

## Technology

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Industry Brief

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## Semiconductors: Industry Tidbit

## PLD Industry Perspective – New and Intriguing Player Entering the Ring

We thought commentary regarding a new and quite interesting Silicon Valley start-up called Tabula was worth some perspective given the company's introduction today of its ABAX family of 40-nm based programmable logic devices (PLDs). Tabula's focus is the communications PLD market (~\$1.5 billion total annual market).

- ◆ It is worth mentioning that the history of PLDs is littered with the bodies of 10s of companies that have attempted to compete with Xilinx (XLNX/\$26.61/Strong Buy) and Altera (ALTR/\$24.99/Strong Buy) and failed due to either lack of focus, software tool limitations or simply hardware that was incrementally no better than existing products. Only Actel (ACTL/\$13.52) and Lattice (LSCC/\$3.49) remain as alternatives to the big two and in niche roles in our view.
- ◆ What makes Tabula a company to watch is that in addition to being founded by electronic design automation (EDA) guru Steve Teig, most of the executive team are former elite Xilinx employees including the highly-regarded CEO Dennis Segers, who had been in the running to become CEO at Xilinx in the not so distant past based on our industry contacts.
- ◆ It is not our intent to comment either way on the technical merits of Tabula's architectural approach called Spacetime, which uses "time" as a way to rapidly reconfigure a chip design. However, Tabula's ABAX products do indeed sport much smaller die sizes (lower cost) and are spec'd with 2.5x the logic density vs. what Tabula views as comparable Xilinx or Altera 40nm-based products.
- ◆ Tabula today is indicating that it has design wins and will start production in 3Q10. From a software tool perspective, the design flow with ABAX PLDs (or 3PLDs as the company prefers) is no different (transparent) than design flows used with current PLD solutions.

Tabula – Right team, right price points, no software "issue," and performance metrics that are close to being disruptive. So what gives?

- ◆ Perspective - Assuming some level of success by Tabula, we are talking years. Remember that in the communications markets the design to production timelines are two to three years and Tabula may need to raise more money to play in the 28nm world where Xilinx and Altera are going later this year.
- ◆ Xilinx in the late 1990s worked on re-configurability as seen with Tabula's Spacetime and the company is adamant that it didn't work then and likely doesn't now. We understand Xilinx has an extensive patent portfolio in this arena.
- ◆ Conclusion – We doubt the Street today will register much of an impact to either ALTR or XLNX on Tabula's coming out as, rightly so, the jury will be out on the company for some time. While history is not in favor of Tabula succeeding, we however are not ones to dismiss Tabula out of hand as Mr. Seger's team is not to be underestimated.

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**Market Perform (MP3)** Expected to perform in line with the underlying country index.

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**Venture Risk (VR)** Companies with a short or unprofitable operating history, limited or less predictable revenues, very high risk associated with success, and a substantial risk of principal.

