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Acquisitions

Cadence Completes Acquisition of Denali

17 June 2010

[Cadence Design Systems, Inc.](#) announced that it has successfully completed the acquisition of Denali Software, Inc., a Sunnyvale, Calif.-based provider of electronic design automation (EDA) software and intellectual property (IP).

Tightly aligned with Cadence's strategy to deliver on the EDA360 vision for applications-driven system design, Denali's product portfolio includes Memory Models, Design IP and Verification IP. The completion of this transaction enables Cadence to accelerate its EDA360 execution and expands the company's solution portfolio to provide efficient, cost-effective system component modeling and IP integration.

"We envision a way forward for the electronics industry, called EDA360, that addresses the emerging shift to applications-driven systems and SoC Realization," said Lip-Bu Tan, president and chief executive officer, Cadence. "Our customers' needs are changing, and EDA providers must respond with their own EDA360 initiatives. The acquisition of Denali, and its world-class design and verification IP and memory models, gives Cadence a significant, first-mover advantage as we execute our strategy."

The Denali team, including founders Sanjay Srivastava and Mark Gogolewski, will report to Nimish Modi, senior vice president, research and development, Front End Group, Cadence.

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GRAPHISOFT Acquires Zermatt Virtual Reality Solution

15 June 2010

GRAPHISOFT announced the acquisition of Swedish developer Zermatt's Virtual Reality Solution, which has been providing the core engine for GRAPHISOFT's Virtual Building Explorer product. The acquisition opens new horizons for innovation in this BIM presentation tool.

GRAPHISOFT Virtual Building Explorer (VBE) is an interactive BIM model presentation tool. Technology allows presentation of full BIM models in self-running interactive environments, without the need for the original BIM authoring software. GRAPHISOFT's Virtual Building Explorer combines video game-like navigation in a high-end graphical environment with live Global-Illumination (Radiosity) technology and native BIM features, including measurement of real building dimensions and retrieving detailed building element information on the fly, making it the *de facto* leader in architectural BIM presentation.

For more information about GRAPHISOFT Virtual Building Explorer visit the [official product page](#).

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Company News

Autodesk Names Applied Software Reseller of the Quarter

15 June 2010

CIMdata PLM Industry Summary

[Autodesk, Inc.](#) has named [Applied Software](#) North American Reseller of the Quarter for the first quarter of the 2011 fiscal year. The company is being honored for its client growth, driven by an expanding staff of trained consultants and an increasing roster of partner solution providers. Autodesk also selected Applied Software to recognize the company's flexibility in tailoring its solutions to serve a wide range of academic, government and commercial clients.

"Applied Software provides traditional classroom training and customer support, but they've taken it to the next level by forging key partnerships and creating flexible, customized curricula," said Steve Blum, senior vice president, Americas Sales, Autodesk. "That's a unique approach. It allows every Applied Software client to implement Autodesk software in the way that's most efficient and beneficial for their business."

Autodesk selects the Reseller of the Quarter based on the company's quality of customer service, support and professional education, overall growth and vertical sales.

As one of the only [Autodesk Authorized Training Centers \(ATC\)](#) in the Southeastern United States, Applied Software offers classes ranging from introductory to mastery level in a wide range of Autodesk products, including [Autodesk Revit](#) products, [AutoCAD Civil 3D](#), [Autodesk 3ds Max Design](#) and [Autodesk Inventor](#) software. Applied Software instructors regularly rank in the top 1 percent of all Autodesk certified instructors worldwide. In addition to traditional classroom training, Applied Software's Installation to Action program provides individual coaching, on-site and computer-based education and specialized project management assistance.

"Like our clients, Applied Software employs architects, professional engineers, project managers and designers," said Richard Burroughs, president, Applied Software. "We work hard to have a finger on the pulse of the key industry trends and issues. We provide training and consulting services that address the challenges our clients face daily."

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CD-adapco Announces the Opening of its New Seattle Office

11 June 2010

After a catastrophic fire ruined the office building where their Seattle office was previously located, CD-adapco is pleased to announce the opening of its new office. Located in Bellevue, Washington, the new, larger facility is specifically designed with customer interaction in mind.

The new CD-adapco Seattle office provides state-of-the-art computing facilities and dedicated customer areas for training and consultancy technology transfer. Located in the Sunset Corporate Campus in Bellevue, it is easily accessible by major freeways, I-90 and I-405. The move from its temporary location was completed without any interruption in working and servicing its customers.

