



PRICE TARGET REVISION | COMMENT

JANUARY 27, 2011

**CEVA, Inc. (NASDAQ: CEVA)**

Looking for solid 4Q10 performance and good 2011 yet watch out for that Apple

**Sector Perform Above Average Risk**

Price:	24.20	Price Target:	24.00 ↑ 18.00
Shares O/S (MM):	22.1	Implied All-In Return:	(1)%
Dividend:	0.00	Market Cap (MM):	535
Float (MM):	18.9	Yield:	0.0%
Debt to Cap:	0%	Tr. 12 ROE:	5.50%
Institutional Ownership:	84%	Enterprise Val. (MM):	410
		Avg. Daily Volume (MM):	0.22
		3-Yr. Est. EPS Growth:	25.00%

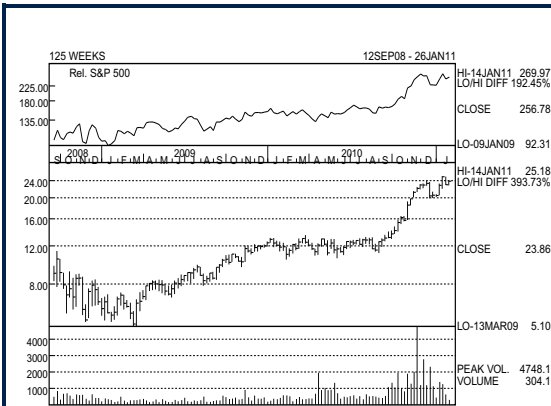
Priced at market close January 27, 2011 ET.

**Expect solid 4Q10; Raising Target to \$24**

- We expect Ceva to cap 2010 on a high note with solid 4Q10 numbers which we model in line at \$12.8m/\$0.18 EPS. We project strong royalties at \$7.4m, up 41% sequentially thanks to ongoing handset market share gains, solid traction in Chinese mobile market, favorable seasonality and healthy backdrop for license sales at \$4.6m.
- We remain comfortable with Ceva's outlook and execution in key mobile and multimedia markets as global handset units continue to show solid growth, particularly smartphones. We believe Ceva continues to benefit from this growth and remains on track to increase its market share from 33% to over half the market in coming years. In addition, Chinese mobile market remains strong opportunity on the heels of Spreadtrum's market share gains which now seems sustainable at least through mid-2011. We see additional opportunities with Huawei, ZTE and others.
- Conversely, we believe Qualcomm gained with Apple around the launch on Verizon iPhone, though most investors recognize this may have limited impact. The main risk may relate to expanded Apple-Qualcomm relationship per media reports for next generation iPhone 5 in February and iPads later on at the expense of Infineon (which uses Ceva). While the shift may be gradual and Ceva may be able to offset lost volume elsewhere, we calculate that this may dent numbers by \$4-5m per annum and the hit to valuation may be compounded by Apple halo effect.
- For now, we remain comfortable with our 2011 estimates for royalties (~53% 2011E mix), which seem undemanding based on favorable demand for handsets, as well as connected devices' potential uptake and additional consumer electronics opportunities. We model 16% revenue growth to \$52m and 26% EPS rise to \$0.68 vs. street average of \$51.8m/\$0.67.
- We believe Ceva may benefit from the ongoing growth in global handset units and continued ramp-up of various design wins. We remain positive long-term factoring the underlying secular trends, yet maintain Sector Perform on balanced risk/reward near-term and look to increase exposure on pullback. We're raising our target to \$24 (from \$18), based on 28x EV/NOPAT 2011E plus cash to reflect industry wide multiple expansion; our bear case points to \$17 and upside potential at \$28.

Priced as of prior trading day's market close, EST (unless otherwise noted).

For Required Conflicts Disclosures, see Page 5.