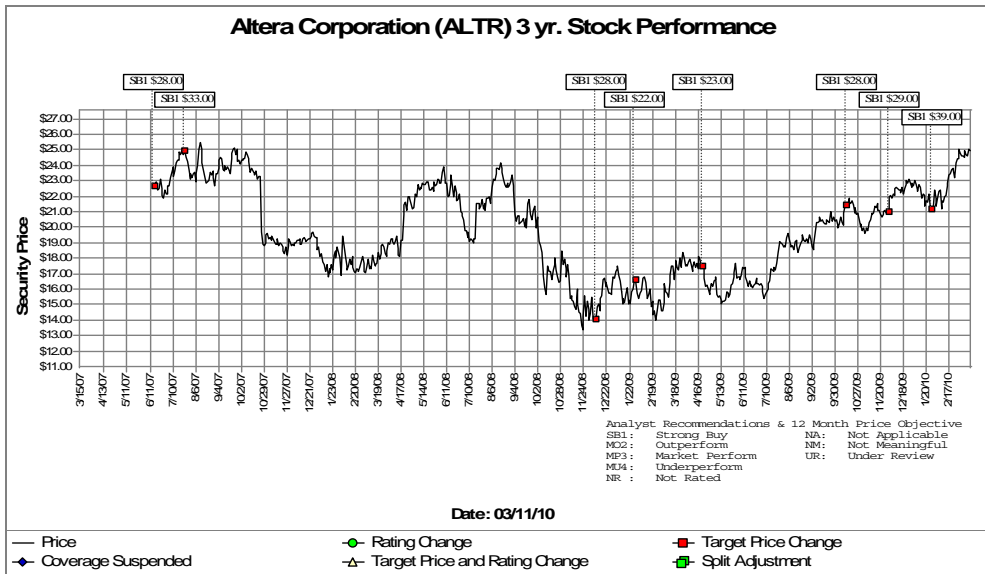
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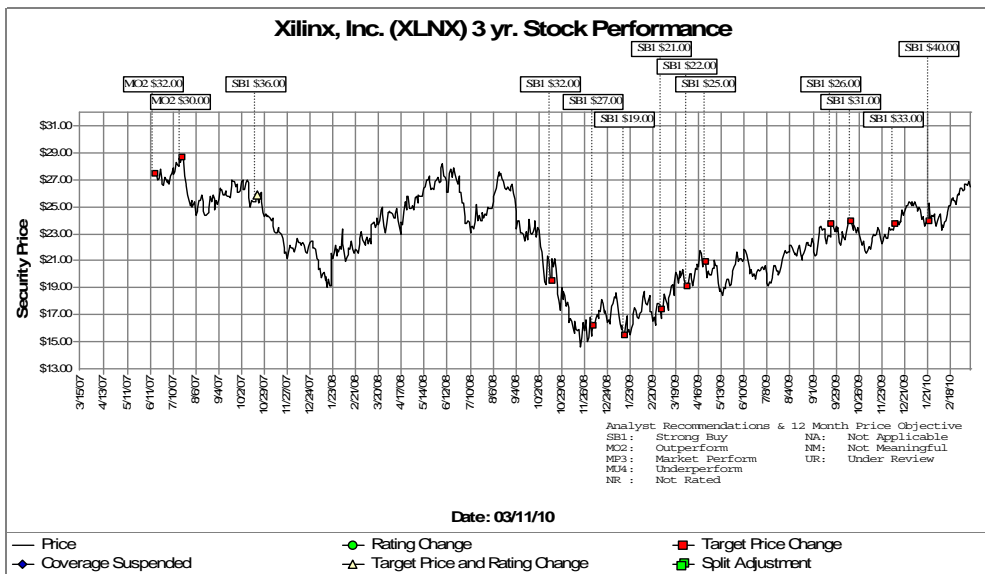
### Stock Charts, Target Prices, and Valuation Methodologies

Target Prices: The information below indicates target price and rating changes for the subject companies included in this research.



Update Date	Closing Price	Target Price	Rating
1/27/10	21.19	39.00	1
12/1/09	21.03	29.00	1
10/14/09	21.43	28.00	1
4/22/09	17.53	23.00	1
1/28/09	16.65	22.00	1
12/9/08	14.04	28.00	1
7/24/07	24.92	33.00	1
6/15/07	22.64	28.00	1

**Valuation Methodology:** The Raymond James methodology for assigning ratings and target prices includes a number of qualitative and quantitative factors including an assessment of industry size, structure, business trends and overall attractiveness; management effectiveness; competition; visibility; financial condition, and expected total return, among other factors. These factors are subject to change depending on overall economic conditions or industry- or company-specific occurrences. Our valuation methodology for ALTR is based on a P/E multiple comparison to its historical forward P/E range.



Update Date	Closing Price	Target Price	Rating
1/21/10	23.94	40.00	1
12/8/09	23.77	33.00	1
10/15/09	24.00	31.00	1
9/23/09	23.80	26.00	1
4/23/09	20.93	25.00	1
4/1/09	19.16	22.00	1
3/3/09	17.39	21.00	1
1/15/09	15.50	19.00	1
12/9/08	16.17	27.00	1
10/16/08	19.49	32.00	1
10/19/07	25.84	36.00	1
7/20/07	28.70	30.00	2
6/15/07	27.50	32.00	2

**Valuation Methodology:** Our valuation methodology for Xilinx is based on a P/E multiple comparison to top rival Altera and also considers the shares' historical forward P/E average.

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The semiconductor industry has a history of volatility given its position at the early stages of the technology supply chain; hence visibility is usually poor and in better times the industry suffers from double or over ordering which can lead to inventory gluts.

#### Company-Specific Risks for Altera Corporation

Risks for Altera include difficulties rolling out new products, a slowdown in the semiconductor industry, a downturn in the company's end markets, specific geographic weakness, storage issues or increased costs at foundry TSMC, and persisting macroeconomic weakness.

#### Company-Specific Risks for Xilinx, Inc.

Risks for Xilinx include difficulties rolling out new products, a slowdown in the semiconductor industry, a downturn in the company's end markets - specifically weakness in telecom, geographic weakness, and persisting macroeconomic weakness.

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