



Commentary

EDA Industry Update June 2007 -- What did the Last Quarter Bring?

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In [MAY 2003](#), [AUGUST 2003](#), [DECEMBER 2003](#), [FEBRUARY 2004](#), [MAY 2004](#), [AUGUST 2004](#), [DECEMBER 2004](#), [FEBRUARY 2005](#), [MAY 2005](#), [AUGUST 2005](#), [NOVEMBER 2005](#), [FEBRUARY 2006](#), [MAY 2006](#), [AUGUST 2006](#), [DECEMBER 2006 AND FEBRUARY 2007](#) **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 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, have been acquired by others and hence have been dropped from the authors' quarterly EDA Commentaries.

This June 2007 report covers the performances of the remaining seven EDA vendors for the nominal First Quarter of 2007.

In this issue, EDA News Highlights are followed by the revenue & earnings performances of the selected group of EDA players for Q1 2007, and then EDA vendor by vendor details. EDA Vendor stock prices are discussed. Finally, individual EDA vendor forecasts for Q2 2007 are provided. Enjoy!

EDA News Highlights

The New York Times reported on June 4, 2007 that **Cadence Design Systems** is in talks with at least two buyout firms about a possible sale of the company. Cadence is said to have held talks with Kohlberg Kravis Roberts and the Blackstone Group. But they warned that a deal may not happen because of the "complicated risks in the company's business". Other private equity firms apparently have looked at Cadence, but passed. Like the private equity purchase of MCAD vendor UGS several years ago, (prior to its acquisition by Siemens this year), a deal for Cadence would be one of the biggest moves by private equity firms into technology, a sector they are said to avoid because of its volatility and capital needs. Though both Kohlberg Kravis and Blackstone have invested in technology firms before — most recently, Kohlberg bought the First Data Corporation and Blackstone purchased Freescale Semiconductor — private equity has rarely approached a firm as steeped in the "arcana of technology as Cadence," reported the Times. Another question that faces Cadence's would-be buyers is its high \$6.4 billion market valuation.

The 44th **Design Automation Conference (DAC)**, featuring over 50 technical sessions covering the latest in design methodologies and EDA tool developments and an Exhibition and Demo Suite area with over 250 of the leading EDA, silicon and IP Providers, is being held **June 4th to June 8th at the San Diego Convention Center**. (www.dac.com).

Synopsys and **Magma Design Automation** recently announced that the companies have agreed to settle all pending litigation between them. As part of the settlement, the parties agreed to release all claims in both California and Delaware and to cross license the patents at issue in these jurisdictions as well as any related applications. Both companies further agreed not to initiate future patent litigation against each other for two years provided certain terms are met. Magma also agreed to make a payment to Synopsys of \$12,500,000 toward the settlement of this dispute. *All other terms of the settlement remain confidential.*

How did the seven EDA Vendors fair during the First Quarter of 2007?

As shown in **Table 1**, the **combined revenue performance** of the seven selected EDA vendors in the nominal Q1 2007 was \$952 million, an increase of nearly 11% from the first quarter of 2006, but a decrease of slightly more than 11% from the traditionally-strong fourth quarter. All vendors had **year-over-year** quarterly revenue growth. Altium, Ansoft, Magma and Cadence had percentage growth in the teens while Mentor, Synopsys and Synplicity had single digit growth. On a **sequential** basis, Ansoft at +26% and Magma at +11% were the only gainers. Mentor and Cadence were the largest sequential decliners at -23% and -15%, respectively.

Company	Last QTR Revenue	Prev QTR Revenue	Last vs. Prev QTR	Comparable 2006 QTR	Last QTR vs. Comparable QTR
Altium AUD\$	12,900	14,100	-8.5%	10,800	19.4%
Altium US\$	10,311	10,506	-1.9%	8,046	17.0%
Ansoft	28,579	22,731	25.7%	24,738	15.5%
Cadence	365,185	431,010	-15.3%	328,214	11.3%
Magma	50,138	45,094	11.2%	44,005	13.9%
Mentor	190,463	246,193	-22.6%	176,322	8.0%
Synopsys	292,928	300,210	-2.4%	274,777	6.6%
Synplicity	14,899	16,417	-9.2%	14,469	3.0%
Total	952,503	1,072,161	-11.2%	870,571	10.7%

Table 1 - Seven Public EDA Companies' Latest Quarterly Revenue Performances
(\$000)

