Commentary

EDA Industry Update December 2008 -- What did the Last Quarter Bring?

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*This issue of the EDA Industry Commentary is a few weeks delayed from its normal quarterly schedule, so that **the just-released re-stated Q3 financial results for Cadence Design Systems** could be included. Indeed, the sad story of Cadence's 2008 woes is incorporated below in* EDA Industry News Highlights.

*In the **May 2003**, **December 2003**, **February 2004**, **August 2004**, **December 2004**, **February 2005**, **May 2005**, **August 2005**, **December 2005**, **February 2006**, **May 2006**, **August 2006**, **December 2006**, **February 2007**, **May 2007**, **August 2007**, **November 2007**, **March 2008**, **June 2008** and **September 2008** **EDA Commentaries** by the authors (published on EDACafé.com), the then-current yearly and quarterly financial performances of a selected group of publicly traded Electronic Design Automation (EDA) companies were analyzed and compared. Expectations regarding the future financial performances of these same EDA entities were documented as well. The originally selected companies were **Altium, Ansoft, Cadence, Magma, Mentor Graphics, Nassda, Synopsys, Synplicity** and **Verisity**.*

Note: *As part of continuing EDA industry consolidation, two previously-selected EDA vendors, namely Verisity and Nassda, had been acquired by others and hence were dropped from the authors' quarterly EDA Commentaries. More recently, EDA vendor Synplicity was acquired by EDA vendor Synopsys, and EDA vendor Ansoft was acquired by MCAE vendor ANSYS. Consequently, both Synplicity and Ansoft will no longer independently appear in these EDA Industry reports.*

***This December 2008 report covers the performances of the remaining selected EDA vendors for the nominal Third Quarter of 2008.** In this issue, EDA News Highlights are followed by the revenue & earnings performances of the selected group of EDA players for Q3 2008, and then EDA vendor by vendor details. EDA Vendor stock prices are discussed. Finally, individual EDA vendor forecasts for Q4 2008 are provided, along with a commentary on the collapsing US economy.*

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Recent EDA Industry News Highlights:

On December 3, 2008 **Virage Logic Corporation** announced that the company sent a proposal on December 2 to the Board of Directors of LogicVision Incorporated, to acquire **LogicVision** for $1.05 per share in cash. The proposal provided a premium of 114% to LogicVision's closing price of $0.49 on December 1, 2008, and valued LogicVision at approximately $10.0 million. LogicVision responded that the proposal of $1.05 per share of common stock was inadequate and was not in the best interests of LogicVision's stockholders. As a result, Virage Logic announced on December 17, 2008 that it sent a letter to the Board of Directors of LogicVision to inform them that Virage Logic was revoking its proposal to acquire the company for $1.05 per share in cash.

On December 1, 2008 **Synopsys** announced it has signed a definitive agreement to acquire the **CHIPit** business unit of ProDesign, a leading provider of high-speed ASIC and SoC verification systems. Synopsys announced December 18 that the acquisition had been completed. The terms of the deal are not being disclosed.

The Cadence Saga to date:

Fresh news broke on October 15, 2008, that the CEO of Cadence Mike Fister and four of his top executives had "resigned" from Cadence. Shares of the company, which had lost three quarters of their value over the previous 12 months, immediately went down another 12% to $4.68 upon the news release October 15. (Cadence subsequently closed at $4.51 per share on Friday October 17, leaving a then-dismal market cap of $1.17 billion).

Combined with the deteriorating revenues, earnings, and stock price endured by Cadence in the first 9 months of 2008, the failed takeover of Mentor earlier this year meant that top management changes at Cadence were arguably inevitable. It is said by EDA insiders that Mike Fister was already out interviewing other companies for a new position for the several months prior to October 15. In addition to the aborted Mentor bid, Cadence's inability to sell itself to a private equity firm in 2007 and an expensive Cadence share buyback were also causes for Fister's resignation.

It may be fairly be said that Cadence also made some poor product decisions during Fister's four-year reign. It did not focus on expansion into key areas such as system level design nor into FPGA markets. Cadence also cut back its involvement in EDAC and halted its appearances at the industry's main trade show, the Design Automation Conference. Finally, EDA industry analyst Gary Smith claimed that Fister shifted Cadence away from industry-standard two- or three-year product & service license contracts toward five-year agreements, enabling Cadence to book more revenue up front. The shift to longer contracts "insulated their actual earnings for three years. At the end of three years, the bubble popped," Smith asserted.

(Of course, Bush 43's year-long second economic recession didn't help Cadence either. Indeed, Mentor's market cap had deteriorated to only $761 million as of October 17, 2008, and even rival Synopsys' market cap had declined some, although it was still a very healthy $2.63 billion on October 17, 2008).

Collateral damage at Cadence:

Soon after October 15, some analysts were predicting that Cadence would rapidly be forced to lay off up to 1500 of its 5000 then-current employees. But it was also speculated then that Cadence might be able to mitigate the depth of any layoff, because the October 15 resignations did eliminate some giant salaries. According to the Cadence proxy statement filed in March 2008 with the (now Madoff-tainted) S.E.C., Fister's total compensation exceeded $13.5 million in 2007. Even if not increased since the filing, the total annual compensation of the five executives who resigned on the Ides of October 2008 was more than $26 million.

In the meantime, the Cadence Board of Directors formed an **Interim Office of the Chief Executive** to oversee the day-to-day running of the company's operations. The Interim Office of the Chief Executive included: John B. Shoven, Ph.D., Chairman of the Board of Directors of Cadence, Lip-Bu Tan, Interim Vice Chairman of

Cadence's Board, Kevin S. Palatnik, Senior Vice President and Chief Financial Officer and Charlie Huang, Senior Vice President - Business Development and Chief of Staff of the Interim Office of the Chief Executive.

Additional Troubles:

Over and above the Cadence troubles outlined in the foregoing, the company announced still more problems on October 22, 2008 when it postponed its promised final Q3 financial results.

On October 22, Cadence announced that “*it was reviewing, in conjunction with the company's independent accountants and legal advisors, the recognition of revenue related to customer contracts signed during the first quarter of 2008.”* It was then thought that some $24 million in revenue associated with those contracts was booked in the first quarter but should have been booked over the duration of the contracts starting in the second quarter. Restatement of both Q1 and Q2 loomed in the company’s future.

In postponing Q3’s earnings announcement back then, the company reiterated its earlier Q3 guidance from July 23, 2008: the company expected Q3 revenue to be in the range of $235 to $245 million; third quarter GAAP net loss per share to be in the range of $(0.27) to $(0.25); and non-GAAP net loss per share to be in the range of $(0.11) to $(0.09).

As early as the morning of October 23, 2008, Cadence shares had lost in value another $1.39 each, trading in the area of $2.88, or a downward plunge of 32% in the first few hours of the October 23rd day in New York.

Next, Cadence shares dropped to $2.70 each in after hours trading on Friday October 24, 2008, then further reducing Cadence's market cap to just north of $700 million. *(On that same day, Mentor Graphics' market cap stood at $642 million, and Synopsys' was at $2.33 billion)*.

Also on October 24, a law firm called *Finkelstein Thompson LLP* (Washington, DC & San Francisco) announced it “was investigating Cadence Design Systems following the announcement that Cadence was indefinitely delaying its third-quarter earnings report and expected to restate its financial reports for the first half of 2008.”

On October 30, 2008 *Dyer & Berens LLP* announced that a class action has been commenced in the United States District Court for the Northern District of California on behalf of all purchasers of Cadence Design Systems, Inc. common stock during the period between April 23, 2008 and October 22, 2008. The case is entitled Hu v. Cadence Design Systems, Inc., Michael J. Fister, William Porter and Kevin S. Palatnik. The complaint charges Cadence and certain of its current and former officers with violations of the Securities Exchange Act of 1934.

Several other law firms have since entered the fray.

Next, on November 5, 2008 Cadence announced the commencement of a restructuring program designed to “focus the company's strategy, streamline the business and improve operational execution and financial performance.” Once completed, the company expected to achieve annual operating expense savings of at least $150 million through a combination of workforce and other expense reductions.

