage Production/Process Technology, and Machines and Lines for the Low Output Range. It provides plant engineering solutions, such as planning new plants, plant expansion, plant structural planning, and energy and media optimization; and process technology systems for use in beer, soft drink, water, milk, spirit, and juice and milk with fruit chunks. It also provides filling technology products for bottle design, stretch blow moulder, PET recycling, bottle washing machine, filling technology, inspection technology, labeling, conveyor, product treatment, and block technology applications; and packaging, palletising, block, and robot technology products. In addition, the company offers logistics services for the food and beverage industries; and IT solutions for filling and packaging, business intelligence, manufacturing intelligence, maintenance, planning, infrastructure, quality, processing, and manufacturing execution systems. Further, it provides lifecycle services comprising support, onsite, productivity, training, design, OriginalSpares, retrofitting, SoftTools, consumables, and resale services. It serves breweries, the soft-drinks sector, and producers of still or sparkling wines and spirits, as well as food and luxury-goods, chemical, cosmetics, and pharmaceutical industries. Krones AG was founded in 1951 and is headquartered in Neutraubling, Germany.

### Robotics & Automation Description:

Krones manufactures industrial robots, grippers, and materials handling equipment for factory automation and warehousing. Krones Line Documentation System, Line Performance Analyser, and Line Management System are used to automatically record and analyze production data. The Krones Line Visualization System displays the operating status machines and allows the user to view all of them from a single location. The Krones Laboratory Information Management System allows for quality control and other defect detection in real-time. Krones Botec F1 application automates complex production processes while enabling the freedom of added flexibility to make changes on the fly. Lastly, Krones has a variety of Modufill products that guarantee precise fill quantities for water, juice, soda, and alcoholic beverage containers.

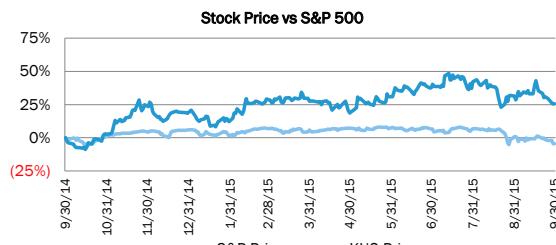
Fundamentals	2010	2011	2012	2013	2014	KRN 2014 Revenue by Geography
Sales	\$2,959	\$3,266	\$3,568	\$3,934	\$3,618	
YoY % Change	17%	14%	8%	6%	5%	
EBITDA	\$170	\$151	\$211	\$303	\$318	
YoY % Change	25%	12%	10%	7%	4%	
Net Income	\$68	\$57	\$90	\$164	\$164	
YoY % Change	0%	(14%)	56%	75%	14%	
Earnings Per Share	\$2.26	\$1.88	\$2.98	\$5.28	\$5.21	
YoY % Change	0%	(14%)	56%	70%	12%	
EBITDA Margin %	6%	5%	6%	8%	9%	
Net % Margin	2%	2%	3%	4%	5%	



Top 5 Comps	PE	PB	P/S EV/EBITDA	Div Yield %	Analyst Recommendations
GEA Group Aktiengesellschaft	30.83	2.59	1.42	16.96	2.06
KUKA Aktiengesellschaft	28.91	4.08	0.92	10.60	0.59
Dürr Aktiengesellschaft	15.16	3.72	0.67	6.80	2.61
DMG Mori AG	24.09	2.17	1.17	11.78	1.61



Ticker	KU2	Currency	USD	Date	9/30/15
<b>KUKA Aktiengesellschaft</b>					
Headquarters	Germany	Share Price	76.11		
Website	<a href="http://kuka-ag.de">kuka-ag.de</a>	52 Week Range	47.62-92.40	556	
Exchange	DB	Market Cap (\$B)	2.717		
Industry (GICS)	Industrials	Enterprise Value (\$B)	2.740		
ROBO Global Classification:		YTD Change	15.71%		
BW or NBW	Bellwether	PE	28.91		
Tier One	Application	P/S	0.92		
Tier Two	Manufacturing	Dividend Yield	0.59%		



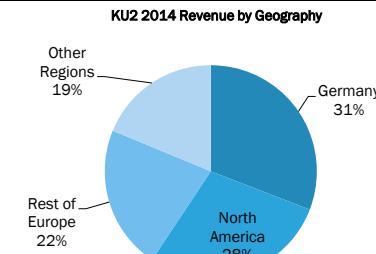
### Business Description:

KUKA Aktiengesellschaft, an automation company, develops and sells robot-based automation systems under the KUKA brand worldwide. The company develops, produces, sells, and services industrial robots for various applications and industry sectors, mobile platforms, control systems, and software solutions; and develops and markets products for the service robotics and health care sectors. It also offers automated production and assembly solutions for industrial manufacturing; operates as a system integrator for systems, tools, and customized mechanical engineering; and automates individual production processes, such as welding and brazing, processing various materials, and integrating various production steps to form a fully automatic system. KUKA Aktiengesellschaft serves companies in the aerospace sector, solar technology, and the metalworking industry. The company was formerly known as Industrie-Werke Karlsruhe Augsburg Aktiengesellschaft and changed its name to KUKA Aktiengesellschaft in 2007. KUKA Aktiengesellschaft was founded in 1898 and is headquartered in Augsburg, Germany.

### Robotics & Automation Description:

KUKA manufactures robots of all sizes for factory automation. KUKA's robotics division offers industrial robots, controllers, positioners, and robot systems. Its industrial robots are mainly palletizers, clean room, and arc welding robots (among others), and can handle payloads of all sizes up to approximately 1,300 KG (~3,000 lbs). KUKA's controllers include the smartPAD, which integrates PC software with modular hardware that allows for the customization and flexibility of system automation. KUKA Robot systems are designed to carry out specific or unique tasks. KUKA has also created cells, in which robots of different sizes and in different constellations can cooperate and work together as a team. Other technological development projects are underway to determine how to make robots lighter and more flexible. From 2010-13, the robotics division accounted for approximately 40% of KUKA's total revenue and approximately 70% of EBIT.