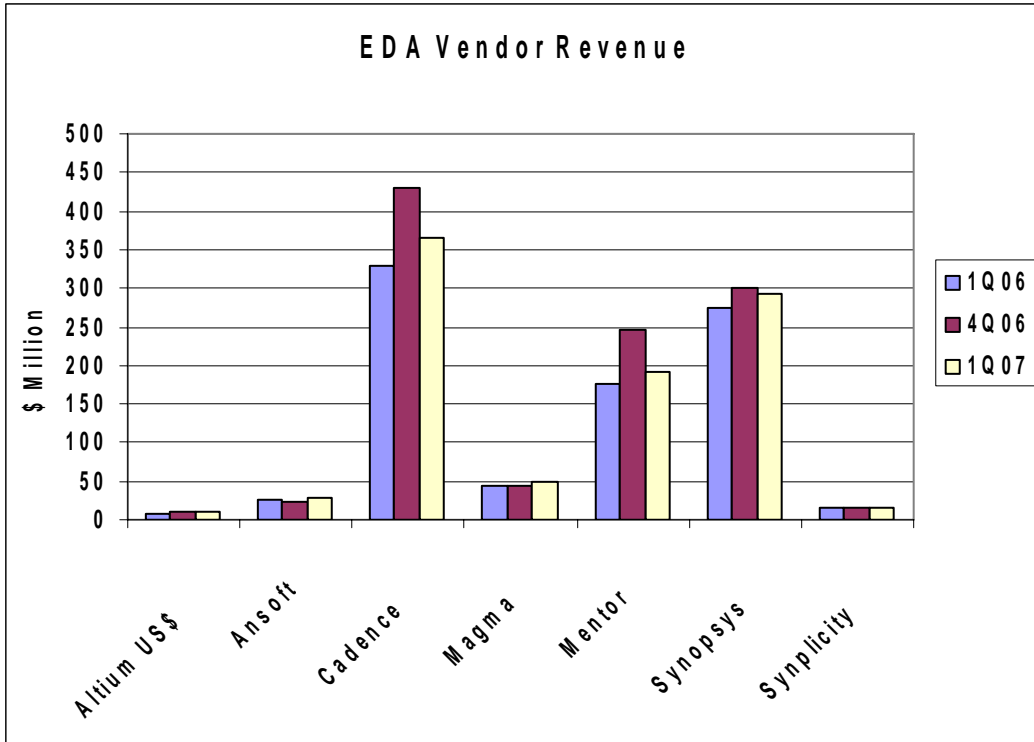


Figure 1 EDA Vendor Financial Performance

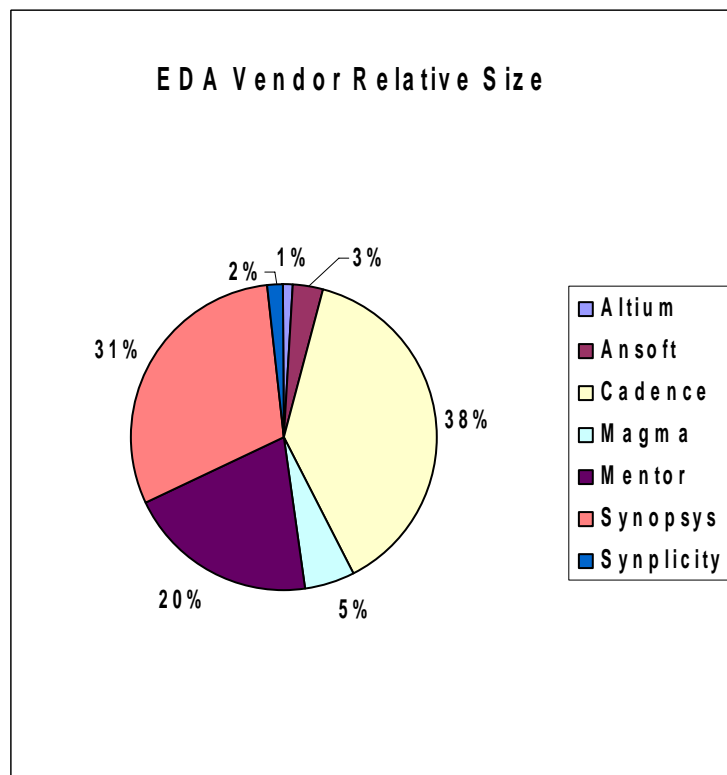


Figure 2 - EDA Vendor Relative Size
(based upon Q1 2007 Revenues)

Figures 1 and 2 above provide additional revenue comparisons among vendors. Cadence was number one at a 38% revenue share, Synopsys number two at 31% and Mentor Graphics number three at 20%. The oligopoly of the top three EDA firms accounted for 89% of total revenue of the selected group. Magma was a distant fourth at 5%.