RBC Capital Markets, LLC

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FY Dec	2009A	2010E	2011E	
EPS (Op) - FD	0.42	0.55	0.68	
P/E	57.6x	44.0x	35.6x	
Revenue (MM)	39	45	52	
EPS (Op) - FD	Q1	Q2	Q3	Q4
2009	0.11A	0.08A	0.12A	0.11A
2010	0.12A	0.12A	0.14A	0.18E
2011	0.18E	0.17E	0.17E	0.18E
Revenue (MM)				
2009	10A	9A	10A	10A
2010	11A	11A	11A	13E
2011	13E	13E	13E	14E

All values in USD unless otherwise noted.

## Details

We expect Ceva to cap 2010 on a high note with solid 4Q10 numbers on strong royalty numbers based on 1) ongoing handset market share gains, 2) solid traction from Spreadtrum in the Chinese mobile market, 3) favorable royalty seasonality (reflecting pre-holiday build-up as royalties are recognized on a one-quarter delay), along with 4) healthy backdrop for license sales. We model 4Q10 in line with revenue of \$12.8m, up 20% sequentially and 26% Y/Y, driven by strong 41% sequential rise in royalty sales to \$7.4m and mild 3% gain in licenses to \$4.6m. With OpEx in check we expect 590bps sequential increase in operating margins to 32.4% and \$0.18 EPS.

We remain comfortable with Ceva's outlook and execution in key mobile and multimedia markets as global handset units continue to show solid growth, particularly in handsets as industry players point to 70% growth in 2010 and additional 50% rise in 2011. We believe Ceva continues to benefit from this growth and remain on track to increase its market share from 33% to over half the market in coming years.

In addition, Chinese mobile market remains strong opportunity on the heels of Spreadtrum's market share gains which now seems sustainable at least through mid-2011. We see additional opportunities for the company in China, including design wins for mobile-data-dongles with the likes of Huawei and ZTE, as well as utilities metering devices.

For now, we remain comfortable with our 2011 estimates for royalties (~53% 2011E mix), which seem undemanding based on favorable demand for handsets, as well as connected devices' potential uptake and additional consumer electronics opportunities. Ceva is also set for incremental royalty flow of ~\$0.5m per quarter as 2 of 3 customers exhaust their prepaid plan, starting in 1Q11 and completed by 2Q11. We model 16% revenue growth to \$52m and 26% EPS rise to \$0.68 vs. street average of \$51.8m/\$0.67.

In addition, the backdrop for further licensing deals remains favorable considering the healthy activity in LTE-related designs. We'd expect some news on the consumer electronics market around the upcoming CES show, and more importantly, the introduction of MM3000 video processing core in mid-February at the Mobile World Congress/3GSM. Overall, the recent reset of expectations for the license segment (~35%) which calls for flattish performance sets a fairly low bar.

### Watch out from that Apple

We believe it is possible that Verizon's iPhone launch in early 2011 may use Qualcomm chips on its CDMA network. There's further risk that Qualcomm may displace Infineon designs elsewhere as well: media reports suggest the Apple-Qualcomm relationship may expand in next generation iPhone 5 to be launched in February and iPads later on (Infineon uses Ceva's intellectual property).

That said, integrating Qualcomm chips internationally may require Apple to go through approval process from each government, so in our view it seems the easier path would be dual sourcing. If the risk fully materializes, we estimate roughly 100m units could be lost, based on >65m iPhone's and >30m iPads, which we calculate would translate to a \$4-5m hole in revenue and thus earnings.

Looking past the Apple halo effect, the longer term impact may be a more limited impact on numbers considering growth from other vendors and markets. We believe the main growth drivers in terms of volumes in coming years are in 2G and with other vendors like Nokia. It also remain to be seen how Qualcomm leverages this relationship and other design wins it gained from the CDMA domain (this standard accounts for <20% of subscriber base) into the LTE realm.

### Scenario Analysis

We believe Ceva may benefit from the ongoing growth in global handset units and continued ramp-up of various design wins; we remain positive long-term factoring the underlying secular trends, yet maintain Sector Perform on balanced risk/reward near-term and look to increase exposure on pullback. Ceva currently trades at 28x taxed earnings which is inline with the peer average. We're raising our target to \$24, based on 28x EV/NOPAT 2011E plus cash (reflecting industries multiple expansions) and scenario analysis offering different cases with upside and downside from Apple business and opportunities elsewhere.