Fundamentals	2010	2011	2012	2013	2014	KU2 2014 Revenue by Geography
Sales	\$1,446	\$1,865	\$2,293	\$2,444	\$2,537	
YoY % Change	20%	33%	21%	2%	18%	
EBITDA	\$41	\$109	\$170	\$209	\$221	
YoY % Change	28%	38%	37%	14%	20%	
Net Income	(-\$12)	\$39	\$73	\$80	\$82	
YoY % Change	0%	0%	87%	5%	17%	
Earnings Per Share	(\$0.38)	\$1.16	\$2.16	\$2.37	\$2.41	
YoY % Change	0%	0%	84%	5%	11%	
EBITDA Margin %	3%	6%	7%	9%	9%	
Net % Margin	(1%)	2%	3%	3%	3%	



Top 5 Comps	PE	PB	P/S	EV/EBITDA	Div Yield %	Analyst Recommendations
Dürr Aktiengesellschaft	15.16	3.72	0.67	6.80	2.61	Buy   6
Krones AG	20.28	2.87	0.97	9.68	1.33	Hold   10
GEA Group Aktiengesellschaft	30.83	2.59	1.42	16.96	2.06	
Heidelberger Druckmaschinen Aktiengesellschaft	NM	1.72	0.23	4.78	0.00	

**Ticker** 6474

**Currency** USD

**Date** 9/30/15

**Nachi-Fujikoshi Corp.**

<b>Headquarters</b>	Japan	<b>Share Price</b>	4.13
<b>Website</b>	<a href="http://nachi-fujikoshi.co.jp">nachi-fujikoshi.co.jp</a>	<b>52 Week Range</b>	4.01721-6.73153
<b>Exchange</b>	TSE	<b>Market Cap (\$B)</b>	1.019
<b>Industry (GICS)</b>	Industrials	<b>Enterprise Value (\$B)</b>	1.455
<b>ROBO Global Classification:</b>		<b>YTD Change</b>	(33.78%)
<b>BW or NBW</b>	Non-Bellwether	<b>PE</b>	11.23
<b>Tier One</b>	Application	<b>P/S</b>	0.57
<b>Tier Two</b>	Manufacturing	<b>Dividend Yield</b>	2.02%

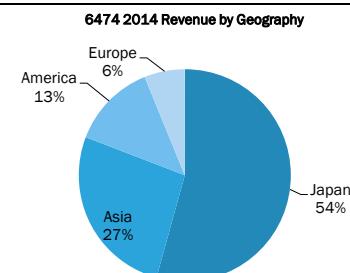

**Business Description:**

Nachi-Fujikoshi Corp. engages in machining, robots, components, and materials businesses. The company operates through Cutting Tools; Machine Tools; Robots; Bearings; Hydraulic Equipment; and Special Steels/Industrial Furnaces and Others segments. It provides cutting tools, including drills, taps, end mills, gear cutters, broaches, and cut-off and re-grinding tools; and machine tools comprising broaching machines, precision roll forming machines, machining cells, power finishers, and gear shape machining centers. The company also offers robots for spot welding, arc welding, handling, heavy duty, cleanroom, and option, as well as controllers and support services; and radial ball, radial roller, thrust ball, and thrust roller bearings, as well as bearing units and plummer block housings. In addition, it provides hydraulic equipment consisting of valves, pumps, motors, units, and rotary center joints; special steels, including pre-harden, pre-shape, and micron hard steel products; coating equipment; and industrial furnaces comprising vacuum carburizing furnace, vacuum degreasing system, and gas-quenching vacuum furnace thermo systems. Additionally, it provides forming tools, cutting saws, machining systems, automotive hydraulics, seismic isolation systems, and filtration systems. Nachi-Fujikoshi Corp. also provides engineering services, including the re-sharpening and recoating of cutting tools and robot maintenance. The company serves automotive, retail, machinery, energy, and infrastructure markets in Japan, rest of Asia, Oceania, the Americas, and Europe. Nachi-Fujikoshi Corp. was founded in 1928 and is headquartered in Toyama, Japan.

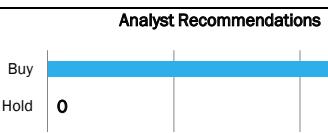
**Robotics & Automation Description:**

Nachi-Fujikoshi manufactures robotics components and industrial robots, such as hydraulic, electric drive, welding, clean room, load handling, vision sensing, press handling, and AX robots. Robot sales represent about 5% of the firm's total revenue. The World's Fastest Lightweight, Compact Robot MZ07 was deployed as an easy-to-use and easy-to-install robot and can complete a back-and-forth motion in just 0.31 seconds.

Fundamentals	2010	2011	2012	2013	2014
<b>Sales</b>	\$1,614	\$2,138	\$2,087	\$1,715	\$1,838
<b>YoY % Change</b>	25%	23%	4%	2%	24%
<b>EBITDA</b>	\$210	\$311	\$252	\$221	\$255
<b>YoY % Change</b>	79%	29%	(6%)	10%	27%
<b>Net Income</b>	\$67	\$129	\$56	\$65	\$84
<b>YoY % Change</b>	0%	80%	(54%)	46%	48%
<b>Earnings Per Share</b>	\$0.27	\$0.52	\$0.22	\$0.26	\$0.34
<b>YoY % Change</b>	0%	80%	(54%)	46%	48%
<b>EBITDA Margin %</b>	13%	15%	12%	13%	14%
<b>Net % Margin</b>	4%	6%	3%	4%	5%



Top 5 Comps	PE	PB	P/S	EV/EBITDA	Div Yield %
Makino Milling Machine Co. Ltd.	7.13	0.70	0.53	5.35	2.14
DMG Mori Co., Ltd.	4.17	1.03	0.83	6.82	1.72
THK Co., Ltd.	10.33	0.98	1.08	3.77	2.96
OSG Corp.	18.96	2.10	1.98	7.95	1.82





**Ticker** NDSN      **Currency** USD      **Date** 9/30/15

### Nordson Corporation

Headquarters	United States	Share Price	62.94
Website	<a href="http://nordson.com">nordson.com</a>	52 Week Range	58.518-84.45
Exchange	NasdaqGS	Market Cap (\$B)	3.792
Industry (GICS)	Industrials	Enterprise Value (\$B)	4.675
ROBO Global Classification:		YTD Change	(19.27%)
BW or NBW	Non-Bellwether	PE	16.79
Tier One	Application	P/S	2.27
Tier Two	Manufacturing	Dividend Yield	1.53%



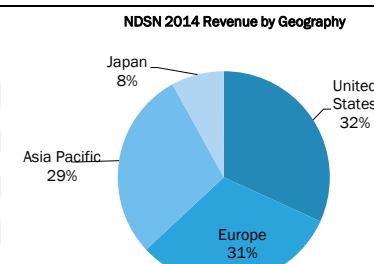
### Business Description:

Nordson Corporation engineers, manufactures, and markets products and systems for dispensing, applying, and controlling adhesives, coatings, polymers, sealants, biomaterials, and other fluids. Its Adhesive Dispensing Systems segment provides dispensing, coating, and laminating systems for applying adhesives, lotions, liquids, and fibers to disposable products and continuous roll goods; and systems for assembling plastic, metal, and wood products in paper and paperboard converting applications, and manufacturing continuous roll goods. This segment also offers automated adhesive dispensing systems for packaged goods industries; and components and systems used in the thermoplastic melt stream. The company's Advanced Technology Systems segment offers automated dispensing systems for attachment, protection, and coating of fluids and related gas plasma treatment systems for cleaning and conditioning surfaces prior to dispense; precision manual and semi-automated dispensers, plastic molded syringes, cartridges and tips, fluid connection components, and tubing and catheters for applying and controlling the flow of adhesives, sealants, lubricants, and biomaterials; and bond testing, and automated optical and X-ray inspection systems. This segment serves electronics, medical, and related high-tech industries. Its Industrial Coating Systems segment provides automated and manual dispensing systems to apply component adhesives and sealant materials, as well as to coat and cure containers; systems to apply liquid paints and coatings to consumer and industrial products; and systems to apply powder paints and coatings to various metal, plastic, and wood products, as well as ultraviolet equipment to cure and dry operations for specialty coatings, semiconductor materials, and paints. The company markets its products through its direct sales force, distributors, and sales representatives worldwide. Nordson Corporation was founded in 1935 and is headquartered in Westlake, Ohio.