Company	Last QTR Earnings	Prev QTR Earnings	Delta Last vs. Prev	Comparable 2006 QTR	Delta Last vs. 2005
Altium	N/A	N/A		N/A	
Ansoft	7,934	6,311	1,623	8,273	(339)
Cadence	44,421	48,365	(3,944)	21,779	22,642
Magma	(24,491)	(13,561)	(10,930)	(6,226)	(18,265)
Mentor	290	30,982	(30,692)	(5,860)	6,150
Synopsys	41,265	23,357	17,908	5,375	35,890
Synplicity	654	1,594	(940)	(1,178)	1,832
Total	70,073	97,048	16,704	22,163	38,955

Table 2 Seven Public EDA Companies' Latest Quarterly Earnings Performances (\$000)

Turning to **earnings performances** in Q1 2007, **Table 2** shows that the EDA group of six (Altium did not report earnings) reported a combined net income of \$70 million, more than a factor of 3 times the combined earnings of \$22 million in the year ago quarter, but down 28% from the \$97 million in the just prior quarter. Magma was the only vendor to lose money in the quarter, attributable in part to the Synopsys litigation settlement (Synopsys enjoyed a corresponding increase to its earnings growth. Details are contained in the company-by-company paragraphs in the sequel). Mentor's large sequential earnings drop in Q1 2007 was due to its large reduction in revenue (and therefore gross margin) from a very strong fourth quarter.

Company by Company Q1 2007 details:



On April 18, 2007 **Altium Limited** announced financial results for its third fiscal quarter, the period ending March 31, 2007. Altium has achieved sales growth across all regions, resulting in another quarter of sales growth in excess of 30%. This sales growth translates to Fiscal Q3 revenues of AU\$12.3 million, representing a revenue increase of 19% on the previous corresponding quarter. (The difference between sales and revenue is due to the increasing percentage of sales being derived from maintenance and software assurance contracts that are recognized as revenue over an extended period).

Since June 30, 2006, revenue recognition that has been deferred to future periods has increased from AU\$5.3 million to AU\$7.5 million, representing significant future value for the business.

Americas (USD)	3,607	5,006	-27.9%	2,686	34.3%
Europe (EUR)	1,701	3,491	-51.3%	1,551	9.7%
AP (USD)	1,604	2,374	-32.4%	732	119.1%
Consulting (EUR)	108	138	-21.7%	149	-27.5%

Table 3 Altium Revenue by Geography in Local Currencies (thousands)

Commenting on these results, Nick Martin, founder and CEO, Altium Limited, said, *"Once again our revenue growth has been driven by continued strong performance in the sales of Altium Designer, our unified electronic product development system, across all markets. Altium has just seen its third consecutive quarter of 30% growth in sales over the previous corresponding period, and we remain confident about our strong strategic position and ability to continue to realize healthy gains through to the end of the financial year."*



On May 23, 2007 **Ansoft Corporation** reported the results for its fourth quarter of Fiscal 2007, the period ending April 30, 2007. Total revenue for the quarter was \$28.6 million, an increase of 15.5% from the \$24.7 million in the fourth quarter of fiscal 2006, and an increase of 26% from the \$22.7 million in the just prior quarter. License revenue was \$18.8 million, an increase of 20% year-over-year, and an increase of 43% sequentially. Service and other revenue was \$9.8 million, up 8% year-over-year, and 2.5% sequentially.

Ansoft's Electromechanical segment accounted for 18% of total revenue, and its High Performance segment accounted for 82%. The three major customers in the quarter were Intel, Sony and Molex. For the year, the three majors were Intel, Samsung and Molex.

Net income for the recent quarter was \$7.9 million, down 4% from the \$8.3 million a year earlier, but up 26% sequentially from \$6.3 million. The year ago quarter included a \$1 million tax benefit.

Revenue for the entire fiscal year totaled \$89.1 million, an increase of 15% compared to \$77.2 million reported in the previous fiscal year. On a GAAP basis, net income for the fiscal year was \$20.2 million, compared to net income of \$17.8 million in the previous fiscal year.

Nicholas Csendes, Ansoft's President and CEO, said, *"We experienced strong revenue growth and are pleased to report record revenue for the fourth quarter. For the next fiscal year, we anticipate continued revenue growth of around 10-15%."*



On April 25, 2007 **Cadence Design Systems, Inc.** reported financial results for the first quarter, the period ending March 31, 2007. Total revenue for the quarter was \$365 million, an increase of 11% over the \$328 million in the first quarter of 2006,

but a 16% decrease from the \$431 million in the usually-strong last quarter of 2006. Product revenue, accounting for 65% of total revenue, was \$238 million, an increase of 14% year-over-year, but a decrease of 20% sequentially. Maintenance revenue was \$95 million, accounting for 26% of total revenue, an increase of nearly 9% year-over-year, and a 3% decrease sequentially. Services revenue was \$32 million, accounting for almost 9% of total revenue, a decrease of nearly 2% year-over-year, and a 9% decrease sequentially.

