CIMdata

PLM Industry Summary

Editor: Christine Bennett

Vol. 9 No. 43 Fridav 26 October 2007

Contents

CIMdata, Inc. 3909 Research Park Drive Ann Arbor, Michigan 48108 Tel: +1 (734) 668–9922 Fax: +1 (734) 668–1957
E-mail: c.bennett@CIMdata.com Web: http://www.CIMdata.com

Top Story

CIMdata Releases its 2007 PLM Market Analysis Report: Comprehensive Information and Analysis of the PLM Market

25 October 2007

Consulting and research firm CIMdata announces the availability of its annual Product Lifecycle Management (PLM) Market Analysis Report. The 2007 report presents an analysis of the 2006 Product Lifecycle Management (PLM) market, with special emphasis on the collaborative Product Definition management (cPDm) segment of that market. In addition, an analysis of the Multi-discipline Mechanical Computer-Aided Design (MCAD) segment of the market is also included. This analysis provides CIMdata's perspective on PLM across a variety of industry and geographic sectors identifies market trends, reviews investments in PLM-related software and services during 2006, and forecasts PLM investments for 2007 through 2011. The forecasts are based on data available through the first quarter of 2007. It is important to note that the data and revenue information presented in this report are CIMdata's estimates of the PLM revenue performance of the various suppliers.

The PLM Market Analysis Report comes in two modules: 'Module 1' presents an overview of the PLM market, overall market statistics, and an analysis of PLM suppliers' performance in 2006. 'Module 2' builds on the information presented in Module 1 by providing detailed geographic and industry 2006 cPDm revenue results and forecasts from 2007 to 2011. The PLM Market Analysis Report is sold as a stand-alone report or as part of the CIMdata PLM Community Gold membership. Further details and pricing information about the report are available at http://www.cimdata.com/publications/reports.html.

CIMdata defines PLM as a strategic business approach that applies a consistent set of business solutions in support of the collaborative creation, management, dissemination, and use of product definition information across the extended enterprise, and spanning from product concept to end of life—integrating people, processes, business systems, and information. "PLM forms the product information backbone for a company and its extended enterprise." explained Mr. Ken Amann, CIMdata Director of Research. "It is composed of multiple elements including: foundation technologies and standards, such as XML, visualization, collaboration, enterprise application integration; information authoring and analysis tools like mechanical design, electronics design, software engineering, technical publishing, finite element analysis; core functions including data vaults, document and content management, workflow, product structuring, program management; functional applications such as configuration management, engineering change control; and business solutions like new product introduction, supply chain collaboration, that incorporate best practices and methods." added Mr. Amann.

Mr. Amann further explained that CIMdata partitions the PLM market into two primary segments: cPDm and Tools. "Tools are focused on fundamental intellectual property (IP) creation and cPDm is focused on IP management including collaboration, visualization, vaulting, and sharing of product related information."

PLM Market Growth Exceeds Forecast

Regarding the PLM market performance, Mr. Amann said, "Our research shows that the overall PLM market grew 10.7% to reach $20.1 billion in 2006. This strong growth rate is attributed to continued recognition of the value of PLM in improving companies' business performance. PLM investments are forecasted to continue their climb over the next five years, increasing at a compound annual growth rate of approximately 8.5% to exceed an estimated $30 billion by 2011 *(*as shown in *Figure 1)*.

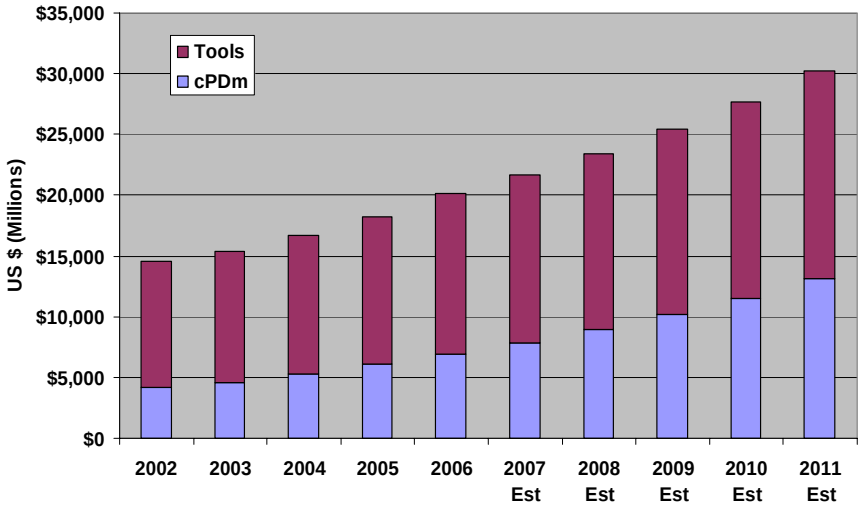

Figure 1—Overall PLM Market History and Forecast from 2002 through 2011

According to CIMdata, $13.2 billion was spent in 2006 by companies worldwide on PLM Tools such as mechanical computer-aided design (MCAD), computed-aided manufacturing (CAM), electronic design automation (EDA), engineering simulation and analysis, technical publishing, and others. Growth in this sector was primarily driven by investments in EDA and mid-range MCAD. Areas such as high-end MCAD and simulation and analysis experienced relatively lower growth. The Tools portion of the PLM market is forecasted to grow at a CAGR of 5.3% over the next five years to reach $17.1 billion by 2011.

The fastest-growing sector of PLM is for expenditures on cPDm, which is focused on collaboration, management, and sharing of product-related information. This segment covers technologies and approaches such as PDM, collaboration and visualization, data exchange, portfolio management, compliance management, strategic sourcing, enterprise application integration, workflow, functional applications such as configuration management, and solutions for specific industries or businesses.

CIMdata research indicates that the cPDm portion of the PLM market met the forecast for growth and reached $6.9 billion in 2006, representing an increase of approximately 13.6% over 2005. The cPDm segment is expected to continue its strong growth to $7.8 billion in 2007 and reach $13 billion by 2011 for a CAGR of 13.6% *(as shown in Figure 2).*

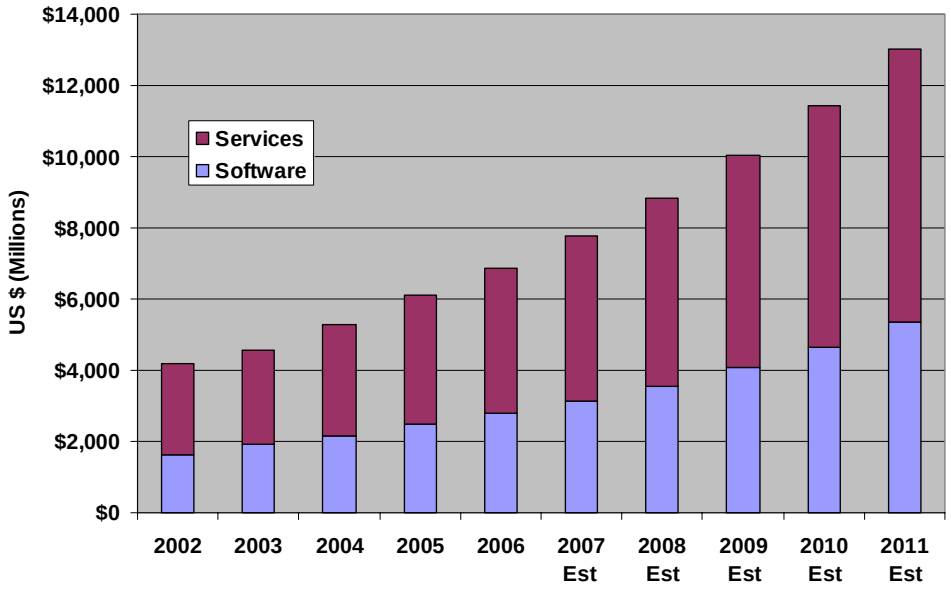

Figure 2—cPDm Market Growth History and Forecast (*Estimated for 2007 to 2011*)

Wide Range of Companies Supply PLM-Related Solutions

Mr. Amann explained that a widely diverse group of suppliers provide PLM-solutions and services. Some of these suppliers focus on specific technologies or industries such as MDA, EDA, CASE, or analysis and simulation. Others deliver broad management and collaboration solutions that are the information backbone for PLM initiatives. Many PLM solution suppliers partner with suppliers of complementary technologies and applications in order to deliver more comprehensive enterprise PLM solutions than each could provide individually. Overall, companies from many different technology and service sectors derive substantial revenues from the PLM market.

Companies that have broad product suites designed to manage the full lifecycle—comprehensive technology suppliers—represent the foundation of PLM. These suppliers continue to expand their

product suites to meet the needs of their customers. “Increased end-user investments are being driven by the continually-broadening scope of enterprise-wide implementations, expansion into new areas such as Digital Manufacturing, Strategic Product Planning, compliance management, industry-focused packaged solutions, and integration with other business initiatives such as Customer Relationship Management (CRM),” explained Amann. Both comprehensive PLM technology suppliers and focused application suppliers are packaging their products into solutions that focus on and support, the practices of specific industries (automotive, aerospace, high-tech electronics) and business problems, e.g. compliance. “The growth of supplier-developed ‘packaged solutions’ is significantly enabling small- and medium-sized businesses to adopt PLM solutions,” according to Amann. “Mid-market investment in PLM continues to grow and PLM solution providers are fine-tuning their product suites and pricing models to better meet mid-market requirements for PLM adoption. PLM suppliers (such as Arena Solutions, Aras, and Contact Software) have differentiated themselves by focusing on small- and mid-sized businesses, Other suppliers such as Selerant, Infor, and Lascom are examples of companies differentiating themselves by focusing on specific industries. Many of the larger PLM suppliers provide multiple solutions, each focusing on specific industries and sizes of companies.

Independent consultancies, systems integrators (SIs) and value-added resellers (VARs) (e.g., Accenture, CSC, Deloitte Consulting, HP Consulting, TCS, T-Systems, etc.) continue to expand their PLM programs in response to the growing demand for such services. Major comprehensive technology suppliers expanded their direct service delivery programs and increased their development of alliances with SIs and VARs. “Consultancies and SIs are growing PLM programs by teaming with one or more of the comprehensive technology suppliers as well as expanding their own PLM knowledge staff,” stated Amann.

Application suppliers focused on specific technologies and functions that are part of an overall PLM environment continue to expand the PLM footprint. Suppliers such as Accept Software, Centric Software, RuleStream, and Eurostep are examples of companies that are adding extended capabilities and value to PLM implementations. Examples of these expansion and/or niche areas include service-after-sales, strategic sourcing, and materials compliance solutions. The area of simulation and analysis continues to receive substantial emphasis, with expanded solutions to manage these environments and integrate them more fully into a full PLM program emerging and transitioning this sector of the market toward comprehensive enterprise simulation management (ESM) support. Suppliers such as MSC have been quite visible in driving this transition as well as the integrated simulation and analysis initiatives at major broad-based PLM suppliers like Dassault Systèmes and Siemens PLM Solutions Group.

All Geography and Industry Sectors See Strong Growth

CIMdata statistics indicate that cPDm growth continued in all industry and geographic sectors for 2006. Both EMEA (Europe, Mid-East and Africa) and the Americas maintained solid growth with the Americas growing at over 15% and EMEA up 13%. Asia-Pacific continues to be a major opportunity. While the 9.2% growth of the Asia-Pacific region was dominated by Japan, continued investment by solution providers in China and other AP countries should result in increased growth across the region in the coming years.

Mr. Amann said, “Our research indicates that the automotive and high-tech continue to be the largest cPDm adopters in 2006. Aerospace and defense (A&D) and fabrication and assembly (F&A), which includes white goods, machine tools, retail and apparel, and others, had solid revenues.” He added that all process industry sectors had solid growth. This includes consumer-focused process industries (consumer packaged goods, food and beverage, and pharmaceuticals), petrochemical, and utilities.

Shipbuilding, construction, infrastructure and non-traditional sectors also showed strength based on increasing adoption of PLM by those industries. “This across the board growth demonstrates the universality of PLM in providing business value across such a diverse spectrum of industries.” noted Mr. Amann.

Click here to return to Contents

Company News

Aspen Technology Joins FIATECH Industry Consortium

23 October 2007

Aspen Technology, Inc. announced that it has joined the FIATECH industry consortium to promote industry standards for process engineering design and operations.

FIATECH is the only non-profit consortium focused on fast-track development and deployment of technologies designed to substantially improve how capital projects and facilities are designed, engineered, built and maintained. By joining the consortium, AspenTech will play an active role in supporting FIATECH and its efforts to create a single, vendor-neutral data exchange standard using the existing ISO 15926 framework.

If process industry vendors use neutral data exchange standards, process industry owner-operators, engineering and construction firms and other companies benefit from increased interchange of data at a lower cost. This significantly reduces plant capital costs and associated design/construct timescales, while increasing the value of information within the operational phases of the plant lifecycle.

A neutral standard such as ISO 15926 provides open access to the data stored in process engineering solutions such as AspenTech’s aspenONE Process Engineering application suite. aspenONE is a highly integrated toolset for Conceptual and Basic Engineering and Engineering support to Plant Operations. It includes Aspen Zyqad, in whose repository all process equipment and cost data, plus associated deliverables created during the Basic Engineering phase of a project are stored. These data may be exchanged with the detailed design and construction information stored in systems such as Intergraph’s SmartPlant Suite.

“AspenTech applauds FIATECH’s leadership role in converging the many parallel activities that are being developed to create standards for data exchange for the process industry,” said Charles Rieb, AspenTech vice president of product management. “AspenTech fully supports standards and industry initiatives that can be practically implemented to deliver customer value. FIATECH’s efforts with ISO 15926 are achieving practical results and are supported by global, industry-leading companies.”

“We are pleased to welcome AspenTech into the FIATECH consortium,” said Dr. Richard Jackson, director of FIATECH. “AspenTech's membership extends the footprint of FIATECH further into the conceptual and basic design arenas as well into the areas of process operations, planning and optimization. This is of great value to the process plant design and operations community and supports FIATECH's mission to improve the entire information and technology lifecycle.”

Click here to return to Contents

Cadence Announces Collaboration Award Winners for Advancing Design Chain Effectiveness

25 October 2007

Cadence Design Systems, Inc. has announced the winners of the second annual Collaboration Awards for excellence in driving design chain success. The award winners are NEC Electronics Corp., ARC International, Denali Software and Taiwan Semiconductor Manufacturing Company (TSMC). Cadence® announced the Collaboration Award winners at the annual Cadence Design Chain Partners Event, held Oct. 23 in San Jose, Calif.

The winners in each of the four categories—whole product support, joint marketing, sales support and relationship management—were selected from a list of finalists. More than 200 companies that are members of the Cadence Connections®, OpenChoice, ASIC, Foundry and Verification Alliance programs were eligible for consideration. The awards recognize each company's operational excellence in the advancement of design chain collaboration.

At the event, Ed Wan, senior director of Design Technology Support and Marketing at TSMC North America, presented keynote remarks titled, "Zero Degrees of Separation," which focused on the need to minimize the separation of ecosystems and embrace collaboration. Attendees also participated in a panel discussion titled, "45 Nanometers—Collaboration for Success," with panel members from Applied Materials, Cadence, Freescale and IBM.

NEC Electronics Corp. won the award in the category of whole product support for its contribution as a founding member of the Power Forward Initiative. NEC has contributed greatly to the initiative, in both technical and marketing activities including submitting almost 400 enhancements to the CPF specification, significantly speeding its maturation.

ARC International won in the category of joint marketing. ARC and Cadence have jointly sponsoring more than 20 marketing and business development activities in 2007.

Denali Software won in the category of sales support. Throughout this past year, Denali worked closely with Cadence to develop business opportunities and generated the largest number of high-quality joint-sales engagement opportunities.

TSMC won in the category of relationship management. TSMC and Cadence have been working together very closely for almost a decade. As a valuable partner in the design chain, TSMC has dedicated resources to managing and fostering the relationship.

"Our customers greatly appreciate the benefits they receive from collaborations between Cadence and our partners along the design chain," said Kevin Bushby, executive vice president, Worldwide Field Operations at Cadence. "The Collaboration Award is Cadence's way of showing our partners that we, too, appreciate their working with us to address today's biggest design challenges. We congratulate the winners of this year's Collaboration Award for all their work on behalf of customer success."

Click here to return to Contents

CGTech Appoints Ucgen Yazilim as a VERICUT Authorized Reseller for Turkey

19 October 2007

CGTech announced that Ucgen Yazilim has joined the company's European Reseller network to market and support VERICUT in Turkey.

Ucgen Yazilim Ltd. Sti. (English translation “Triangle Software”) is based in Southern Istanbul, on the Asian side of the Bosphorus. They provide professional software solutions for CAD and PLM, with a strong bias to CAM.

According to Sarp Egilmez, General Manager “The Turkish investment in CNC Machinery, particularly in the Aerospace and Automotive sectors, is driving requests for CNC Verification and Optimization. VERICUT is the clear market leader, and we are delighted to be able to offer it to Turkish manufacturers.”

Lee Fowkes, CGTech’s country manager continues “We are delighted with the extra skills and geographical coverage that Ucgen Yazilim bring to our Reseller network. We have great expectations for the Turkish market”

For further information on Ucgen Yazilim please visit: http://www.ucgenyazilim.com/

Click here to return to Contents

Chair in Construction Design/CAD of the Technical University (TU) Dresden Joins the ProSTEP iViP Association

23 October 2007

The chair in construction design/CAD of the Technical University Dresden under the direction of Prof. Dr. Ralph Stelzer joined the ProSTEP iViP association. Goal for the chair which has been mostly involved in virtual product development is to further strengthen the cooperation with industrial partners. "The close cooperation between university and industry is indispensable for the successful realization of our research projects. In this context the collaboration of users, IT-manufacturers and research institutes within the ProSTEP iViP association is of essence", Professor Stelzer points out and adds: "Being able to address specific problems in one of the project groups and promote them in respect of content was another good reason for this membership."

Against the background of always shorter production times, globalized manufacturing and increasing complexity and model variety the chair in construction design/CAD is particularly involved in the usage of virtual technology. Focus is here the holistic approach to the entire product lifecycle. Part of the chair’s central work areas are: the cross domain integration of design tools among each other and with systems of the product lifecycle management; the visualization, simulation and validation of virtual prototypes at al., by means of virtual- and augmented reality; reverse engineering for the return and integration of real product models into the virtual product creation; design methods for generative production processes (Rapid Engineering).