In the same November 5 announcement, the company expected to eliminate at least 625 full-time positions, representing 12% of its global employee base, plus a substantial number of contractors and consultants. Because of varying regulations in the jurisdictions and countries in which Cadence operates, workforce reductions would be realized over a period of time and were expected not to be completed in full until the second half of fiscal 2009. Cadence expected to record a restructuring charge of approximately $65 million to $70 million pre-tax, $48 million of which was predicted to be recorded in the third quarter of 2008, once Q3 restatement occurred.

Several analysts said at the time that Cadence's November 5th cost cutting plan was not severe enough.

Cadence Shares closed trading in New York on November 6 at $3.98 a share, down more than 8% on the day. Cadence's Market Cap stood just north of $1 billion. (The Dow itself lost 443 points on that day, or 4.85%).

On November 21, 2008, Cadence announced the promotion of three senior managers to executive positions in R&D and Worldwide Sales and Field Operations. All three came from inside Cadence ranks and all now report to the *"Interim Office of the Chief Executive."*

Dr. Chi-Ping Hsu, 53, was named senior vice president of research and development for the Implementation Products Group. Dr. Hsu joined Cadence in 2003 from Get2Chip, Inc. **Mr. Nimish Modi**, 46, was named senior vice president of research and development for the Front End Group. He came to Cadence in 2006 from Intel. Finally, **Mr. Tom Cooley**, 46, was named senior vice president of Worldwide Field Operations. Prior to joining Cadence in 1995, Cooley held application engineering and sales positions at Cadnetix, Mentor Graphics and Racal-Redac.

Since these men are well-respected veteran Cadence employees, we can only speculate that the promotions will survive the eventual hiring of a new CEO.

By the way, Cadence's Market Cap stood at only $812 million at the close of trading on November 21, 2008, down from $975 million just three days earlier. The large reduction in Stock Market Capitalization suffered by Cadence since January 2008 is behind most of the company's woes.

Cadence again made the news in late November 2008, when the difficulty Cadence endures just keeping up with those pesky SEC filings associated with Cadence's Q3 decision to review its financial statements for 2008 was announced. For example, Cadence received a letter from The NASDAQ Stock Market on November 18, 2008 indicating that the company was not in compliance with the filing requirements under NASDAQ Marketplace Rule 4310(c)(14) because Cadence did not file in a timely fashion its Quarterly Report on Form 10-Q for the quarter ended September 27, 2008. Cadence was told to submit a plan to regain compliance no later than January 19, 2009, or risk being delisted from The NASDAQ Global Select Market.

Rumors also surfaced that Cadence had "evicted" from membership a large number of software vendors from its Connections partnership program. Cadence denied these rumors.

Cadence Q3 2008 Report finally surfaces:

Recall that back in October 2008, Cadence delayed reporting its Q3 2008 financial results to launch an investigation of its financial methods and practices for all of 2008.

Well, on December 10, 2008, Cadence finally reported the results of said investigation, and the news was not pretty.

Cadence said it actually lost $169 million, or 67 cents per share, for Q3 2008, which certainly compares unfavorably with profit of $72.7 million, or 24 cents per share, in Q3 2007. The Q3 2008 revenue of course also declined dramatically, falling 42% to $232 million from $401 million in Q3 2007. The much-reduced Q3 2008 revenue figure still missed analysts' most-recent pre-December 10 estimates for Q3 2008 of $239 million.

The company paid a dear price as it finally announced its Q3 2008 results. Trading near $4.00 per share on December 9, 2008, Cadence shares had plunged to $2.73 each by close of trading on Friday December 12, 2008, resulting in a meager Market Cap of only $710 million. (Cadence shares then sank to $2.50 each in after-hours trading on Friday December 12).

The other two Big 3 EDA fellow travelers have also suffered during Bush 43's year-long recession. Between December 31, 2007 and December 12, 2008, **Mentor Graphics** shares have declined in value from $10.78 each to $5.14 each, resulting in a Market Cap today for Mentor of only $475 million. *(During the same period, Cadence crumbled from $17.01 to $2.73 per share).*

By these measures, **Synopsys** is a relative star, falling from $25.93 per share to "only" $17.81 between December 31, 2007 and December 12, 2008. As a result, Synopsys Market Cap remains a healthy $2.52 billion.

Back to Cadence:

For Q4 2008, Cadence is forecasting revenue of only $215 million to $225 million, well below analysts' recent consensus of $247 million. The Q4 loss is forecast to be ~5 cents per share, although analysts' predict ~7 cents per share loss.

By the way, Cadence also announced on December 10, 2008 that it had completed an accounting review, saying it will restate $24.8 million in revenue from the first quarter of 2008 and $12 million from the second quarter. **More significantly, the company's own review found that a contract was improperly accounted for early in 2008, but that no illegal activity had occurred on the part of its executives or employees.** That's a relief!

Cadence shares closed December 22, 2008 at $3.29 each, yielding a Market Cap of a meager $843 million.

In other EDA highlights:

On October 15, 2008 the **Global Semiconductor Alliance (GSA)** released the CYQ2 2008 version of its Global Semiconductor Financial Report. This quarterly report includes detailed trend analysis on financial data for fabless, IDM, pure-play foundry, intellectual property, electronic design automation, design service and back-end sectors.

Worldwide semiconductor revenue totaled $67.4 billion in CYQ2 2008, falling 2% quarter-over-quarter, but rising 5% year-over-year.

Fabless revenue totaled $13.9 billion, which grew 4% quarter-over-quarter and grew 9% year-over-year. This revenue equated to 21% of the semiconductor sales total.

The top 10 fabless companies by second quarter revenue combined for $8 billion, or 58% of total fabless revenue:

1. Qualcomm: $1.8B
2. Broadcom: $1.2B
3. NVIDIA: $893M
4. Marvell Technology Group : $842M
5. SanDisk : $816M
6. LSI: $692M
7. MediaTek: $544M
8. Xilinx: $488M
9. Avago Technologies: $439.0M
10. Altera : $359M

Table 1 Top 10 Fabless Companies by Q2 2008 Revenues

On October 30, 2008 the **Semiconductor Industry Association (SIA)** reported that worldwide sales of semiconductors, the second-largest U.S. export, increased by 1.6% to $23 billion in September compared to sales of $22.6 billion in September 2007. Sales grew by 1.1% from August 2008 when sales were $22.7 billion. Sales of $196.4 billion for the first nine months of 2008 were up by 4% compared to the first nine months of 2007 when sales were $189 billion. Excluding memory products, industry sales in September grew by 7.8% year-on-year.

A concerned SIA President George Scalise said, "*The rate of semiconductor sales growth slowed in September as the industry began to feel the effects of the turmoil in world financial markets. We face a near-term period of uncertainty with a steep decline in consumer confidence and caution in the enterprise segment.*"

The SIA's Global Sales Report (GSR) is a three-month moving average of "sales activity" tabulated by the World Semiconductor Trade Statistics (WSTS) organization, which represents approximately 66 companies. The moving average for the third quarter shown in **Table 2** below has the Americas accounting for only 14% of "*sales activity*", Europe slightly ahead, Japan accounting for over 18% and Asia Pacific accounting for over 52%:

Region	3Q08	2Q08	Delta
Americas	3.21	3.4	-5.6%
Europe	3.48	3.37	3.3%
Japan	4.26	3.95	7.8%
AP	12.02	10.85	10.8%
Total	**22.97**	**21.57**	**6.5%**

Table 2 SIA Global Sales report: Three-month Moving Sales Average

Recession blues:

With the recession spreading to the semiconductor sector, the impact on Electronic Design Automation (EDA) vendors can't be far behind. And the woes of the semiconductor companies, as we saw above, have been making news.

Applied Materials, National Semiconductor and AMD, the latest in the chip sector to feel the economic slump, announced cuts in their work forces and also announced downbeat financial projections.