Functional Verification accounted for 24% of total revenue, Digital IC Design 26%, Custom IC Design 24%, DFM 6%, System Interconnect 10% and Services 9%.

\$K	1Q07	4Q06	Delta	1Q06	Delta
Func Verif	87,644	103,442	-15.3%	85,336	2.7%
Dig IC Design	94,948	103,442	-8.2%	65,643	44.6%
Custom IC	87,644	116,373	-24.7%	88,618	-1.1%
DFM	25,563	30,171	-15.3%	26,257	-2.6%
Sys Interconnect	36,519	43,101	-15.3%	29,539	23.6%
Services	32,867	38,791	-15.3%	32,821	0.1%
Total	365,185	435,320	-16.1%	328,214	11.3%

Table 4 Cadence Revenue by Product Segment

On a geographic basis, North America accounted for 48% of total revenue, Europe 15%, Japan 27% and Asia 10%. On a year-over-year basis, revenue from North America was up almost 5%, from Europe down 12%, from Asia up 27% and from Japan up 43%. On a sequential basis, revenue from North America was down 32%, from Europe down 33%, from Asia down 23%, but up 129% from Japan.

Mike Fister, president and CEO of Cadence, said, "*We saw strong growth in our core business in the first quarter led by our digital platform, and we continued to build the foundations for expansion into adjacent markets.*"

Bill Porter, executive vice president and chief financial officer, added, "*The first quarter was characterized by continued consistent execution against our objectives to demonstrate growth and achieve our operating targets.*"



On April 26, 2007 **Magma Design Automation Inc** reported the financial results for its fourth quarter and Fiscal year 2007, the periods ending April 1, 2007. Total revenue for the quarter was \$50 million, an increase of nearly 14% from the \$44 million in the same quarter a year ago, and an increase of 11% from the \$45 million in the just prior quarter.

Net loss for the quarter was \$24.5 million, compared to net loss of \$6.2 million in the year ago quarter, and compared to net loss of \$13.6 million in the prior quarter.

Net income reflects the costs of Magma's patent litigation with Synopsys which continued to have an impact on profitability. Ongoing litigation expenses in the fourth quarter were \$1.9 million. On March 30, 2007, Magma entered into a

settlement agreement with Synopsys pursuant to which Magma and Synopsys agreed to settle all pending litigation between them and Magma agreed to make a payment to Synopsys of \$12.5 million toward the settlement of this dispute.

For fiscal 2007 Magma had total revenue of \$323 million, an increase of 6.5% from the \$303 million in fiscal 2006. License revenue of \$102 million, accounting for 32% of total revenue, and was up 18%. Service revenue was \$221 million, accounting for 68% of total revenue, and up nearly 9%. Bundled license and service revenue was \$43 million, down nearly 19%.

Rajeev Madhavan, chairman and CEO of Magma, said, "*Throughout fiscal 2007 we characterized it as a year of investment, and those investments are paying off. Our product teams delivered a range of new products that have positioned us to compete in several new markets. We achieved record revenue for the year and surpassed \$50 million in revenue for the first time in the company's history in the fourth quarter. We enter fiscal 2008 with a great deal of momentum.*"



On May 24, 2007 **Mentor Graphics Corporation** announced financial results for its first quarter of Fiscal 2008, the three-month period ending April 30, 2007. (As previously reported here, Mentor has adopted a new fiscal year beginning on February 1st and ending April 30th). Total revenue for the quarter was \$190 million, an increase of 8% from the \$176 million in the same quarter a year ago, but down almost 23% from the \$246 million in the just prior quarter. The \$190 million was split 60% Systems and Software, and 40% Service and Support. Systems and Software revenue was \$114 million, up nearly 11% year-over-year, but down 32% sequentially. Service and Support revenue was \$77 million, up 4.4% year-over-year but down 1.8% sequentially.

Revenue from North America accounted for 47% of the total. 24% was from Europe, 15.5% was from Japan, and 13.5% from the Pacific Rim.

\$K	1Q07	4Q06	Delta	1Q06	Delta
America	89,619	134,749	-33.5%	63,688	40.7%
Europe	45,546	65,549	-30.5%	49,679	-8.3%
Japan	29,592	19,514	51.6%	38,981	-24.1%
Pac Rim	25,706	26,381	-2.6%	23,974	7.2%
Total	190,463	246,193	-22.6%	176,322	8.0%

Table 5 Mentor Graphics Revenue by Geography

Net income for the quarter was \$290,000 compared to a net loss of \$5.86 million in the corresponding quarter last year. The difference is due to \$5.87 million in debt retirement a year ago. Mentor enjoyed net income of \$31 million in the just previous quarter.