About the Technical University Dresden

The Technical University Dresden traces back to the Technical Educational Establishment Dresden founded in 1828; therewith the university is one of the oldest technical-academic educational establishments in Germany. With round about 35 000 students and 6 000 permanent employees - among 419 professors – and almost 2 000 persons employed through third-party-funds it is today the largest university in Saxony. The department of mechanical engineering with about 4 500 students is the largest faculty in the area of engineering sciences. Here Prof.Dr.-Ing.habil. Ralph H.Stelzer is in charge of the chair in construction design/CAD since 2001.

Click here to return to Contents

TopSolid – Reported to be the 2nd CAD/CAM Solution in France

October 2007

In a recent PLM report published in France "Marché Français du PLM 2007" Missler Software was classified as "2nd CAD and 2nd CAM Mid Range software developer in France, in front of Autodesk and SolidWorks."

According to Marc Choquin, Sales Director France: "Missler Software has been an important CAD/CAM developer for 20 years now. TopSolid is a leading CAD and CAM solution worldwide. "Within France the name TopSolid is often associated with pure CAM. However, TopSolid'Design is a very powerful design solution which can be used completely independently from the rest of the TopSolid product suite. Nonetheless, greatest productivity gains are achieved when using the integrated CAD/CAM TopSolid solution). Missler Software's TopSolid is a major player in both CAD and CAM Mid Range mechanical markets in France.

Click here to return to Contents

VISTAGY Partners with Beijing Institute of Aeronautical Materials to Advance Composites Engineering Research

23 October 2007

VISTAGY, Inc. announced a strategic partnership with the Beijing Institute of Aeronautical Materials (BIAM), China's largest and most influential composites research and development organization, to advance composites engineering technology for the region's aerospace manufacturers. In addition, the institute has selected VISTAGY's FiberSIM® suite of composites design software as the foundation of its virtual 3D product engineering process for composites.

"BIAM is honored to work with many of China's most active aerospace and composites manufacturers to help them successfully develop products made of advanced composite materials, and our partnership with VISTAGY has helped to advance our strong position," said Dr. YI Xiaosu, director of Science Technology Committee at Beijing Institute of Aeronautical Materials. "We have great confidence in FiberSIM's industry-leading capabilities for composites development. VISTAGY's software has enabled us to streamline our research and development processes, and we're convinced that Chinese aerospace manufacturers will achieve significant advances in composites engineering when using the software on their upcoming major aircraft programs."

BIAM's mission is to research and develop new composites technologies and methodologies and introduce them to the Chinese aerospace manufacturing community. FiberSIM plays an essential role in helping BIAM advance composites engineering in China. With its capabilities for quickly defining and capturing all non-geometric product information, and efficiently managing design changes all within the CAD environment, FiberSIM has become the engineering software of choice for BIAM's research and development teams. And, because FiberSIM is integrated directly into commercial CAD software systems, scientists and engineers can experiment with new design concepts and composites processes in a real-world development environment that replicates how engineers work in aerospace manufacturing organizations.

"BIAM has long been recognized as a leader in materials research and engineering, not only in China but throughout the world, because of its highly respected professors and focus on aerospace engineering. BIAM has partnered with VISTAGY because of our mutual goals to achieve composites development

excellence with best-in-class research and tools," said Mamoru Iguchi, general manager, Asia Pacific, at VISTAGY, Inc. "VISTAGY's continued success in the Asia Pacific region is a testament to FiberSIM's effectiveness in helping organizations more efficiently design and manufacture the world's most innovative aerospace products."

Click here to return to Contents

Events News

ProSTEP iViP Symposium 2008

26 October 2007

"Vitality of Standards – Service Orientation for Dynamic Enterprises" – that's the motto of the next ProSTEP iViP Symposiums that will be held at the Ludwig-Erhard-Haus in Berlin on April 9 and 10, 2008. With around 350 participants per year this trade congress organized by the ProSTEP iViP Association is the most important conference for product lifecycle management experts.

The ProSTEP iViP Symposium 2008 will be conducted with support of ProSTEP iViP Association members Continental and Microsoft. Numerous lectures and workshops being held in German and English will highlight topics like: Integration of product development and production processes, visualization and simulation, product data management, archiving and security aspects as well as business value and risk analysis. The exhibition accompanying the conference program will show the current spectrum of IT and system services.

Further information visit http://www.prostep.org/.

Click here to return to Contents

Register Now for BlueCielo ECM Frontiers 2008 Europe

23 October 2007

BlueCielo ECM Solutions (formerly Cyco Software) revealed that it will hold its second European user conference – BlueCielo ECM Frontiers 2008 Europe – at the glamorous InterContinental Carlton Hotel in Cannes, France on February 10-12, 2008. Full conference details and registration at special early-bird prices are now available at http://www.bluecieloecm.com/frontiers2008.

BlueCielo's user conference (now titled 'BlueCielo ECM Frontiers') has become the premier networking, learning and inspirational event exclusively for customers and resellers of BlueCielo's InnoCielo solutions to learn more about the future of InnoCielo solutions, share their experiences, interact with BlueCielo executives and gain first-hand insight into a wide range of business, strategic and technical issues.

The much-anticipated 2008 conference is themed around one of the industry's hottest current talking points – Crossing Borders in Collaborative Engineering – and will explore ways corporations, large and small, can deploy InnoCielo solutions to facilitate collaborative engineering – between internal departments, across your subcontractor network and across the globe.

At BlueCielo ECM Frontiers 2008 Europe, BlueCielo executives, customers and trend-watchers will demonstrate how these industry trends will directly affect your business and shape the future of engineering content management solutions.

The business-critical topics to be discussed include:

- Benefits of ECM in a Distributed Organization
- Latest Global Engineering Trends
- Managing Daily Operations with ECM Solutions
- How to Stay on Top of Health & Safety Issues

Conference highlights include:

- Industry experts highlighting the latest trends in ECM
- Customer case-studies from multiple industry sectors discussing real-life results of working with InnoCielo solutions
- Hands-on sessions to learn more about InnoCielo solutions
- An introduction to InnoCielo Meridian Enterprise 2008 and a sneak peek at upcoming products
- Tutorials on BlueCielo's add-on integration solutions for Documentum and Microsoft SharePoint
- Networking opportunities with BlueCielo customers, resellers and executives

BlueCielo ECM Frontiers 2008 Europe will also feature the independent global user group CyConnect International, which will unveil exciting plans for the further growth of BlueCielo's user community.

All this will take place at the InterContinental Carlton Hotel in Cannes, France.

Click here to return to Contents

Siemens PLM Software Hosts UGS Connection 2007 in Tokyo Where Teamcenter 2007 Will be Unveiled

18 October 2007

Siemens PLM Software announced it will host UGS Connection 2007, its annual user conference, Oct. 30-31 in Tokyo at the Hotel Nikko Tokyo.

Seiichiro Saito, professor of Chiba University of Commerce, director of NTT Data Institute of Management Consulting and well-known TV commentator of economic programs, is scheduled to deliver the keynote address. Keigo Fukushi, general manager, Process Information Management Department, R&D Engineering Management Division of Nissan Motor Co., Ltd. and Toshiaki Sato, deputy general manager, Development Process Innovation Center of Ricoh Co., Ltd. are scheduled special guest speakers who will introduce their innovations during the general session on Day 1.

Siemens PLM Software will unveil details of its Teamcenter 2007 software on Day 2.

For more information, visit http://www.go-event.info/ucj2007.

Click here to return to Contents

Synopsys Recognizes Engineers' Technical Excellence with Best Paper Awards at 16th Annual SNUG Europe Conference

23 October 2007

Synopsys, Inc. announced the Best Paper Awards for the 16th annual Synopsys Users' Group (SNUG®) in Munich, Germany. At the Munich event, the first place award for Best Paper went to Kees Timmermans and Simon Meintema of TTA-International for "Automated Development of Schematic Documentation for Web-Delivery." Second place went to Dan Steinberg of Integrated Device Technology for "Regression & Random Sims: Techniques & Recommendations." Third place went to Jacob Andersen, Peter Jensen and Stig Kofoed of SyoSil for "Standardizing Verification IP Reuse by Introducing SystemVerilog Verification Components." The award for Best First-Time Presenter went to Juergen Dirks of LSI Corporation for "Mix and Match of Flat, Hierarchical and Pseudo-Hierarchical Approaches for Different Steps of a Design Flow." The winning papers were selected by the attendees and the SNUG Technical Committee.

The Technical Committee Award went to Roberto Mattiuzzo and Saverio Graniello of STMicroelectronics and Salvatore Talluto, Alfredo Conte and Adam Cron of Synopsys, Inc. for "Small Delay Defect Testing." Two Technical Committee Honorable Mentions went to David Sebastio of Texas Instruments Inc. and a co-author for "Analog Simulations of High-Speed Serial Chip-to-Chip Links with HSPICE®," and to Stuart Vernon of Imagination Technologies Ltd. and Simon Bloyce of Synopsys, Inc. for "Easing the Pain of Sign-off Timing and SI Closure Using PrimeTime® Distributed Multi-Scenario Analysis."

SNUG Europe is part of a global program that last year drew more than 5,000 integrated circuit (IC) and system design engineers to 10 such technical conferences worldwide. The flagship event in San Jose, California drew record attendance of nearly 1,600 Synopsys users in March of 2007.

"Year after year, we get positive feedback from users about the quality and breadth of SNUG's technical content," said Frank Poppen, research engineer at OFFIS Institute for Information Technology and SNUG Europe technical chair. "Users from all over Europe gather to network and exchange ideas about the technical challenges in semiconductor design and manufacturing. SNUG gives them broad exposure to a range of hot topics in the industry, particularly those unique to European markets and applications."

Aart de Geus, chairman and chief executive officer at Synopsys, addressed attendees at the technical conference with a keynote that focused on what Synopsys is doing to help customers with their challenges in achieving higher quality of results (QoR), faster time to results (TtR) and lower cost of results (CoR). He gave an industry overview that set the context for the economic and technological challenges in the industry and then took a deeper look into QoR, specifically focusing on power management challenges and solutions from system level to manufacturing. He also highlighted some of the exciting progress Synopsys has made in the past year in the TtR arena with advanced verification solutions and IP, and CoR progress with improved yield technology.

"SNUG is a great opportunity for our customers to exchange ideas and give Synopsys executives honest feedback on what we're doing right and where we can improve," said Mr. de Geus. "The open communication and vibrant collaboration at SNUG conferences make them premier technical events in the EDA industry. This year's best paper winners exemplify that cooperative spirit and we thank them for sharing their technical insights."

SNUG Europe Sponsors include: Global Sponsors ARM and TSMC; Gold Sponsors Hewlett-Packard and Virage Logic, and Common Platform Technology members Chartered Semiconductor, IBM and Samsung. The two-day SNUG Europe conference featured a technical program with more than 70 presentations that focused on all areas of design including synthesis, verification, low-power design, physical design, test and design-for-manufacturing. This year's program featured 49 user papers, 26 Synopsys technical tutorials and two panels. These presentations focused on the challenges that

engineers face as they design complex systems for a wide array of applications. Unique to SNUG Europe is the multi-technology systems track, geared towards users in the automotive, aerospace and IC industries. Conference proceedings are available on the SNUG website: http://snug-universal.org/

Click here to return to Contents

The MathWorks Highlights Model-Based Design at SAE Commercial Vehicle Engineering Congress 2007

24 October 2007

Who: The MathWorks

What:

- Peter Maloney of The MathWorks will participate on a panel with participants from Cummins, General Motors, International Truck and Engine Corp., John Deere and Ohio State University to discuss analytical engine calibration techniques.
- Experts from The MathWorks will present papers about applying Model-Based Design to the commercial vehicle industry.
- Jon Friedman of The MathWorks will co-chair a two part session on Model-Based Design (Embedded Systems).

Where/When: SAE Commercial Vehicle Engineering Congress, Donald E. Stephens Convention Center, Rosemont (Chicago), IL, October 31- November 1, 2007

At this year's SAE Commercial Vehicle Engineering Congress, The MathWorks, a gold level sponsor, will demonstrate how Model-Based Design is being leveraged by the world's leading commercial vehicle manufacturers. Experts from the Company will participate in the technical program and provide in-booth demonstrations.

Learn more about The MathWorks and Model-Based Design in the following technical sessions or by stopping by booth # 307 .

The MathWorks will participate in the following panel discussion:

Wednesday, October 31, 8:00 a.m., Room 12

Peter Maloney of The MathWorks will participate on the panel, "Analytical Engine Calibration: From Theory to Application" along with participants from Cummins, General Motors, International Truck and Engine Corp., and John Deere. Giorgio Rizzoni of Ohio State University will moderate the panel. Panelists will discuss their experiences using MATLAB® for analytical engine calibration and visions of how the methods and tools can be applied to meet the expanding list of demands placed on calibrators of modern embedded powertrain controllers. (Session Code: CV401).

The MathWorks experts will present the following technical papers:

Wednesday, October 31, 10:30 a.m., Room 12

Thomas Erkkinen of The MathWorks will present a paper entitled, "Automatic Code Generation - Technology Adoption Lessons Learned from Commercial Vehicle Case Studies." (Paper # 2007-01-4249)

Wednesday, October 31, 1:30 p.m., Room 12

Sameer M. Prabhu of The MathWorks will present a paper entitled, "Model-Based Design for Off-Highway Machine Systems Development." (Paper # 2007-01-4248)

The MathWorks will be co-chairing the following technical sessions:

Wednesday, October 31, 10:30 a.m.-12:00 p.m., Room 12

Jon Friedman of The MathWorks will co-chair the session, Model-Based Design (Embedded Systems) (Part 1 of 2; Session Code: CV407).

Wednesday October 31, 1:30 p.m. – 3:30 p.m., Room 12

Jon Friedman of The MathWorks will co-chair the session, Model-Based Design (Embedded Systems) (Part 2 of 2; Session Code: CV407).

Click here to return to Contents

TopSolid'Wood - A Real CAD/CAM Solution for the Wood Industry

25 October 2007

Missler Software will participate in the International Construction Trade Fair, Batimat, which will take place in Paris, 05-10 November, Hall 5.1, Stand E38 with TopSolid'Wood and TopSolid'WoodCam.

TopSolid'Wood is an integrated design, manufacturing and management solution for the wood industry. TopSolid'Wood, a 3D design solution based on the Parasolid solid modeler, offers all the modelling facilities of the CAD module TopSolid'Design. In addition, TopSolid'Wood offers industry-specific functions for woodmaking which enable unprecedented time and quality gains.

TopSolid'Wood outputs to the CNC plant floor through TopSolid'WoodCam, an integrated CAM solution which automatically produces the ISO code, via a post processor, to manufacture parts on CNC machinery. TopSolid'WoodCam offers complete simulation of the machine tool which is vital to verify complex 5 axis tool paths. Thanks to the complete integration between TopSolid'Wood and TopSolid'WoodCam a real data flow exists between the design office and the manufacturing facility. This prevents numerous potential communication and technical errors and thereby generates considerable time gains.

A real CAM solution

TopSolid'WoodCam is a « real » CAM solution developed for the wood industry. Thanks to the many partnerships established by Missler Software with machine tool manufacturers in the wood industry, TopSolid'WoodCam drives the most complex machines present on the market today. TopSolid'Wood also proposes interfaces for 2 ½ D machining which enables files to be exported directly to the machine tool manufacturer's software solution. In simple terms, TopSolid'Wood can directly communicate geometries to be machined to such machine tool manufacturer software solutions as WoodWop, BiesseWorks, Xilog, ... for the machining of simple parts (for example, panels.)

While TopSolid'Wood may be used purely for CAD purposes, Missler Software strongly advocates the benefits of using its integrated CAD/CAM for the following reasons:

- The existence of a 3D design model in TopSolid'WoodCam offers complete integration between design and production processes. Operations carried out in the design stage are recognised by

TopSolid'WoodCam (rough milling, grooving, surfacing, drilling, profiling, routing, doweling, etc.) All tool paths are calculated taking into account the geometry of the model to be produced, the specific tooling to be used and the original stock as defined in TopSolid'Wood.

- Any modification made during the design stage is automatically recuperated in the machining stage without having to make time-consuming changes (positioning of the part, identification of operations, choice of tools, etc.) The generation of the new ISO codes, following a design modification is, therefore, practically instantaneous.
- The use of one software solution for design and machining leads to shorter and less expensive training. Working with 1 solution also means one contact point for all CAD/CAM exchanges.

TopSolid'Wood outputs to the CNC plant floor through TopSolid'WoodCam, an integrated CAM solution which automatically produces the ISO code, via a post processor, to manufacture parts on CNC machinery.

Click here to return to Contents

WorkNC and MyWorkPLAN Attract Worldwide Interest at EMO and TCT

19 October 2007

Two major shows in September were a shop window for Sescoi's new WorkNC G3 Automatic CAM/CAD software and its job management system, MyWorkPLAN.

EMO in Hannover proved to be a great draw to visitors from around the globe, with live machining demonstrations on the Sescoi stand of WorkNC's latest 5-axis and trochoidal cutterpaths.

TCT at the Ricoh Arena in Coventry, which has grown to become the UK's leading event for rapid product development and rapid manufacturing technology, was an ideal venue for Sescoi to demonstrate its products. The company hosted a free seminar on efficient machining & job management as part of the exhibition's conference programme, providing delegates with best practice manufacturing advice.

Visitors to both shows positively received Sescoi's new generation CAM/CAD system, WorkNC G3. WorkNC G3's new intuitive single user interface brings together design, programming, analysis and toolpath verification, simplifying and speeding up the preparation of CNC programmes. WorkNC G3 also includes some significant enhancements to its 5-axis technology. New routines for blade and impeller machining, and revised machining algorithms will produce smoother cutterpaths and improve the surface finish on difficult to machine components.

At both shows, Sescoi's MyWorkPLAN job management system attracted a considerable amount of interest. For toolmaking and rapid prototyping companies there is a growing movement to improve processes through more efficient manufacturing management. MyWorkPLAN provides the software tools to control costs, create accurate quotations, and manage production, deliver dates and quality. Improvements in these areas will cut down on non-productive work and administration and enable significant savings to be made cost effectively.

Bruno Marko, founder of Sescoi said, " In our 20th year we have built on our success by launching new generation products. Exhibiting at EMO and TCT gives us the platform to communicate these advances to engineers across the world."