### Robotics & Automation Description:

Nordson manufactures robotic hot melt dispenser systems and distributes automated systems operations for a number of applications including sealants, plastics, coating, etc. Nordson ASYMTEK designs and manufactures a full line of automated precision fluid dispensers and selective conformal coating systems that are ideal for a range of applications for the manufacturing and assembly of photovoltaic cells and fuel cells. ASYMTEK also supplies automated dispensing systems for one-drop fill (ODF), UV and gasket seals writing, and filling clear protective materials and other processes for OLED, LCD, and touch panel assembly.

Fundamentals	2010	2011	2012	2013	2014
Sales	\$1,042	\$1,233	\$1,410	\$1,543	\$1,704
YoY % Change	27%	18%	14%	9%	10%
EBITDA	\$266	\$348	\$378	\$379	\$429
YoY % Change	33%	20%	11%	5%	9%
Net Income	\$168	\$222	\$225	\$222	\$247
YoY % Change	0%	32%	1%	(1%)	11%
Earnings Per Share	\$2.49	\$3.29	\$3.49	\$3.45	\$3.88
YoY % Change	0%	32%	6%	(1%)	12%
EBITDA Margin %	26%	28%	27%	25%	25%
Net % Margin	16%	18%	16%	14%	14%



Top 5 Comps	PE	PB	P/S EV/EBITDA	Div Yield %	Analyst Recommendations
INDEX Corporation	21.10	3.81	2.70	11.91	1.80
Graco Inc.	11.62	5.43	3.17	12.29	1.79
Watts Water Technologies, Inc.	40.69	2.10	1.24	10.71	1.29
TriMas Corporation	12.49	1.23	0.49	5.85	0.00



Ticker	TER	Currency	USD	Date	9/30/15
<b>Teradyne Inc.</b>					
Headquarters	United States	Share Price	18.01		
Website	<a href="http://teradyne.com">teradyne.com</a>	52 Week Range	16.02-21.33		
Exchange	NasdaqGS	Market Cap (\$B)	3.797		
Industry (GICS)	Information Technology	Enterprise Value (\$B)	3.044		
ROBO Global Classification:		YTD Change	(8.99%)		
BW or NBW	Non-Bellwether	PE	34.11		
Tier One	Application	P/S	2.32		
Tier Two	Manufacturing	Dividend Yield	1.33%		
 <p>The chart shows the performance of Teradyne's stock price relative to the S&amp;P 500 index from September 30, 2014, to September 30, 2015. The Y-axis represents percentage change from -25% to 50%. The S&amp;P Price (blue line) starts at approximately 0% in September 2014 and fluctuates between 0% and 10% throughout the period. The TER Price (red line) starts at approximately 0% in September 2014, drops to about -10% in October 2014, and then generally trends upwards, reaching approximately 10% by September 30, 2015.</p>					

### Business Description:

Teradyne, Inc. provides automatic test equipment worldwide. The company's Semiconductor Test segment designs, manufactures, sells, and supports semiconductor test products and services for wafer level and device package testing in automotive, industrial, communications, consumer, computer and electronic game applications, and others. This segment offers FLEX test platform systems; Magnum test platform that tests memory devices, such as flash memory and dynamic random access memory; J750 test system to address the highest volume semiconductor devices; and ETS platform for use by semiconductor manufacturers, and assembly and test subcontractors in the low pin count analog/mixed signal discrete markets. It serves integrated device manufacturers (IDMs) that integrate the fabrication of silicon wafers into their business; fabless companies, which outsource the manufacturing of silicon wafers; foundries that cater to the processing and manufacturing of silicon wafers; and outsourced semiconductor assembly and test providers, which offer test and assembly services for the final packaged devices to fabless companies and IDMs. The company's Wireless Test segment designs, develops, and supports wireless test equipment for developing and manufacturing wireless devices, including smart phones, tablets, notebooks, laptops, personal computer peripherals, and other Wi-Fi, Bluetooth, and cellular enabled devices. This segment offers IQxstream solution for testing GSM, EDGE, CDMA2000, TD-SCDMA, WCDMA, HSPA+, LTE-FDD, TD-LTE, and LTE-A technologies for calibration and verification of smartphones, tablets, and embedded cellular modules; test equipment for connectivity testing; IQfact chipset software; and modular wireless test instruments. The company's System Test segment offers defense/aerospace test instrumentation and systems; storage test systems; and circuit-board test and inspection systems. The company was founded in 1960 and is headquartered in North Reading, Massachusetts.

### Robotics & Automation Description:

Teradyne is a leading supplier of automation solutions for test and industrial applications. Teradyne Automatic Test Equipment (ATE) is used to test semiconductors, wireless products, data storage and complex electronic systems, which serve consumer, communications, industrial and government customers. The company's industrial automation solutions include collaborative robots used by global manufacturing and light industrial customers to improve quality and increase manufacturing efficiency. From computing to communications, data storage to defense and aerospace and scores of other applications, Teradyne helps electronics manufacturers ensure the integrity and quality of their products.