Our base case is our \$24 target, and other possible scenarios we have identified are a bear case at \$17 and upside potential at \$28.

- **Our \$24 base case** assumes Apple business remains at current levels and suggests our modeled 16% revenue growth and low 30% operating margin with 28x EV/NOPAT.
- **Bear:** Assuming Apple is off the table and Ceva see no real offset elsewhere we model 7-10% Y/Y rev growth or \$48m-\$49m with 29-30% operating margin. Based on 20x multiple plus cash of \$117m, which is what was warranted to shares a year back before IP stocks got hyped, we get bear case of \$16-\$17 (down ~17%).
- **Bull:** Our bull case suggests share value of \$28 assuming 25% rev growth to 56m with 37% operating margin. Based on 30x multiple (tad ahead of current multiples), and adding back cash.
- The **mid ground** occurs if Ceva lose Apple and gain elsewhere which suggests \$21 as we'd assume some multiple compression closer to the peer average at 25x ex ARM.

*Please refer to our recent notes on Ceva for further insight on outlook and industry dynamics, including recent checks titled "On Track for Solid 4Q10 and 2011" from January 5 and our key takeaways from the management roadshow titled "Handsets Pave the Road to Growth" issued Nov. 15, 2010.*



## Valuation

Ceva is currently trading at 35x our 2011 EPS, compared to high growth peers at 28x and the industry peers average of 13x. Netting Ceva's cash position which accounts for ~25% of valuation, shares trade at more palatable EV/E of 29x. This is still ahead of communications semiconductor peers inline with direct, high growth peers.

We raise our target price to \$24 on 28x our FY11 Net Operating Profit After Tax plus Ceva's cash position of \$117m to reflect industry wide multiple expansion. Our operating multiple is in line with those afforded to high growth peers and ahead of the broader communication semiconductor industry given its secular expansion trajectory. Our previous target price of \$18 was based on 19x our FY11 NOPAT.

However, following CEVA's run-up of 45% in the past couple of months, our notion is shares adequately discount the long-term earnings power of royalty growth from market share gains. Further upside may be realized once LTE kicks in or CEVA gains further traction in consumer electronics / connected devices. For now, risk/reward seems balanced and we'd await pullback or additional catalysts to get more constructive.

## Price Target Impediment

We assign CEVA an Above Average Risk qualifier given risks and uncertainties relating to dependency on other vendors, a rapidly changing market, competition, and macro and forex headwind.

- **Dependency on other vendors** – Aside from license fees paid by its customers, CEVA totally depends on its customer sales to generate royalty streams. We see this dependency as the key risk to CEVA's business model.
- **Rapidly changing market** dynamics in technology.
- **Competition** – CEVA faces fierce competition for in-house R&D departments, off-the-shelf chip makers such as Texas Instruments (TXN) and Qualcomm and other DSP IP vendors such as ARM Holdings. Market consolidation in the DSP market as well as in the consumer electronics market might also pose a threat.
- **Macro and Forex Headwind** – CEVA may suffer from sluggish world economy. On FX: most of CEVA's expenses are paid in new Israeli shekels and most revenues are in US dollars, exposing Ceva to FX shifts.

## Company Description

CEVA is a leading licensor of Digital Signal Processing Intellectual Property (DSP IP) platforms and solutions. The Company's DSP cores are deployed in mobile phones, consumer electronics and storage applications. CEVA's IP portfolio includes comprehensive solutions for multimedia, audio, voice over packet (VoP), Bluetooth, Serial Attached SCSI (SAS) and Serial ATA (SATA), and a wide range of programmable DSP cores.