The Wall Street Journal reported on November 14, 2008 as follows:

Applied, considered "the sales leader among makers of tools for manufacturing chips, said it will cut 1,800 jobs, or 12% of its work force, through a combination of attrition, voluntary severance and other reductions." The company "announced the planned reductions -- expected to reduce expenses by about $400 million a year -- along with a 45% drop in profit for the fiscal fourth quarter ended October 26, 2008 and said it expects further declines in sales and orders in the current quarter."

National Semiconductor "said it will cut nearly 5% of its work force, or about 300 positions, in an effort to save about $50 million in annual expenses." The maker of "chips used in a variety of products that include computers and televisions, said it now sees revenue for the fiscal second quarter ending November 23, 2008 of $420 million to $425 million, well below the forecast it gave in September of $470 million to $480 million."

Advanced Micro Devices Inc. (AMD) "has already changed CEOs, announced 2,100 layoffs this year and is cutting back on expenses. Travel is scrutinized more and even cell phone and computer upgrades for employees are being delayed." Moreover, "slumping sales, big layoffs and devastated stock prices are becoming the norm," according to the Associated Press. "Semiconductor companies' fortunes say a lot about the health of other tech industries, because slowdowns in chip sales can reflect slumping demand for everything from personal computers to cell phones."

How did the covered EDA Vendors fair during the Third Quarter of 2008?

If you read the **Cadence Saga** in the foregoing, you now have a good handle on how that company is doing. But what about the other selected vendors as a group, and each on its own?

As shown in **Table 3**, the **combined revenue performance** of the five EDA firms for the third quarter was $818 million, down 15.5% from the $970 million in the same quarter a year ago, and down almost 9% from $898 in the preceding quarter. Altium was the year-over-year revenue percentage growth leader at +29% with Synopsys coming second at almost +12%. Magma and Cadence suffered significant year over year decreases in revenue while Mentor dropped only 3%.

Sequentially, Altium, Cadence and Magma endured decreases of over minus 20% in revenue compared to the just prior quarter while, Mentor and Synopsys managed modest gains.

Company	Last QTR Revenue	Prev QTR Revenue	Last vs. Prev QTR	Comparable 2007 QTR	Last QTR vs. Comparable QTR
Altium	12,205	18,200	-32.9%	9,435	29.4%
Cadence	232,488	308,041	-24.5%	400,924	-42.0%
Magma	36,458	45,742	-20.3%	53,493	-31.8%
Mentor	184,852	182,404	1.3%	190,489	-3.0%
Synopsys	352,805	344,128	2.5%	315,233	11.9%
Total	**818,808**	**898,515**	**-8.9%**	**969,574**	**-15.5%**

Table 3 – Public EDA Companies' Latest Quarterly Revenue Performance ($000)

Figures 1 and **2** below provide additional revenue comparisons among vendors. In Q3 2008, Synopsys at 44% dominated Cadence at 28% for largest market share among these firms. Mentor was third at 23%.

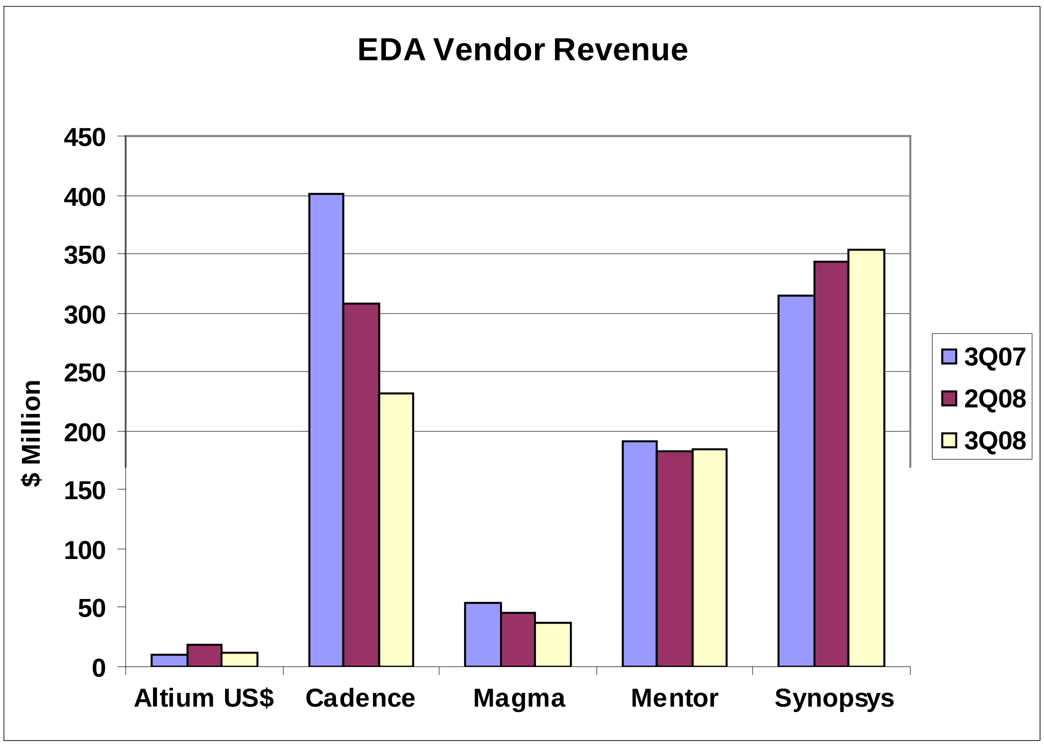

Figure 1 EDA Vendors Financial Performance

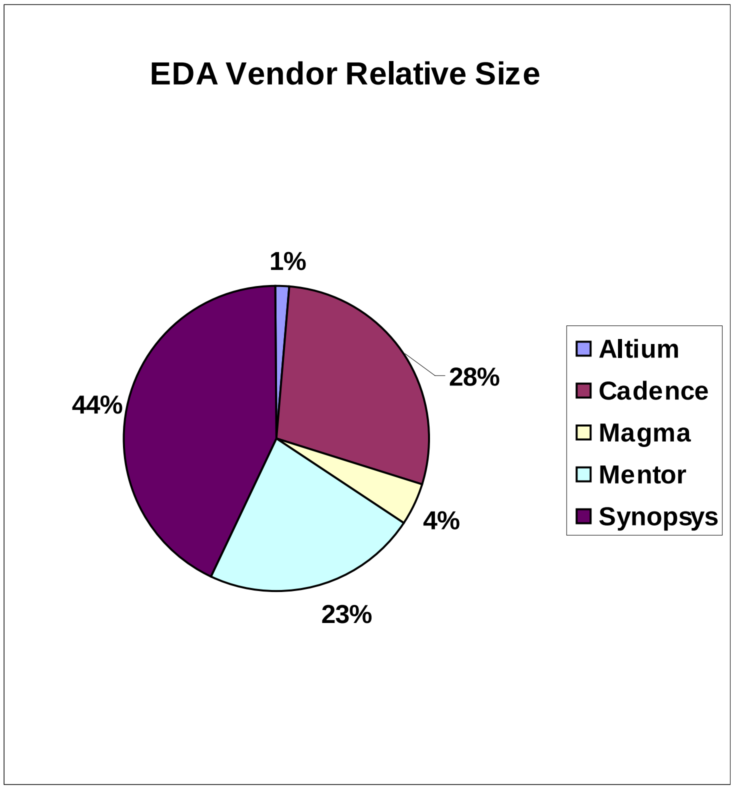

Figure 2 EDA Vendor Relative Size (based on Q3 2008 revenues)

Turning to **earnings performances** in Q3 2008, **Table 4** shows lots of red numbers. The EDA group of 4 (that reported quarterly income) delivered reported combined loss of $227 million. This was quite a reversal from the prior quarters that saw net income of $98 million in the third quarter of 2007. and net income of $30 million just last quarter. Only Synopsys posted a net gain in Q3 2008 and also only Synopsys registered earnings growth (13%) year-over-year. But even Synopsys suffered an earnings drop (-20%) compared to the just previous quarter.