Fundamentals	2010	2011	2012	2013	2014	TER 2014 Revenue by Geography																																			
Sales	\$1,566	\$1,429	\$1,657	\$1,428	\$1,648																																				
YoY % Change	101%	(9%)	16%	(14%)	15%																																				
EBITDA	\$511	\$356	\$431	\$343	\$356																																				
YoY % Change	155%	(16%)	23%	(9%)	9%																																				
Net Income	\$385	\$370	\$217	\$165	\$81																																				
YoY % Change	0%	(4%)	(41%)	(24%)	(51%)																																				
Earnings Per Share	\$2.14	\$2.00	\$1.16	\$0.86	\$0.40																																				
YoY % Change	0%	(12%)	(38%)	(26%)	(47%)																																				
EBITDA Margin %	33%	25%	26%	24%	22%																																				
Net % Margin	25%	26%	13%	12%	5%																																				
<table border="1"> <thead> <tr> <th>Top 5 Comps</th> <th>PE</th> <th>PB</th> <th>P/S</th> <th>EV/EBITDA</th> <th>Div Yield %</th> <th>Analyst Recommendations</th> </tr> </thead> <tbody> <tr> <td>KLA-Tencor Corporation</td> <td>22.32</td> <td>18.73</td> <td>2.88</td> <td>11.10</td> <td>4.16</td> <td>Buy   10</td> </tr> <tr> <td>Entegris, Inc.</td> <td>38.78</td> <td>2.38</td> <td>1.69</td> <td>11.95</td> <td>0.00</td> <td>Hold   4</td> </tr> <tr> <td>Applied Materials, Inc.</td> <td>13.99</td> <td>2.21</td> <td>1.88</td> <td>8.63</td> <td>2.72</td> <td></td> </tr> <tr> <td>Advantest Corporation</td> <td>12.22</td> <td>1.03</td> <td>0.89</td> <td>5.13</td> <td>2.34</td> <td></td> </tr> </tbody> </table>						Top 5 Comps	PE	PB	P/S	EV/EBITDA	Div Yield %	Analyst Recommendations	KLA-Tencor Corporation	22.32	18.73	2.88	11.10	4.16	Buy   10	Entegris, Inc.	38.78	2.38	1.69	11.95	0.00	Hold   4	Applied Materials, Inc.	13.99	2.21	1.88	8.63	2.72		Advantest Corporation	12.22	1.03	0.89	5.13	2.34		
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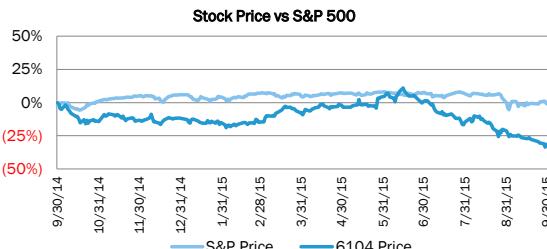
**Ticker** 6104

**Currency** USD

**Date** 9/30/15

**Toshiba Machine Co. Ltd.**

<b>Headquarters</b>	Japan	<b>Share Price</b>	3.12
<b>Website</b>	<a href="http://toshiba-machine.co.jp">toshiba-machine.co.jp</a>	<b>52 Week Range</b>	3.02334-5.23656
<b>Exchange</b>	TSE	<b>Market Cap (\$B)</b>	0.474
<b>Industry (GICS)</b>	Industrials	<b>Enterprise Value (\$B)</b>	0.257
<b>ROBO Global Classification:</b>		<b>YTD Change</b>	(22.25%)
<b>BW or NBW</b>	Non-Bellwether	<b>PE</b>	8.85
<b>Tier One</b>	Application	<b>P/S</b>	0.44
<b>Tier Two</b>	Manufacturing	<b>Dividend Yield</b>	3.21%


**Business Description:**

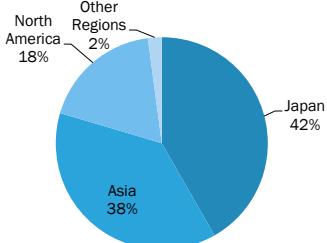
Toshiba Machine Co., Ltd. manufactures and sells various machines in Japan and internationally. The company operates in three segments: Molding Machinery, Machine Tools, and Hydraulic Equipment. It provides injection molding machines, including electric injection molding machines, hybrid molding machines, hydraulic injection molding machines, and control systems; die casting machines; and extrusion machines comprising TEM/twin screw extruders, SPU/sheet manufacturing equipment, FPU/film manufacturing equipment, CMT/coating machines, roll-to-roll type UV imprinting machines, rotogravure printing presses, and process controllers. The company also offers nano processing systems, such as high precision aspherical and free-form surface grinders; high precision vertical machines; high precision micro-grooving machines; high precision grooving lathe machines; high precision dicing machines; high precision optical glass mold press machines; micro-pattern imprinting machines; ultra high precision flat polygon mirror generators; high precision turning machines; high precision optical communication device automated alignment and assembling machines; and supports special purpose machines. In addition, it provides machine tools consisting of double column type machining centers, boring machines, horizontal machining centers, vertical boring and turning mills, roll grinders, and mold base cutting machines; FA controllers; electronic controls; castings; machining products; heat-treatment products; servo motors; industrial robots; hydraulic equipment comprising motors, piston pumps, and control valves; and semiconductor manufacturing equipment. The company was founded in 1875 and is headquartered in Numazu, Japan.

**Robotics & Automation Description:**

Toshiba develops, manufactures, and sells 6-axis, FPD handling, semiconductor palletizing, painting, and class handling robots as well as robotic components. TH-A Series of SCARA robots provides quicker acceleration / deceleration, a longer life span, and easier maintenance. These robots are most ideal for use in pick-and-place, assembly, and production lines. Its BA-II Series of Cartesian robots is a nice alternative to costly industrial robots that are difficult to program and operate. Toshiba also manufactures a custom-made programmable logic controller, the TCmini®, for high product mix/low volume automation that performs sequencing, temperature, operational panel, and communication control functions. This PLC is most commonly seen in food, environmental, health, and industrial appliances.

**Fundamentals**
**2011**   **2012**   **2013**   **2014**   **2015**

<b>Sales</b>	\$1,154	\$1,450	\$1,283	\$1,098	\$1,037
<b>YoY % Change</b>	28%	25%	1%	(6%)	10%
<b>EBITDA</b>	\$77	\$118	\$107	\$67	\$60
<b>YoY % Change</b>	41%	22%	8%	(6%)	7%
<b>Net Income</b>	\$40	\$82	\$84	\$43	\$36
<b>YoY % Change</b>	0%	105%	17%	(44%)	(3%)
<b>Earnings Per Share</b>	\$0.26	\$0.54	\$0.55	\$0.28	\$0.24
<b>YoY % Change</b>	0%	105%	17%	(44%)	(3%)
<b>EBITDA Margin %</b>	7%	8%	8%	6%	6%
<b>Net % Margin</b>	3%	6%	7%	4%	3%

**6104 2015 Revenue by Geography**

**Top 5 Comps**
**PE**   **PB**   **P/S**   **EV/EBITDA**   **Div Yield %**

Nachi-Fujikoshi Corp.	11.23	1.23	0.57	5.71	2.02
Haitian International Holdings Limited	12.60	2.19	2.15	7.96	2.82
The Japan Steel Works, Ltd.	NM	1.02	0.72	6.83	1.32
Mesnac Co.,Ltd.	48.38	2.58	3.09	29.19	0.24

**Analyst Recommendations**



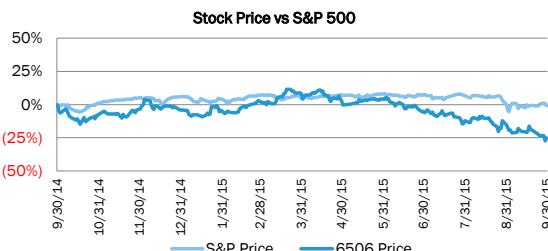

**Ticker** 6506

**Currency** USD

**Date** 9/30/15

### **Yaskawa Electric Corp.**

<b>Headquarters</b>	Japan	<b>Share Price</b>	10.12
<b>Website</b>	<a href="http://yaskawa.co.jp">yaskawa.co.jp</a>	<b>52 Week Range</b>	9.81-334-15.2921
<b>Exchange</b>	TSE	<b>Market Cap (\$B)</b>	2.655
<b>Industry (GICS)</b>	Information Technology	<b>Enterprise Value (\$B)</b>	2.904
<b>ROBO Global Classification:</b>		<b>YTD Change</b>	(21.91%)
<b>BW or NBW</b>	Bellwether	<b>PE</b>	12.30
<b>Tier One</b>	Application	<b>P/S</b>	0.75
<b>Tier Two</b>	Manufacturing	<b>Dividend Yield</b>	1.65%