Click here to return to Contents

Financial News

Apache Achieves Record Sales for the Nineteenth Consecutive Quarter

25 October 2007

Apache Design Solutions announced that the company has achieved its 19th consecutive quarter of record sales, while maintaining profitability. Sales growth consists of a healthy mix of RedHawk SoC and mixed-signal dynamic power and Sentinel chip-package and I/O integrity solutions. In addition, the company signed a four-year agreement that includes the full spectrum of Apache product lines with one of the top five fabless semiconductor companies.

“Power and noise are clearly a system-wide challenge. The rapid adoption of our new Sentinel product demonstrates that we are addressing the critical need of chip-package-system co-design,” said Craig Shirley, vice president of sales at Apache. “Adding the success of Sentinel to the widespread adoption of RedHawk strengthens our business growth.”

“Achieving nineteen consecutive quarters of record sales signifies Apache’s solid business execution,” said Andrew Yang, CEO of Apache. “We are committed to continue delivering innovative technologies required for our customers to manage power and noise challenges for 65/45nm migrations.”

Click here to return to Contents

Cadence Reports Q3 Revenue Up 9% Over Q3 2006

24 October 2007

Cadence Design Systems, Inc. reported third quarter 2007 revenue of $401 million, an increase of 9 percent over the $366 million reported for the same period in 2006. On a GAAP basis, Cadence recognized net income of $73 million, or $0.24 per share on a diluted basis, in the third quarter of 2007, compared to $42 million, or $0.14 per share on a diluted basis, in the same period in 2006.

In addition to using GAAP results in evaluating Cadence's business, management believes it is useful to measure results using a non-GAAP measure of net income, which excludes, as applicable, amortization of intangible assets, stock-based compensation expense, in-process research and development charges, integration and acquisition-related costs, gains and expenses related to non-qualified deferred compensation plan assets, executive severance payments, restructuring charges and credits, losses on extinguishment of debt and equity in losses (income) from investments. Non-GAAP net income is adjusted by the amount of additional taxes or tax benefit that the company would accrue if it used non-GAAP results instead of GAAP results to calculate the company's tax liability. See "GAAP to non-GAAP Reconciliation" below for further information on the non-GAAP measure.

Using this non-GAAP measure, net income in the third quarter of 2007 was $97 million, or $0.33 per share on a diluted basis, as compared to $81 million, or $0.26 per share on a diluted basis, in the same period in 2006.

"Our cross platform solutions, such as low power and logic design team, are gaining traction. At the same time, we're seeing momentum in the uptake of our Virtuoso platform upgrade," said Mike Fister, president and CEO of Cadence.

"It was another good quarter for achieving our primary operating metrics—revenue, operating profitability and cash flow," added Bill Porter, executive vice president and chief financial officer.

The following statements are based on current expectations. These statements are forward looking, and actual results may differ materially. These statements do not include the impact of any mergers, acquisitions or other business combinations completed after Sept. 29, 2007.

Business Outlook

For the fourth quarter of 2007, the company expects total revenue in the range of $465 million to $475 million. Fourth quarter GAAP earnings per diluted share are expected to be in the range of $0.34 to $0.36. Diluted earnings per share using the non-GAAP measure defined below are expected to be in the range of $0.45 to $0.47.

For the full year 2007, the company expects total revenue in the range of $1.622 billion to $1.632 billion. On a GAAP basis, net income per diluted share for fiscal 2007 is expected to be in the range of $0.94 to $0.96. Using the non-GAAP measure defined below, diluted earnings per share for fiscal 2007 are expected to be in the range of $1.34 to $1.36.

Click here for the Q3 2007 Financial Schedules

Audio Webcast Scheduled

Fister and Porter will host a third quarter 2007 financial results audio webcast today, Oct. 24, 2007, at 2 p.m. (Pacific) / 5 p.m. (Eastern). An archive of the webcast will be available starting Oct. 24, 2007, at 5 p.m. Pacific time and ending at 5 p.m. Pacific time on Oct. 31, 2007. Webcast access is available at http://www.cadence.com/company/investor_relations.

Click here to return to Contents

EMC Reports Record Third-Quarter Financial Results

25 October 2007

EMC Corporation announced record third-quarter revenue and net income. EMC has now delivered seventeen consecutive quarters of double-digit revenue growth marked by strong, balanced execution across all its business lines and major geographies.

Total consolidated revenue for the third quarter of 2007 was $3.3 billion, an increase of 17% over the $2.8 billion reported for the third quarter of 2006. GAAP net income for the third quarter of 2007 was $492.9 million or $0.23 per diluted share, 77% higher than the GAAP earnings per diluted share of $0.13 reported for the year-ago period. GAAP net income for the third quarter of 2007 includes net gains of $115.2 million, primarily from the sale of six million shares of EMC's interest in VMware to Cisco Systems. Excluding this item, net income was $377.8 million or $0.17 per diluted share, an increase of 31% year-over-year. During the quarter, EMC generated operating cash flow of $718 million, an increase of 57% compared with the same period a year ago and free cash flow of $475 million, an increase of 124% year-over- year.

"Solid global execution of our strategy resulted in record third-quarter financial results," said Joe Tucci, EMC Chairman, President and Chief Executive Officer. "Customers around the world are benefiting from the breadth and quality of our information infrastructure product and services portfolio, which provides them with the most cost-effective way to store, protect, optimize, and leverage their vast and growing quantities of strategic information. We see broad opportunities in the global marketplace, and we will continue to drive profitable growth by furthering technology integration across our portfolio, investing in research and development, and expanding into the fastest-growing global markets."

Tucci continued, "Among the many standouts during the quarter was VMware's quarterly performance and the completion of the initial public offering of approximately 10% of VMware. VMware is not only one of the fastest-growing businesses in the history of the software industry, but it has also created an entire IT category based on one of the very few game-changing technologies out there today. The IPO has enabled EMC to expose and unlock more of VMware's value for shareholders."

EMC systems revenue increased 9% year-over-year and represented 43% of total third-quarter revenue. Software license and maintenance revenue increased 25% year-over-year and accounted for 41% of total third-quarter revenue. Professional services, systems maintenance and other services revenue grew by 25% year-over-year and represented 16% of total third-quarter revenue.

Revenue from North America increased 15% compared with the same period a year ago and represented 59% of total third-quarter revenue. Revenue from operations outside of North America grew 21% year-over-year, highlighted by double-digit year-over-year revenue growth in EMC's Europe, Middle East and Africa (EMEA) and Asia-Pacific and Japan (APJ) regions.

"We demonstrated crisp business and financial execution around the world with operating income growing faster than revenue and free cash flow more than doubling compared to the same period a year ago," said David Goulden, EMC Executive Vice President and Chief Financial Officer. "We remain focused on driving operating leverage across the business. To continue to return value back to shareholders, we are also increasing our previously announced stock buyback commitment from $1 billion to $2 billion. Based on our results year- to-date and our expectations for a solid fourth quarter, we are now very clearly on track to exceed the annual financial targets we set in January."

Third-Quarter Highlights

EMC's Information Storage business, which includes revenue from storage systems, storage software and related customer and professional services, reached $2.6 billion, an increase of 8% compared with the year-ago period. Third-quarter growth in this business was largely driven by strong customer demand for EMC's CLARiiON and Celerra networked storage systems and from EMC's expansive information protection portfolio, including the EMC Disk Library for back-up to disk, EMC Avamar for data de-duplication and EMC Recoverpoint for CDP. EMC Smarts resource management and EMC Rainfinity global file virtualization software experienced double-digit, year- over-year revenue growth. In the third quarter, EMC also announced its expansion of the industry's broadest set of storage technologies - spanning from entry-level to the high-end, helping customers of all sizes store information more cost-effectively, securely and intelligently.

EMC's Content Management and Archiving business posted double-digit revenue growth, increasing third-quarter revenue 27% year-over-year to $189 million. New license revenue increased 34% on a year-over-year basis. During the quarter, EMC announced the Documentum 6 platform, a key component of EMC's suite of enterprise content management products. With the release of Documentum 6, EMC continues to lead the industry into the next generation of enterprise content management, as it moves from a separate application platform to an integral part of an organization's information infrastructure.

RSA information security revenues for the third quarter of 2007 grew 22% when compared with the results of the division's constituent companies in the year-ago period, reaching $133 million in revenue. This growth was primarily driven by RSA's core authentication business, as well as its consumer-facing applications and information and event management offerings. The division also continued to see success in its comprehensive security solutions for businesses seeking to comply with regulatory

mandates and managing information risk holistically across the enterprise.

VMware Inc. which is majority-owned by EMC, had third-quarter revenues of $354 million, an increase of approximately 90% compared to the year-ago quarter. Visit http://ir.vmware.com/ for more information about the virtualization software leader's third-quarter financial results.

Use of Non-GAAP Financial Measures

This release contains non-GAAP financial measures. These non-GAAP financial measures, which are used as measures of EMC's performance or liquidity, should be considered in addition to, not as a substitute for, measures of EMC's financial performance or liquidity prepared in accordance with GAAP. EMC's non-GAAP financial measures may be defined differently than similar terms used by other companies, and accordingly, care should be exercised in understanding how EMC defines its non-GAAP financial measures.

Where specified in the accompanying schedules for various periods entitled "Reconciliation of GAAP to Non-GAAP," certain items noted on each such specific schedule (including, for certain time periods where noted, amounts relating to tax benefits, net gains on investments, including gain on sale of VMware stock, restructuring and IPR&D charges relating to EMC on a consolidated basis, and stock-based compensation expense and intangible amortization relating to only EMC Information Infrastructure) are excluded from the non-GAAP financial measures.

EMC's management uses the non-GAAP financial measures in the accompanying schedules to gain an understanding of EMC's comparative operating performance (when comparing such results with previous periods or forecasts) and future prospects and excludes the above-listed items from its internal financial statements for purposes of its internal budgets and each reporting segment's financial goals. These non-GAAP financial measures are used by EMC's management in their financial and operating decision-making because management believes they reflect EMC's ongoing business in a manner that allows meaningful period-to-period comparisons. EMC's management believes that these non-GAAP financial measures provide useful information to investors and others (a) in understanding and evaluating EMC's current operating performance and future prospects in the same manner as management does, if they so choose, and (b) in comparing in a consistent manner the Company's current financial results with the Company's past financial results.

This release also includes disclosures regarding free cash flow which is a non-GAAP financial measure. Free cash flow is defined as net cash provided by operating activities less additions to property, plant and equipment and capitalized software development costs. EMC uses free cash flow, among other measures, to evaluate the ability of its operations to generate cash that is available for purposes other than capital expenditures and capitalized software development costs. Management believes that information regarding free cash flow provides investors with an important perspective on the cash available to make strategic acquisitions and investments, repurchase shares, service debt and fund ongoing operations. As free cash flow is not a measure of liquidity calculated in accordance with GAAP, free cash flow should be considered in addition to, but not as a substitute for, the analysis provided in the statement of cash flows.

All of the foregoing non-GAAP financial measures have limitations. Specifically, the non-GAAP financial measures that exclude the items noted above do not include all items of income and expense that affect EMC's operations. Further, these non-GAAP financial measures are not prepared in accordance with GAAP, may not be comparable to non-GAAP financial measures used by other companies and do not reflect any benefit that such items may confer on EMC. Management

compensates for these limitations by also considering EMC's financial results as determined in accordance with GAAP.

For full financials details please visit
http://www.emc.com/news/emc_releases/showRelease.jsp?id=5403&l=en&c=US

Click here to return to Contents

MSC.Software to Host Third Quarter Earnings Conference Call and Webcast on November 6, 2007

25 October 2007

MSC.Software Corporation announced that it will host a conference call to discuss third quarter financial results on November 6, 2007 at 7:00 am Pacific (10:00 am Eastern).

The third quarter conference call will include a slide presentation that can be downloaded at: http://www.mscsoftware.com/ir/. The conference call can be accessed by web cast at: http://www.mscsoftware.com/ir/ or by dialing in to (800) 374-0151 for US callers, or (706) 634-4981 for international callers. To participate in the live conference call, use the following conference ID code: 22241568.

An archived version of the conference call will be available at http://www.mscsoftware.com/ir/ The teleconference replay will be available for 48 hours and can be accessed by dialing in to: U.S. (800) 642-1687 or Intl. (706) 645-9291 using the conference ID code: 22241568.

Click here to return to Contents

Synplicity Announces Third Quarter 2007 Results

22 October 2007

Synplicity®, Inc. announced financial results for the quarter ended September 30, 2007.

Revenue for the quarter ended September 30, 2007 was $19.4 million. This compares to the $16.3 million of revenue reported for the quarter ended September 30, 2006. On a generally accepted accounting principles (GAAP) basis, net income was $1.5 million, or $0.05 per diluted share, for the quarter ended September 30, 2007, as compared to a GAAP net income of $1.6 million, or $0.06 per diluted share, for the quarter ended September 30, 2006. For the quarter ended September 30, 2007, GAAP net income included non-cash charges of $959,000 of intangible amortization expense from acquisitions and $747,000 of stock-based compensation expense. For the quarter ended September 30, 2006, GAAP net income included $223,000 of intangible amortization expense from acquisitions and $947,000 of stock-based compensation expense.

For the nine months ended September 30, 2007, revenue was $51.1 million, compared to revenue of $46.1 million for the nine months ended September 30, 2006. For the nine months ended September 30, 2007, the Company reported GAAP net income of $2.7 million, or $0.10 per diluted share. Included in GAAP net income for the nine month period ended September 30, 2007 were non-cash charges of $1.6 million of intangible amortization expense from acquisitions and $2.4 million of stock-based compensation expense. For the nine months ended September 30, 2006, the Company reported a GAAP net income of $1.6 million, or $0.06 per diluted share. Included in net income was $668,000 of intangible amortization expense from acquisitions, $2.8 million of stock-based compensation and a restructuring charge of $854,000.

"I am pleased to report another great quarter at Synplicity with record revenue and operating income, excluding the effects of stock and amortization expenses", said Gary Meyers, president and CEO. "The integration of HARDI Electronics has been seamless and we are very pleased with the results to date."

Business Outlook

The following statements are based on current expectations. This guidance reflects the acquisition of HARDI Electronics AB in June 2007. We do not intend to update, confirm or change this guidance until our earnings conference call for the fourth quarter of 2007.

Revenue for the fourth quarter of 2007 is expected to be in the range of $19.0 to $20.0 million.

GAAP net income per fully diluted share for the fourth quarter of 2007 is expected to be in the range of $0.02 to $0.05. GAAP net income for the quarter is expected to include non-cash charges of approximately $850,000 relating to stock-based compensation and $880,000 of amortization expense from acquisitions.

Audio Webcast

The Company's earnings call will be webcast today at 5:45 a.m. Pacific, and may be accessed at http://investor.synplicity.com. Following completion of the call, a rebroadcast of the webcast will be available at http://investor.synplicity.com through December 31, 2007. For those without access to the Internet, a replay of the call will be available from 8:45 a.m. Pacific on October 22, 2007 through November 5, 2007. To listen to a replay, call (719) 457-0820, access code 7036417.

Click here to return to Contents

Telelogic Interim Report, July - September 2007

23 October 2007

- Revenue climbed 21% in local currency during the third quarter to SEK 428.5 million.
- Sales of licenses and maintenance rose 20% in local currency. Sales of services increased by 23% in local currency.
- Pre-tax profit increased 79% to SEK 75.4 million for the quarter.
- Earnings per share increased by 77% for the third quarter and amounted to SEK 0.23/share.
- Cash flow from current operations was SEK 189.9 million during the first nine months of the year.

CEO’s comments on the quarter:

“Operations showed good growth during the third quarter of 2007. The uncertainty that was the natural response to the bid for Telelogic announced on June 11 initially had a negative impact on operations. Telelogic initiated a campaign to handle this uncertainty both internally and externally. The delay of the offer announced on July 30 drew attention to current business and core operations. During the third quarter customer trust gradually returned and Telelogic closed an unusually large number of major transactions, including the company’s largest deal ever, worth SEK 91 million. A number of these deals were planned to be closed during the second quarter, but were delayed and signed in the third quarter. Organic growth was 21 percent for the third quarter, while pre-tax profit surged 79 percent.

The new product focused organization is working well and all product categories showed good growth.

It is particularly gratifying that requirements management once again showed strong growth with a 31 percent increase. Once again, the EMEA Market Division was the geographic area that showed the strongest growth at 36 percent.

Based on our strong third quarter and the first nine months, Telelogic is revising its forecast upward for the year. Our assessment is that growth for 2007 will fall in the range of 12 to 15 percent in local currency and that the increase in earnings per share will exceed 25 percent year on year."

Anders Lidbeck, President and CEO for Telelogic

Key numbers July - September 2007

Revenue: 428.5 SEK million (370.1 SEK million) Pre-tax profit: 75.4 SEK million (42.2 SEK million) Income after tax: 55.8 SEK million (31.7 SEK million) Earnings per share: 0.23 SEK (0.13 SEK) Cash flow, current operations: 21.4 SEK million (35.0 SEK million)

Key numbers for corresponding period from previous year in parenthesis.

Click here to return to Contents

Implementation Investments

Altair Engineering HyperWorks Selected by Ducati for Series Production of "Hypermotard"

22 October 2007

Altair Engineering, Inc. announced that Ducati, a leading manufacturer of racing-inspired motorcycles has chosen Altair HyperWorks as its preferred tool for the optimization and verification of structural parts for the series production development of the "Hypermotard." The Hypermotard concept motorcycle has already won several awards following its presentation at the EICMA, the 63rd International Motorcycle Exhibition held in Milan during November 2005. To continue this success, Ducati has now taken the prize-winning bike into series production. The Hypermotard 1100 and 1100 S were launched in spring 2007.

"When we presented the Hypermotard as a concept bike at the EICMA, it was enthusiastically received," said Simone Di Piazza, head of the calculation department at Ducati. "International experts and attendees praised both Hypermotard's outstanding technology and Pierre Terblanche's excellent design. Everybody at Ducati was extremely pleased that the prototype was awarded 'Best of Show' at the Motorcycle Design Association 'Designers Night.' Reassured by this successful presentation, we knew it was time to go into series production with the bike, and started the development for series production in March 2006. As soon as we knew we would go into series production with the bike, we started to look for a state-of-the-art simulation tool to deal with the challenges we would have to face. We then learned that HyperWork's integrated framework fit our needs in the area of structural optimization perfectly. We are confident that HyperWorks is the best choice for us to receive accurate results and to realize this project within the expected time frame."