Ceva DSP Inc. (CEVA)  
 Income Statement  
 (\$ 000 except per share, FY Dec)  
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	1Q09A Mar	2Q09A Jun	3Q09A Sep	4Q09A Dec	2009A	1Q10A	2Q10A	3Q10A	4Q10E	2010E	1Q11E	2Q11E	3Q11E	4Q11E	2011E
<b>Licensing Fees and Pre-paid Royalties</b>	<b>4,544</b>	<b>4,273</b>	<b>5,242</b>	<b>4,705</b>	<b>18,764</b>	<b>4,722</b>	<b>4,593</b>	<b>4,459</b>	<b>4,600</b>	<b>18,374</b>	<b>4,400</b>	<b>4,600</b>	<b>4,500</b>	<b>4,700</b>	<b>18,200</b>
QoQ	-1%	-6%	23%	-10%		0%	-3%	-3%	3%		-4%	5%	-2%	4%	
YoY	-11%	-29%	-12%	2%	-14%	4%	7%	-15%	-2%	-2%	-7%	0%	1%	2%	-1%
mix	48%	47%	54%	46%	49%	45%	43%	42%	36%	41%	34%	36%	35%	35%	35%
<b>Post paid Royalties</b>	<b>3,759</b>	<b>3,950</b>	<b>3,694</b>	<b>4,822</b>	<b>16,225</b>	<b>4,980</b>	<b>5,154</b>	<b>5,238</b>	<b>7,400</b>	<b>22,772</b>	<b>7,700</b>	<b>7,300</b>	<b>7,600</b>	<b>7,900</b>	<b>30,500</b>
QoQ	-12%	5%	-6%	31%		3%	3%	2%	41%		4%	-5%	4%	4%	
YoY	1%	30%	12%	13%	13%	32%	30%	42%	53%	40%	55%	42%	45%	7%	34%
mix	40%	42%	38%	47%	42%	47%	49%	49%	58%	51%	60%	57%	59%	59%	59%
<b>Other revenue</b>	<b>1,210</b>	<b>887</b>	<b>723</b>	<b>658</b>	<b>3,478</b>	<b>899</b>	<b>862</b>	<b>978</b>	<b>800</b>	<b>3,539</b>	<b>800</b>	<b>800</b>	<b>850</b>	<b>850</b>	<b>3,300</b>
QoQ	9%	-27%	-18%	-9%		37%	-4%	13%	-18%		0%	0%	6%	0%	
YoY	-3%	-13%	-23%	-41%	-19%	-26%	-3%	35%	22%	2%	-11%	-7%	-13%	6%	-7%
mix	13%	10%	7%	6%	9%	8%	8%	9%	6%	8%	6%	6%	7%	6%	6%
<b>Revenue</b>	<b>9,513</b>	<b>9,110</b>	<b>9,659</b>	<b>10,185</b>	<b>38,467</b>	<b>10,601</b>	<b>10,609</b>	<b>10,675</b>	<b>12,800</b>	<b>44,685</b>	<b>12,900</b>	<b>12,700</b>	<b>12,950</b>	<b>13,450</b>	<b>52,000</b>
QoQ	-5%	-4%	6%	5%		4%	0%	1%	20%		1%	-2%	2%	4%	
YoY	-6%	-10%	-5%	2%	-5%	11%	16%	11%	26%	16%	22%	20%	21%	5%	16%
<b>Cost of Goods Sold*</b>	<b>1,175</b>	<b>1,118</b>	<b>828</b>	<b>881</b>	<b>4,002</b>	<b>696</b>	<b>848</b>	<b>978</b>	<b>1,050</b>	<b>3,572</b>	<b>1,050</b>	<b>1,000</b>	<b>1,050</b>	<b>1,100</b>	<b>4,200</b>
Margin	12.4%	12.3%	8.6%	8.6%	10.4%	6.6%	8.0%	9.2%	8.2%	8.0%	8.2%	8.0%	8.1%	8.1%	8.1%