CD-adapco Seattle

13810 SE Eastgate Way

Sunset Corporate Campus

Building 1, Suite 400

Bellevue, WA 98005

Tel: (+1) 425 957 7827

Fax: (+1) 425 373 5403

Email: info@us.cd-adapco.com

Support: support@us.cd-adapco.com

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Cortona3D and Shufra to Jointly Deliver Cutting-Edge Technical Publication Solutions to Aerospace and Defense Markets Worldwide

18 May 2010

Cortona3D signed a partnership agreement with [Shufra](#) to represent its products globally to the aerospace, defense and manufacturing markets. Shufra specializes in software, training, consultancy and implementation services to help companies worldwide optimize their documentation creation and management processes and comply with international technical authoring standards, such as ASD-STE100 (Simplified Technical English) and S1000D. Cortona3D is a leading 3D visual communication and publishing software company for manufacturers, OEMs and content.

Cortona3D software enables manufacturers to provide more efficient and effective technical documentation – parts catalogs, technical manuals, operating procedures, work instructions and training materials. Cortona's Rapid family of tools is used on projects run by [Boeing](#) and [The European Space Agency](#) amongst many others.

About Cortona3D

Cortona3D provides 3D visual communication and publishing software to equipment manufacturers worldwide. Cortona3D open standards tools give manufacturers the power to author web-based interactive, animated 3D product documentation such as maintenance manuals, spare parts catalogs and interactive training from existing CAD assets. Benefits are three times faster production, 80%+ cost savings, and improved quality. Customers include Boeing, Ford, GE, ESA and Airbus. Cortona3D has a record of sector leadership and product improvement with representation in industry standardization bodies including AECMA, ATA and ADL-SCORM and S1000D.

About Shufra

[Shufra](#) is a full-service technical documentation provider that specializes in international documentation standards, providing training, software, consultancy and ASD-STE100 Simplified Technical English implementation services. Their experts have supported over 70 customers in implementing Simplified Technical English, including Boeing, Rolls-Royce, BAE Systems, EADS, HOMAG, SAAB, FAA, L-3 communications, NICE Systems, Philips, Fluke, WatchGuard, Kubota and Omron.

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IronCAD Extends Growth in South Africa

16 June 2010

IronCAD, LLC announced the signing of their latest premier reseller, Advance Design Solutions, based in South Africa. Advance Design Solutions is a division of Puremission Engineering that has offered design services to various industries throughout South Africa. While working with their clients,

CIMdata PLM Industry Summary

Advance Design Solutions observed a need from engineers for a 3D design solution that offered freedom to design and modify products during analysis and validations stages of the development cycle. The IronCAD design solutions were selected.

"Within our design services operation, we have observed a need for designers to have a design solution that is easy to learn and use that could take the three dimensional concept in the designers mind and bring them to reality for advance interrogation. Being new to IRONCAD ourselves, within a day of use, we were able to be up and running in IRONCAD productively, meeting the demanding needs of our customers. It was a natural progression to offer this solution to allow our customers the ability to be equally innovative in their design concepts and to give them the ability to produce production ready products" stated Sam Du Plessis, General Manager of Advance Design Solutions.

For information about Advance Design Solutions, please visit <http://www.ironcad.co.za>.

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Knovel Celebrates a Decade of Helping Engineers to Solve Problems

14 June 2010

[Knovel](#), a Web-based application integrating technical information with analytical and search tools to drive innovation and deliver answers, announced the formal celebration of ten years in business.

In 2000, Knovel embarked on a journey to become the first place engineers go to solve problems. A pioneer in the field of online, interactive publishing, Knovel transformed the way engineers find and use technical reference information. Engineers no longer have to physically go to specialty libraries to retrieve books, sift through countless sources for the right information, photocopy or manually enter data into a spreadsheet. A process that used to take hours or days, now takes minutes. Today engineers find reliable answers to their technical questions online via Knovel. Knovel remains the only provider of interactive tools and content for engineers.

Knovel partners with more than 70 international professional societies and publishers to ensure engineers have access to trusted sources of technical content across 23 engineering subject areas. In addition to offering depth and breadth of validated engineering content, Knovel's interactive tools focus on the tight integration of optimized search capabilities and data analysis tools to help engineers improve productivity. Specifically, the Company offers 46,000 interactive graphs, charts and equations that can be manipulated and analyzed as part of what-if experiments and incorporated into an engineer's workflow.

Bolstered by a loyal user base, including 70 Fortune 500 companies and 80 percent of the top engineering schools in the United States, Knovel begins its second decade with a renewed commitment to its users by continually improving the way both engineers and engineering students access crucial reference information.

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MSC.Software Donation to University of California, Irvine Gives Students Engineering Simulation Experience for the Future

15 June 2010

MSC.Software announced that it has renewed its donation of 50 software seats to The Henry Samueli

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School of Engineering at the University of California, Irvine (UC Irvine). These seats give students the opportunity to become proficient in industry-standard simulation software while exploring key engineering theories and principles.