Altair HyperWorks is an integrated CAE framework containing solutions for the complete virtual product development process. HyperWorks not only contains finite-element and multi-body simulation solutions, it also delivers an open, programmable platform that is easy to integrate into existing processes. From modeling and assembly, to visualization and reporting, to virtual manufacturing and robustness assessment, HyperWorks' interface system to all major CAD and CAE packages is the

foundation for an integrated simulation-driven design process. It can also help bring highly engineered products to market faster.

“The new Ducati machine is a bike built to turn bikers’ dreams into reality,” said Cosimo Panetta, country manager, Altair Engineering, Italy. “It is a radical bike that takes power, versatility and performance to a new level, but is also built to be driven every day of the year. I am very proud that HyperWorks was used to put this 95hp – 90CV (66kw) at 7750rpm, 175 kg dry-weight bike from concept into series production. HyperWorks and the Hypermotard not only share a part of their names – they are also both state-of-the-art products. With two wheels, but only one purpose – to thrill, the Hypermotard is a symbol for innovative driving. Similarly, HyperWorks is a suite of products put together to serve one purpose. That is, to accelerate product development – standing for driving innovation at its best.”

Click here to return to Contents

Altair Engineering RADIOSS Selected by PSA Peugeot Citroën for Crash Analysis

22 October 2007

Altair Engineering, Inc announced that PSA Peugeot Citroën, one of the leading European automotive original equipment manufacturers (OEMs), has selected Altair’s RADIOSS simulation solution for crash simulation and analysis. RADIOSS, a nonlinear finite-element solver, is part of Altair’s HyperWorks computer-aided engineering (CAE) software suite.

“The performance and code quality of the CAE tools we use are very important to us,” said Laurent Di Valentin, head of Numerical Simulation, PSA Peugeot Citroën. “HyperWorks tools, especially RADIOSS, deliver the quality and performance we expect and need in our CAE processes. Using RADIOSS, we can simulate very large models and can perform a complete vehicle simulation – from model building up to crash simulation – in the same environment. We have been able to replace many physical tests with RADIOSS’ numerical simulation, saving time and money in the development phase while delivering the same or even higher level of quality.”

RADIOSS is a comprehensive transient, dynamic finite-element solver for simulating impact, safety-related performance, manufacturing processes and fluid-structure interaction problems. From consumer product drop-testing to vehicle crash analysis, terminal ballistics to explosions, RADIOSS provides a world-class solution to solve today's most complex physical problems.

“We are proud to consider PSA Peugeot Citroën one of our most important customers in France,” said Mauro Guglielminotti, managing director of Altair Engineering France. ”Especially within the automotive industry, crash simulation is gaining importance. Physical testing is expensive and time-consuming. With RADIOSS, automotive OEMs such as PSA Peugeot Citroën can improve their development processes and shift their testing efforts from the physical into the virtual world.”

Click here to return to Contents

Arrhythmia Research Technology Goes Live With IFS Applications Within Four Months

25 October 2007

IFS announced that Arrhythmia Research Technology has successfully gone live with IFS Applications in only four months.

Almost exactly 120 days after signing a contract with IFS North America and Corning Data Services of Corning, N.Y., the medical device manufacturer has successfully implemented a full suite of IFS functionality including repetitive manufacturing, discrete manufacturing, engineer-to-order, distribution, demand planning, human resources, financial integration and shop floor reporting.

Rapid implementation was one reason Arrhythmia chose IFS Applications over competing products, as the company wanted to get up and running quickly to allow automated reporting required under Sarbanes-Oxley (SOX) and FDA regulations for medical device manufacturers.

"One reason for our ERP system search was to proactively meet new SOX reporting requirements that will be enforced January 1, 2008," Arrhythmia IT Director Salvatore Emma said. "We were convinced that IFS Applications would be able to meet our diverse business needs and aggressive implementation timeline. At the same time, we needed to choose a vendor that could meet our budget requirements and help us to eliminate a variety of software systems we previously had in place. IFS Applications has proven agile enough to implement quickly, so we could be fully functional with the system an entire quarter before the reporting requirements deadline in January. The IFS Applications implementation has shown us that our systems will be able to support the growth and strategic goals of the organization in the future. Corning's consultants and service level is among the best we have ever worked with, and this successful go-live couldn't have been achieved without their in-depth business knowledge, the committed backing of our organization's leadership and the hard work from a talented team of employees."

"Implementing a top-tier enterprise application on a four-month timeline -- even one as granular and flexible as IFS Applications -- took close collaboration between Corning, IFS and the great team at Arrhythmia Research Technology," Corning Data Services General Manager Michael Pauley said. "The fact that our consulting services team was based near the deployment helped, as did the rapport we were able to build with Arrhythmia."

"Rapid implementation compared to other top-tier enterprise suites is one benefit customers can expect from IFS Applications," IFS North America President and CEO Cindy Jaudon said. "But implementing the best-designed application in the world will take longer without quality people involved in the project, and much of the credit here must go to Corning and to Arrhythmia's dedication."

Click here to return to Contents

Audi Standardizes on MSC.Software's MD Nastran as Its Solution for Multidiscipline Simulation

23 October 2007

MSC.Software announced that automotive manufacturer Audi AG has standardized on the company's multidiscipline solver, MD Nastran, as their standard technology for vehicle simulation. More than 100 installations of MD Nastran will be deployed throughout Audi design and development sites during 2007 and early 2008.

The current announcement follows a successful historical use of MSC.Software's engineering product solutions, most notably MSC.Nastran and Adams. More recently Audi has worked with MSC.Software to develop the CAEBench system, a full simulation management environment built around the company's SimManager Enterprise. By selecting MD Nastran, Audi is targeting improvements in both design innovation and efficiency, ultimately producing benefits in both quality and cost. The implementation of MD Nastran within Audi's managed simulation environment will also ensure efficient and verifiable data and process control.

"Audi has a 'Vorsprung durch Technik (Progression through Technology)' philosophy that has allowed us to build a reputation for introducing innovation and technological advances to the motor industry," said Dr. Michael Holzner, Manager CAX Methods of Audi. "With increasing requirements for a variety of linear, nonlinear and dynamic analyses, MD Nastran's comprehensive simulation capability is a critical component in this process." "MD Nastran is rapidly becoming the de-facto simulation technology for automotive OEMs and their suppliers," said Amir Mobayen, Senior Vice President, MSC.Software EMEA Operations. "We are proud to have a strong Strategic Alliance partnership with Audi, and we are confident that together we can deliver the software solutions and support infrastructure to meet their efficiency and quality objectives."

MD Nastran builds on MSC.Software's heritage of providing leading FE and MBS solvers for linear, nonlinear, and dynamic applications, and is the solution technology at the center of the company's new SimEnterprise portfolio. By combining the most common simulation types into a single integrated data model, MD Nastran allows manufacturers to more efficiently address a broad set of multi-disciplinary engineering applications. Traditionally such analysis would be performed using a linked series of analyses, with manual or a limited automatic connectivity. The MD approach addresses multidisciplinary applications in a fully combined solution, therefore eliminating the need for re-modeling and transfer of data, and hence reduces the potential for error. The MD system architecture also enables new levels of solution optimization, thereby creating faster simulations with higher accuracy and more reliability than was previously possible.

In addition to the technology benefits, customers with existing MSC.Software installations can also take advantage of the Enterprise Advantage licensing system, allowing them to incrementally adopt the new MD and SimEnterprise technology while fully preserving their historic investments.

More information regarding MSC's products and services can be found at http://www.mscsoftware.com/.

Click here to return to Contents

Burgmann Industries Optimizes its Construction Process With Siemens PLM Software's Solid Edge and Teamcenter

22 October 2007

Siemens PLM Software announced that Burgmann Industries GmbH & Co. KG, one of the world's leading seal manufacturers, will implement Solid Edge® software for the 3D development of its products and Teamcenter® software for product data management and data integration into its ERP system.

Burgmann Industries is using Teamcenter in combination with Solid Edge, a hybrid 2D/3D design system and a core component of the UGS Velocity Series™ portfolio, in order to consistently manage the extensive stock of available product data. With Siemens PLM Software's solutions, Burgmann Industries is forging a link between the engineering and commercial departments in order to retrieve important product data via their ERP system.

"To convert development from 2D to 3D, we considered and tested solutions from several providers," said Daniel Ketterer, project manager for Global Technology Management at Burgmann Industries. "During the testing phase, we were sold on the simple derivation option from 3D to 2D constructions offered by Solid Edge. We develop our seals in 3D, but most customers want to see the constructions in 2D. With the automatic 2D derivation, we are able to tighten our cycle times and optimise delivery times

and costs in order to carry out our development processes more efficiently."

"With Teamcenter as the single source for all product and process knowledge, Burgmann Industries can optimally manage all product data and use the data across all departments," commented Paul Vogel, senior vice president and managing director, Europe, Middle East and Africa, Siemens PLM Software. "The time employees save can be invested in new, innovative developments and an even higher level of quality."

About Burgmann Industries GmbH & Co. KG, Wolfratshausen / Germany

EagleBurgmann is one of the leading seal manufacturers worldwide. The group employs a workforce of about 5,000 in more than 50 subsidiaries and joint ventures. Turnover reached 500 Mio. € in 2006. The product range includes: mechanical seals for pumps, compressor and agitators, seal supply systems, magnetic couplings, stuffing box packings, static seals and expansion joints.

Click here to return to Contents

Cadence Encounter Test Helps Enable IBM To Deliver High-volume Chips

23 October 2007

Cadence Design Systems, Inc. said that it has helped IBM deliver high-quality, high-volume chips for consumer devices by enabling the detection and correction of "small delay defects"—miniscule defects that are nearly invisible without sophisticated test programs that operate above the normal operating speed of the chip. Most recently, the Cadence Encounter® Test solution was able to help IBM meet its goals for quality and volume production of a high-performance custom chip based on IBM's Power Architecture™ technology.

With consumer electronics taking advantage of more advanced semiconductor technology, the process to test, identify and remove defective parts from the supply chain has become more challenging. By today's standards, a show-stopping defect can be extremely small—a few atoms wide—resulting in timing delays as little as a tenth of a nanosecond—about the time it takes light to travel just a few inches.

The problem, of course, is that finding a defect in a super-small, super-dense and super-fast chip is a significant challenge. To address this problem today, IBM is working with Cadence Design Systems' Encounter Test group.

"The Cadence Encounter Test team has a capability called small delay defect detection," said Ron Martino, director of Power Architecture, IBM Global Engineering Solutions. "What this means is, they can detect a timing delay in a signal that is caused not by a broken wire, but by one that is merely a few atoms thinner than it is supposed to be. The difference in thickness creates a difference in resistivity, which delays the signal for a fraction of a nanosecond. In many high-performance, high volume applications, that's just too long."

Traditional test methodologies using test vectors can overlook such small delays, enabling test escapes that eventually manifest themselves as consumer product failures. Cadence Encounter Test avoids this problem through Encounter True-Time Test, which accelerates the speed of the device to reveal very small timing delays, much as running an automobile engine at a high RPM will reveal performance issues that would not show up at a lower speed.

"By using the Encounter True-Time Test capability, IBM was able to assure low defect rates for a

superscalar chip design," said Sanjiv Taneja, vice president of Encounter Test R&D at Cadence. "This was important for IBM, it's important for their customer, but most of all, it's important for users of high-performance systems, because it demonstrates that there are ways to enable higher quality even as the semiconductor industry moves to smaller and more complex technologies."

The Cadence Encounter Test Solution will be demonstrated at the International Test Conference (ITC) 2007 at the Santa Clara Convention Center, October 23-26, 2007.

Click here to return to Contents

Cadence Test Technology Helps LSI Corporation, Kawasaki Microelectronics Deliver Products Faster

23 October 2007

Cadence Design Systems, Inc. has developed unique test technologies enabling its customers, including Kawasaki Microelectronics (K-micro) and LSI Corporation, to more cost effectively produce large numbers of high-performance, super-dense integrated circuits with extremely high quality. Building a competitive processor or an advanced system on chip (SoC) ASIC design is a daunting technological challenge. Through its leading test generation and compression technology, Cadence® Encounter® Test technology helps ensure these complex, high-performance devices work as designed.

At companies like K-micro and LSI Corporation the drive to advanced process technologies is a key differentiating strategy. However, at these smaller geometries, the requirement for test coverage goes up dramatically, increasing both the time and cost of manufacturing test. In some cases, a single test program with high test coverage can add significant cost to a project, not just in test application time but also in the time it takes to develop and debug it. In the meantime, engineers struggle for a better way to avoid delivering defective chips to the market.

Cadence has made enormous advances to improve the quality of electronic devices through its inventive test methodology. Cadence has developed Encounter True-Time Test ATPG, which generates accelerated tests to rigorously exercise the design using on-product clock generation (OPCG) and faster-than-at-speed tests to find and eliminate small delay defects that might otherwise go undetected using traditional transition testing. Encounter True-Time Test ATPG also features unique timing-aware vector generation that uses SDF data to create vectors that are right by construction, as opposed to alternative solutions that do not use actual circuit timing. This results in more accurate vectors and fewer false failures, eliminating the need for time-consuming iterative debug and refinement to arrive at a good set of vectors.

Since many of today's designs are extremely dense, the number of test patterns required to thoroughly test the entire chip could be too large for practical application on production test equipment. That's why Cadence has also developed advanced Encounter Test compression technology—it reduces test volume and application time, and enables customers to achieve a high level of quality with shorter and less costly testing.

Cadence was able to demonstrate the value of Encounter Test compression technology and Encounter True-Time Test ATPG on a leading-edge DSP Processor design at LSI Corporation. The Encounter True-Time Test ATPG was able to generate effective test patterns to meet the quality needs of the LSI design team and improved defect containment within a fixed test data volume budget.

"Through the Cadence Encounter Test compression technology, and Encounter True-Time Test ATPG,

we were able to meet our test data volume requirements with a highly effective set of tests," said Technical Manager Rick Muscavage, DSP IC Design for LSI Corporation. "Our requirements were tough, including some very challenging scan structures not typically supported by other compression structures, but the expert Encounter Test support team came through for us."

Similarly, Encounter Test allowed K-micro to embark on an advanced SoC design with significant amounts of embedded memory and multiple clock domains. To meet this challenge, and to improve the overall quality of their chip, K-micro deployed Encounter True-Time Test and heavily leveraged OPCG and test compression to successfully improve overall product quality.

"Encounter Test provides the capabilities K-micro requires to address design and test requirements for large, complex SoC products," said Yoshito Muraishi, director of CAD development for Kawasaki Microelectronics. "Encounter True-Time Test ATPG achieved our stringent quality requirements for delay testing, and the compression structures allowed us to eliminate 'x'-states caused by aggressive use of delay testing and still have a cost-effective test program."

"Cadence Encounter Test compression technology and Encounter True-Time Test ATPG are proven technologies for testing advanced semiconductor designs," said Sanjiv Taneja, vice president of Encounter Test R&D at Cadence. "This is a key combination to ensure highest quality while minimizing test cost for nanometer designs."

Cadence will demonstrate both Encounter True-Time Test ATPG and Encounter Test compression technology at the International Test Conference (ITC) 2007, Santa Clara Convention Center, October 23-26, 2007.

Click here to return to Contents

Catalog Data Solutions CAD Downloads Adopted by Sofasco

23 October 2007

Catalog Data Solutions (CDS) announced that Sofasco Inc. has adopted its CAD model download solution.

Sofasco is a Winchester, Virginia based manufacturer and international supply chain integrator of ball bearing and sleeve AC/DC axial fans, cross flow fans, blowers and chip coolers. Responding to customer requests for CAD models of its products, Sofasco decided to offer 3D CAD models for download as a component of its second generation website. “We frequently got requests from customers for CAD models” said Mike Frazier, CEO, Sofasco. “By adding 2D/3D CAD drawings as a component of our new website, we are meeting that need and already seeing hundreds of CAD downloads and a resulting increase in RFQs and sales.”

“We are delighted to have been selected by Sofasco, and our partner Net Power Marketing, for our leading online CAD model download solution”, said John Major, CEO Catalog Data Solutions, “online 3D models are an important sales and marketing tool for all industrial suppliers and distributors. With many customers moving from 2D to 3D CAD systems providing online 3D CAD model downloads often ‘locks’ products into a design so suppliers later benefit from the sales success of that design. Suppliers without 3D models on their website are at risk of losing customers to their competition who do offer 3D models”.

Click here to return to Contents

CoCreate Software's 3D CAD Adopted by Apic Yamada Corporation

25 October 2007

CoCreate Software, Inc. announced that Apic Yamada Corporation has adopted CoCreate OneSpace Modeling as its 3D product development platform.

Apic Yamada is a comprehensive manufacturer of high-tech electronic machinery that supports production within the semiconductor industry. The company's business includes designing and manufacturing metal molding systems and production equipment for customers across the world, including Toshiba Corporation, Matsushita Electric Industrial Co., Ltd., and Sony Corporation.

Apic Yamada first began using 3D CAD software to perform engineering analysis on 3D virtual prototypes to improve design quality and prioritized its use as the basis for product development to enhance efficiency.

As the company researched different 3D CAD platforms, it considered how the software would support its specific development processes. In particular, design flexibility is critical to Apic Yamada. The company's production equipment must accommodate frequent customer-driven design and specification changes. Moreover, the company requires an approach to 3D product development that accelerates development by giving any team member the ability to pick-up and change any part of a design at anytime.

Apic Yamada evaluated CoCreate OneSpace Modeling alongside several history-based 3D CAD systems for over a year. With the full backing of Apic Yamada designers, the company adopted the CoCreate platform and cites the following advantages:

- The flexibility to include unexpected, client-driven design changes at all stages of development allows the company to deliver customer-focused products.
- Designers freely explore new and creative designs by using Dynamic Modeling based 3D CAD software. The history-free approach eliminates the overhead of a history tree (or feature manager) and avoids upfront planning of modeling steps that restrict the innovation process.
- Lightweight history-free models provide high performance for large assembly design.
- CoCreate OneSpace Modeling is widely used within the high-tech electronic and machinery industry worldwide.

"I was impressed with how easy it is to use CoCreate's Dynamic Modeling based 3D CAD software. OneSpace Modeling is very user friendly and simple to learn so designers can learn it in a short time," said Mr. Yoshinari Hosaka, Senior Engineer for the System and Technology Management Group in Apic Yamada.

CoCreate channel partner, OBIC Co., Ltd., supported Apic Yamada with both its evaluation of the CoCreate OneSpace Suite and its implementation of OneSpace Modeling and the Advanced Design and FE Analysis add-on modules.