<b>Gross Income*</b>	<b>8,338</b>	<b>7,992</b>	<b>8,831</b>	<b>9,304</b>	<b>34,465</b>	<b>9,905</b>	<b>9,761</b>	<b>9,697</b>	<b>11,750</b>	<b>41,113</b>	<b>11,850</b>	<b>11,700</b>	<b>11,900</b>	<b>12,350</b>	<b>47,800</b>
QoQ	-6%	-4%	10%	5%		6%	-1%	-1%	21%		1%	-1%	2%	4%	
YoY	-7%	-10%	-3%	4%	-4%	19%	22%	10%	26%	19%	20%	20%	23%	5%	16%
Margin	87.6%	87.7%	91.4%	91.4%	89.6%	93.4%	92.0%	90.8%	91.8%	92.0%	91.9%	92.0%	91.9%	92.1%	91.9%
<b>Research and Development*</b>	<b>3,813</b>	<b>3,766</b>	<b>3,864</b>	<b>4,245</b>	<b>15,688</b>	<b>4,442</b>	<b>4,366</b>	<b>3,946</b>	<b>4,400</b>	<b>17,154</b>	<b>4,400</b>	<b>4,400</b>	<b>4,500</b>	<b>4,600</b>	<b>17,900</b>
Margin	40.1%	41.3%	40.0%	41.7%	40.8%	41.9%	41.2%	37.0%	34.4%	38.4%	34.1%	34.6%	34.7%	34.2%	34.4%
<b>Sales and Marketing*</b>	<b>1,474</b>	<b>1,508</b>	<b>1,490</b>	<b>1,670</b>	<b>6,142</b>	<b>1,696</b>	<b>1,680</b>	<b>1,572</b>	<b>1,800</b>	<b>6,748</b>	<b>1,800</b>	<b>1,800</b>	<b>1,850</b>	<b>1,900</b>	<b>7,350</b>
Margin	15.5%	16.6%	15.4%	16.4%	16.0%	16.0%	15.8%	14.7%	14.1%	15.1%	14.0%	14.2%	14.3%	14.1%	14.1%
<b>General and Administrative*</b>	<b>1,123</b>	<b>1,247</b>	<b>1,196</b>	<b>1,179</b>	<b>4,745</b>	<b>1,259</b>	<b>1,280</b>	<b>1,354</b>	<b>1,400</b>	<b>5,293</b>	<b>1,400</b>	<b>1,400</b>	<b>1,400</b>	<b>1,500</b>	<b>5,700</b>
Margin	11.8%	13.7%	12.4%	11.6%	12.3%	11.9%	12.1%	12.7%	10.9%	11.8%	10.9%	11.0%	10.8%	11.2%	11.0%
<b>Operating Expenses</b>	<b>6,410</b>	<b>6,521</b>	<b>6,550</b>	<b>7,094</b>	<b>26,575</b>	<b>7,397</b>	<b>7,326</b>	<b>6,872</b>	<b>7,600</b>	<b>29,195</b>	<b>7,600</b>	<b>7,600</b>	<b>7,750</b>	<b>8,000</b>	<b>30,950</b>
QoQ	-15%	2%	0%	8%		4%	-1%	-6%	11%		0%	0%	2%	3%	
YoY	-19%	-19%	-13%	-6%	-13%	15%	12%	5%	7%	10%	3%	4%	13%	5%	6%
Margin	67.4%	71.6%	67.8%	69.7%	69.1%	69.8%	69.1%	64.4%	59.4%	65.3%	58.9%	59.8%	59.8%	59.5%	59.5%
<b>Operating Income*</b>	<b>1,928</b>	<b>1,471</b>	<b>2,281</b>	<b>2,210</b>	<b>7,890</b>	<b>2,508</b>	<b>2,435</b>	<b>2,825</b>	<b>4,150</b>	<b>11,918</b>	<b>4,250</b>	<b>4,100</b>	<b>4,150</b>	<b>4,350</b>	<b>16,850</b>