Gregory K. Hinckley, president of Mentor Graphics, said, "The first quarter was strong despite a lack of significant lease renewal activity. New customer accounts were up sharply in the first quarter, which we see as a bullish sign. This, combined with a strong renewal outlook for the second half of the year, gives us increased confidence in our outlook."

SYNOPSYS®

On May 23, 2007 **Synopsys, Inc.** announced the financial results for its second quarter of Fiscal 2007. Total revenue for the quarter was \$293 million, an increase of 6.6% from the \$275 million in the same quarter a year earlier, but a drop of 2.4% from the \$300 million in the just previous quarter. Time-based license revenue was \$243 million, accounting for 83% of total revenue. This represented an increase of 16% year-over-year, but a decline of 3.4% sequentially. Upfront license revenue was \$14.6 million, or 5% of total revenue. This was a decrease of 44% year-over-year, and an increase of 8.3% sequentially. Maintenance and service revenue was \$35 million, or 12% of total revenue. This was a drop of 10.6% from the same quarter a year ago, but a slight rise sequentially. One customer accounted for more than 10% of the quarter's revenue.

From a product perspective, 49% of revenue came from core Galaxy design, 26% from Discovery verification solutions, 8.5% from IP, 11% from DFM, and over 5% came from professional services and other.

\$M	1Q07	4Q06	Delta	1Q06	Delta
Galaxy	143.4	151.1	-5.1%	141.3	1.5%
Discovery	76	78.3	-2.9%	64	18.8%
IP	25	23.4	6.8%	20.9	19.6%
DFM	32.9	34.1	-3.5%	34.1	-3.5%
Service/Other	15.7	13.3	18.0%	14.5	8.3%
Total	293	300.2	-2.4%	274.8	6.6%

Table 6 Synopsys Revenue by Product Segmentation

From a geographic point of view, North America accounted for 53% of total revenue, Europe 15.5%, Japan 16% and Asia Pacific 16%. Year over year revenue from North America increased 4.5%, from Europe 7% and from AP 30%. Revenue from Japan was down 6%. On a sequential basis, revenue from North America and AP was down only slightly. Revenue from Japan and Europe was down 9.1% and 6.4%, respectively.

Net income for the quarter was \$41 million, compared to \$5.4 million in the same quarter a year earlier, and compared to \$23 million in the prior quarter. The year-over-year increase was driven primarily by an increase in revenue and a decrease in operating expense compared to the year-ago quarter, as well as by a \$12.5 million litigation settlement received from Magma Design Automation, recorded in other income, net.

Aart de Geus, chairman and CEO of Synopsys, said, "In the second quarter we again executed very well, with strong revenue and earnings growth and solid cash flow. As

a result of this performance and continuing technology momentum, we are well-positioned to finish the year stronger than initially planned."



On April 25, 2005 **Synplicity, Inc.** reported its financial results for the first quarter of 2007, the period ending March 31, 2007. Total revenue for the quarter was \$14.9 million, a 3% increase over the \$14.5 million in the first quarter of 2006, but a 9.2% drop from the \$16.4 million in the just prior quarter. License revenue at \$3.9 million was up 26% year-over-year, but down 27% sequentially. Maintenance revenue at \$6.6 million was down 1.1% year-over-year, and down almost 4% sequentially. Bundled license and services revenue at \$4.4 million was down over 6% year-over-year, but up 4.8% sequentially.

Net income for the quarter was \$654,000, down 59% sequentially, but an improvement on the loss of \$1.2 million a year earlier.

Gary Meyers, president and CEO of Synplicity, said, *"We are pleased to report that the results in the first quarter of 2007 came in ahead of our expectations. We enjoyed another successful quarter of Synplify Premier sales at 15% of our total bookings and Certify generated 9% of the total. I remain excited with our new product release calendar that has already included the ASIC edition of Synplify DSP, and later this year will include new capabilities in Synplify Premier as well as the production version of our unique TotalRecall™ technology."*

EDA Vendor Stock Performance:

Shown in **Tables 7** and **8** and **Figure 3** below are the stock prices for the seven EDA vendors. In absolute terms, stock prices were up 31% from the same quarter in 2006, while the average stock price increased 55%. This compares to an average rise of 8% for the major stock indexes. Altium was the clear growth leader at 210%. Ansoft, Mentor and LogicVision had substantial year-over-year growth. Synopsys at +8% was the only firm with less than double digit growth. On a sequential basis the combined stock prices rose 8.5% in absolute terms and 20% on average. By comparison the major stock indexes were essentially flat relative to the prior quarter. Altium was again the leader at +75% with LogicVision a strong second at 35% growth. Mentor and Synopsys stock prices declined from the prior quarter.