Experience CoCreate's 'dynamic difference' today. CoCreate OneSpace Modeling Personal Edition is a freely available download offering users the power of CoCreate's enterprise 3D CAD software for assemblies up to 60 unique parts. Downloads are available from http://www.cocreate.com/free

Click here to return to Contents

Elektrobit Corporation Selects Catapult C Synthesis to Design Next-Generation Wireless Hardware

24 October 2007

Mentor Graphics Corporation announced that Elektrobit Corporation (EB), a company delivering cutting-edge embedded technology solutions to automotive and wireless markets has selected the Catapult® C Synthesis product to accelerate creation of its next-generation wireless technology. EB selected the Catapult C Synthesis product based on the tool's ability to synthesize pure ANSI C++ and increase hardware designer productivity up to 10x.

EB is using the Catapult C Synthesis product to design advanced next-generation wireless hardware, including ultra-high-performance hardware that enables next generation mobile WiMAX. When implementing complex designs like a multiple input/multiple output (MIMO) algorithm, hardware designers must make many micro-architecture decisions that can have a large impact on performance, area or power consumption in the final implementation. The Catapult C Synthesis product enables automatic RTL creation from an ANSI C++ source, allowing users to quickly implement their designs, evaluate how their decisions impact the design, and make adjustments with minimal effort.

"Catapult delivers a level of productivity that we are unable to achieve using hand-coded RTL methodologies. The productivity benefits come from automatic RTL creation that eases design exploration, plus verification efficiencies delivered by the C testbench Catapult's error-free RTL code," Ari Hulkkonen, Director, Wireless Systems, EB. "As we move to implement more complex designs with Catapult, we routinely observe 5x productivity improvements over manual RTL, as well as efficient performance and area values depending on the application. This is a very valuable tool for anyone designing wireless hardware."

The Catapult C Synthesis tool is the first product to automatically generate RTL from a pure ANSI C++ source where both the core algorithm and interface are untimed. This productivity improvement gives designers time and freedom to automatically perform detailed design exploration of different micro-architectural options and interface scenarios to quickly achieve fully optimized hardware designs for either ASIC or FPGA implementations. Catapult's SystemC verification extension offers integration to industry standard SystemC verification platforms and tools providing a complete ESL design and verification methodology.

"Companies like EB are designing the backbone of our future communications infrastructure. We are pleased that EB has chosen Catapult C Synthesis to help create their advanced products," said Simon Bloch, general manager of Mentor Graphics' Design Creation and Synthesis Division. "Through extensive pilot projects and now production usage at EB, Catapult has been proven to produce high-quality RTL designs far faster than hand-coded methods."

Click here to return to Contents

Kubotek USA and Brazil's RCTASK Announce Agreement With SENAI São Paulo

23 October 2007

Kubotek® USA and its Brazilian partner RCTASK®, announced a licensing and services agreement with SENAI – São Paulo. Kubotek is donating licenses of the latest version of its KeyCreator product featuring its new FaceLogicTM technology. RCTASK, a Kubotek Authorized Service Center, will equip SENAI mechanical design labs with KeyCreator NC and train SENAI instructors. The SENAI schools provided Kubotek software and RCTASK training under this agreement are SENAI units CFP 1.23,

1.15, 5.01, and 6.01.

“Brazilian manufacturers are looking for an easier way to design in 3D,” said Antonio Pedro Lourenço, Operations Manager of RCTASK. “Currently, most companies in Brazil deploy only popular 2D packages to meet their design needs. KeyCreator offers rich solid modeling capabilities without the complex and costly history-based constraints that limit design and manufacturing flexibility. We believe that KeyCreator is an easy-to-use and easy-to-learn 3D modeling solution that will be adopted as the standard 3D CAD tool in Brazil.”

“We are excited about beginning this relationship with SENIA-SP and look forward to providing long-term support.” said Scott Sweeney, vice president at Kubotek USA. “RCTASK has established a strong reputation for providing quality CAD solutions and services across Brazil. Our companies will work closely together to ensure SENAI instructors and their students achieve success.”

Sweeney continued, “Companies all over Brazil are adopting KeyCreator as their main CAD tool primarily because of its flexibility, ease of use, and superior price/performance. In addition, companies are adding licenses to augment their current CAD toolset. We believe that parametric software will soon be replaced by the new direct editing software. KeyCreator is on the leading edge of this wave as the inventor of 3D direct editing CAD software. With this software grant, SENAI - São Paulo will be able to prepare design and manufacturing professionals for the future.”

Click here to return to Contents

Maxim Adopts Magma’s FineSim SPICE to Reduce Time to Market for Mixed-Signal Analog Designs

24 October 2007

Magma Design Automation Inc. announced that Maxim Integrated Products, a leading international supplier of quality analog and mixed-signal products for applications that require real-world signal processing, has adopted FineSim™ SPICE.

FineSim SPICE, Magma’s SPICE-level simulator that incorporates transistor-level simulation analysis capabilities for mixed digital and analog design, runs on both multiple-CPU and multiple-machine compute environments, can simulate much larger designs than traditional SPICE simulation could handle yet delivers silicon-accurate results.

“By using FineSim SPICE, our designers can reduce simulation run time while preserving SPICE-level accuracy,” said Dr. Saeed Navid, vice president at Maxim. “Combined with our advanced mixed-signal simulation environment, FineSim SPICE delivers significant performance improvement.”

FineSim SPICE contains a full SPICE simulation engine with distributed processing that enables designers to simulate large-scale mixed-signal system chips at the transistor level. By providing increased speed and capacity while maintaining full SPICE accuracy, FineSim SPICE enables simulation of advanced circuits.

“FineSim SPICE eliminates the need for designers to trade off between accuracy and simulation speed,” said Suk Lee, general manager of Magma’s Custom Design Business Unit. “This advanced circuit simulation technology gives FineSim SPICE users a significant competitive advantage.”

Click here to return to Contents

Samsung SDI Successfully Adopts Windchill® for Enterprise PLM

22 October 2007

PTC announced that Samsung SDI, a world leading digital products company, has successfully deployed PTC® Windchill® as its enterprise-wide PLM system. Windchill is PTC's content and process management solution that enables Samsung SDI to streamline its product development processes to deliver superior products and improve customer satisfaction.

Windchill is the only PLM solution designed from the ground up to work in an Internet-based, distributed design environment. Samsung SDI will adopt Windchill across the organization as its central source of information for products being designed and manufactured. Specifically, SDI intends to utilize Windchill for its Engineering Change Management, Part/Product Information Management, Bill of Materials (BOM) Management, Standards Management, Technical Document Management and Engineering Data Management requirements.

"For better performance in delivering products to the market, we are standardizing on our product development and management processes throughout the world," said Hyun-Soo Choi, Ph. D., executive vice president of process innovation team, Samsung SDI. "We have gladly selected PTC Windchill for Samsung's standardized PLM system. We trust its superior capabilities and look forward to working with PTC."

"Samsung SDI is a leading display and energy company and we are pleased to be their long-term strategic PLM partner," said Chad Hawkinson, vice president product strategy, electronics, PTC. "SDI's decision demonstrates that we are providing real-world business solutions to our customers and enabling them to be strong competitors in the electronics industry."

Click here to return to Contents

SEMA Cuts Project Runtimes 30% with CoCreate OneSpace Suite

24 October 2007

CoCreate Software Inc. announced that SEMA Maschinenbau GmbH has moved its entire development process to the CoCreate OneSpace Suite.

Based in Traunkirchen, Austria, the international manufacturer of metal-cutting machine tools uses CoCreate OneSpace Modeling, CoCreate OneSpace Model Manager, the add-on module FE Analysis for CoCreate OneSpace Modeling, as well as SolidPower, a standard parts library from CoCreate's certified partner TECHSOFT.

With the CoCreate Engineering environment established at SEMA, the company has significantly improved production levels. Just one year ago, SEMA Maschinenbau projected an average of approximately one year to take an order from receipt to delivery. Delivery today now takes only 8 months.

"What used to be a very short project runtime is now what our clients have come to expect," says Martin Spiessberger, Design Manager at SEMA. "To meet those deadlines, we use large teams working simultaneously on one design. For that approach to succeed, CoCreate OneSpace Model Manager must integrate external engineering firms into our projects without any problems."

Engineers frequently copy the models, components, and parts managed in OneSpace Model Manager and adapt them for new projects. In fact, Spiessberger estimates that up to 80% of the company's parts

can be reused directly or with only slight adjustments.

While OneSpace Model Manager ensures parts are easy to find and track, SEMA particularly benefits from the Dynamic Modeling approach to product design in OneSpace Modeling, which makes it easy to rework those existing models.

"While our clients expect ever shorter project runtimes, their machinery is becoming increasingly complex, and the procurement of parts gets more and more time consuming," says Spiessberger. "Thanks to the CoCreate OneSpace Suite, we can act quickly and flexibly to meet customer requirements. The average 30% shorter project runtimes would not have been possible without the CoCreate OneSpace Suite."

You can find more about SEMA at http://www.sema.at/

Click here to return to Contents

Shive-Hattery Selects Avatech Solutions for AutoCAD Civil 3D Implementation

24 October 2007

Avatech Solutions, Inc. announced that Shive-Hattery has contracted Avatech to perform consulting, implementation, training, and support services over the next 6 months to launch and support AutoCAD Civil 3D and Autodesk Vault for their civil engineering staff in their Moline, IL, office.

Employee-owned and managed, Shive-Hattery is one of the largest architecture and engineering firms in the Midwest. Based in Cedar Rapids, Iowa, Shive-Hattery has worked with Avatech for years to ensure that the professionals across their eight locations are kept up to date with leading technology tools and best practices.

Shive-Hattery's CAD Manager, Ken Fisher, says "I consider Avatech a vital and trusted partner in our business. Their technology expertise has helped us establish and maintain leading edge design systems and this pilot will bring our civil services online in 3D."

This new contract is for a pilot to demonstrate the productivity and efficiency gains that Civil 3D brings to design for the built environment. Currently the firm is working with AutoCAD Architecture AutoCAD MEP, and AutoCAD Land Desktop for civil work. Their goal is for the entire business to move to dynamic 3D modeling using Civil 3D and the Revit family of products.

"The future of building systems and engineering is moving toward information modeling for all disciplines and our vision at Shive-Hattery is for the adoption of 3D dynamic design tools across all services, including architecture, civil, structural, and MEP," said Dale Moore, Vice President at Shive-Hattery. "The value that Avatech brings is their depth of experience within our industry and their knowledge of the technology and how it will benefit our business."

"Forward-thinking firms like Shive-Hattery have already experienced the benefits of 3D with AutoCAD Architecture, but know they need to go one step further to stay ahead of the curve," said Bruce White, Senior Vice President of Sales at Avatech. "This Civil 3D implementation shows Shive-Hattery's commitment to long term innovation that benefits their customers and positions them as leaders in a rapidly moving market where a technical edge can improve the bottom line."

Click here to return to Contents

Product News

Ansoft Releases New Permanent Magnetic Material Library From Shin-Etsu Magnetics

24 October 2007

Ansoft Corporation announced the availability of a new library of permanent magnet materials from Shin-Etsu Magnetics Inc. for its Maxwell® electromagnetic field simulation software. The library contains more than 31 high-performance permanent magnets defined at different operating temperatures using rare earth elements that can be downloaded by Ansoft customers and are ready for use within Maxwell.

Brad Lucas, national sales manager for Shin-Etsu's Magnetic Materials Research Center, said, “We are pleased our materials are now included in Ansoft's Maxwell. We believe this will be very beneficial to those wishing to design magnetic circuits utilizing the most advanced materials currently available.”

Permanent magnet materials are used in many applications, including motors, sensors and actuators. Maxwell users now have access to the latest materials from Shin-Etsu to use directly within their simulations of new or existing designs.

“The ability to have access to accurate material properties is very important for our customers,” said Scott Stanton, technical director at Ansoft. “Often users must contact the material vendor directly to obtain the measurements, and commonly they do not have accurate or complete measurement data available. Shin-Etsu working with Ansoft makes it very convenient for our global customer base to evaluate the performance of their materials within a design simulated in Maxwell.”

Customers can download the library by logging in to Ansoft's Online Technical Support site at http://www.ansoft.com/ots.

About Shin-Etsu Magnetics Inc.

Founded in Tokyo, Japan, in 1926, Shin-Etsu is Japan's foremost supplier of chemical products, such as silicon products, polyvinyl-chloride resins, rare earth materials, semiconductor silicon, synthetic quartz and gadolinium gallium garnet crystals. Shin-Etsu is the only company in the world engaged in all aspects of rare earth magnet production, from separating and refining rare earth compounds to producing rare earth magnet lines with precise customer specifications. Shin-Etsu started its US Magnet Division in Torrance, California, in 1986. In 1992, Shin-Etsu moved the Magnet Division to San Jose. Shin-Etsu Magnetics incorporated in October 1993. The company has continued to grow steadily and now has sales offices in Eden Prairie, Minnesota, and Glen Ellyn, Illinois.

Click here to return to Contents

ANSYS and Network Analysis Team Up to Improve Thermal Simulation

24 October 2007

ANSYS, Inc. and Network Analysis, Inc. (NAI), a global provider of thermal simulation software and the developers of the SINDA/G™ advanced thermal modeling software, announced a combined product that integrates the SINDA/G thermal analyzer into the ANSYS® Workbench™ modeling system.

The SINDA/G for ANSYS Workbench plug-in is a transparent integration of SINDA/G into ANSYS Workbench. Of benefit to both beginning thermal modelers and advanced thermal analysts, the

transparent integration allows users to utilize advanced thermal features involving convection, surface-to-surface radiation and orbital heating without needing to know the format of SINDA/G or thermal radiation codes. Experienced SINDA/G users no longer will be limited by the simple boundary conditions typically associated with finite element analysis (FEA) thermal codes: They now can experience the full power of SINDA/G within the ANSYS Workbench environment.

"ANSYS Workbench is one of the most user-friendly and easy-to-use simulation environments that has ever been created," said Ron Behee, president, Network Analysis, Inc. "Through the cooperation of our two companies, ANSYS users now have access to advanced thermal features found in SINDA/G, and SINDA/G users have a powerful and user-friendly simulation environment."

"Collaborating with Network Analysis provides ANSYS Workbench users access to the many unique features of the SINDA/G thermal solver. The interface also provides access to major thermal radiation codes to allow orbital heating effects to be included in their satellite simulations," said Joe Solecki, vice president, mechanical business unit at ANSYS, Inc. "Now satellite models generated in ANSYS Workbench can be solved for transient temperatures during orbit. These temperatures can be used in subsequent thermal/stress predictions. This is one additional step in providing our customers with a complete simulation solution."

The mechanical analysis products from ANSYS, Inc. incorporate a graphical modeling environment ideal for producing SINDA/G thermal models. These models have enhanced the concurrent engineering processes by allowing temperatures computed from advanced SINDA/G models to be used by simulation software from ANSYS for thermal stress/distortion computations. Since many thermal engineers already are familiar with the ANSYS Workbench environment, the learning curve for the SINDA/G plug-in is greatly reduced, thus eliminating the need to learn another modeling system.

The SINDA/G plug-in has powerful connections to thermal radiation codes such as THERMICA, NEVADA, TRASYS, TSS and NAI's fast new radiation solver SINDARad. Spacecraft thermal models now can be created in the ANSYS Workbench environment, and the orbital thermal environment can be defined by utilizing one of these thermal radiation and orbital heating codes.

SINDA/G is a trusted thermal design system. When integrated into an FEA modeler such as the ANSYS Workbench platform, these finite element models are translated into a SINDA/G network thermal model. SINDA/G is stable and can quickly solve large complex nonlinear thermal models involving temperature-dependent thermal properties, radiation and orthotropic material properties.

Click here to return to Contents

Bentley Receives Stoomwezen Certification for AutoPIPE V8.6, 8.9, and 9.0

23 October 2007

The latest version of AutoPIPE—the leading software for calculating piping code stresses, loads, and deflections under both static and dynamic loading conditions—has been recertified by the combined services of Lloyd's Register Nederland B.V. and Stoomwezen in accordance with the Dutch Rules for Pressure Vessels (G0501). This allows clients involved on Stoomwezen certified projects to benefit from the latest enhancements to the AutoPIPE product.

Additional approvals and compliances to date include ISO 9001, Nuclear NQA-1, 10CFR21, and ASME N45.2; GOST approval for Oil & Gas and Power projects in Russia; and approved use of European piping code EN13480.

AutoPIPE provides improved productivity and increased interoperability with other computer-aided design (CAD) and analysis products like STAAD.Pro. It analyzes systems of any complexity, with special features for buried pipeline analysis, wave loading, water or steam hammer, FRP/GRP pipe and built-in pipe/structure interaction.

For more information about Bentley AutoPIPE XM, please visit http://www.bentley.com/AutoPIPE or contact us at structural@bentley.com or by phone at +1 800 BENTLEY or +1 610 458 5000.

Click here to return to Contents

CONCENTRIC Asia Pacific to Represent Right Hemisphere in Australia-New Zealand

24 October 2007

CONCENTRIC Asia Pacific has been appointed as a reseller for Right Hemisphere and its Right Hemisphere 5 suite of solutions to the Australasian region.

“CONCENTRIC is a leader in Australasia for its expertise in 3D CAD/CAM/CAE and Product Lifecycle Management (PLM) and it has detailed knowledge of the local market,” says Mark Thomas, Right Hemisphere CTO and Founder, “This company truly understands how to make its customers more competitive.”

“With the Right Hemisphere 5 platform now as part of its offerings, CONCENTRIC will deliver additional productivity gains to its customers. Right Hemisphere's software streamlines visual product communications and collaboration business processes, resulting in overall faster time to market, reduced operational costs and increased revenues associated with new product introductions and their support."

Michael Myers, the Managing Director of CONCENTRIC, says Right Hemisphere complements the existing portfolio of offerings, “We are all about providing our customers with the world’s best sustainable solutions and guiding them along their technological evolutionary journeys so that they become more competitive on a global scale. To this end, Right Hemisphere provides a perfect fit.”

"Right Hemisphere for Product Graphics Management (PGM) is complementary to ENOVIA MATRIXONE for Product Lifecycle Management (PLM) and ENOVIA SMARTEAM for Product Data Management (PDM) thus providing a content, graphics and lifecycle management and collaboration solution. What we call 'One Version of the Truth'. It supports our vision as a Digital Technology Integrator by providing a holistic suite of solutions that contribute to every aspect of design- or production-centric business."

The Right Hemisphere 5 platform is a fully integrated set of products that delivers visual product communication and collaboration to the enterprise.