Department of Civil and Environmental Engineering Professor Lizhi Sun, Ph.D. at UC Irvine is one of the Samueli School professors using the software in his undergraduate classes. Sun feels it is important for his students to learn how to use the software through an understanding of the basic theory and principles of the finite element method. Finite Element Analysis (FEA) consists of a computer model of a material or design that is stressed and analyzed for specific results. It is used in new product design and existing product refinement, allowing a company to verify a proposed design will perform to specifications prior to manufacturing or construction.

"My students enjoy solving structural engineering problems using the software, and we are very appreciative of this generous annual software donation from MSC.Software," stated Professor Sun from University of California, Irvine (UCI).

MSC.Software's donation includes the company's multidisciplinary (MD) simulation products, including **MD Nastran**, Patran and **MD Adams** that are widely used in a variety of engineering disciplines and industries, particularly in the aerospace, defense, automotive and medical fields.

The donation, made through MSC.Software's University Program, strives to help students find desirable jobs within organizations that are looking to hire engineers proficient with MSC.Software's **Computer Aided Engineering** (CAE) software solutions.

MSC.Software supports universities such as UC Irvine with tools and resources that enhance engineering research and education, and teaches students how their designs perform in "real-world" conditions, without requiring the necessary resources to build and test physical prototypes.

"We are pleased to make this donation to a university in our local community," said Dominic Gallelo, President & CEO of MSC.Software. "Through our University Program we aim to facilitate collaboration between MSC.Software and leading universities, researchers and students to arm students with CAE skills for the future, and collaborate to rapidly bring advanced, leading-edge technologies to industry."

MSC.Software has partnered with UC Irvine since 1985. This gift represents the company's continued contributions and commitment to education by preparing the next generation of engineers with a practical skill set they can apply in the workplace.

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New On-Line Certification Program for Oracle's Agile PLM Engineering Collaboration Module

16 June 2010

Zero Wait-State announced their new online training certification program ([view video](#)) for Oracle's Agile PLM Engineering Collaboration (EC) Module. This program is now available at <http://www.zerowait-state.com/hub>. The certification program requires users to register on the Zero Wait-State site. Once registered the user gains access to the Zero Wait-State resource center where the training program resides. Users can navigate through the course watching a series of short videos about using the Engineering Collaboration module to manage their CAD data inside of Agile PLM. When the users complete the videos they can take the certification test. A passing score will qualify them for membership in the Zero Wait-State Certified Training for EC Alumni sub group in LinkedIn. This sub group is under their [Engineering Collaboration for PLM](#) group. Members will gain exclusive access

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to additional training content and access to their Oracle Agile PLM EC Forum where they can interact with other EC users and the Zero Wait expert staff.

Users will also receive a badge they can use in their signatures and on the Zero Wait-State forum that identifies them as having successfully completed the online program. Currently the training is only for Pro/Engineer but SolidWorks and AutoCad Inventor will be introduced by the end of the summer. Zero Wait-State also offers hard copy training guides to accompany the on-line exercises. These guides are also used with our instructor led training classes. Zero Wait-State is the only Oracle Partner that provides formal EC Training Classes and also exclusively offers an Oracle Accelerate Solution for EC

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solidThinking Continues International Expansion by Adding Sumisho Computer Systems Corporation as a Reseller in Japan

18 June 2010

[solidThinking, Inc.](#) has partnered with Tokyo-based [Sumisho Computer Systems Corporation](#) (SCS) to increase the adoption of solidThinking's 3D NURBS-based conceptual-design software throughout Japan and its surrounding regions. SCS is one of Japan's largest IT solution and service providers and is listed on the Tokyo Stock Exchange.

This agreement with SCS is the latest in a series of recent international value-added reseller (VAR) announcements for solidThinking. The company has extended its market presence through VARs in Belgium; Brazil; Canada; China; France; Germany; India; Italy; Japan; Korea; Luxemburg; Malaysia; Mexico; Netherlands; Portugal; Spain; Sweden; UK; and USA.

"solidThinking provides an excellent complement to our wide range of product development solutions," said Amino, Hirotaka, general manager of SCS's digital design division, engineering solution unit. "We are pleased to have solidThinking as a partner in our effort to bring valuable new technology to aid our clients during the design ideation process. We are confident that we can successfully introduce solidThinking's software to our clients by utilizing our rich experience and strong expertise."

Through its flexible, yet powerful, implementation of NURBS (non-uniform rational b-splines) modeling, solidThinking's 3D conceptual-design software encourages innovation in industrial designers who want the highest precision for any analytic or freeform shape. The software offers a ConstructionTree™ technology that allows designers to experiment in real time, without starting from scratch, when they change their minds. solidThinking produces high-quality, real-time photorealistic imaging for realistic design visualization.