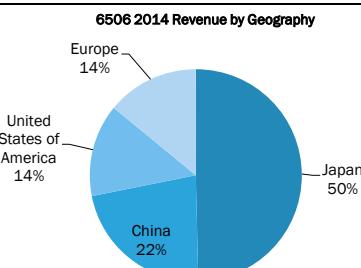
### **Business Description:**

Yaskawa Electric Corporation manufactures and sells mechatronic products in Japan and internationally. It operates in three segments: Motion Control, Robotics, and System Engineering. The company offers motion control products, including AC servo amplifiers and motors, AC drives, photovoltaic power conditioners, motor drive systems for electric vehicles, matrix and regenerative converters, machine controllers, vision systems, AC spindle motors and controllers for machine tools, and linear motors and controllers. It also provides arc welding, spot welding, painting, handling, picking/packing, palletizing, sealing/cutting, deburring/polishing, and clean/vacuum transfer robots, as well as peripheral equipment for robots, robot-application FA systems, and service robots primarily for use in the automobile, electrical machinery, and semiconductor related markets. This segment also develops mechanical components and robot controllers, as well as robots for use in non-manufacturing fields, such as the biomedical and service industries. In addition, the company offers electrical systems for steel plants and various industries, electrical instrumentation for water supply plants and sewage treatment facilities systems, small-scale wind power and solar generation systems, energy-related systems, medium-voltage AC drives, medium-voltage matrix converters, wind power converters, industrial motors and generators, wind power generators, and electric power distribution equipment. Further, it is involved in the information processing, software development, and sale of system equipment; provision of information-related products and services, such as optomechatronics, information security, and information multimedia, as well as information management software and services, and machines for office applications. Additionally, the company provides distribution services, etc. Yaskawa Electric Corporation was founded in 1915 and is headquartered in Kitakyushu, Japan.

### **Robotics & Automation Description:**

Yaskawa's robotics segment primarily offers arc welding robots, spot welding robots, painting robots, handling robots, and individual robot components. Yaskawa was one of the first robotics firms to develop semiconductor manufacturing technology and the first robot company to develop coordinated motion of multiple robots from one controller. Coordinated motion enables multiple robots to work within the same space without getting in one another's way. It built "The MOTOMAN" robot in the 1970s which was the first electrically driven industrial robot in Japan. Initially it didn't take but production is now exceeding 1,000 units per month. Yaskawa has a line of robotic palletizing solutions with 2D and 3D vision guidance that enable product handling, inspection, and process monitoring. Its paint robots can be programmed to apply coating materials to different areas of an object at various thicknesses. Yaskawa also produces robot transporters for both light and heavy loads and robotic positioners. The robotics segment represents about 30% of the overall firm revenue.

Fundamentals	2011	2012	2013	2014	2015
<b>Sales</b>	\$3,660	\$3,674	\$3,249	\$3,550	\$3,328
<b>YoY % Change</b>	32%	3%	1%	17%	10%
<b>EBITDA</b>	\$246	\$269	\$222	\$341	\$364
<b>YoY % Change</b>	51%	3%	3%	32%	17%
<b>Net Income</b>	\$81	\$101	\$71	\$166	\$206
<b>YoY % Change</b>	0%	29%	(19%)	149%	46%
<b>Earnings Per Share</b>	\$0.32	\$0.40	\$0.28	\$0.66	\$0.82
<b>YoY % Change</b>	0%	29%	(23%)	149%	46%
<b>EBITDA Margin %</b>	7%	7%	7%	10%	11%
<b>Net % Margin</b>	2%	3%	2%	5%	6%



Top 5 Comps	PE	PB	P/S	EV/EBITDA	Div Yield %
Fanuc Corporation	16.81	2.68	4.69	7.93	5.37
THK Co., Ltd.	10.33	0.98	1.08	3.77	2.96
OMRON Corporation	13.19	1.52	0.91	5.82	2.57
Mitsumi Electric Co., Ltd.	8.71	0.51	0.36	2.58	1.82

Analyst Recommendations		
Buy	5	
Hold		10



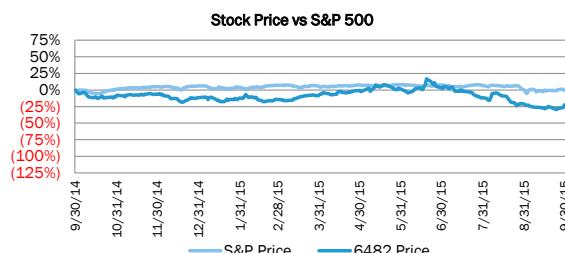
Ticker 6482

Currency USD

Date 9/30/15

### **Yushin Precision Equipment Co., Ltd.**

Headquarters	Japan	Share Price	16.97
Website	<a href="http://yushin.com">yushin.com</a>	52 Week Range	15.32-26.05
Exchange	TSE	Market Cap (\$B)	0.296
Industry (GICS)	Industrials	Enterprise Value (\$B)	0.218
ROBO Global Classification:		YTD Change	(11.65%)
BW or NBW	Bellwether	PE	18.74
Tier One	Application	P/S	1.86
Tier Two	Manufacturing	Dividend Yield	1.77%



### **Business Description:**

Yushin Precision Equipment Co., Ltd. manufactures and sells robots and automated stock machines for automated part extraction and storage from molding machines worldwide. Its primary products include take-out robots of injection molded plastic products; automated stock systems; and labor-saving automation equipment. The company also offers servo traverse robots; air traverse robots; swing robots; side entry robots; take-out robots for vertical molding machines; optical disc take-out robots and stock systems; stock systems comprising stockers, conveyors, pallets, and containers; and downstream equipment, including gate-cut systems, assemblers, and custom-made stockers. In addition, it is involved in the total system design of flexible manufacturing systems for plastic injection molding plants. Yushin Precision Equipment Co., Ltd. was founded in 1971 and is headquartered in Kyoto, Japan.