Symbol	1Q06	4Q06	1Q07	QoQ	YoY
ALU	0.31	0.55	0.96	74.5%	209.7%
ANST	20.84	27.80	31.64	13.8%	51.8%
CDNS	18.49	17.91	21.06	17.6%	13.9%
LAVA	8.65	8.83	11.96	35.4%	38.3%
MENT	11.05	18.03	16.34	-9.4%	47.9%
SNPS	22.35	26.73	26.23	-1.9%	17.4%
SYNP	6.46	6.26	6.99	11.7%	8.2%

Total	88.15	106.11	115.18	8.5%	30.7%
			Ave Delta	20.3%	55.3%

Table 7 – Seven Public EDA Companies' Stock Prices (\$)
(Synopsys adjusted for 2:1 split September 2003)

Symbol	1Q06	4Q06	1Q07	QoQ	YoY
DJI	11,109	12,463	12,354	-0.9%	11.2%
Nasdaq	2,340	2,415	2,421	0.2%	3.5%
S&P	1,294	1,418	1,421	0.2%	9.8%
			Ave Delta	-0.1%	8.2%

Table 8– Statistics of three major stock indices

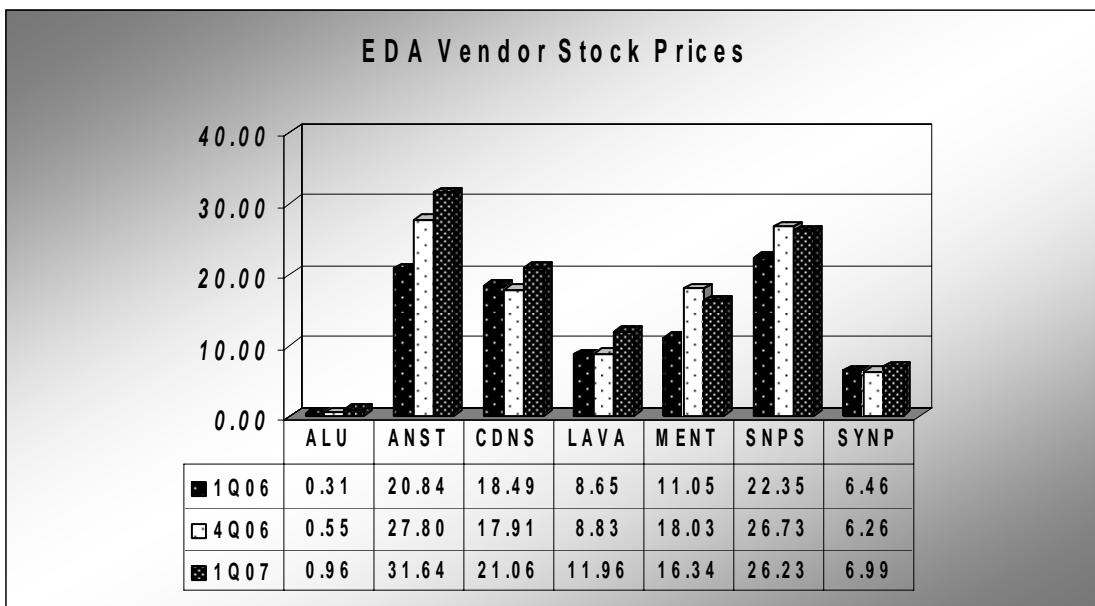


Figure 3 – Seven Public EDA Companies' Stock Prices (\$)
(Synopsys adjusted for 2:1 split September 2003)

MCAD versus EDA in Q1 2007

The detailed quarterly performances of a selected group of public MCAD Vendors has been provided in the authors' [MCAD Commentary May 2007](#) recently published on MCADCAfe.

The revenue from the top three MCAD vendors was \$1.2 billion, or 1.4 times the revenue from the top three EDA vendors.

An earnings comparison is omitted here, since neither Autodesk nor UGS on the MCAD side provided earnings results for the quarter.

\$M	Revenue	Earnings
MCAD		
Autodesk	508	N/A

Dassault	381	43.1
UGS	302	N/A
Total MCAD	1,191	
EDA		
Cadence	365	44.4
Synopsys	293	41.2
Mentor	190	0.2
Total EDA	848	85.8

Table 9 EDA versus MCAD

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.