Right Hemisphere's Collaborative Development and Sourcing solution reduces the time to prepare design packages, supplier communications and other engineering deliverables. Product design information—based on current design data stored in CAD and PDM systems—is automatically published using secure and common document formats such as PDF and Microsoft® Office.

Right Hemisphere's Technical Publications and Training solution reduces manual development steps to affordably include more graphical product content. Technical publications and training can be developed concurrently with product design, minimising the risk of delayed product launches. With high-quality product graphics replacing more text, knowledge transfer is improved, language translation costs are reduced, and global product rollout times are shortened.

Right Hemisphere's Sales and Marketing Communications solution enables the delivery of consistent digital product media through multiple channels such as broadcast and cable TV, the Web, iPods, and cell phones. The solution helps teams develop more compelling marketing communications and sales presentations using cost-effective computer-generated imagery (CGI) while also eliminating costly physical prototypes and on-location photo shoots.

Global customers include Microsoft, Siemens, NASA, Lockheed Martin, Pratt & Whitney, Northrop Grumman, Airbus, General Dynamics, Bell Helicopters, Raytheon, DaimlerChrysler and Halliburton.

About CONCENTRIC Asia Pacific

CONCENTRIC Asia Pacific is a leading provider of design-engineering manufacturing- visualisation-simulation technology solutions and knowledge based services to the Australia-New Zealand-South Asia Pacific region.

A privately owned Australian company founded in 1982, they have many global strategic alliances including Dassault Systemes, Intel, Hewlett Packard, IBM, Autodesk, LMS International, Right Hemisphere, Gehry Technologies, CGTech, ITI TranscenData, COSMOS, DCS. In 2007 CONCENTRIC Asia Pacific formed a joint venture with Imag Australia which created the biggest and most experienced Product Lifecycle Management (PLM) and Product Data Management (PDM) enterprise in the region.

CONCENTRIC integrates 3D CAD/CAM/CAE, Product Lifecycle Management (PLM) solutions, Product Realisation technology, virtual manufacturing, animation/simulation and rapid prototyping-model making into a wide diversity of industries including automotive, aerospace, shipbuilding, defence, manufacturing, transportation, heavy engineering, industrial design, consumer products, video games, movie animation, packaging, and architecture.

CONCENTRIC has pioneered the role of “Digital Technology Integrator” which enables the company to assist OEM’s and their supply chains from the initial concept stages of products right through to retirement.

The full portfolio of offerings - “Engineering Solutions On Demand” – is provided by subsidiary business groups CONCENTRIC Engineering Services, CADCENTRE Asia Pacific (specialising in Autodesk solutions) and ENVIZAGE (which features a simulation-virtual reality-visualisation technology department as well as the largest and most comprehensive

The nationwide CONCENTRIC Engineering Services team of consultants and engineers provides a comprehensive portfolio of solutions including: Animation, Analysis solutions, At-elbow support, Back-up solutions, Business consulting, CAD/CAM/CAE support, Collaboration, Computer hardware, Contract engineers, Data exchange solutions & support, Data management solutions, Design assistance, Finite element analysis, Help desk, Hotline 24 hour, Human simulation, Installation, Implementation, Knowledge management, Laser scanning, Middleware solutions, Modeling, Model making, Network administration, NC programming, Production engineering, Product support, Programming, Project management, Rapid prototyping, Rapid manufacturing, Reverse engineering, Services, Simulation, Subject matter experts (SME), Support, Storage solutions, Systems integration, Training, Virtual manufacturing solutions, Virtual analysis, testing solutions, Visualisation.

There are more than 65 industry specialists located in Sydney, Melbourne, Adelaide, Brisbane.

Click here to return to Contents

ERP-CAD Data Integration System for SolidWorks CAD and Microsoft Dynamics/AX (Axapta) ERP Ships

24 October 2007

Elmo Solutions (http://ElmoSolutions.com?ref=071024) announced the immediate availability of Agni Link (http://www.elmosolutions.com/elmo_link_cad_erp_interface.html?ref= 071024), a live, bidirectional ERP-CAD connector for SolidWorks and Microsoft Dynamics/AX (Axapta). (Due to its length, this URL may need to be copied/pasted into your Internet browser's address field. Remove the extra space if one exists.)

Agni Link is a SolidWorks add-in that provides real-time, bidirectional integration with Microsoft Dynamics/AX (Axapta). Agni Link is the only application of its kind that offers a reliable way to integrate SolidWorks and Microsoft Dynamics/AX (Axapta) databases. Every time a SolidWorks document is saved, after automatically resolving discrepancies between ERP and CAD data, Agni Link allows the user to edit data shared between SolidWorks and Microsoft Dynamics/AX (Axapta) using possible values obtained "live" from Microsoft Dynamics/AX (Axapta). Upon end-user confirmation, data is updated in both the SolidWorks document and the Microsoft Dynamics/AX (Axapta) database, thus ensuring perfect synchronization of both data sets and completely eliminating redundant data entry. Agni Link can process and synchronize a wide range of data from either environment, including, among others:

- SolidWorks Part, Component and Assembly data
- Microsoft Dynamics/AX (Axapta) Bills Of Materials, Routing Instructions, Sales Quotes, Work Orders, Estimation and/or Customer Data
- Microsoft Dynamics/AX (Axapta) Routing instructions

Yielding high Return on Investment, Agni Link typically pays for itself in 60-90 days. Elmo Solutions Science Officer, Ricardo Talbot said: "We are pleased - and very proud – to be able to deliver the most advanced and efficient method of integrating SolidWorks and Microsoft Dynamics/AX (Axapta) product data. Our customers' response so far has been most rewarding, and we are very excited about this new edition of Agni Link. We expect similar response on the upcoming release of Agni Link for SAP BusinessOne, which should be ready toward the end of calendar year 2007."

Agni Link is readily available from Elmo Solutions. Agni Link not only addresses the needs of SolidWorks users, but also those of Microsoft Dynamics/AX (Axapta) users, who share product data with them throughout the enterprise.

 *Click here to return to Contents*

KeyCreator and GibbsCAM Integration Announced

25 October 2007

Gibbs and Associates and Kubotek USA announced that they have teamed to develop integrations linking Kubotek's KeyCreator software with GibbsCAM. A newly developed one-button interface allows models to be sent directly to GibbsCAM from within a KeyCreator session with the touch of a single button. Additionally, GibbsCAM now has the ability to directly read models from the KeyCreator CKD file format. Both capabilities were demonstrated at the Kubotek Americas Reseller Conference earlier this month.

Since KeyCreator's inception, Kubotek USA has maintained a primary focus of empowering manufacturers with innovative tools and processes allowing them to be more productive and efficient in the manufacturing environment. This complements Gibbs' focus on GibbsCAM's ease-of-use and learning. Kubotek USA continues to focus on developing powerful, direct modeling CAD design tools that use a geometry-based format. This empowers manufacturing engineers with the ability to modify and prepare designs for manufacturing, without having to repeat a structured or "parametric history-based" formal design process, which could add significant time to the process. Gibbs' on-going development continues to advance the state of manufacturing technologies, while maintaining a commitment to production efficiency.

Robert Bean, Executive VP of Kubotek USA comments; "So many CAD companies view their products from a design-only perspective, without regard to CAM or an understanding of the manufacturing process. Kubotek USA embraces the manufacturing engineer, looking through their eyes at their problems with real solutions for what they need to get accomplished … making parts. KeyCreator is a power tool for manufacturing engineering."

With breakthrough data exchange, able to handle data from any source, and powerful model editing technologies, which combines the power of 3D solid modeling, surfacing, drafting, and layout capabilities, KeyCreator supports the full art-to-part process. KeyCreator allows users to translate a design, suppress features of the design and prepare shop floor documentation in order to keep the production line running. In-process shapes and any geometry needed to support CAM can be sent to GibbsCAM.

"In order to stay current with the latest versions of CAD applications, we continually update GibbsCAM's data interoperability capabilities," states Bill Gibbs, Founder and President of Gibbs and Associates. "KeyCreator is an excellent PC-based design tool, but the capabilities introduced with the latest version of KeyCreator are directly applicable to manufacturing users. Using KeyCreator's feature discovery and manipulation technology, manufacturers can better prepare the design model for machining. The GibbsCAM/KeyCreator combination really makes for a cost effective, yet extremely powerful product development solution."

Peter McCutchen, Kubotek USA's VP of Strategic Partnerships, comments that "GibbsCAM users can be more efficient using KeyCreator. Now, anyone running GibbsCAM can take full advantage of the features and functionality of KeyCreator with either a simple, one-button transfer or direct read capability. Load them both up on the same PC, then modify CAD designs prior to passing it to GibbsCAM to create machining process and toolpath. It's that easy. If you operate GibbsCAM, you need KeyCreator."

Click here to return to Contents

Mentor Graphics Releases Serial ATA PHY Intellectual Property for SMIC 130 Nanometer Generic Process

23 October 2007

Mentor Graphics Corporation announced the immediate availability of a Serial ATA (SATA) PHY Intellectual Property (IP) core for Semiconductor Manufacturing International Corporation's (SMIC) 130nm Generic (G) process. The IP core significantly accelerates development of SATA storage solutions while minimizing power and design footprint.

The Mentor MSATA PHY S130A IP core comes fully integrated with Mentor's SATA controllers,

targeting both Host and Device applications running at either 1.5Gbps or 3.0Gbps speeds. The MSATA PHY S130A core, along with Mentor's other SATA PHY offerings, deliver industry-leading attributes: (1) analog circuitry residing in the I/O ring, resulting in one of the smallest footprints at <3mm², up to five times smaller than other available solutions; and (2) low power optimization, with less than 75mW per lane including the termination power--almost 50% lower than other competitive offerings.

"By continuously expanding our line-up of SATA PHYs verified along with Mentor's SATA controller IP, we offer chip architects proven, single-vendor solutions, for reliable integration into storage applications," said Bill Martin, general manager for the Intellectual Property BU of Mentor Graphics. "Consistent with our strategy of becoming a market-leading IP Subsystem provider, we are executing roadmaps toward a complete SATA IP Subsystem across multiple processes."

For more information on Mentor Graphics IP solutions, call 1-800-547-3000 or visit the website at http://www.mentor.com/ip.

Click here to return to Contents

New CENIT Software for Automated Generation of Die Forming Trimming Tools in CATIA V5

23 October 2007

At this year's European CATIA Forum in Paris (ECF, November 6-7, 2007), CENIT introduces its CAA software TRIM STEEL EXPERT, the first fully CATIA V5 integrated solution for the automated generation of trimming tools used in the sheet metal and plastics die forming industry. The software replaces hitherto necessary manual processes, thus reducing response time to product changes. In addition, the application also generates cast bodies and surfaces as separate elements for an optimized design and construction process. Users profit from an easy-to-use add-on simulation function of the end result, such as the intrusion of the trim steel into the metal sheet.

Kurt Bengel, Member of the Executive Board at CENIT, underlines: "Compared to the traditional manual design and construction process of trimming tools, our customers profit from time savings and thus also from cost cuts in 3 development areas: tool surfaces, design of the cast body blank as well as in milling processes through detailed raw part description." An additional advantage is, according to Bengel, the facilitated storage of entrepreneurial and process specific data: "Trimming profiles, generated through TRIM STEEL EXPERT, can be stored within a library, administered and re-used at any time. Thus, future product development stages or product changes can easily be realized."

TRIM STEEL EXPERT was developed in close cooperation with iCapp. The solution is based on Dassault Systèmes CAA V5 platform and thus fully integrated in V5. This allows the direct use of native CATIA data and therefore also the full integration within the overall process of tool planning and design. Existing data management processes do not have to be converted. „Our experience is derived from many years as CATIA development partner of Dassault Systèmes" explains Jos Verbakel, product manager at CENIT, the development of TRIM STEEL EXPERT.

The new software is another important addition to the yet extensive portfolio of the PLM specialist CENIT, that already features a variation of innovative solutions for the tool engineering industry, such as: electrode generation, analysis of thickness or tolerance. But additional CENIT add-ons for CATIA used in production processes (3D Laser, contour and surface processing, wire cutting) and product data management also lead to a highly efficient design and development of products.

The PLM specialists will present the CENIT CAA software portfolio, including the new solution TRIM

STEEL EXPERT, at the exhibition accompanying the European CATIA Forum of Dassault Systèmes in Paris from November 6-7, 2007 (http://www.ecforum.com/).

Click here to return to Contents

New GibbsCAM 5-Axis Module Now Shipping

23 October 2007

Gibbs and Associates announced that a new GibbsCAM option, which supports 5-axis simultaneous milling, has begun shipping to customers around the world. The new GibbsCAM 5-Axis option further extends GibbsCAM's existing machining capability and provides the user with a complete range of 5-axis simultaneous milling functionality to be able to machine turbine blade, impellers, engine porting, aircraft wing spars and various medical parts.

We are seeing an increased use of 5-axis machining in production manufacturing," states Bill Gibbs, founder and president of Gibbs and Associates. "Not only do 5-axis machine tools minimize the number of set-ups required to machine a part, but many of the models being created by today's CAD systems contain geometry that can only be machined using 5-axis technology. Due to the extensive and varied feature set of the 5-Axis option, users are able to machine almost any 5-axis shape. In addition, 5-axis technology provides the user with the ultimate amount of control when applying tooling to a part. Because of this, collision avoidance, improved surface finish, and reduced tool wear are some of the numerous benefits realized. With the new 5-axis module, GibbsCAM users will not only be able to machine parts they couldn't before, but may even be able to improve the machining of parts they could."

The new 5-Axis option introduces the following capabilities:

- Multi-surface 5-axis roughing and finishing.
- Multi-surface 5-axis flowline machining.
- Surface edge 5-axis swarf cutting (trimming vacuum-formed parts)
- Adaptable interface, based on part type strategy, shows only what is needed
- Advanced gouge protection ensures safe cuts in even the most complex operations.
- Complete control over entry/exit, cut-to-cut, and between cut moves.

A variety of post processing approaches is available for the GibbsCAM 5-Axis option. Simple modifications to most GibbsCAM post processors allow them to support 5-axis output. Existing posting systems, which are based on APT-CL, can also be supported through GibbsCAM's APT-CL post. Additionally, 5-axis drivers initially created for the ProAXYZ 5as option for GibbsCAM are compatible with the new 5-Axis option.

"Many multi-task machining centers," explains Mr. Gibbs, "such as Mazak's Integrex E-series and Mark IV series, Mori Seiki's NT series, Okuma's MacTurn and Multus series, Doosan's MX series, Nakamura Tome's Super NTJ and Super NTJX series, and Index's G series, incorporate B-axis live tooling to provide even more flexibility and versatility. When combined with the GibbsCAM MTM option, the new GibbsCAM 5-Axis option is capable of supporting multi-task machining centers with live B-axis tooling."

The new 5-Axis option is fully integrated with GibbsCAM's Machine Simulation option allowing the user to virtually set-up and prove-out complex 5-axis programs off of the machine tool minimizing

costly machine down time. The 5-Axis option is also supported by GibbsCAM's integration with CGTech's VERICUT machine simulation application.

To further enhance the usability of the new 5-Axis option, a comprehensive set of documentation was developed which allows users to quickly learn how to focus upon machining their specific type of work. Unlike other CAM systems which expect only "power users" to be able to figure out their 5-axis simultaneous machining, the GibbsCAM documentation, consisting of almost 325 pages, provides users with an explanation of the many varied machining strategies available within the GibbsCAM 5-Axis option. GibbsCAM's printed documentation for the option is complemented by GibbsCAM's context sensitive online help.

For more information about GibbsCAM or to learn more about the new GibbsCAM 5-Axis option, please call 1-800-654-9399, email mailto:info@GibbsCAM.com, or visit the company's website, http://www.gibbscam.com/.

Click here to return to Contents

New Open Text Business Solutions Give Customers Using SAP® Applications 360-Degree Views of Data, Business Documents

24 October 2007

Open Text™ Corp. announced new business solutions that give companies using SAP® applications a 360-degree view of supplier and employee information, including document and email content, in the context of SAP solutions. The company also announced a new data access solution that makes information contained in SAP solutions and other systems easily accessible to customers, partners and employees. Using these solutions, companies can increase process efficiency, more easily meet regulatory requirements, and improve employee, customer and business partner satisfaction.

The new Livelink ECM - Supplier Information Management and Livelink ECM - Employee Information Management solutions are part of the Open Text Business Suite for use with SAP solutions, a growing portfolio of 360-degree solutions that deliver enterprise content integrated with other business applications and data, thereby bridging silos of information. Earlier this year, Open Text released Livelink ECM - Customer Information Management (CIM), which provides a comprehensive view of all customer content and data. A key aspect of Open Text solutions is integration with desktop clients in use at most businesses, including the SAP GUI, SAP NetWeaver® Portal, and Microsoft Office. CIM is also a featured Microsoft Office Business Application (OBA).

"Our family of 360-degree solutions assembles content from across various SAP applications as well as other sources and makes it available through the user interface of choice for a particular user community," said Patrick Barnert, Vice President for SAP Applications at Open Text. "These applications dramatically increase productivity by putting accurate and complete information in the hands of workers when they need it, in the context of their normal work environment. These enterprise-ready solutions are a direct outcome of the close relationship we have with both SAP AG and Microsoft, coupled with our deep expertise in helping companies manage enterprise content."

Livelink ECM - Supplier Information Management

Livelink ECM - Supplier Information Management (SIM) provides a 360-degree view of supplier and purchasing data and documents, whether it is managed in the SAP ERP or SAP Supplier Relationship Management (SAP SRM) application. It enhances the information in SAP applications with external

documents and other content to optimize the order approval process, enabling workers and managers to make better decisions faster. The solution assembles content from various sources such as email and document repositories, consolidates results and displays them in the choice of interface, including the SAP GUI or SAP NetWeaver Portal.

With SIM, the procurement environment is transformed so that all of the relevant content is a mouse click away. The tedious paper shuffle is eliminated and the correct people are involved using predetermined business logic for a specific scenario. Best practice design is used for an optimized and automated procurement solution based on business processes. It results in faster processing time and cost savings while adhering to financial audit traceability requirements. Livelink ECM - Supplier Information Management is currently available. For more information go to: http://www.opentext.com/sim

Livelink ECM - Employee Information Management

Livelink ECM - Employee Information Management (EIM) from Open Text provides human resource (HR) departments with a complete solution that eliminates frustrating paper chases and supports the SAP ERP Human Capital Management (SAP ERP HCM) solution. Using the EIM solution, all printed documents from employees and job applicants, master data and internal personnel documents are stored and immediately available from complete electronic personnel files. This ensures that personnel activities and processes are performed quickly and easily. And because EIM functionality can be used with the SAP GUI or the SAP NetWeaver Portal, HR employees can quickly begin using the solution with minimal training. In addition, content can be delivered through SAP Employee Self-Service application-based portals.