### **Robotics & Automation Description:**

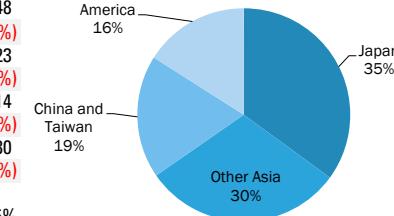
Yushin manufactures a line of air traverse, servo traverse, swing, and take-out robots whose uses span across a multitude of industries including factory automation applications. Take-out robots are used mainly in injection molding processes by taking the plastic pieces out of the mold once they've cooled, transporting them to the next step in the production process, and in some cases, stocking them in containers for shipping. Take-out robots differ from traditional industrial robots in that they are faster, more precise, require less labor, and are more user friendly. Take-out robots are now gradually being adapted to handle an increasingly broad range of functions. Sales of take-out robots represent roughly 70% of Yushin's total revenue. Side entry robots are ideal for high speed packaging of light or thin payloads and are most ideal for clean room production lines. Servo traverse robots are multi-axis robots that can handle payloads of all sizes. Swing robots are two-axis robots that are most ideal for moving small payloads at fast speeds.

### **Fundamentals**

**2011**    **2012**    **2013**    **2014**    **2015**

Sales	\$152	\$173	\$156	\$174	\$148
YoY % Change	2%	13%	3%	22%	(1%)
EBITDA	\$16	\$18	\$18	\$30	\$23
YoY % Change	11%	12%	6%	32%	(5%)
Net Income	\$9	\$9	\$12	\$18	\$14
YoY % Change	50%	7%	43%	70%	(11%)
Earnings Per Share	\$0.50	\$0.54	\$0.68	\$1.05	\$0.80
YoY % Change	50%	7%	43%	70%	(11%)
EBITDA Margin %	11%	10%	12%	17%	15%
Net % Margin	6%	5%	8%	11%	9%

### **6482 2015 Revenue by Geography**

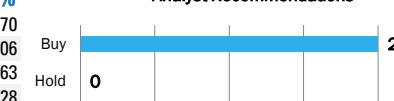


### **Top 5 Comps**

**PE**    **PB**    **P/S**    **EV/EBITDA**    **Div Yield %**

Nissei Asb Machine Co., Ltd.	11.42	1.81	1.41	6.81	1.70
Harmonic Drive Systems Inc.	29.05	4.32	5.78	15.61	1.06
Tsugami Corporation	6.42	0.83	0.58	4.11	3.63
Obara Group Incorporated	12.53	2.19	1.72	6.65	1.28

### **Analyst Recommendations**



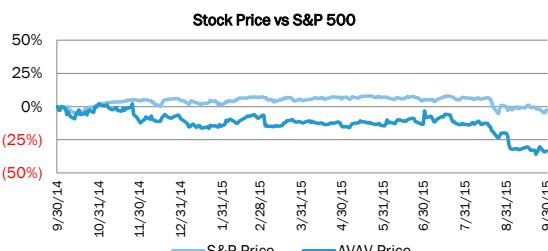
# Surveillance / Security



**Ticker** AAVV **Currency** USD **Date** 9/30/15

### AeroVironment, Inc.

Headquarters	United States	Share Price	20.04
Website	<a href="http://avinc.com">avinc.com</a>	52 Week Range	19.1-30.96
Exchange	NasdaqGS	Market Cap (\$B)	0.470
Industry (GICS)	Industrials	Enterprise Value (\$B)	0.253
ROBO Global Classification:		YTD Change	(26.46%)
BW or NBW	Bellwether	PE	NM
Tier One	Application	P/S	1.80
Tier Two	Surveillance/Security	Dividend Yield	0.00%



### Business Description:

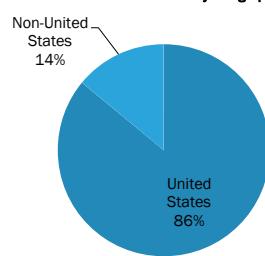
AeroVironment Inc. designs, develops, produces, supports, and operates unmanned aircraft systems (UAS) and efficient energy systems (EES) in the United States and internationally. The company offers small UAS products to deliver intelligence, surveillance, and reconnaissance; and communications, including real-time tactical reconnaissance, tracking, combat assessment, and geographic data to the small tactical unit or individual operator. Its small UAS wirelessly transmit critical live video and other information to a hand-held ground control unit enabling the operator to view and capture images; ground control systems allow the operator to control the aircrafts; and tactical missile systems designed to be reusable for flights under normal operating circumstances and can be recovered through an autonomous landing feature that enables a controlled descent to a designated location. The company also provides spare equipment, alternative payload modules, batteries, and chargers; repair, refurbishment and replacement, training, and customer support services to small UAS; turnkey mission services; and contract engineering services. In addition, it offers electric vehicle charging systems, services, and related solutions for plug-in passenger and fleet vehicles; PosiCharge industrial electric vehicle charging systems for electric material handling vehicles and airport ground support equipment; and power cycling and test systems for developers and manufacturers of electric vehicles, as well as battery packs, electric motors, and fuel cells. The company sells EES products directly through sales force; and through retailers, resellers, industrial battery and lift-truck dealers, and distributors and representatives. It serves U.S. Department of Defense, including the U.S. Army, Marine Corps, Special Operations Command, and Air Force, as well as commercial, consumer, and government customers. AeroVironment Inc. was founded in 1971 and is headquartered in Monrovia, California.

### Robotics & Automation Description:

AeroVironment has robotics exposure to the defense sector in the form of unmanned aerial solutions (UAS) and missile defense systems. AeroVironment first introduced the Pointer in 1987, which was the first small UAS used by the military. In addition to military uses, its UAS are now commonly used for reconnaissance missions of remote locations, by law enforcement agencies, in search and rescue operations, and for helping fire fighters fight, monitor, and control fires. Just about all of its smaller UAS can be assembled without tools in a matter of minutes and require minimal training to be flown by one or two individuals. From 2008-13, AeroVironment generated 85% of its revenue from its UAS division. Additionally, it has won every United States Department of Defense competition for programs of record involving small UAS. Its electric vehicle and charging solutions include plug-in stations for use at home, work, and various public locations as well as for large fleet transportation. Its EV charging systems are divided into three categories that differ in recharging times and infrastructure requirements.