Forecast Guidance from Individual EDA Providers

The combined forecast for the next quarter for the six companies providing guidance, calls for 10.4% growth from the same quarter last year, but a mere 4% growth over the quarter just reported. All six vendors are forecasting year-over-year growth. Ansoft is the most bullish at 86%. Magma, Mentor and Synopsys are projecting percentage growth in the low teens. On a sequential basis most firms are projecting low signal digital percentage growth. Magma is projecting a slight drop. See **Table 10**.

\$M	Next Q	Current Q	Delta	Year Ago	Delta
Ansoft	32	29	12.5%	17.3	86.0%
Cadence	380	365	4.1%	359	5.8%
Magma	47	50	-6.3%	41	14.6%
Mentor	200	190	5.0%	178	12.4%
Synopsys	305	293	4.1%	277	10.1%
Synplicity	15	15	3.7%	15.4	0.3%
Total	980	942	4.0%	887.7	10.4%

Table 10 Revenue Forecasts for the Next Quarter

Individual Company by Company Guidance

Altium Limited did not provide guidance.

For fiscal 2008 **Ansoft** foresees revenue growth of 10% to 15% from the \$89 million in fiscal 2007, or in the range of \$98 million to \$102 million.

As guidance **Cadence** expects revenue for the second quarter of 2007 to be in the range of \$375 million to \$385 million. This compares to \$365 million in the quarter just completed and compared to \$359 million in the second quarter of 2007. For the full year 2007, the company expects total revenue in the range of \$1.580 billion to \$1.630 billion. This would be an increase of 8% compared to \$1.484 billion in 2006.

As guidance **Magma** expects revenue for the next quarter to be in the range of \$46 million to \$48 million, compared to \$50 million in the quarter just reported, and compared to \$41 million in the same quarter last year.

For the next quarter **Mentor Graphics** expects revenue of approximately \$200 million, compared to \$190 million in the quarter just reported and compared to \$178 million in the second quarter of Fiscal 2006. For Fiscal year 2008, revenue is expected to be approximately \$844 million, unchanged from April's guidance, but increased from initial 2008 guidance of \$830 million.

As guidance **Synopsys** expects revenue in the next quarter to be in the range of \$295 million to \$305 million. This compares to \$293 million in quarter just reported, and to \$277 million in the same quarter a year ago. For fiscal 2007, the firm increased the bottom end of the projected range to a new target of between \$1.19 billion and \$1.205 billion. This compares to \$1.096 billion for fiscal 2006.

As guidance **Synplicity** said that revenue is expected to range from \$15.3 million to \$15.6 million in the next quarter, compared to \$14.9 million in the quarter just concluded, and compared to \$15.4 million in the second quarter of 2006. As stated at the time of fourth quarter reporting, Synplicity expects revenue for the year 2007 to be in the range from \$65.0 million to \$67.0 million. Non-ASIC revenue is expected to increase at a low double digit rate in 2007 over 2006, while ASIC revenue is expected to decline by approximately \$3.5 million in 2007 versus 2006.

EDA Consortium's Market Statistics



On April 9, 2007, the **EDA Consortium's Market Statistics Service (MSS)** announced that overall EDA industry revenue for **Q4 2006** was \$1,493 million, a 19% increase over Q4 2005. For the full year 2006, revenue totaled a record \$5,274 million, which was 15% more than the \$4,575 million recorded in 2005.

For the fourth quarter of 2006 the CAE segment accounted for 42.5% of total revenue, IC Physical Design and Verification for 26%, PCB/MCM 8%, Semiconductor IP for 18% and Services for 5%.

Segment	4Q2006	4Q2005	Delta
CAE	634	542	17.0%
IC Des&Ver	385	347	11.0%
SIP	274	249	10.0%
PCB/MCM	123	87	41.0%
Services	77	69	12.0%
Total	1,493	1,294	15.4%

Table11 Overall EDA Revenue by Product Segment 4Q2006

For the fourth quarter, North America accounted for 53% of total revenue, Western Europe for 19%, Japan 15% and ROW 13%.

	4Q2006	4Q2005	Delta
NA	788	567	39.0%
Europe	287	271	6.0%
Japan	230	256	-10.0%
ROW	188	158	19.0%
Total	1,493	1,251	19.3%

Table 12 Overall EDA Revenue by Geographic Segment 4Q2006

For the full year 2006 the CAE segment accounted for 41.5% of total revenue, IC Physical Design and Verification for 27%, PCB/MCM for 7.4%, Semiconductor IP for 19% and Services for 6%.

Segment	2006	2005	Delta
CAE	2,190	1,921	14.0%
IC Des&Ver	1,396	1,214	15.0%
SIP	989	817	21.0%
PCB/MCM	391	343	14.0%
Services	308	283	9.0%
Total	5,274	4,578	15.2%

Table 13 Overall EDA Revenue by Product Segment 2006

For the full year 2006 North America accounted for 49% of total revenue, Europe 19%, Japan 20% and ROW 13%.