Company	Last QTR Earnings	Prev QTR Earnings	Delta Last vs. Prev	Comparable 2007 QTR	Delta Last vs. 2007
Altium	N/A	N/A		N/A	
Cadence	(169,066)	4,996	(174,062)	72,732	(241,798)
Magma	(25,906)	(14,910)	(10,996)	(6,395)	(19,511)
Mentor	(78,244)	(17,192)	(61,052)	(8,796)	(69,448)
Synopsys	46,397	57,749	(11,352)	41,014	5,383
Total	**(226,819)**	**30,643**	**(257,462)**	**98,555**	**(325,374)**

Table 4 Public EDA Companies' Latest Quarterly Earnings Performances ($000)

Company by Company Q3 2008 details:

Altium

On October 3, 2008 **Altium Limited** reported financial results for its first quarter the period ended September 30, 2008. Total revenue for the quarter was $12.2 million, an increase of 29% from the $9.4 million in the same quarter a year earlier but a drop of 33% from the $18.2 million in the prior quarter. The Americas and Europe each accounted for about a third of the revenue. AP and China accounted for 13% and 18.5% respectively.

KUS$	**3Q08**	**2Q08**	**Delta**	**3Q07**	**Delta**
Americas	4,113	7,500	-45.2%	3,587	14.7%
Europe	4,218	7,800	-45.9%	2,973	41.9%
Asia Pacific	1,554	2,900	-46.4%	1,457	6.7%
Consulting	59	0		108	-45.4%
China	2,261	1,800	25.6%	1,310	72.6%
Total	**12,205**	**18,200**	**-32.9%**	**9,435**	**29.4%**

Table 5 Altium Revenue by Geography

Nick Martin, Altium Founder and CEO, said "*We are pleased to report continued sales growth as we gain further traction for our next generation electronics design solutions and as our strengthened sales organization gains momentum. In working to our financial model that we presented to shareholders in April 2008, we expect this growth rate to continue across all regions to finish the year at our 25%+ sales growth target whilst holding our operational cost growth within our single digit target. As planned for, this indicates a healthy return to our bottom line this financial year, including for our first half.*"

cadence

For the complete **Cadence Saga**, see the story under **EDA News Highlights** above.

On December 10, 2008 **Cadence Design Systems, Inc.** finally reported financial results for the third quarter of 2008, the period ending in late September 2008. The company also reported the results of accounting investigation of the recognition of revenue related to certain customer contracts. Total revenue for the quarter was $232 million, a decrease of 43% from the $405 million in the same quarter a year earlier and a decrease of 24.5% from the $308 million in the preceding quarter (as restated). Product revenue was $107 million or 46% of total revenue. This was a decrease of 61% from the third quarter of 2007 and a decrease of 38% from the second quarter of 2008. Services revenue was $33 million accounting for 14% of revenue. This was an increase of 5.3% year-over-year but a drop of 2.4% sequentially. Maintenance revenue was $92 million or 40% of total revenue, a decrease of 4% from the year ago quarter and a decrease of 7.3% from the previous quarter.

Revenue from North America accounted for 43% of total revenue. Europe accounted for 23%, Japan 20% and the rest of Asia for 14%.

$K	3Q08	2Q08	Delta	3Q07	Delta
NA	99,970	147,860	-32.4%	164,379	-39.2%
Europe	53,472	64,689	-17.3%	100,231	-46.7%
Japan	46,498	58,528	-20.6%	92,213	-49.6%
Asia	32,548	36,965	-11.9%	48,111	-32.3%
Total	**232,488**	**308,041**	**-24.5%**	**404,933**	**-42.6%**

Table 6 Cadence Financial Results by Geographic Segment

In terms of functional areas Functional Verification accounted for 22% of total revenue, Digital IC Design for 20%, Custom IC for 26%, DFM for 7%, System Integration for 11% and Services for 14%.

$K	3Q08	2Q08	Delta	3Q07	Delta
Func Verif	51,147	77,010	-33.6%	96,222	-46.8%
Dig IC Design	46,498	73,930	-37.1%	76,176	-39.0%
Custom IC	60,447	70,849	-14.7%	120,277	-49.7%
DFM	16,274	21,563	-24.5%	32,074	-49.3%
Sys Inter	25,574	30,804	-17.0%	40,092	-36.2%
Services	32,548	33,885	-3.9%	36,083	-9.8%
Total	**232,488**	**308,041**	**-24.5%**	**400,924**	**-42.0%**

Table 7 Cadence Financial Results by Product Segment

Net loss for the quarter was $169 million, compared to net gains of $72 million and $5 million in the year-ago-quarter and prior quarter, respectively. The loss for the quarter included $48 million in restructuring and other costs.

As a result of the accounting investigation Cadence will adjust $24.8 million of product revenue recognized in the first quarter of 2008 and $12.0 million of product revenue recognized in the second quarter of 2008. This revenue will be instead realized over the term of the relevant arrangement. This adjustment had the following impact on revenue and profit for the first and second quarters of the year.

Delta $K	Q1	Q2
Revenue	($16,439)	($21,437)
Net Income	($10,476)	($21,790)

Table 8 Impact of the Accounting Investigation

Cadence is preparing its third quarter Form 10-Q, together with amended Form 10-Qs for the first and second quarter of 2008, and expects to file all three reports in December 2008.

Lip-Bu Tan, Interim Vice Chairman of the Board of Directors and member of the Interim Office of the Chief Executive, said, "*Over the past two months, the Interim Office of the Chief Executive has been working closely with the management team, and taking aggressive steps to better position the company today and in the future. We remain focused on leveraging the company's many strengths, including our market leadership position, our innovative, cutting-edge technology and our long-standing customer relationships. We believe strongly that Cadence's highly ratable* *business model and improved cost structure form a solid foundation for enhanced operating and financial performance and long-term growth."*

The Board of Directors has formed a **search committee**, co-chaired by Dr. John Shoven, Chairman of the Board, and Lip-Bu Tan, to identify a candidate to lead the company on a permanent basis.

On December 4, 2008 **Magma Design Automation Inc.** reported revenue for its fiscal 2009 second quarter, ended November 2, 2008. Total revenue for the quarter was $36.4 million, a decrease of 32% from the $53.5 million in the same quarter a year ago and a decrease of 25% from the $45.7 million in the prior quarter. The $36.4 million exceeded the revenue guidance range issued by the company on August 28, 2008 of $34 million to $35 million. License revenue was $19.7 million accounting for 54% of total revenue. This was a decrease of 45% year-over-year and a decrease of 32% sequentially. Bundled revenue was $7.5 million or 20% of total revenue. This was down 19% from a year earlier and down 33% from the previous quarter. Services revenue was $9.2 million accounting for 25% of total revenue. This was up almost 7% year-over-year but down 5.3% from the prior quarter. The percentage of revenue from backlog-related transactions was in the high 80s. This compares to the previous quarter's mix of 91% of revenue from backlog-related transactions.

On a geographic basis North America accounted for 55% of total revenue, Europe for 16%, Japan for 21% and the rest of Asia Pacific for 8%.

Geography	3Q08	2Q08	Delta	3Q07	Delta
North America	20,044	24,332	-17.6%	31,610	-36.6%
Europe	5,833	12,765	-54.3%	4,106	42.1%
Japan	7,621	4,112	85.3%	14,601	-47.8%
AP	2,960	4,533	-34.7%	3,176	-6.8%
Total	**36,458**	**45,742**	**-20.3%**	**53,493**	**-31.8%**

Table 9 Magma Revenue Performance by Geographic Segment

Rajeev Madhavan, chairman and CEO of Magma, said, "*Revenue and earnings exceeded our guidance range as we executed effectively against our operating plan during the second quarter. But despite the success of Q2, we believe it is prudent to adapt our outlook to the realities of the current economic environment and reduce our expected revenue for fiscal 2009 to a range of $144 million to $146 million. Our products continue to do well in competitive engagements, but in this period of economic uncertainty customers are paying particular scrutiny to their spending."*

Back on October 2, 2008, Magma announced it was restructuring certain aspects of the company's operations, resulting in reduced costs and focus on key product areas. Magma expected to record a one-time charge during the second quarter of fiscal 2009 ranging from $2.5 million to $3.5 million.

Net loss for the quarter was $25.9 million. This was three times the loss of $6.4 million in the year ago quarter, and a 74% increase from the loss of $14.9 million in the preceding quarter.