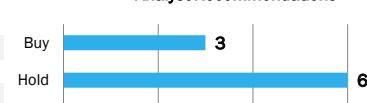
Fundamentals	2011	2012	2013	2014	2015
Sales	\$293	\$325	\$240	\$252	\$259
YoY % Change	17%	11%	(26%)	5%	3%
EBITDA	\$45	\$52	\$15	\$27	\$11
YoY % Change	21%	10%	(28%)	3%	9%
Net Income	\$26	\$30	\$10	\$14	\$3
YoY % Change	25%	18%	(66%)	32%	(79%)
Earnings Per Share	\$1.20	\$1.40	\$0.47	\$0.61	\$0.13
YoY % Change	24%	16%	(65%)	28%	(79%)
EBITDA Margin %	15%	16%	6%	11%	4%
Net % Margin	9%	9%	4%	5%	1%

AAVV 2014 Revenue by Geography



Top 5 Comps	PE	PB	P/S	EV/EBITDA	Div Yield %
Sypris Solutions Inc.	NM	0.96	0.09	NM	0.00
API Technologies Corp.	NM	1.16	0.55	10.75	0.00
DigitalGlobe, Inc.	119.49	1.05	2.03	7.41	0.00
LMI Aerospace Inc.	NM	1.11	0.35	9.39	0.00

Analyst Recommendations



**Ticker** ESLT

**Currency** USD

**Date**

9/30/15

**Elbit Systems Ltd.**

<b>Headquarters</b>	Israel	<b>Share Price</b>	73.93
<b>Website</b>	<a href="http://elbitsystems.com">elbitsystems.com</a>	<b>52 Week Range</b>	56.15771-83.34396
<b>Exchange</b>	TASE	<b>Market Cap (\$B)</b>	3.158
<b>Industry (GICS)</b>	Industrials	<b>Enterprise Value (\$B)</b>	3.446
<b>ROBO Global Classification:</b>		<b>YTD Change</b>	22.48%
BW or NBW	Non-Bellwether	PE	19.45
Tier One	Application	P/S	1.08
Tier Two	Surveillance/Security	<b>Dividend Yield</b>	2.00%


**Business Description:**

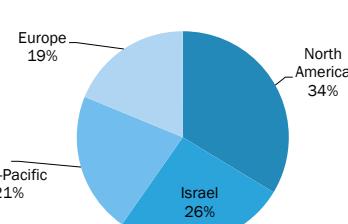
Elbit Systems Ltd. develops and supplies a range of airborne, land, and naval systems and products for defense, homeland security, and commercial aviation applications worldwide. The company offers military aircraft and helicopter systems; helmet mounted systems; commercial aviation systems and aero structures; unmanned aircraft systems and unmanned surface vessels; land vehicle systems; command, control, communications, computer, and intelligence systems; intelligence and cyber systems; electro-optic and countermeasures systems; homeland security systems; and electronic warfare and signal intelligence systems, as well as technologies for commercial applications and activities. It also provides a range of support services. The company markets its systems and products as a prime contractor or subcontractor to various governments and defense and homeland security contractors. Elbit Systems Ltd. was founded in 1966 and is based in Haifa, Israel.

**Robotics & Automation Description:**

Elbit produces unmanned ground and air vehicles (UGAV) used for defense through the integration of multirole A/A and A/G capabilities, multimode radar, structural modifications, leading edge avionics systems, display and sight helmets, and advanced weapons and pods. Its UGAV can carry out multiple missions spanning close to 15 hours and altitudes of nearly 30,000 feet. In the area of guided munitions, it developed the "OPHER" and "Lizard" systems. OPHER is a thermal-imaging, autonomous precision guidance system and The Lizard system provides munitions guidance towards laser designated targets. SWORD (Surveillance, Warning, Obstacle Ranging and Display) is for low visibility landings by taking real-time digital images of the terrain below. START™, a Smart Tactical Advanced Rocket, is laser-guided with high-precision strike capabilities designed to greatly improve hit probability; while at the same time, reduce collateral damage.

**Fundamentals**
**2010**   **2011**   **2012**   **2013**   **2014**

<b>Sales</b>	\$2,670	\$2,817	\$2,889	\$2,925	\$2,958
<b>YoY % Change</b>	(6%)	6%	3%	1%	1%
<b>EBITDA</b>	\$348	\$339	\$342	\$362	\$363
<b>YoY % Change</b>	(5%)	(1%)	1%	1%	(0%)
<b>Net Income</b>	\$183	\$90	\$168	\$183	\$171
<b>YoY % Change</b>	(15%)	(51%)	86%	9%	(7%)
<b>Earnings Per Share</b>	\$4.30	\$2.11	\$3.98	\$4.35	\$4.01
<b>YoY % Change</b>	(15%)	(42%)	62%	9%	(7%)
<b>EBITDA Margin %</b>	13%	12%	12%	12%	12%
<b>Net % Margin</b>	7%	3%	6%	6%	6%

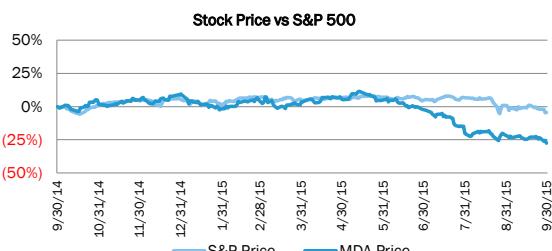
**ESLT 2014 Revenue by Geography**

**Top 5 Comps**
**PE**   **PB**   **P/S**   **EV/EBITDA**   **Div Yield %**

<b>SAAB AB (publ.)</b>	24.33	2.01	0.99	16.75	2.12
<b>Exelis Inc.</b>	0.00	0.00	0.00	0.00	0.00
<b>Aselsan Elektronik Sanayi ve Ticaret A.S.</b>	33.94	3.06	2.60	15.46	0.95
<b>Esterline Technologies Corp.</b>	17.76	1.37	1.13	9.49	0.00

**Analyst Recommendations**




Ticker	MDA	Currency	USD	Date	9/30/15
<b>Macdonald Dettwiler &amp; Associates Ltd.</b>					
Headquarters	Canada	Share Price	54.18		
Website	<a href="http://mda.ca">mda.ca</a>	52 Week Range	52.66537-75.70973		
Exchange	TSX	Market Cap (\$B)	1.961		
Industry (GICS)	Industrials	Enterprise Value (\$B)	2.559		
ROBO Global Classification:		YTD Change	(23.56%)		
BW or NBW	Non-Bellwether	PE	38.89		
Tier One	Application	P/S	1.24		
Tier Two	Surveillance/Security	Dividend Yield	2.04%		



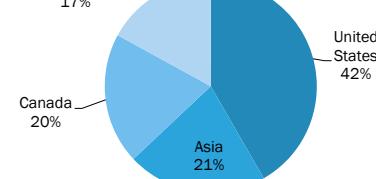
### Business Description:

MacDonald, Dettwiler and Associates Ltd., a communications and information company, provides operational solutions to commercial and government organizations worldwide. The company operates through two segments, Communications, and Surveillance and Intelligence. The Communications segment offers space-based solutions for the delivery of a range of services, including television and radio distribution, broadband Internet, and mobile communications. This segment supplies communication satellites, satellite antenna subsystems, and associated ground infrastructure and support services for the communication satellite operators, communication satellite manufacturers, and government agencies. The Surveillance and Intelligence segment provides space-based and airborne surveillance solutions, imaging satellite ground systems, geospatial information services, and associated support services. Its solutions support the operational needs of government and commercial customers, including space agencies, defense and civil departments, intelligence agencies, aerospace prime contractors, aviation authorities, imaging satellite operators, and oil and gas companies. This segment also supplies robotic systems for the space and terrestrial markets. The company was founded in 1969 and is headquartered in Richmond, Canada.