The ECM capabilities of EIM can transform an HR department. Instead of spending hours on time-consuming, labor-intensive administrative tasks, EIM optimizes and automates many repetitive tasks, so that HR staff is freed up to focus on strategic activities, such as recruitment, skills development, support, compensation and reporting. An HR organization that can focus on strategy provides more value. Livelink ECM - Employee Information Management is currently available for use with SAP ERP HCM. For more information go to: http://www.opentext.com/eim

Livelink ECM - Shared Document Access

Livelink ECM - Shared Document Access provides customers, partners and employees with a personalized overview of all documents related to a specific business process in a secure manner. For example, Shared Document Access enables customers external to the company to see order status, invoices and other information through a self-service portal, whether the documents are stored in SAP solutions or in other core applications. This helps increase customer and partner satisfaction due to improved service, as well as cost reductions from improvements in process efficiency.

This solution is also ideal for such industries as high-tech or aerospace which are subject to special compliance requirements and must guarantee sustained access to SAP data and documents. Using Livelink ECM - Shared Document Access, this information can be stored in a tamper-proof repository and made available at any time regardless of the originating system. Livelink ECM - Shared Document Access is available now. For more information, go to: http://www.opentext.com/sda

In addition to the new solutions, Open Text also announced that Livelink ECM - Customer Information Management has added full support for Microsoft Outlook 2007. For more information, go to: http://www.opentext.com/cim.

Click here to return to Contents

Open Text Raises the Bar With Next-Generation Content Services

22 October 2007

Open Text™ announced Open Text Content Services which represent a major step forward in unifying people, processes and content in large organizations.

Open Text Content Services empower information workers to manage and exploit all content types in a unified way at three critical levels: At the desktop, facilitating access and interaction to all content through customizable business views from within familiar desktop applications, including Microsoft Office, Microsoft Explorer and Microsoft Outlook; in business processes to facilitate content flows which leads to improved productivity and process efficiency; and for archiving and records management to consistently manage retention and compliance rules across all business content, providing a single trusted repository.

Announced this week at Open Text's annual LiveLinkUp 2007 conference, the new content services form the basis for Open Text's next-generation content management framework that takes a repository-agnostic approach to ECM, eliminating the content and process silos created by different systems by decoupling the user experience from the underlying information repositories.

"Open Text Content Services act as an enabler to improve user adoption and extend content management deployments enterprise-wide," said Kirk Roberts, President, Livelink ECM Division at Open Text. "The new capabilities we are announcing today, along with Open Text's two decades of experience and best practices, will help customers break down the seemingly insurmountable process and content silos that exist in organizations today, and exploit the real value of business content for competitive advantage. Leveraging Open Text Content Services, our customers will be able to more effectively preserve corporate memory, protect intellectual capital, leverage business content across all applications to derive true value, and address governance and compliance requirements."

The new capabilities are exposed as Web Services, so that customers and partners can integrate and extend their use of the ECM technology within their organizations. The new services include:

Open Text Enterprise Connect:

Designed from the ground up to eliminate user adoption challenges and minimize training requirements, Enterprise Connect is a new user interface paradigm that serves dynamic, personalized content in context from within a user's choice of desktop application, including Microsoft Office, Microsoft Explorer and Microsoft Outlook.

At the core of Enterprise Connect is a framework which allows organizations to deliver to information workers content in context, leveraging customizable business views. Its extensible plug-in architecture and software development kit decouples the user experience from the underlying content repositories, providing access to all business content. Leveraging the business views, Open Text partners and customers will be able to design and deploy content-enabled applications with much greater speed, eliminating the development effort for an application interface.

(http://www.newswire.ca/en/releases/archive/October2007/22/c6528.html)

Open Text Enterprise Process Services:

Open Text Enterprise Process Services provides enterprise process services which allow information

workers to automate and manage the flow of business content both within and across departments to meet the business requirements of the organization. The BPM capabilities act as the glue that take a typical ECM implementation beyond simple access to content, delivering on the promise of interaction with all business content, providing ways of tying together business content with enterprise application data.

(http://www.newswire.ca/en/releases/archive/October2007/22/c6529.html)

Open Text Enterprise Library Services:

Enterprise Library Services provide the foundation for a single, trusted repository that delivers integrated records management, metadata management, archive and search capabilities for all business content in an organization including content stored in Microsoft Office SharePoint Server sites, SAP applications, file systems, email and Open Text content repositories. With Enterprise Library Services, content can be managed, archived and stored consistently across the entire organization, based on a lifecycle defined by records retention and disposition rules and the value of the content to the organization.

(http://www.newswire.ca/en/releases/archive/October2007/22/c6524.html)

Open Text Content Services enable organizations to extend the footprint of their deployments of content-enabled applications across the enterprise, including applications for accounts payable, vendor invoice management, employee information management, customer information management, contract management, regulated documents, litigation management, internal controls, brand asset management, and applications for vertical markets such as matter lifecycle management for law firms, collaborative submissions for life sciences, real estate lease management, deal management, and more.

The key to the new services is their ability to tie into an organization's existing IT ecosystem, incorporating content from different systems into a cohesive strategy, while helping organizations gain more value from their major enterprise systems. Open Text is in a unique position to deliver these integrated capabilities because of its strategic relationships with Microsoft, SAP and Oracle, and a track record for delivering solutions that extend all three.

For information on availability, see individual press announcements on each of the services by following the links above.

Click here to return to Contents

SAMTECH to Release Version 12.1 of its FEA Suite SAMCEF

October 2007

SAMTECH announced the launch of the new commercial release 12.1 of its Finite Element software suite SAMCEF.

SAMCEF is known in particular for its integrated non-linear module SAMCEF Mecano/SAMCEF Thermal embedding in one single solver rigid and flexible multi-body simulation, non linear metallic/composite structures analysis and thermal analysis. SAMCEF contains also linear FEA capabilities and linear modules of SAMCEF can also be used after a non-linear analysis. This allows for example to perform a modal analysis of a pre-stressed structure or to predict the resonances of a flexible mechanical system in various configurations.

Aimed at meeting its customers' needs, SAMTECH focuses continuously on the improvement of

capabilities: overall CPU performance, robustness, ease-of-use and result reliability of SAMCEF. With close to 100 new enhancements, SAMCEF V12.1 offers major advances in linear and nonlinear mechanical modeling, thermal analysis, parallel computing and results post-processing.

Among the extensive list of new features, the following are worth mentioning:

- Direct parallel solver for linear static analysis (SAMCEF Asef) and non linear mechanical, thermal and thermo-mechanical ablation analyses (SAMCEF Mecano, SAMCEF Thermal and SAMCEF Amaryllis), including the parallelization of elements generation;
- Inverse analysis in SAMCEF Mecano with un-deformed geometry as unknown;
- Improved face-to-face contact feature both in SAMCEF Mecano and SAMCEF Asef;
- New second degree heterosis shell element for linear and non-linear analyses;
- Improved thermal post-processing after SAMCEF Thermal;
- Multi-stage cyclic symmetry dynamic modal analysis (SAMCEF Dynam) and time&frequency response (SAMCEF Repdyn);
- A Monte Carlo Ray tracing method for the calculation of view factors for thermal analysis (SAMCEF Thermal);

SAMCEF V12.1 runs on Linux, Unix and Windows 64 bits platforms.

“SAMCEF is being used more and more by industry with extensive references in all sectors. New developments in SAMCEF by SAMTECH are strategic in helping its customers access state-of the- art numerical methods thus reducing the time-to-market and to lowering development costs”, explains Didier Granville, Chief Marketing Officer of SAMTECH. Depending on the industrial constraints, SAMCEF solvers can be run either within the standalone CAD Based pre- and postprocessor SAMCEF Field or within CATIAV5. Both user environments offer highly efficient and innovative capabilities enabling our customers to be ever more competitive. Design problems can also be solved by using jointly SAMCEF solvers and BOSS quattro, the Optimisation platform developed by SAMTECH. Finally, the extensive capabilities of the SAMCEF toolbox are more and more used as internal solver for advanced Professional Products dedicated to specific applications.

Through SAMCEF Field, the Integrated FEA approach of SAMCEF can also be complemented by advanced Multi-Physics capabilities available in OOFELIE for example for vibro-acoustics, electrostatics, electromagnetism, optics, phase change and fluid-structure interaction.

Click here to return to Contents

Share-A-space™ 5.5 Released

18 October 2007

Eurostep announced version 5.5 of Share-A-space™. The focus in this release has been documentation and new features are included like support for Oracle 10g as well as full browser support for Internet Explorer 7 and Firefox 2.

Updated and new functionality in 5.5:

General

- Support for Oracle 9i / 10g / 10g XE

Share-A-space™ from version 5.5 is supported on both Oracle 9i and 10g. It is also possible to run it on 10g XE (Express Edition) which is available free of charge from Oracle. However, the XE version of Oracle comes with some limitations on database size which makes it unsuitable for production installations.

- Supports Firefox 2.0 AND Internet Explorer

Internet Explorer in version 6 and 7 as well as Firefox in version 2 are now officially supported browsers for running the Share-A-space™ Web GUI.

DataExchange

- Data Exchange reachable via Web Services

The DataExchange component is now accessible via WS. This means that clients developed using the PLCS PLM Services to access PLCS data from Share-A-space™, can now also take full advantage of the possibilities of the DataExchange component provided with Share-A-space OOTB, to make automatic imports, mappings between different file formats and generating reports.

- New C# Exporter.

The old COM exporter has been replaced by a new exporter developed in C# with the same functionality. The reason for this is to enhance the performance as well as the extensibility of it and to make it more accessible by other components.

Security

To be able to trace possible intruders to the Share-A-space™ Server, failed login attempts are now traced in a log-file alongside with the regular user-log.

Encrypted passwords in database

Passwords can now be encrypted in the database using HMAC encryption.

Techie

- Performance enhancements on the SASSetting component, the component in Share-A-space™ that keeps track of all personal settings of a user.
- The ECS namespace has been removed and all components have moved to a formal namespace under “Eurostep.SAS.*”, e.g. Eurostep.SAS.Interface.JavaMapper
- All components of the Share-A-space Server are now explicitly versioned to ensure consistency throughout the new releases.

Web Services

Strict PLCSPLMServices separated from Share-A-space specifics in the ClientSDK by introducing the “PLCS Foundation” and “PLCS Templates” classes.

Changed namespaces in:

-SASAdapter, from SASAdapter to Eurostep.SAS.Services.PLCS.Adapter

-PLCS Foundation, from Types to PLCS.Types

-ClientSDK, from ClientSDK to Eurostep.SAS.Services.PLCS.ClientSDK

Added WorkspaceManagement to support working with Favourites, etc.

Added UpdateHeader as an in parameter in many of the template methods

On all implemented create and update methods e.g. CreatePart(), the method ends with a rebind of the actual PLCS object.

In the Update methods for the master objects the ability to change the name has been added.

In the Create methods of all master and version objects the Organization_or_person_in_organization_assignment has been added and mapped against actor in SAS.

In the Update methods of the version objects the Organization_or_person_in_organization_assignment has been added and mapped against actor in SAS.

In the Create method the Organization_or_person_in_organization_assignment has been added and mapped against actor in SAS.

Click here to return to Contents

Siemens PLM Software and TATA Consultancy Services Announce New Teamcenter Based Solution for the Medical Device Industry

23 October 2007

Siemens PLM Software and Tata Consultancy Services (TCS) announced Teamcenter for Medical Devices, the first fully integrated PLM solution for the medical device industry.

The Teamcenter™ for Medical Devices solution leverages Teamcenter foundation elements to deliver an holistic and integrated solution for end-to-end management of the medical devices industry's product lifecycle. Teamcenter enables companies to fully trace all activities from concept to retirement by automatically linking compliance requirements with engineering and specification data. The solution combines compliance management, traceability and reporting capabilities to help medical devices manufacturers address strict quality and regulatory requirements, increasing competition and demanding time-to-market pressures.

"Guarding the health and safety of consumers is job one for Wright Medical and therefore complying with regulations set forth by regulatory agencies must be part of a comprehensive product lifecycle management strategy," said Amy Cooper, quality documentation supervisor, Wright Medical, a global orthopaedic medical device company specializing in the design, manufacture and marketing of reconstructive joint devices and biologics. "Siemens PLM Software's Teamcenter solution helps Wright Medical insure that information regarding our products will be available for the life of the product which can be 40, 80 or even 100 years."

Teamcenter for Medical Devices facilitates comprehensive program lifecycle management, which in turn results in faster design cycles, accelerated time to regulatory agency approval, fewer design and submittal iterations and lower costs for design, development, manufacturing, testing and tracing.

Teamcenter facilitates this strategic approach by tracking all of the product data that pertains to product development activities performed by a medical devices OEM and its suppliers. By integrating

compliance management into a complete product lifecycle, Teamcenter virtually eliminates manual data entry, improves data accuracy and reduces the costs of both compliance and non-compliance.

“Wright Medical has dramatically enhanced the availability of compliance data and reduced the time it takes to access that data,” added Cooper. “Teamcenter allows device history of the part to be available at the click of a button rather than having to search through physical files. Something that previously took weeks to find can now be accessed within minutes. Suppliers have direct access to data, enhancing efficiency and reducing time-to-market.”

“With our recent launch of Teamcenter 2007 complete, Siemens PLM Software is making good on its commitment to expand its list of industry specific solutions that create real value through tailored functionality,” said Steve Bashada, vice president of Teamcenter Applications, Siemens PLM Software. “Companies producing medical devices can now use Teamcenter to establish regulatory compliance as a strategic initiative by integrating the solution into their existing supply chain, design and manufacturing systems to support efficient data collection, reporting and traceability. Teamcenter's robust capabilities and integrated features establish the industry’s premier quality assurance environment for creating, managing, controlling, tracking and distributing all of the electronic product records associated with the medical devices lifecycle.”

TCS’ industry domain knowledge and solution development experience coupled with its system integration capabilities and channel partner relationships make it an instrumental partner in development and implementation of Teamcenter for Medical Devices. TCS’ Engineering and Industrial Services Practice helps customers across the world focus on developing and bringing innovative and efficient products to market faster.

“Teamcenter for Medical Devices, developed in collaboration between TCS and Siemens PLM Software, is an innovative solution that caters to the needs of the growing global medical devices market. Teamcenter for Medical Devices encapsulates predefined compliance needs of the industry thus making it easy to deploy and reliable to use,” said Regu Ayyaswamy, vice president, Engineering and Industrial Services, TCS. “TCS’ two decade-old partnership with Siemens PLM Software has grown stronger with time and has brought benefits to a multitude of customers across the globe in industries such as high technology, medical devices, aerospace and automotive.”

Click here to return to Contents

Siemens PLM Software Launches Teamcenter 2007 in China, Pushing Boundaries Forward in the PLM Industry

25 October 2007

Siemens PLM Software unveiled details of its Teamcenter™ 2007 software at a press briefing in Beijing. The new version of Teamcenter provides greater manageability, productivity, teamwork and control for the manufacturing industry.

Teamcenter 2007 includes a number of enhancements and features that simplify and accelerate implementations, enhance productivity, streamline collaboration and expand control of the entire product lifecycle process. Its fully unified architecture presents a complete end-to-end PLM portfolio.

“We are confident that Teamcenter 2007, which is built on a complete Service Oriented Architecture (SOA) using the latest IT standards, will help a greater number of Chinese manufacturers to actively participate in Global Innovation Networks,” said Hans-Kurt Lübberstedt, senior vice president, Asia

Pacific, Siemens PLM Software. “By deploying Teamcenter 2007, Chinese enterprises will benefit greatly from lower total cost of ownership and achieve greater productivity. I believe this experience will change the perceptions – which many Chinese enterprises still have – of PLM as ‘computer aided design (CAD) + product data management (PDM)’ software, and help them implement Teamcenter more strategically.”

“We selected Teamcenter to establish the whole-process of cooperation between channels, customers, our supply chains and suppliers,” said Zhan Li, director of IT Department for Haier Group. “Haier attaches great importance to information construction to meet requirements for implementing a global branding strategy. In our opinion, computerization is not a tool but the main component of corporate competitiveness. By deploying PLM, the number of components has been decreased by 29 percent, and enabled Haier to build a standardized system.”

“Teamcenter enables us to build an integrated distributed collaboration management platform for product R&D and manufacturing, and provides us with a single source of knowledge for company product data management and decision making,” said Sun Baodong, CIO of DHI. DCW Group Co., Ltd. “Through effective reuse of knowledge, we have significantly improved our product quality and reduced our R&D and design cycle by 17 percent, while production preparation time has been improved by 20 percent.”

“We have selected Teamcenter for management and reuse of the lifecycle data and knowledge of integrated products and to support collaboration between our customers and the global subsidiaries of JCI. This allows us to promote the concurrent design activities of the development teams,” said Ni Jiawen, director of Technical Center for Shanghai Yanfeng Johnson Controls Seating Co., Ltd. “Teamcenter is currently used in development projects and has significantly reduced the costs from concept design to mass production.”

In China, an extensive range of customers use Teamcenter across different industries, especially automotive, aerospace and defense, high-tech electronics and machinery. These clients include large enterprises such as SAIC, Chery Automobile Co., Ltd., Shanghai Yanfeng Johnson Controls Seating Co., Ltd., Haier Group, Hisense, Konka, Changhong, Shenyang Liming Aero-Engine Group Corporation, Harbin Turbine Co., Ltd., Hongdu Aviation Industry Group Ltd., DHI. DCW Group Co., Ltd., and many others.

For more information, please visit http://www.siemens.com/teamcenter.

Click here to return to Contents

Synopsys Advances Low Power Management for Manufacturing Test

22 October 2007

Synopsys, Inc. announced it has extended low power management capabilities in the Synopsys Galaxy™ test solution to significantly reduce the time and effort needed to generate high-quality, power-aware manufacturing tests for integrated circuits (ICs). The TetraMAX® automatic test pattern generation (ATPG) solution now creates tests reflecting designers' power budgets, and the DFT MAX scan compression product further automates integration of design-for-test (DFT) structures in designs that deploy advanced low power management techniques.