On November 19, 2008 **Mentor Graphics Corporation** reported results for the third quarter, the period ended October 31, 2008. Total revenue for the quarter was $185 million, a decrease of only 3% from the $190 million in the third quarter of 2007 and a 1.3% increase from the $182 million in the second quarter of 2008. The $185 million for Q3 was below the guidance given last quarter but in line with a "guidance update" given November 11, 2008. Systems and Software revenue was $97 million accounting for 53% of total revenue. This was a drop of 10.2% from the year ago quarter but an increase of 1.5% sequentially. Services and Support revenue was $87.5 million or 47% of total revenue. This was an increase of 6.6% year-over-year and an increase of 1.3% sequentially.

In the recent third quarter, Americas accounted for 40% of total revenue, Europe accounted for 35% of total revenue, the Pacific Rim 15% and Japan 10%. Japan was down around 50% both year-over-year and sequentially.

$K	3Q08	2Q08	Delta	3Q07	Delta
America	73,941	63,841	15.8%	76,196	-3.0%
Europe	64,698	54,721	18.2%	47,622	35.9%
Japan	18,485	36,481	-49.3%	38,098	-51.5%
Pac Rim	27,728	27,361	1.3%	28,573	-3.0%
Total	**184,852**	**182,404**	**1.3%**	**190,489**	**-3.0%**

Table 10 Mentor Graphics Financial Breakdown by Geography

Revenue by product area was 25% Integrated Systems Design, 30% IC Design2Silicon, 25% Scalable Verification, 10% New and Emerging and 10% Services.

$K	3Q08	2Q08	Delta	3Q07	Delta
Integrated Sys Design	46,213	36,481	26.7%	47,622	-3.0%
IC Design2Silicon	55,456	54,721	1.3%	47,622	16.4%
Scalable Verification	46,213	45,601	1.3%	47,622	-3.0%
New & Emerging	18,485	27,361	-32.4%	28,573	-35.3%
Services	18,485	18,240	1.3%	19,049	-3.0%
Total	**184,852**	**182,404**	**1.3%**	**190,489**	**-3.0%**

Table 11 Mentor Graphics Financial Breakdown by Product Segment

Revenue from Perpetual Licenses was 20% of total revenue, from Ratable 20% and from UpFront 60%. On a year-over-year basis Perpetual was down 35%, Ratable was up 94% and UpFront was down 3%. On a sequential basis Ratable was down 24%.

"The current economic outlook has delayed the typical contract renewal pattern we had been seeing. Customers are now more typically waiting until the quarter of contract expiration to renew. One of the consequences of this pattern is that we see greater strength going into fiscal 2010," said Walden C. Rhines, chairman and CEO of Mentor Graphics. *"Even in this tougher environment, renewals in our top ten contracts in the quarter increased 35% over their previous contract value primarily due to adoption of new capabilities, like design for manufacturing, that were just emerging three years ago when the contracts were created."*

On December 3, 2008 **Synopsys, Inc.** reported financial result for its fourth quarter and for its fiscal year 2008, the periods ended October 31, 2008. Total revenue for the quarter was $352.8 million, an increase of almost 12% from the $315 million in the same quarter a year earlier, and an increase of 2.5% from the $344 million in the prior quarter. The $352.8 million was in the middle of the range given as guidance last quarter. Time Based License (TBL) revenue was $290 million or 82% of total revenue. This was up 12.6% year-over-year and 0.4% sequentially. Upfront license revenue was $26 million accounting for 7% of total revenue. This was up 28% from the year ago quarter and up 27% from the previous quarter. Maintenance and services revenue was $36 million or 10% of total revenue. This was a drop of 1.8% year-over-year but an increase of 5.5% sequentially.

North America accounted for 51% of total revenue. Europe accounted for almost 15%, Japan almost 18% and the rest of AP for almost 17%. Japan was up 28% year-over-year but down 15% sequentially. North America and Europe had single digit percentage improvements compared to last year and last quarter. Asia Pacific had low double digit growth.

Core EDA revenue accounted for 75% of total revenue, IP & Systems for 9.5%, DFM for 11% and Services for almost 5%. Synplicity products associated with FPGA design are now contained in Core EDA category and products and Synplicity products associated with ASIC rapid prototyping and DSP are now contained within IP and Systems.

$M	**3Q08**	**2Q08**	**Delta**	**3Q07**	**Delta**
Core EDA	263.7	258.5	2.0%	232.5	13.4%
IP & Systems	33.5	29.8	12.4%	24.4	37.3%
DFM	39	38.8	0.5%	42.3	-7.8%
Services	16.6	17	-2.4%	16	3.8%
Total	352.8	344.1	2.5%	315.2	11.9%

Table 12 Synopsys Financial Results by Product Segment

Net income for the quarter was $46.3 million, an increase of 13% from the $41 million in the same quarter a year earlier but a drop of almost 20% from the $57.7 million in the preceding quarter.

For fiscal year Synopsys had total revenue of $1.337 billion, a 10% increase from the $1.212 billion in the prior fiscal year. TBL license revenue was $1.125 billion or 84% of the total. This was an increase of 12% from the prior year. Upfront license revenue was $71 million or 5.3% of total revenue. Maintenance and services revenue was $140 million, down almost 1% from the previous year. North America represented 51% of total revenue, Europe 15%, Japan 19% and the rest of AP 16%.

For the year, Core EDA represented 75% of total revenue, IP & Systems 8.4%, DFM 11.5% and Services 5%, a very healthy mix.

$1M	**F2008**	**F2007**	**Delta**
Core EDA	1,005	907	10.7%
IP & Systems	112	98	14.7%
DFM	154	148	4.1%
Services	67	60	11.2%
Total	**1,337**	**1,213**	**10.3%**

Table 13 Synopsys Financial Results for Fiscal 2008 by Product Segment

Anticipating the economic recession effects, Aart de Geus, chairman and CEO of Synopsys, said, "*Synopsys delivered very good financial and operational results in (fiscal) Q4 and (fiscal) 2008, despite a marked change in the economic environment. While the global economic landscape is unpredictable, and leading to more conservative consumer and business practices, Synopsys is heading into 2009 with a solid financial, technical and business foundation."*

EDA Vendor Stock Performance

As shown in **Tables 14** and **15** and **Figure 3** below, the combined stock prices for the selected 5 EDA vendors decreased in absolute terms 47% year-over-year and decreased 25% sequentially. The average percentage change was down 36% year-over-year and down 20% sequentially. In the same time period the major indexes actually faired better, falling an average of “only” 20% year-over-year and 7.4% compared to the previous quarter.

Symbol	**3Q07**	**2Q08**	**3Q08**	**QoQ**	**YoY**
ALU	0.92	0.55	0.39	-29.1%	-57.6%
CDNS	22.19	10.10	6.76	-33.1%	-69.5%
LAVA	14.70	6.07	4.02	-33.8%	-72.7%
MENT	15.10	15.80	11.35	-28.2%	-24.8%
SNPS	27.08	23.90	19.95	-16.5%	-26.3%
Total	**79.99**	**56.42**	**42.47**	**-24.7%**	**-46.9%**
			Ave Delta	**-20.1%**	**-35.9%**

Table 14 – Public EDA Companies’ Stock Performance (Synopsys adjusted for 2:1 split September 2003)

On a year-over-year basis, each of the selected EDA stocks was down, with Magma (-73%), Cadence (-70%) and Altium (-57%) topping the loser list. Mentor and Synopsys stock prices both fell over 20%. On a sequential quarterly basis, Magma, Cadence, Altium and Mentor all saw stock prices dip in the area of 30%. Synopsys fell "only" 16.5%.

