

NVE Corp. NYSE:NVEC

Analyst: Tom Kaczmarek Sector: Technology

BUY
Price Target: \$81.60

Key Statistics as of 4/1/2015

Market Price: \$68.74

Industry: Consumer Finance

Market Cap: \$333.8M

52-Week Range: \$50.06 - \$75.94

Beta: 0.52

Thesis Points:

- Underestimated growth in growing submarkets
- Most efficient firm in industry
- Focused management team
- New dividend policy
- Poorly covered

Company Description:

Founded in 1989, Nonvolatile Electronics Corp (NVEC) specializes in the research and production of spintronics based products. The company primarily produces sensors, isolators, couplers, and MRAM which is used for medical devices, memory storage, and electronic components. The small firm of only 54 employees operates extremely efficiently from a small headquarters and laboratory located outside Minneapolis, MN. The company holds over 50 patents pertaining to their stage 1 spintronics products. The company increasingly fulfills research contracts for the development of new sensors and MRAM products for larger companies, leading to an increasingly diverse revenue stream.





Thesis

NVE Corp (NVEC) is a small but efficient manufacturer and researcher in the field of spintronics technologies used for medical, military, and commercial use. Spintronics technologies are nanoscale sciences which allow for the production of smaller and more efficient storage of memory (solid state MRAM) as well as medical applications for organic and inorganic matter. NVEC's products are not only cutting edge but also the smallest in class, which make the products especially appealing in the medical industry. While historically NVEC has been at the mercy of lumpy order cycles from the medical industry purchase schedule, recent expansion into R&D services will allow the company to achieve a more consistent stream of revenue. NVEC's new product lines increasingly expose the company to the electric vehicle market as well as other semiconductor applications. In an industry poised for growth, NVEC is the most efficient player in the market despite its small footprint. With deployment of new product lines, a more diverse revenue stream, and a planned distribution of cash to shareholders, 2015 will prove to be a year of continued success for NVEC. For these reasons, a BUY is recommended.

Industry Leading Efficiency

NVE has tremendously outperformed competitors with regards to efficiency. The firm generates an impressive gross margin of 79.2%, partnered with a 45.5% profit margin. The company's efficiency is in part correlated to a business model which helps to mitigate the costs of R&D. NVEC has recently successfully completed research on a salmonella detection system through a stage 1 grant from the National Science Foundation. The company is currently working to acquire a Stage 2 grant from the foundation which would provide NVEC with over \$500,000 to conduct additional research. NVEC is able to maintain their market share in the semiconductor industry thanks to their specialization and patented technologies.

Date	Revenue, Adj	Gross Profit, Adj: Margin %	Net Income, Adj: Margin %
Current/LTM	28.995M	79.2014	45.7587
FY2014	25.935M	77.9437	42.9378
FY2013	27.033M	74.013	43.7564
FY2012	28.579M	67.3696	39.823
FY2011	31.197M	68.639	42.8276

Given NVEC's high and stable margins, revenue growth is the primary driver of NVE's stock price. Revenue growth has been inconsistent in the last two years, with revenue decreasing by 5.4% in 2013 and 4.1% in 2014. Recent reports suggest that sales orders from the medical industry have increased substantially in the past quarter, which will partner with the company's new product lines to create a more diverse and dramatically increased revenue stream during 2015. NVE's superior efficiency will directly correlate to the firm's ability to generate impressive earnings and ROE over the next year.

New Product lines

R&D investments are imperative to maintaining a competitive advantage in an industry known for rapid technological advancement. For NVE, the company has recently expanded dramatically in R&D contracting projects, allowing the company to externally fund R&D activities. While this business segment is currently only accounting for 1.6% of revenues, new customers from the aerospace defense and ballistic missiles industries prove that the firm remains an industry leader in product development and signals the growth of R&D revenue. R&D revenue is not unusual for NVEC, while relied on this segment for over 50% of revenue in the early 2000's. While this segment has fallen off in recent years, contracts indicate that this segment is significantly recovering. R&D revenue is expected to increase to 6% of total revenue for 2015.