### Robotics & Automation Description:

MacDonald manufactures unmanned aerial vehicles (UAV) along with robots commonly used in space exploration applications. It also develops space automation capabilities for planetary exploration and on-orbit satellite servicing and repair. MacDonald's robotic and planetary exploration solutions have played key roles in four previous Mars missions, and will play a leading role on NASA's upcoming Mars Science Lab mission. MacDonald developed the Robotic Workstation (RWS) for NASA, to provide a reliable, seamless interface between operators and robotic systems deployed on the International Space Station. Additionally, MacDonald develops high reliability, long-endurance UAV services providing real-time, multi-sensor surveillance to support critical military operations and for commercial use.

Fundamentals	2010	2011	2012	2013	2014	MDA 2014 Revenue by Geography
Sales	\$692	\$749	\$883	\$1,712	\$1,812	
YoY % Change	33%	11%	16%	107%	15%	
EBITDA	\$128	\$182	\$163	\$193	\$250	
YoY % Change	46%	14%	11%	56%	15%	
Net Income	\$131	\$157	\$84	\$99	\$41	
YoY % Change	21%	22%	(48%)	25%	(55%)	
Earnings Per Share	\$3.22	\$4.02	\$2.64	\$2.82	\$1.13	
YoY % Change	(16%)	128%	(20%)	14%	(56%)	
EBITDA Margin %	19%	24%	18%	11%	14%	
Net % Margin	19%	21%	10%	6%	2%	



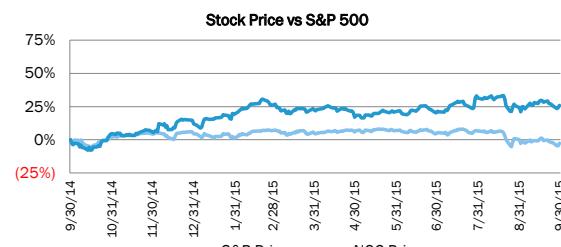
Top 5 Comps	PE	PB	P/S	EV/EBITDA	Div Yield %	Analyst Recommendations
Open Text Corporation	23.43	2.98	2.95	12.20	1.79	Buy
Constellation Software Inc.	69.43	34.91	5.51	32.55	0.96	5
CGI Group, Inc.	16.28	2.60	1.48	9.54	0.00	Hold
Sandvine Corporation	11.82	1.54	2.24	3.65	0.00	5



**Ticker NOC**      **Currency USD**      **Date 9/30/15**

### **Northrop Grumman Corporation**

<b>Headquarters</b>	United States	<b>Share Price</b>	165.95
<b>Website</b>	<a href="http://northropgrumman.com">northropgrumman.com</a>	<b>52 Week Range</b>	118.2401-176.83
<b>Exchange</b>	NYSE	<b>Market Cap (\$B)</b>	31.09
<b>Industry (GICS)</b>	Industrials	<b>Enterprise Value (\$B)</b>	35.71
<b>ROBO Global Classification:</b>		<b>YTD Change</b>	12.59%
<b>BW or NBW</b>	Non-Bellwether	<b>PE</b>	16.81
<b>Tier One</b>	Application	<b>P/S</b>	1.38
<b>Tier Two</b>	Surveillance/Security	<b>Dividend Yield</b>	1.93%



### **Business Description:**

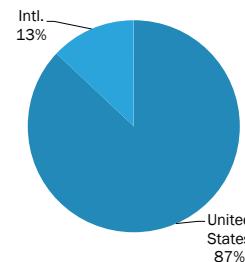
Northrop Grumman Corporation, a security company, provides systems, products, and solutions in aerospace, electronics, information systems, and technical service areas to government and commercial customers worldwide. The company's Aerospace Systems segment designs, develops, integrates, and produces manned aircraft, unmanned systems, spacecraft, high-energy laser systems, microelectronics, and other systems and subsystems. This segment sells its products primarily to government agencies for use in various areas, including intelligence, surveillance, and reconnaissance; communications; battle management; strike operations; electronic warfare; earth observation; satellite communications; space science; and space exploration. Its Electronic Systems segment offers solutions for sensing, understanding, anticipating, and controlling operating environment to military, civil, and commercial customers. This segment provides various defense electronics and systems, airborne fire control radars, situational awareness systems, early warning systems, electronic warfare systems, air defense radars and management systems, navigation systems, communications systems, marine power and propulsion systems, space systems, and logistics services. The company's Information Systems segment offers advanced solutions for Department of Defense, national intelligence, federal civilian, state, international, and commercial customers. This segment provides products and services primarily in the fields of command and control, communications, cybersecurity, air and missile defense, intelligence processing, civil security, health information technology, and government support systems. Its Technical Services segment provides logistics, modernization, and sustainment support; and other advanced technology and engineering services, including space, missile defense, nuclear security, training, and simulation services. The company was founded in 1939 and is based in Falls Church, Virginia.

### **Robotics & Automation Description:**

Northrop Grumman provides all types of robotic/unmanned aerial, ground, space and underwater systems with a focus on keeping humans out of harms way. Its unmanned systems operate in areas where manned vehicles cannot, allow for prolonged missions, and help reduce risk to both national security and human lives. These systems and technologies are used for a wide range of missions from intelligence, surveillance and reconnaissance, protected communications, battle management, strike operations, electronic warfare, and space exploration. The Andros™ HD Series is quickly becoming the "go-to" unmanned ground vehicle (UGV) for military, EOD, and other first responders worldwide. Unmanned systems accounts for roughly 25% of the Aerospace divisions' revenue and 10% of the overall firm revenue.

Fundamentals	2010	2011	2012	2013	2014
<b>Sales</b>	\$28,143	\$26,412	\$25,218	\$24,661	\$23,979
<b>YoY % Change</b>	2%	(6%)	(5%)	(2%)	(3%)
<b>EBITDA</b>	\$3,344	\$3,820	\$3,640	\$3,618	\$3,658
<b>YoY % Change</b>	8%	6%	(1%)	(4%)	4%
<b>Net Income</b>	\$2,053	\$2,118	\$1,978	\$1,952	\$2,069
<b>YoY % Change</b>	22%	3%	(7%)	(1%)	6%
<b>Earnings Per Share</b>	\$6.91	\$7.65	\$7.96	\$8.50	\$9.91
<b>YoY % Change</b>	42%	17%	5%	7%	17%
<b>EBITDA Margin %</b>	12%	14%	14%	15%	15%
<b>Net % Margin</b>	7%	8%	8%	8%	9%

NOC 2014 Revenue by Geography



Top 5 Comps	PE	PB	P/S EV/EBITDA	Div Yield %	Analyst Recommendations
Raytheon Company	15.72	3.30	1.46	10.96	2.45
General Dynamics Corporation	15.95	3.99	1.43	9.48	2.00
Lockheed Martin Corporation	18.41	21.59	1.44	10.78	3.18
Precision Castparts Corp.	22.31	2.82	3.27	13.51	0.05



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