Symbol	3Q07	2Q08	3Q08	QoQ	YoY
DJI	13,167	11,350	10,851	-4.4%	-17.6%
Nasdaq	2,603	2,293	2,092	-8.8%	-19.6%
S&P	1,526	1,280	1,165	-9.0%	-23.7%
			Ave Delta	**-7.4%**	**-20.3%**

Table 15 - Statistics of the Major Stock Indexes

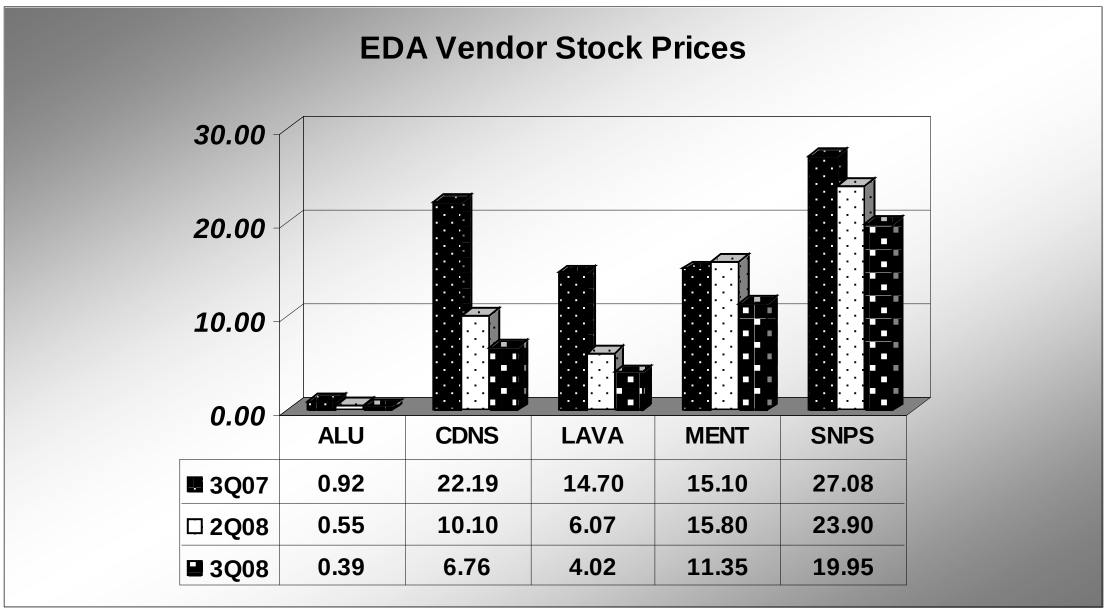

Figure 3 – Public EDA Companies' Stock Prices ($)
(Synopsys adjusted for 2:1 split September 2003)

The nominal third quarter ended September 30, 2008**.** The market has continued to slide for both the Big 3 and the Dow Jones Index as shown in the **Figure 4** chart below.

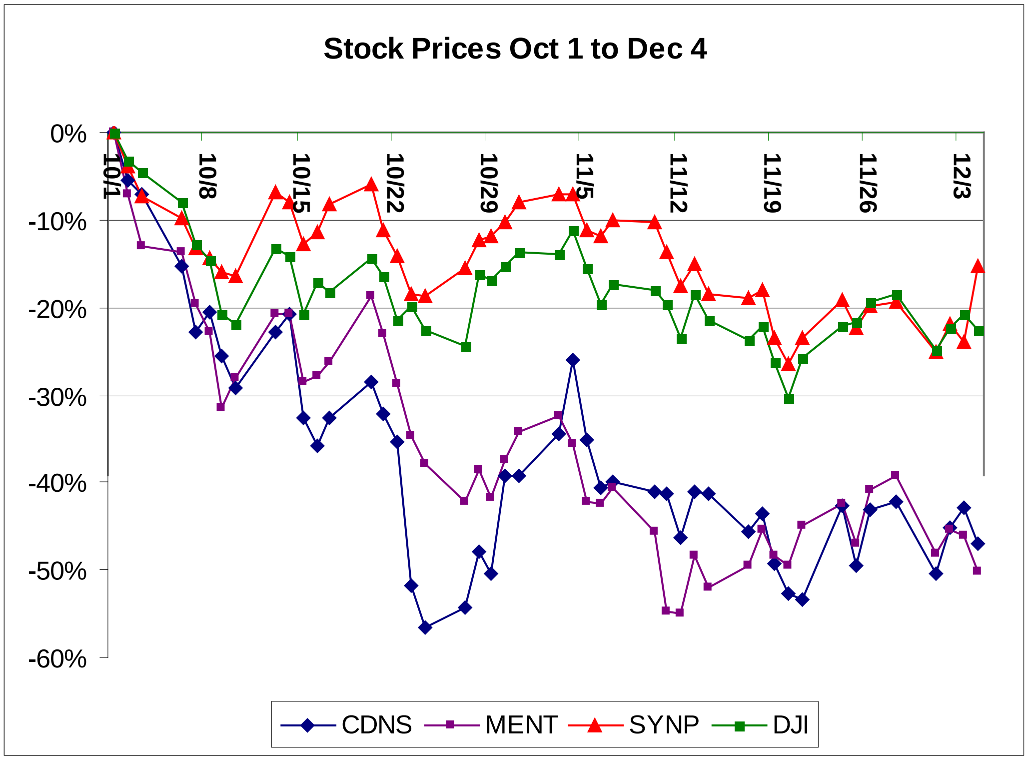

Figure 4 Recent Stock Prices

MCAD versus EDA Q3 2008

The detailed third quarterly performances of a selected group of public MCAD Vendors have been provided in the authors' MCAD Commentary for December 2008, recently published on MCADCafe. *(Go to MCADcafe.com and scroll down the left-hand column of photos to the link).*

As **Table 16** below reveals, the combined Q3 2008 revenue from the top three MCAD vendors was $1.38 billion, 61% higher than the $858 million in combined revenue from the top three EDA vendors. The three leading MCAD vendors all had net earnings for the quarter, while on the EDA side, both Mentor Graphics and Cadence suffered significant net losses.

On average, the MCAD vendors reported Q3 2008 positive earnings of 14.8% of sales, whereas EDA vendors delivered a combined loss.

$Millions	**Revenue**	**Earnings**
MCAD		
Autodesk	607	104
Dassault	477	65
PTC	300	37
Total MCAD	***1,384***	***206***
EDA		
Cadence	322	(169)

Synopsys	352	46.3
Mentor	184	(78)
Total EDA	***858***	***(201)***

Table 16 MCAD vs ECAD

Keep in mind that Autodesk sells its products predominantly through valued added resellers and distributors. Dassault Systemes sells predominantly through IBM and its Business Partners and in some instances, notably SolidWorks, through VARs. Thus, if one were to count actual end-user purchases of MCAD products, the combined MCAD revenue total would raise the Big 3 MCAD dollar total substantially. On the other hand, Autodesk has not-insignificant revenue outside MCAD in AEC, GIS and Media/Entertainment. Also, remember that UGS, a leading MCAD vendor, is now part of Siemens and does not disclose its financial performance.

Forecast Guidance from Individual EDA Providers

ANTICIPATING TOUGHER TIMES AHEAD, the combined forecast (of 4 of the 5 giving guidance) for the next quarter calls for a drop of 23% compared to the same quarter a year earlier and an almost 5% drop from the current quarter. On a year-over-year basis, only Synopsys is forecasting revenue growth at 6.7%. Cadence and Magma are forecasting around a 50% drop.

In comparison with the current quarter, Mentor is very optimistic with a 46% projected increase. Cadence and Magma again see downsides at minus 32% and minus 22%, respectively.

$M	Next Q	Current Q	Delta	Year Ago	Delta
Cadence	220	322	-31.8%	458	-52.0%
Magma	29	36	-21.8%	56	-48.8%
Mentor	270	185	46.1%	284	-4.9%
Synopsys	336	353	-4.8%	315	6.7%
Total	**855**	**897**	**-4.7%**	**1,113**	**-23.2%**

Table 17 Revenue Forecast for the Next Quarter

Individual Company by Company Forecast Guidance

Altium *did not provide guidance.*

For the next quarter **Cadence** expects total revenue to be in the range of $215 million to $225 million. This compares to $232 million in the quarter just reported and compares very poorly to $458 million in the same quarter a year ago. For the full year 2008, Cadence expects total revenue in the range of $1.025 billion to $1.035 billion. This compares to $1.62 billion in the preceding year. As a preliminary look at 2009, Cadence expects order levels in the range of $800 to $900 million. The company expects to see a stronger renewal cycle in 2010 and they will provide its initial look at expected 2010 order levels in its Q4 earnings call.