In addition to growing R&D revenue, recent product development for NVEC will allow the company to diversify into the electric automotive industry. As the electric car industry rapidly expands, NVEC's new quarter sized couplers (QSOPs) will provide space and energy efficient products to the marketplace of both hybrid electric and entirely electric vehicles. Energy usage and size are two significant advantages which NVEC products provide over competition in a market which could provide for rapid revenue growth.

In order to continue innovation, R&D investments in 2014 increased 39%. These investments resulted in the production of new top of the line couplers, smaller couplers, custom medical device sensors, and a product which will provide for strong unexpected revenue later this year.



Through a partnership with the National Science Foundation, NVEC successfully produced a quicker and more convenient salmonella detection system than is currently available in the marketplace. While the company has mentioned that there is discussion about a partnership with a distributor in the food industry to make this product readily available, analyst growth estimates do not currently expect sales of these products in 2015. When this product becomes commercially available, NVEC's strong network of global distributors would allow for rapid deployment, and unexpected increases in sales.

Industry Growth

Revenue growth expectations for NVEC are set high for 2015 at an expected rate of 19.1%. This estimate can be easily met and surpassed given the expected growth in the marketplace and initial sales figures given during Q3 earnings. For the first nine months of fiscal 2015, total revenue has increased 15%, product sales increased 14%, and contract R&D revenue increased 124%. These strong growth figures can be indicative of the double digit growth expected this year in the company's 3 major submarkets.

- The nanomedicine market is expecting to grow at a 12.5% CAGR through 2016, with new NVEC sensors and product order cycles helping 2015 sales. By launching salmonella detection sensors through a major distributor, NVEC would generate additional revenue which is not currently expected in revenue expectations.
- The macro-environment for the semiconductor industry is also expected to grow substantially over 2015. Future Horizons expects 11% growth in the market, which would benefit the sale of resistors, couplers, and some sensor products. As seen on page 1, there is a strong correlation between the stock price of NVEC and the PHLX semiconductor index (SOX shown in green).
- With new NVEC products expanding into the electric vehicle market, growth opportunities are plentiful. Navigant Research forecasts an explosive CAGR of 29.3% in the electric and

Siena Market Line 1st week of April 2015

hybrid vehicle market through 2023. The extremely low energy usage provider by NVE's products will make the company a prime producer of couplers and resistors for this emerging market segment.

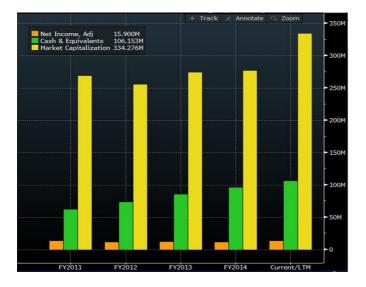
NVEC is poised for strong revenue growth throughout 2015, manufacturing and researching products in market segments which are forecasting double digit growth throughout the year. With NVE's profit margins remaining at 45%, strong revenue growth will result in a further accumulation of cash in the company.

Cash Disbursement

NVE's CEO Daniel Baker joined the NVE team in 2001, and the company has performed exceptionally under his control. Baker has made a positive impression with shareholders, dramatically increasing shareholder value over his tenure. When Baker joined the company, shareholder equity was only \$2M. Currently, shareholder equity has risen to \$104M, up \$9.7M in just the last twelve months alone. Baker envisioned the future of NVEC, which at the time was completely dependent upon R&D contracts, and created a diverse product mix which could independently support the company.

Cash and equivalents have increased dramatically year after year, resulting in a current cash balance of \$106.2 M, currently accounting for almost one-third of the debt free company's market cap. While significant investments are being made into the company's future R&D, the firm has officially decided to return tens of millions of dollars in cash to shareholders. In the last quarter's earnings report, a special \$10 M dividend is being offered to shareholders, equating to \$2.06 per share. The company's next dividend is planned to be issued in May, with quarterly dividends extending at least through 2015 averaging \$3-5 M per issuance. These dividends are being issued to reduce the company's cash and cash equivalents (including over \$90M in marketable securities). Some cash holdings are being reserved for operations and to defend intellectual property, but the company's expected \$12-20 M dividend outlay in the next year will be partially recouped through the expected \$14.2M profit projected for 2015.