QoQ	43%	-24%	55%	-3%		13%	-3%	16%	47%		2%	-4%	1%	5%	
YoY	99%	89%	45%	64%	69%	30%	66%	24%	88%	51%	69%	68%	47%	5%	41%
Margin	20.3%	16.1%	23.6%	21.7%	20.5%	23.7%	23.0%	26.5%	32.4%	26.7%	32.9%	32.3%	32.0%	32.3%	32.4%
<b>Interest and other income, net</b>	<b>476</b>	<b>474</b>	<b>551</b>	<b>547</b>	<b>2,048</b>	<b>557</b>	<b>541</b>	<b>493</b>	<b>500</b>	<b>2,091</b>	<b>500</b>	<b>500</b>	<b>500</b>	<b>500</b>	<b>2,000</b>
% of pretax income	19.8%	24.4%	19.5%	19.8%	20.6%	18.2%	18.2%	14.9%	10.8%	14.9%	10.5%	10.9%	10.8%	10.3%	10.6%
<b>Income before taxes on income</b>	<b>2,404</b>	<b>1,945</b>	<b>2,832</b>	<b>2,757</b>	<b>9,938</b>	<b>3,065</b>	<b>2,976</b>	<b>3,318</b>	<b>4,650</b>	<b>14,009</b>	<b>4,750</b>	<b>4,600</b>	<b>4,650</b>	<b>4,850</b>	<b>18,850</b>
<b>Taxes on Income</b>	<b>228</b>	<b>271</b>	<b>394</b>	<b>376</b>	<b>1,269</b>	<b>422</b>	<b>313</b>	<b>292</b>	<b>600</b>	<b>1,627</b>	<b>700</b>	<b>700</b>	<b>700</b>	<b>700</b>	<b>2,800</b>
Tax rate	9%	14%	14%	14%	13%	14%	11%	9%	14%	12%	14%	15%	15%	15%	15%
<b>Net Income*</b>	<b>2,176</b>	<b>1,674</b>	<b>2,438</b>	<b>2,381</b>	<b>8,669</b>	<b>2,643</b>	<b>2,663</b>	<b>3,026</b>	<b>4,050</b>	<b>12,382</b>	<b>4,050</b>	<b>3,900</b>	<b>3,950</b>	<b>4,150</b>	<b>16,050</b>
QoQ	39%	-23%	46%	-2%		11%	1%	14%	34%		0%	-4%	1%	5%	
YoY	17%	13%	34%	53%	29%	21%	59%	24%	70%	43%	53%	46%	31%	2%	30%
Margin	22.9%	18.4%	25.2%	23.4%	22.5%	24.9%	25.1%	28.3%	31.6%	27.7%	31.4%	30.7%	30.5%	30.9%	30.9%
<b>EPS*</b>	<b>\$ 0.11</b>	<b>\$ 0.08</b>	<b>\$ 0.12</b>	<b>\$ 0.11</b>	<b>\$ 0.42</b>	<b>\$ 0.12</b>	<b>\$ 0.12</b>	<b>\$ 0.14</b>	<b>\$ 0.18</b>	<b>\$ 0.55</b>	<b>\$ 0.18</b>	<b>\$ 0.17</b>	<b>\$ 0.17</b>	<b>\$ 0.18</b>	<b>\$ 0.68</b>
QoQ	41%	-24%	42%	-6%		8%	0%	12%	30%		0%	-5%	0%	5%	
YoY	24%	19%	36%	42%	30%	9%	44%	14%	59%	30%	46%	39%	23%	-1%	24%
<b>Shares Out (Diluted)</b>	<b>19,754</b>	<b>20,014</b>	<b>20,588</b>	<b>21,480</b>	<b>20,459</b>	<b>22,003</b>	<b>22,126</b>	<b>22,356</b>	<b>23,000</b>	<b>22,400</b>	<b>23,100</b>	<b>23,300</b>	<b>23,700</b>	<b>23,700</b>	<b>23,500</b>