Previously, manufacturing tests were not power-aware, and designers used a time-consuming and error-prone manual process to integrate on-chip DFT resources into low-power design flows. The Galaxy test

solution now offers enhanced automation of power management to accelerate DFT implementation for low-power flows and automatically creates high-quality, power-aware manufacturing tests. Synopsys will demonstrate this power management functionality at this year's International Test Conference (ITC) in Santa Clara, California, October 23-25 (booth #212).

Scan testing typically increases transistor switching activity inside ICs by many times their peak functional mode levels, leading to excessive power consumption. Too much power consumption during test can lead to unpredictable test results, including the failure of fully-functional devices at the tester, and unnecessary yield loss. Ad-hoc power reduction techniques for test, however, require considerable engineering effort to implement seamlessly with scan compression, used for reducing test data volume. New functionality in the TetraMAX product limits power consumption during test by automatically reducing switching activity to levels consistent with normal operation, based on designer-specified power budgets. This is achieved without compromising the cost-savings advantage of DFT MAX scan compression and test coverage.

Automation to manage power consumption also facilitates testing of subtle delay defects in nanometer devices. "Synopsys' TetraMAX small delay defect pattern generation capability detects timing problems associated with paths having very small timing margins," stated Dr. Tom Williams, a Synopsys Fellow and industry-recognized test expert. "Because excessive power consumption can affect the delays of such paths, automation to manage it is now included in TetraMAX as part of Synopsys' comprehensive ATPG solution for achieving ultra-high test quality."

Besides adding capabilities to limit power consumption during test, Synopsys has enhanced DFT MAX to significantly simplify the implementation of DFT in designs with multiple voltage domains. DFT MAX power optimization minimizes the number of scan chain connections that cross voltage domains, lowering the area impact of DFT by reducing the number of required level shifters and power isolation cells. Power intent affecting both scan domains and power domains, and specified in the Accellera standard Unified Power Format (UPF), is now preserved throughout the Galaxy platform flow, from synthesis through physical implementation and sign-off.

"Designers benefit from the ability to quickly and easily generate high-quality, low-cost manufacturing tests while preserving their power intent," said Antun Domic, senior vice president and general manager, Synopsys Implementation Group. "Automation of low-power management in the Galaxy platform is consistent with Synopsys' commitment to provide our customers a comprehensive design platform that makes possible concurrent optimization of timing, signal integrity, area, power, and test."

Click here to return to Contents

Synopsys Customers Accelerate Yield Learning With Converged Test and Yield Management Data Flow

23 October 2007

Synopsys, Inc. announced general availability of the Odyssey Design-for-Test (DFT) module for use by design organizations worldwide. The Odyssey yield management software has been widely adopted by leading semiconductor manufacturers to correlate and analyze diverse datasets needed for product yield enhancement. The TetraMAX® automatic test pattern generation (ATPG) solution creates high-quality manufacturing tests and identifies logic in a design that could contribute to observed tester failures. TetraMAX failure diagnostics data is exported to the new Odyssey DFT module to facilitate comprehensive failure analysis and rapid yield improvement of fabricated devices. Fabless firms have

adopted the Synopsys solution because shorter yield-learning cycles can increase net profits over a product's life cycle. Synopsys will demonstrate the yield enhancement suite at this year's International Test Conference (ITC) in Santa Clara, Calif., October 23-25 (booth #212).

"If a device fails production test, we want to understand why," said Bruce Cory, DFT manager at NVIDIA Corporation. "The Synopsys yield management solution allows us to leverage design, fabrication, and production test data to analyze TetraMAX diagnostic isolations across multiple die and wafers. The software helps identify underlying failure signatures to enable faster yield ramp."

Semiconductor foundries typically supply their fabless clientele with parametric data associated with the manufacture and testing of production parts, but until now there was little designers could do with the information to improve product yield. With the Synopsys tools in-hand, designers are now leveraging the foundry-supplied data together with failure diagnostics accumulated from production runs (a capability often referred to as "volume diagnostics") to help determine the root cause of yield loss.

For example, designers at NVIDIA Corporation and TranSwitch Corporation are using the Odyssey solution to correlate circuit failure candidates reported by TetraMAX diagnostics with foundry-supplied information. Data mining and cross-correlation features in Odyssey assist designers in quickly determining both the impact of measured process parameters on product yield and whether failing parts are caused by systematic or random processes.

"Nanometer manufacturing steps can distort device and wire geometries, leading to more frequent failures at process corners," said Zahi Abuhamdeh, director of DFT and Diagnostics at TranSwitch Corporation. "Also, the foundry's occasional tweaking of the process can cause subtle corner failures that previously did not occur. The Synopsys yield enhancement solution has provided us the ability to determine whether failing parts from a product run are due to foundry, specification, or design-specific issues. In the latter scenario, making alterations to a single library cell or including or removing a foundry-recommended design rule might lead to a step-increase in the product's yield."

"Synopsys is committed to providing both foundries and their fabless clientele the latest innovations in ATPG diagnostics and yield management systems," said Dr. J. Tracy Weed, director of the Manufacturing Products Group at Synopsys. "With the Odyssey DFT module, our customers now have vastly improved automation that enables analysis of product-specific diagnostics, design and foundry-supplied data to identify yield delimiters that present a barrier to higher profitability."

Click here to return to Contents

Synopsys Improves the Quality of Manufacturing Tests with Timing-Aware Pattern Generation

22 October 2007

Synopsys, Inc. announced availability of its TetraMAX® small delay defect automatic test pattern generator (ATPG) for use by design organizations worldwide to significantly improve the quality of manufacturing tests. Customers have validated the new test capability on manufactured designs, identifying problems in some devices that had previously passed standard at-speed tests. Small delay defect ATPG creates patterns to test the smallest defects inside integrated circuits (ICs) that could lead to failures when the devices are operated at full speed. Targeting these subtle delay-related defects using timing-aware pattern generation can improve the quality of test compared with existing ATPG technologies. Synopsys will demonstrate the new test feature as part of its power-aware design flow at this year's International Test Conference (ITC) in Santa Clara, Calif., October 23-25 (Booth #212).

"Our member companies value innovations that improve the quality of manufacturing tests, and we believe Synopsys' TetraMAX small delay defect ATPG is an excellent achievement," said Yoshio Okamura, vice president and general manager of Development Department-2 at the Semiconductor Technology Academic Research Center (STARC), a research and development consortium founded by major Japanese semiconductor companies. "Synopsys' new test technology will identify failures caused by small delay defects that were not detectable before. Small delay defect testing has important ramifications for our member companies, and to all semiconductor firms dedicated to continually improving product quality."

Process variations can introduce small delays that adversely affect sensitive paths in a design, leading to circuit failures under certain conditions. Until now, designers could not create tests to reliably detect these small added delays because traditional transition-delay ATPG technologies lacked sufficient timing resolution. Synopsys responded to this challenge by enhancing its pattern generation capability to utilize precise timing information to target very small timing slacks. Designers can pass a circuit's detailed parasitic information from Synopsys' Star-RCXT™ extraction tool to Synopsys' PrimeTime® static timing analysis tool, then use pin-slack information generated from the timing analysis to create small delay defect patterns using the TetraMAX ATPG technology. The new ATPG technique is consistent with existing design-for-test (DFT) methodologies and does not require changes to a design.

"Synopsys' collaboration with a majority of the world's top semiconductor firms has proven that TetraMAX small delay defect ATPG is capable of identifying subtle timing defects that escape traditional at-speed testing," said Gal Hasson, senior director of Synthesis and Test Marketing at Synopsys. "We regard this successful validation of our timing-aware pattern generation capability as a critical milestone, and anticipate the new TetraMAX feature will lead to lower test escapes and ultimately lower test costs for our customers."

Click here to return to Contents

Tech Soft 3D's HOOPS Drives 40% Graphics Performance Gains in COADE's CAESAR II Package

22 October 2007

Tech Soft 3D (TS3D) and COADE, Inc. announced 40% graphics performance gains in CAESAR II V5.10, COADE's latest release of its flagship pipe stress analysis software product. These performance gains have been made possible by the use of TS3D's HOOPS graphics engine.

"CAESAR II users expect us to constantly raise the bar in all areas, including graphic display performance," commented Thomas J. Van Laan, PE, President/CEO of COADE. "This recent improvement is yet another example of the benefits we have realized using HOOPS technology over the years. Our collaboration with TS3D continues to bear fruit," Van Laan stated, "and we are pleased with the ongoing optimization and the innovation that HOOPS allows us to deliver in end user value and satisfaction."

"A key strategic focus of our recent HOOPS development has been performance -- particularly with the large and complex models that CAESAR II is capable of handling. Our R&D in this area has proven to be very exciting as well as productive -- so users of HOOPS-based applications such as COADE's CAESAR II can expect even more impressive speed gains in upcoming releases," added Ron Fritz, TS3D's Managing Partner.

Click here to return to Contents

Virage Logic Broadens Its Silicon Aware Intellectual Property (IP) Offering with New Release of the STAR™ Memory System

22 October 2007

Virage Logic Corporation has broadened its Silicon Aware IP product portfolio with a new release of the Self-Test and Repair (STAR) Memory System. Introduced in 2001 and successfully used by over 100 companies, this new release adds capabilities to address the challenges of advanced design and process technologies. A dashboard of user-selectable options enables tradeoffs between test time, area, and state-of-the-art diagnostics for optimal design complexity management.

This release also expands the STAR Memory System's capabilities to address process challenges with a new product option called STAR™ Yield Accelerator, created to boost silicon yield and accelerate time-to-volume. The STAR Yield Accelerator bridges the design and manufacturing disciplines to enable automated test vector generation, silicon analysis, fault isolation and classification to be used at the critical semiconductor tape-out, bring-up and volume manufacturing stages.

The company also announced that for the first time, the STAR Memory System will be open to enable licensees to use the systems' capabilities with other commercially available and internally developed embedded memories.

Already proven through preliminary engagements with several key customers at advanced process nodes, the new STAR Yield Accelerator addresses the requirements of integrated device manufacturers (IDM), fabless and foundry customers to rapidly, cost-effectively and accurately identify, analyze, isolate and classify memory faults as designs are readied for transition from first silicon to volume manufacturing. By doing this automatically within the existing development workflow, STAR Yield Accelerator works in concert with the embedded test-and-repair infrastructure of the STAR Memory System to speed system-on-chip (SoC) time-to-volume and boost the yield percentages of good die per wafer. The STAR Memory System is proven to reduce tape-out schedules for new complex SoCs by weeks and the STAR Yield Accelerator can reduce silicon bring-up by months, reducing overall time-to-volume production. (Virage Logic also today announced new Silicon Aware memory and logic products. See related press release titled, "Virage Logic Expands Silicon Aware IP Offering with New 65nm Memory and Logic Products.")

"As process nodes advance, the risk and the costs of lost yield increases exponentially," noted Dr. Yervant Zorian, Virage Logic's vice president and chief scientist. "With our latest release of the STAR Memory System, licensees are well equipped to proceed with speed and confidence through the critical design and manufacturing stages, while optimizing the profit opportunities their products represent."

Anticipating significant demand for the yield-enhancing capabilities of the STAR Memory System, particularly among users designing at the advanced process nodes, Virage Logic has announced the opening of the STAR Memory System architecture to enable the integration of commercially and internally developed memories. As a result, users will have the flexibility to leverage the full benefits of the STAR Memory System, including the STAR Yield Accelerator's capabilities.

"The benefits of the STAR Memory System's silicon IP and STAR Yield Accelerator carry tremendous value for memory-dominant SoC designs. By providing an open interface to the STAR Memory System, we extend the value to designers regardless of whether they select to use Virage Logic memories, other commercially available or internally developed memories," said Brani Buric, vice president of product marketing and strategic foundry relationships. "Licensees will enjoy the flexibility of being able to mix memories from various sources and still be able to reap the benefits of the STAR Memory System's

capabilities."

STAR Yield Accelerator consists of the STAR Verifier, STAR Vector Generator, STAR Debugger, and STAR Yield Analyzer components. Leveraging the infrastructure of the STAR Memory System, the STAR Yield Accelerator automatically generates vectors for test equipment and provides fault analysis and root-cause failure guidance based on silicon test results. Using STAR Yield Accelerator, manufacturers can rapidly and directly analyze failures manifested in embedded memories and inspect the physical location and class of each fault to determine the root cause without involving the IP vendor or SoC designers.

For SoC designers and manufacturers for whom on-chip memory may impact yield losses or time-to-volume, STAR Yield Accelerator offers capabilities far beyond conventional physical de-processing and manual analysis approaches thereby pinpointing the physical location of memory faults as well as providing guidance of root cause. Moreover, STAR Yield Accelerator protects manufacturers' sensitive process data -- and the designers' closely guarded design data -- by enabling engineers to troubleshoot yield issues in a secure and efficient manner.

Availability and Pricing

The new release of the STAR Memory System is available today with project-based pricing starting at $25,000. STAR Yield Accelerator is available today. Project-based engagements include software and services with pricing starting at $50,000.

Click here to return to Contents

Virage Logic Expands Silicon Aware Intellectual Property (IP) Offering with New 65-Nanometer Memory and Logic Products

22 October 2007

Virage Logic Corporation announced the availability of a broad new family of 65-nanometer (nm) products -- SiWare Memory compilers and SiWare Logic libraries. This new offering, based on more than two years of early 65nm silicon successes, broadens the company's Silicon Aware IP portfolio and enables semiconductor companies to design faster, lower power and more area efficient System-on-Chips (SoCs) while achieving higher yields.

The SiWare Memory product line provides a dashboard that enables SoC designers to explore the tradeoffs between performance, area, power and statistical yield to generate optimal memory configurations. This "dashboard control" capability is critical at 65nm where design and process complexities require sophisticated management of the various tradeoffs in order to effectively meet stringent end-product requirements and increasingly narrow market windows. (Virage Logic also today announced new Silicon Aware memory test and yield analysis products. See related press release titled, "Virage Logic Broadens its Silicon Aware IP Offering with New Release of the STAR™ Memory System.")

In addition to being optimized for design-for-manufacturing (DFM), the SiWare Logic product line offers SoC designers the ability to manage tradeoffs between area, speed and power. The SiWare Logic library architectures -- high-speed, high-density and ultra-high-density -- can also be extended with ultra-low-power (ULP) kits for power management and engineering change order (ECO) kits for metal-only design modifications.

"Since the first introduction of our 65nm offering with TSMC, UMC and Freescale in 2004, we have

leveraged our early experience to provide designers with an advanced product offering that addresses tough 65nm challenges," said Brani Buric, vice president of product marketing and strategic foundry relationships at Virage Logic. "Our SiWare Memory and SiWare Logic offerings incorporate what we've learned to provide a rich set of performance-enhancing, area-saving, power-optimizing and yield-accelerating options for SoC designers to control as they develop competitive products."

"Our successful, long-standing relationship with Virage Logic spans various process technologies for multiple foundries, and enables us to utilize their portfolio of highly differentiated IP solutions in our industry-leading multi-mode VDSL2 and gateway products," said Shekhar Khandekar, vice president of operations at Ikanos. "As a result, our products are able to power the processing and distribution of triple play services in the carrier infrastructure and at the customer premise."

"Virage Logic was one of the pioneers in establishing the third-party commercial IP market more than 10 years ago and they have a long track record of being first to deliver quality, silicon proven products on each new node," said Rich Wawrzyniak, senior analyst at SEMICO Research Corporation. "I am impressed with the breadth of their new 65nm SiWare Memory and SiWare Logic offering and the attention to detail in terms of providing a complete capability set. With the ability to manage and optimize speed, power, area and yield tradeoffs, the SiWare product family enables designers to successfully address the challenges of 65nm design."

Availability and Pricing

SiWare Logic libraries and SiWare Memory compilers, including single port and dual port SRAMs and register files, are available now for TSMC's 65nm GP and LP processes. Project pricing starts at $70,000. SiWare IP supports all major electronic design automation (EDA) tool flows such as those offered by Cadence, Magma and Synopsys.

Click here to return to Contents

Zuken Makes Free Simulation Kits Available to Users for Xilinx Virtex-5 FPGA

18 October 2007

Zuken announced the availability of a free simulation design kit for the latest high-performance Virtex™-5 FPGA from Xilinx. Born from cooperation between the two companies, this comprehensive design tool keeps pace with advanced technologies, delivering first-class signal integrity for 65nm FPGA designs.

The Xilinx® Virtex-5 FPGA simulation kit is for use with Zuken's high-speed design solution, CR-5000 Lightning, and provides a set of topology templates, in-context HTML documentation and useful content for simulation of waveforms and eye patterns, etc. The templates are ready to use and help users to save time in designing and analyzing printed circuit boards by eliminating many common manual tasks. Because much of the pre-design work is already done, the templates within the simulation kit allow a user to plan and constrain a design more efficiently, even adhering to common pre-defined sets of standards.

“The creation of design kits to assist with the rapid adoption of technology for companies like us who use both Xilinx and Zuken products is sure to contribute to an increase in effective product development, and we look forward to the further release of design kits to support the further cutting edge technology.” said Mr. Minoru Kinoshita, Chief Engineer, Panasonic AVC Networks Company.

Key design team innovations in process technology, architecture and product development methodology

have led to unprecedented performance gain and power reduction with Xilinx 65nm Virtex-5 FPGAs. The LXT and SXT platforms offer 3.2Gbps low-power transceivers with built-in PCI Express® endpoint and tri-mode Ethernet MAC blocks, allowing engineers to implement serial interfaces with the greatest ease of use. All these benefits enable designers to differentiate their end products with increased performance and lower power while reducing design complexity and gaining time-to-market advantages.

"This design kit enables easy front-loaded verification of signal integrity in high-speed IO between memory and FPGA. The easier front-loaded verification made possible by the design kit helps improve design quality. Like many of our other cooperative projects, this enables us to continue progressing the usability of our high-speed design environment, CR-5000 Lightning; to better serve our customers," said Werner Rissiek, General Engineering Manager, Zuken Europe.

"With today's high clock rates and signal transitions in multi gigabits per second, designing of printed circuit boards can be challenging, especially in high-speed serial designs," said Per Holmberg, Xilinx director of Programmable Digital Systems Marketing at Xilinx. "This tool allows designers to streamline their Virtex-5 FPGA-based PCB designs, encouraging further serial adoption."

This simulation kit is available from October 18 and is provided free of charge to Zuken CR-5000 Lightning users via their LinkZ login visit http://www.zuken.com/linkz Users can ensure they have the latest simulation models by importing compatible IBIS files from the Xilinx website at http://www.xilinx.com/.

Click here to return to Contents