Competitive Advantage

The small scale of NVEC is unusual considering the complexity of the semiconductor industry, but has allowed the firm unparalleled flexibility. By maintaining a small footprint, NVEC has been able to thrive in the niche market of spintronic couplers, sensors, MRAM and isolators. The company's products gain competitive advantage based on their state-of-the-art miniaturization techniques, which are protected by the company's patents and know-how. Barriers to entry in the specialized field of spintronics are high. Considering the specialized applications of NVEC's products and the applications which are still emerging, large semiconductor manufacturers have not invested significantly into stage 1 spintronics products. Stage 2 spintronics research is currently being conducted by many large companies in order to prepare for future applications of the technology, but material results of these pursuits are not expected in the next few years. While many large companies focus on developing next generation tech, NVEC is facing limited competition in the field of stage 1 spintronics applications.

Consensus about the future of NVEC is becoming increasingly positive, with short interest currently at the firm's 52 week low, 1.82% of float. The company is far more efficient and stable than any peers, holding an Altman Z score of 110 and an average price target of \$97.

Summary

NVE Corp. is the most efficient company in its market, boasting a debt free balance sheet and a profit margin of 45%. With a strong and experienced management team, as well as a diversified and growing revenue stream, NVE will have no foreseeable issues continuing to generate an exceptional ROI to shareholders while also disbursing a significant portion of the firm's cash reserves through dividends. The management team is focused on expanding R&D revenue while accumulating additional patents to remain the leading provider in this market niche. With spintronics being adopted by the nanomedicine and electric vehicle markets, NVEC is in a position to capitalize from strong market growth. For these reasons, a BUY is recommended for NVEC with a price target of \$81.60.