\* Pro forma results exclude stock-based comp, amortization of intangibles and one-time charges.  
 Source: Company Reports and RBC estimates.

## Required Disclosures

### Conflicts Disclosures

The analyst(s) responsible for preparing this research report received compensation that is based upon various factors, including total revenues of the member companies of RBC Capital Markets and its affiliates, a portion of which are or have been generated by investment banking activities of the member companies of RBC Capital Markets and its affiliates.

RBC Capital Markets, LLC makes a market in the securities of CEVA, Inc. and may act as principal with regard to sales or purchases of this security.

The author is employed by RBC Capital Markets, LLC, a securities broker-dealer with principal offices located in New York, USA.

### Explanation of RBC Capital Markets Equity Rating System

An analyst's 'sector' is the universe of companies for which the analyst provides research coverage. Accordingly, the rating assigned to a particular stock represents solely the analyst's view of how that stock will perform over the next 12 months relative to the analyst's sector average.

#### Ratings

**Top Pick (TP):** Represents best in Outperform category; analyst's best ideas; expected to significantly outperform the sector over 12 months; provides best risk-reward ratio; approximately 10% of analyst's recommendations.

**Outperform (O):** Expected to materially outperform sector average over 12 months.

**Sector Perform (SP):** Returns expected to be in line with sector average over 12 months.

**Underperform (U):** Returns expected to be materially below sector average over 12 months.

#### Risk Qualifiers (any of the following criteria may be present):

**Average Risk (Avg):** Volatility and risk expected to be comparable to sector; average revenue and earnings predictability; no significant cash flow/financing concerns over coming 12-24 months; fairly liquid.

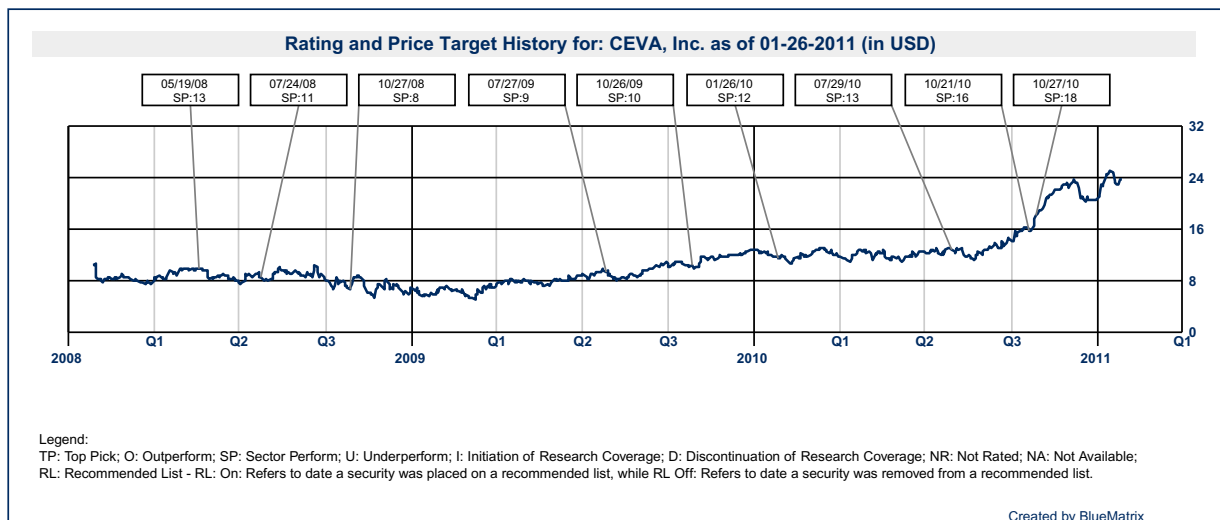
**Above Average Risk (AA):** Volatility and risk expected to be above sector; below average revenue and earnings predictability; may not be suitable for a significant class of individual equity investors; may have negative cash flow; low market cap or float.

**Speculative (Spec):** Risk consistent with venture capital; low public float; potential balance sheet concerns; risk of being delisted.

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			Count	Percent
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