For **Magma's** fiscal 2009 third quarter, ending February 1, 2009, the company expects total revenue in the range of $28.0 million to $29.0 million. This compares unfavorably to revenue of $36.4 in the quarter just reported and compares weakly to $56 million in the same quarter a year ago. Magma is adjusting its outlook for fiscal 2009, ending May 3, 2009. For fiscal 2009 the company now expects total revenue in the range of $144.0 million to $146.0 million, a reduction from the previous guidance range of $158.0 million to $160. The range of $144- to $146 million compares feebly to revenue of $214 million in fiscal 2008.

For its fiscal fourth quarter ending January 31, 2009, **Mentor Graphics** now expects revenues of about $270 million. This compares well to $184 million in the quarter just reported but down from the $284 million reported in the fourth quarter of last fiscal year. For fiscal 2009, the company expects full year revenues of approximately $815 million, less than the $879 million in the previous fiscal year. For fiscal first quarter 2010 ending April 30, 2009, the company initially expects revenues of $200 to $210 million.

As guidance **Synopsys** expects revenue in the next quarter to be in the range of $332 million to $340 million. This is down slightly from the $353 million in the quarter just reported and compares slightly favorably to $315 million in the same quarter a year ago. For the full year, the still bullish firm expects revenue in the range of $1.38 billion to $1.41 billion, versus $1.212 billion in the last fiscal year.

The Big News - The COLLAPSE of the ECONOMY

As we saw above, the financial results of the selected 5 EDA vendors for nominal Q3 2008 are beginning to reveal glimpses of the economic troubles ahead, as the data in the sequel herein will show. As a group, the 5 selected EDA vendors generated combined revenues of $818 million in nominal Q3 2008, already down over 15% from the year ago quarter (Q3 2007). Combined earnings are already deeply in the red.

Moreover, the impending reality of the economic downturn has dented the EDA revenue forecasts for Q4 of 2008. As a group, they forecast a combined revenue decline of 23% from the same period a year ago!

Worse times are coming fast!

Most EDA vendor executives acknowledge the advancing storm.

Falling stock prices were way ahead of the vendors' revenue forecasts in signifying impending gloom, as all the EDA vendors' Market Caps are down significantly since the beginning of 2008.

“Tells” Long Visible:

Of course, the “tells” indicating that the overall US economy (followed by the rest of the industrial world) is now collapsing around our ears, have long been visible to those who were looking. An economy as intrinsically great as the US economy cannot forever withstand the years of extraordinary unchecked greed on Wall Street, rampant deregulation, continued outsourcing of the US manufacturing base, and deep government deficits that we have endured. It's just that these seeds sown so widely over the last eight years in the United States are now reaping their most devastating negative results in 2008.

Remember, the US unemployment rate zoomed to a 14-year high in October 2008 as another 240,000 jobs were cut, far worse than expected, providing unquestionable evidence of Bush 43's deepening second recession. The data, released November 7, 2008 by the US Labor Department, showed the US jobless rate rose to 6.5% in October from 6.1% in September. By October 2008, unemployment had surpassed the high seen after Bush 43's first recession in 2001, when the US jobless rate peaked at 6.3% in June 2003.

The October 2008 decline marked the 10th straight month of payroll reductions, and Labor Department revisions showed that job losses in August and September 2008 were actually much deeper than first estimated. Employers cut 127,000 positions in August, compared with 73,000 previously reported. And some 284,000 jobs were cut in September, compared with the 159,000 job cuts first reported. Through October 2008, 1.2 million jobs had disappeared; over half the decrease occurred in the prior three months. The total number of US unemployed in October was just over 10 million, the most in 25 years.

But the news released December 5, 2008 was ridiculous and unforgivable! The Labor Department announced that US employers **slashed 533,000 jobs** in November alone! This was the worst monthly number in 34 years!

The unemployment rate would be even higher if not for the exodus in November of 422,000 more frustrated people from the work force.

Job losses in November were widespread, hitting factories, construction companies, financial firms, retailers, leisure and hospitality, and others industries. The couple places where gains were logged? You guessed it: the government and health services.

As if we needed confirmation, the “news” emerged on December 1, 2008 from the National Bureau of Economic Research, (despite repeated denials throughout 2008 from Bush 43) that the United States economy officially sank into a recession last December (2007), which means that the downturn is already longer than the average for all recessions since World War II, according to the committee of economists responsible for dating the nation's business cycles. Moreover, private forecasters warn that the current painful downturn is likely to set a new postwar record for length.

Meanwhile, the Bush administration's financial bailout packages and radical actions seem unable to break though a dangerous credit clog, restore stability to financial markets and help the sinking US economy. And the critical US auto industry, begging for its life for months, just scored a measly $17 billion in government loans with multiple strings attached, while tons and ton of money continue to be ineffectively lavished (without strings attached) on Wall Street and selected banks.

As another “tell”, the **US economy actually shrank in Q3 2008** even more than previously believed, and consumers reduced their spending by the largest amount in 28 years. During the same period, home prices fell to levels not seen since early 2004. The updated reading on the US economy's performance from the Commerce Department showed the Q3 gross domestic product shrank at a 0.5% annual rate in the July-September quarter, weaker than the 0.3% rate of decline first estimated, and it marked the worst showing since the economy contracted at a 1.4% pace in the third quarter of 2001, when the nation was suffering through Bush 43's first recession. Even in Q2 2008, the economy was already struggling, growing at a measly 2.8%.

Meanwhile, the FDIC said the list of banks it considers to now be in trouble shot up nearly 50% to 171 during Q3 2008. The FDIC also said that US commercial banks and savings institutions suffered a 94% drop in third-quarter profits to $1.7 billion. Except for the fourth quarter of 2007, it was the lowest profit since the fourth quarter of 1990. On average, about 13% of “troubled banks” end up failing. Nine banks failed in the third quarter, reducing the FDIC's deposit insurance fund to $34.6 billion from $45.2 billion in the second quarter. Twenty-two banks have failed so far this year through 11 months, compared with three for all of 2007, and more failures are expected.

The New York-based Conference Board said its Consumer Confidence Index fell to 38.8 in October 2008, the lowest since the research group started tracking the index in 1967, and Americans' views on the economy remained the gloomiest in decades as they grappled with massive layoffs, slumping home prices and dwindling retirement funds. American consumers slashed spending in the third quarter at a 3.7% pace, the biggest reduction in 28 years. **Americans' disposable income fell at an annual rate of 9.2% in the third quarter, the largest quarterly drop on record dating back to 1947.**

Home builders slashed spending at a 17.6% pace in Q3 2008, marking the 11th straight quarterly cut and fresh evidence of the depth of the US housing slump.

The AP reported on December 1, 2008, "A gauge of US manufacturing activity that fell to a 26-year low followed similarly weak readings in Europe and China, fueling fears of a deepening global downturn. The Institute for Supply Management's (ISM) index of manufacturing activity for November (2008) fell to 36.2 from October's 38.9." Economists said that, "the manufacturing survey showed that the US economy was in a steep recession and that tough times will continue for manufacturers.”

Simultaneously, the “news” also emerged on December 1, 2008 from the National Bureau of Economic Research, (despite repeated denials throughout 2008 from Bush 43) that the United States economy officially sank into a recession last December (2007), which means that the downturn is already longer than the average for all recessions since World War II, according to the committee of economists responsible for dating the nation's business cycles. Private forecasters warned that this downturn was likely to set a new postwar record for length and likely to be more painful than any recession since 1981.

On cue, the Dow Jones industrial average promptly plunged nearly 680 points, or 7.7%, closing at 8,149 on December 1, 2008.