Terminal Yalue	and term Growth	Market Risk Premium	Op. Costs Variation	Revenue Variation			TM-9Y	TMLSY	TM-7Y	LTM-6Y	LTM-5Y	LTM-4Y	LIM-3Y	LTM+2Y	LTM+IY	LTM		Justified TEV/UFCF	Justified TEV/EBITA	Justified TEV/EBITDA	Justified TEV/REV	Invested Capital Growth	Long Term ROIC	Continuing Period Revenue Grov	Rev/Invested Capital	Unlevered Beta	Operating. Cash/Cash			Last Quarter -4	Last Quarter -2	ast Quarter 2	Last Quarter 1			6-month volatility	5y Beta	52-week low	52 week high	Days to cover short interest	Short interest	% shares held by insiders	% shares held by institutions	Diluted shares outstanding	Shares outstanding	Daily volume	Market Capitalization	Enternrise value	Next earnings date	Last unidance	<u>_</u>	Sector
• ;	37	8%	0	•	Base	00000	40.7%	4157	45.5%	42.8%	429%	41.9%	40.2%	38.0%	34.5%	28.3%	ROIC	35.0x	18.0x	5.0%	7.5x	Equals to Maintenance	51.8%	3.0%	20.08	0.75	200			2.00	.19.7%	31.	3 5 5	Tevenue	Past Earn	23.83%	0.40	\$50.06	\$75.94	8.48	1.79%	1.78%	68.18%	4.87	4.86	0.01	\$329.52	\$306.17	profession	ner	m	Information Lectinology
2.	NA	NA	10%	10%	Stdev Min	Monto Carlo Cimulation A	78%	750	74%	7.3%	72%	7.1%	7.0%	6.9%	88%	6.7%	VACC	LTM+9Y	LTM48Y	LTM+7Y	LTM+6Y	LTM+5Y	LTM+4Y	LTM+3Y	LTM+2Y	LTM+IY	LTM	Period	Proforma decumptions	200	2217	44.8%	200	EBILON	Past Larning Surprises	WACC (based on market value weig	Levered Beta	Debt Rating	Altman Z	Interest Coverage	Cost of Borrowing	Total debt/market cap	Current Capital Structure		Pixelworks, Inc.		Vishay Intertechnology Inc.	oigma Designs, inc.	Signa Designs Inc	Fairchild Semiconductor Internation	Silicon Laboratories Inc.	American Superconductor Corporal
NIA	n:	57	NA	N/A	Min	4 months	#16.66 #16.66	#15.74	910.45	\$16.24	\$15.72	\$14.62	\$13.36 \$13.36	\$12.00	\$10.18	\$8.67	EVA Yaluation	3%	3%	*	8%	%	ē	₹	₹	4%	12%	Rev. Growth		20.0	00%	0.0%	0.0%	Norm. EP'S		6.73%	0.75	AAA	131.06		200.0	200.0	tructure		\$120.12		\$2,026.14	\$20.203	\$000 0g	\$2,210.68	\$2,205.03	\$68.06
NIA	14.7	77	NA	NIA	Max	*******	*484.00	\$450.21	*437 R3	\$425.91	\$414.40	\$402.50	\$390.44	\$378.01	\$364.66	\$348.51	ம் Enterprise Value	37%	36%	35°X	34%	83	32%	30%	: 23	28%	31%	Adj. Op. Cost/Rev	=	SG&A Capitalization	For Drilling For Capitalization	Operating Controlleration	Operating League Capitalizat	I TO	TEVERIA	TEVÆBITDA	TEVIREY	Unlevered Beta	Excess Cash/Revenue	Revenues/Invested capital	EBITA Margin	Roic	Retention Ratio	Growth		Historical Performance	Leali, Anthony	Brown Jan	Muser loke	Heynders, Curt	Baker, Daniel	Professional
Normal		=	Normal	Normal	Distribution	40:00	\$0.00	\$0.00	9000	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	Total Debt	\$58.03	\$56.36	\$54.63	\$52.43	\$49.39	\$45.66	\$41.63	\$37.83	\$33.09	\$29.00	Revenue		2:2			100%	34.38	24.00	i 5.4s	7.5	1.09	20.8%	115.8%	52.7%	304.0%	8.8%	14.1%	NYEC	·- I	Director of Standard Produ-	Vice President of New Busil	Vice President of New Busin	Chief Financial Unicer, Prin-	Chief Executive Officer, Pre	litte
halysts' median est	Current Price	of () adjusted pric	200	Mean est.		Monto	-\$17117	- 0.000	.4129.71	\$109.77	-\$8 Ne2	-\$73.44	\$56.89	-\$41.77	-\$28.25	-\$20.11	Other claims	\$19.84	\$19.64	\$19.38	\$18.92	\$18.07	\$16.90	\$15.53	\$14.03	\$12.07	\$9.25	NOPLAT Invested	Egrecasted Pro	N/A	Oughme	Straightline	Or sightline	70.38	17.3%	9.4 ₂	17	1.73	39.5%	85.2%	10.0%	16.6%	4.9%	0.2%	Peers				\$ 20,040,00	\$ 176,699.00	\$ 320,318.00	Comp. FYZUIZ
	\$67.83	\$76.07	\$0.32	\$77.03	Intrinsic Value 19-1	velo Cimulation	\$635.50 500.00	\$800.50	\$567.33	\$535.68	\$505.36	\$475.94	\$447.33	\$419.78	\$392.91	\$368.62	Equity	\$50.45	\$48.72	\$47.28	\$45.82	\$44.16	\$42.13	\$40.35	\$38.62	\$36.85	\$32.90	Invested capital		N/A		10 means	5	20.02	3 35 18	14.0%	2.8	1.26	54.7%	99.0%	13.5×	7	#.17	6.5%	Industry				\$ 20,000.00	\$ 193,998,000	\$ 354,183.00	Comp. FYZUI3
\$97.00	******	\$81.62	\$0.25	\$82.37	ly-Target	Darrelly.	\$120.75	\$10E 22	\$119.32	\$111.73	\$105.73	\$99.35	\$93.42	\$87.70	\$82.37	\$77.03	Adjusted Price	\$18.10	\$18.20	\$17.93	\$17.26	\$16.04	\$15.11	\$13.80	\$12.26	\$10.11	\$9.02	UFCF		3ē ∶	e ĝ	SPEC	NAME .	20.08	5.48	11.3%	2.42	0.95	18.5%	202.3%	13.7%	11.8%	818%	6.0%	All U.S. firms				\$ 2,000,00	00,000,00	\$ 326,980.00	Comp. FYZUI4