Geo	2006	2005	Delta
NA	2,580	2,115	22.0%
Europe	977	872	12.0%
Japan	1,051	1,020	3.0%
ROW	666	570	16.8%
Total	5,274	4,578	15.2%

Table 14 Overall EDA Revenue by Geographic Segment 2006

The US Economy:

The combined revenues for the **seven EDA vendors** selected here, for "nominal" 2006, were \$3.77 billion, up almost 12% from the \$3.39 billion in nominal 2005. The same vendors then created, in nominal Q1 2007, \$952 million, an increase of nearly 11% from the first quarter of 2006.

Total combined revenue for the G8 **MCAD vendors** in the nominal year 2006 was \$6.1 billion, up a very robust 18% from the \$5.2 billion in 2005. The same G8 MCAD vendors then generated combined revenues of \$1.61 billion in Q1 2007, a healthy increase of 18% from the \$1.37 billion in the first quarter of 2006. The forecasts for total G8 2007 revenue remain bullish.

These performances are all the more remarkable when one considers the recent general decline in US economic fortunes.

For example, US manufacturers cut 19,000 jobs in April 2007, the tenth consecutive month of reductions in this essential sector so vital to MCAD, CAE and EDA

businesses. Just 32% of 84 US manufacturing industries were hiring in April, the lowest in nearly four years. Overall the US Labor Department reported that in April 2007, only 80,000 new jobs were added to non-farm US payrolls, *the worst figure in 29 months*. Through April 2007, US jobs are running some 43% below the figure at this time last year. The Manufacturing sector also lost jobs again in May.

The US Trade Deficit surged in March 2007, up 10.4% from the February level. So far this year, the US trade deficit is running at an annual rate of \$723 billion, just a tad below the \$765 billion deficit set in 2006, *the fifth consecutive year of record trade deficits*. Growth of the US economy, as measured by the GDP, slowed to an anemic rate of just 1.3% in Q1 2007, per recent reports. *The new March 2007 trade deficit number ended up actually lowering that Q1 2007 GDP figure to a mediocre level of just 0.6%*.

Total retail sales at stores open at least a year, known as same-store sales, fell by a record 2.4% in April 2007, the worst since 1970. Wal-Mart's same-store sales fell by 4.6% while Target's dropped by 6.1%. US gasoline prices surged in mid-May 2007 to a record nationwide average of \$3.07 per gallon, nearly 20 cents higher than two weeks earlier, according to the Lundberg Survey. Regular gas in CA rose to \$3.66 per gallon.

The National Association of Realtors reported May 25, 2007 that sales of existing US homes dropped by 2.6% in April 2007, to a seasonally adjusted annual rate of 5.99 million units, *the slowest sales pace in nearly four years*. Prices slid for *a record ninth consecutive month*, indicating further troubles ahead for the US housing market.

A generation ago, American men in their thirties had median annual incomes of about \$40,000 compared with men of the same age who now make about \$35,000 a year, adjusted for inflation. That's a 12.5% drop between 1974 and 2004, according to the report from the Pew Charitable Trusts' Economic Mobility Project.

Average US worker wage growth was again second-rate in April 2007, rising just 4 cents to \$17.21. Wages are up only 3.7% in the past year. *The Commerce Department reported on June 1, 2007 that Americans' incomes fell by 0.1% in April, a month when the job creation was at its weakest in 2.5 years and wage growth slowed. Perversely, Wall Street loves it when workers are squeezed*, which is one important reason the Dow closed at another record high on May 18, 2007, and again on June 1st.

However, the tech-laden NASDAQ continues to labor along at half its record high.

Meanwhile, the news from IRAQ continues grim. A record 219 US soldiers died in April & May, 2007, the worst of the entire war. Another 14 GI's have died in the first 3 days of June.

According to a new **Washington Post – ABC News Poll** published June 5, 2007, **73% of Americans said the country is seriously on the wrong track.**

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Comments? Feedback? Tell us what you think about this overall Commentary, or share any additional information you may have on the subject! Submit your comments to: EDAtoolsCafe-Editor@ibsystems.com.

About the Authors:

*Since 1996, Dr. Russ Henke has been president of HENKE ASSOCIATES, a 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 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 also 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 part of the HENKE ASSOCIATES team since 2001, LA-based Dr. John R. (Jack) Horgan co-authored this June 2007 Electronics IP Industry 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 EDACafe Weekly.

Since May 2003 the authors have now published a total of fifty-four (54) 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>.