Despite their recent ineffectiveness, the Federal Reserve lowered interest rates still again when it met on December 16, 2008, its last session of the year. The Fed recently had ALREADY dropped its key rate to 1%, a level seen only once before in the last half-century (in 2003!). MOREOVER, LOW INTEREST RATES ARE DEVASTATING TO THOSE WHO WERE FRUGAL FOR 30 OR 40 YEARS AND STRUGGLED TO BUILD UP A FIXED-INCOME NEST EGG.

So far, though, even these interest rate cuts, like the other Bush administration financial bailout packages, seem unable to help the sinking US economy.

The US federal government just committed an additional $800 billion to two new loan programs on November 25, 2008 alone, bringing its cumulative commitment to financial rescue initiatives to a staggering $8.5 trillion. (That sum represents 60% of the nation's entire estimated gross domestic product!).

Given the unprecedented size and complexity of these programs and the fact that many have never been tried before, it's impossible to predict how much they will help now or how much they will eventually cost hapless US taxpayers. The final cost won't be known for many years. **The alleged curbs on executive pay and golden parachutes for entities receiving bailouts are also not being enforced.** The money has been committed to a wide array of programs, including loans and loan guarantees, asset purchases, equity investments in financial companies, tax breaks for banks, grudging help for struggling homeowners and a currency stabilization fund.

Oh yeah, Citibank still gets billions in bailout money to use part of the money ($400 million) for naming the new NY Mets' baseball stadium.

Note also that most of the trillions in rescue money, about $5.5 trillion, comes from the Federal Reserve, which as an independent entity does not need congressional approval to lend money to banks or, in "unusual and exigent circumstances," to other financial institutions.

This November - January lame duck period is hard to stomach. One supposes the lame-duck-in-chief is too busy adding to his list of 171 pardons and eight criminal sentence commutations so far, issuing midnight regulations to further weaken national environmental rules, and saving selected turkeys from the holiday dining table.

Too bad President-elect Obama has to wait till January 20, 2009 to take office!

By the way:

While the above “tells” over the last 12 months were very visible, the burgeoning problems occurring over the previous seven years were also there for all those willing to notice, foretelling the ultimate disaster we're experiencing now.

These latter crises date back to the 2001-2007 years and include but are not limited to the following enervating economic and/or geopolitical issues, many of which have been mentioned here in previous quarterly publications of the EDA Industry Commentary:

(1) unremitting government extravagance and unwarranted tax cuts in the face of the shift from US federal budget surplus to deep deficit; (2) the definite long-term trend of a rich-get-richer, poor-get-poorer US income distribution; (3) sluggish net job growth chronically below the requirements of US population increases; (4) a net US disadvantage in globalization; (5) weakened US environmental stewardship and deteriorating US infrastructure; (6) the ballooning real and psychic costs of recent and current wars, in lives and treasure, including the 5-year-old IRAQ quagmire and resurgence of the Taliban in Afghanistan; (7) reduced worldwide and domestic admiration for US leadership, with an astonishing lack of accountability, conflating IRAQ with 9/11, and appalling ignorance of history in understanding or even talking to foreign countries (Syria, Palestine, Iran, North Korea, et al); (8) the weaker US

dollar; (9) serially elevated energy, oil & gas prices, with record profits for "big oil"; (10) a still-deteriorated domestic tech-laden NASDAQ market vs. 2001; (11) ongoing corporate fraud, including but not limited to widespread options back-dating; (12) scandals, indictments, criminal investigations and even some guilty pleas in the White House and Congress; (13) double-digit annual rises in the cost of US health care and ongoing increases in the number of US medical & dental uninsured; (14) stunning US federal incompetence (revolving-door cronyism, inept disaster relief, the bumbled Medicare drug plan, mishandled offshore oil leases, ignoring global warming, homeland security lapses, incompetent nation building, Osama still on the loose, condoning or ordering extraordinary foreign rendition, Abu Ghraib, Haditha, Guantanamo, water-boarding, etc.); (15) illegalities in reduced US civil liberties & personal privacy; (16) unrelenting illegal immigration into the US, with no reform in sight; (17) the rise of religious fundamentalism in the US, resulting in the blurring of constitutional separation between church and state; (18) deterioration of the US K-12 education system, especially in math & science, and ominous reductions in college affordability by low & medium income US citizens; all resulting in abridged future global US competitiveness; (19) rapidly falling US home prices during 2005-2008, and coming soon, the same fate for commercial property; (20) the rise of secretive, unregulated hedge fund investment partnerships and sub-prime mortgages, derivatives and credit default swaps that create widespread financial disruptions; and (21) unceasing record-high US trade deficits, requiring the US to borrow billions of dollars every week from abroad, just to name a few.

EDA Consortium's Market Statistics

Back on October 9, 2008 the **EDA Consortium's Market Statistics Service** (MSS) announced that the EDA industry revenue for Q2 2008 declined 3.7% to $1,357 million, versus $1,408 million in Q2 2007. Wow, Q2 2008 seems like ancient history now.

In the second quarter the CAE segment accounted for 39% of total EDA revenue, IC Design & Verification for 23%, Semiconductor IP for 19.5%, PCB/MCM for 10% and Services for 8%.

Segment	**2Q08**	**2Q07**	**Delta**
CAE	525	539	-2.6%
IC Des&Ver	317	397	-20.2%
SIP	265	269	-1.6%
PCB/MCM	142	119	19.3%
Services	109	85	28.5%
Total	1,357	1,409	-3.7%

Table 18 EDA Revenue by Product Segment 2Q08

For the second quarter of 2008 North America accounted for 43% of total EDA revenue, Europe for 20%, Japan for 21% and ROW for 16%.

Geo	2Q08	2Q07	Delta
NA	585	675	-13.3%
Europe	273	247	10.5%
Japan	282	248	13.7%
ROW	217	239	-9.0%
Total	**1,357**	**1,409**	**-3.6%**

Table 19 EDA Revenue by Geographic Segment 2Q08

Dr. Walden C. Rhines, EDAC chair and Mentor Graphics' CEO and chairman, said, *"Solid year over year growth in the PCB/MCM and services segments were offset by declines in CAE, IC Physical Design & Verification, and Semiconductor IP, resulting in an overall decline for Q2, 2008. Geographically, Western Europe and Japan showed growth in Q2, but this growth was offset by declines in North America and the rest of the world."*

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Comments? Feedback? Tell us what you think about this topic, or share any additional information you may have on the subject! Submit your comments to: EDACafe-Editor.

About the Authors:

*Since 1996, **Dr. Russ Henke** has been president of HENKE ASSOCIATES, an active San Francisco Bay Area high-tech business & management consulting firm. The number of client companies for Henke Associates now numbers more than forty. During his corporate career, Henke operated sequentially on "both sides" of MCAE/MCAD and EDA, as a user and as a vendor. He's a veteran corporate executive from Cincinnati Milacron, SDRC, Schlumberger Applicon, Gould Electronics, ATP, and Mentor Graphics. Henke is a Fellow of the Society of Manufacturing Engineers (SME) and served on the SME International Board of Directors. He is also a member of the IEEE and a Life Fellow of ASME International. In April 2006, Dr. Henke received the 2006 **Lifetime Achievement Award** from The CAD Society, presented by CAD Society president Jeff Rowe at COFES2006 in Scottsdale, AZ. In February 2007, Henke became affiliated with Cyon Research's select group of experts on business and technology issues as a Senior Analyst. This Cyon Research connection aids and supplements Henke's ongoing, independent consulting practice (HENKE ASSOCIATES).*

*An affiliate of the HENKE ASSOCIATES team since 2001, LA-based **Dr. John R. (Jack) Horgan** co-authored this DECEMBER 2008 EDA Commentary. Dr. Horgan's prior corporate career has included executive positions at Applicon, Aries Technology, CADAM and MICROCADAM, as well as a stint at IBM. Dr. Horgan is also an editor of EDAcafé Weekly.*

*Since May 2003 the authors have now published **a total of seventy-two (72)** independent articles on MCAD, PLM, EDA and Electronics IP on IBSystems' MCADCafé and EDACafé. Further information on HENKE ASSOCIATES, and URL's for past Commentaries, are available at http://www.henkeassociates.net. March 31, 2008 marked the 12th Anniversary of the founding of HENKE ASSOCIATES.*