With solidThinking Inspired™, users can apply morphogenesis™ form-generation technology to grow efficient shapes in response to environmental forces and pressures. Morphogenesis draws on the principles of biomimicry to allow designers and architects to use form generation to explore and experiment with design concepts.

To acquaint current and potential clients in the Asian-Pacific region with the advanced features and benefits of its software, solidThinking will host free product demonstrations along with parent company [Altair](#), at the upcoming **Design Engineering & Manufacturing Solutions Expo (DMS) June 23-25, 2010**. Visit **Altair's DMS booth 17-34** at the Tokyo International Exhibition Center for a hands-on demonstration of solidThinking and solidThinking Inspired. For more information, visit the solidThinking events calendar at <http://www.solidthinking.com/forms/eventlist.aspx> or the DMS website

at <http://www.dms-tokyo.jp/english/>.

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Studica Selects CAD Gorilla for its Autodesk Premium Support Package

14 June 2010

[CAD Gorilla](#) announced that it has been selected to be included in Studica's Premium Support Package for educational institutions. The Premium Support Package from Studica includes resources that help instructors make the most of their Autodesk software purchase such as live support, fischertechnik building sets, and CAD Gorilla's video training for Autodesk Inventor.

CAD Gorilla provides interactive video training for Autodesk Inventor and Autodesk Revit. Each course includes downloadable exercise files the guide students through each lesson, and supporting assessment exams are used to measure learning goals throughout the curriculum.

CAD Gorilla courses augment instructor led training by providing a blended training solution that facilitates self-paced learning. Blended training solutions help ease the burden of an already demanding curriculum, while providing resources that are geared for today's learners.

About Studica

Serving local and world education markets, [Studica](#) now has offices in four countries; the US, Canada, the UK, and Brazil, with more planned in the near future.

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3Dconnexion Advances to PTC® Platinum Tier Partner

6 June 2010

[3Dconnexion](#) announced it has advanced from a Gold Tier Partner to a Platinum Tier Partner within PTC's PartnerAdvantage™ Program. Platinum tier partnership status is characterized by the highest level of joint go-to-market support, including product promotions, active participation in program activities, and visibility to PTC customers, prospects and channels.

Using 3Dconnexion 3D mice with Pro/ENGINEER helps design engineers deliver high-quality and accurate digital models. From concept, to sketch, to part, to assembly and drawing, 3Dconnexion 3D mice enable a level of design interaction that is unattainable with a traditional mouse and keyboard. Using a 3D mouse, Pro/ENGINEER users are able to design more intuitively and with such precise control they feel as though they are holding their digital models in their hand.

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Vero and MIRDC Sign Collaboration Agreement

16 June 2010

Vero Software announced that it has entered into an agreement with the MIRDC (Metal Industries Research and Development Centre) of Taiwan to link its CAD and CAM applications with MIRDC's own software solutions and jointly promote these solutions to the mould and die makers of Taiwan and China.

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Under the agreement, MIRDC will link its ERP solutions to Vero's VISI die design and manufacturing applications. MIRDC will also promote and train potential and existing customers on the use and benefits of the software to further their capabilities in advanced mould and die applications.

Originally founded in 1963, MIRDC was setup to promote the growth and transformation of metal-related industries in Taiwan. To meet the demands of local industries, the centre has increasingly allocated its resources to research and now, MIRDC is the second largest research and development organisation in Taiwan and the largest organisation specifically focussed on the design and manufacturing of moulds and dies. Partly government funded, MIRDC provides services to the manufacturing community with bespoke projects for rapid manufacture, green and lean manufacture as well as value added services for project management and automation.

Specific areas of expertise include castings, metal forming, precision forming, precision mould technologies, precision press manufacture, welding, surface treatment, R & D, inspection, green technologies and many others.

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Zuken Announces New E³.WireWorks Reseller for Midwest Region

15 June 2010

Zuken has announced that FISHER/UNITECH has joined its North American network of [E³.WireWorks](#) resellers. FISHER/UNITECH, headquartered in Troy, Michigan, is a leading SolidWorks 3D CAD software reseller with 10 branch offices located throughout the Midwest. The company provides design, analysis, data management, manufacturing, and rapid technology solutions to the discrete manufacturing sector.

With Zuken's electrical/fluid engineering solution for SolidWorks users in its portfolio, [FISHER/UNITECH](#) can help its customers integrate their engineering disciplines by offering a bidirectional, associative solution that bridges the gap between disciplines. Zuken's E³.WireWorks closely integrates with SolidWorks Premium Routing and Enterprise PDM, providing a complete design solution from design concept through physical realization and manufacturing output.

Most products and systems today have both mechanical and electrical content. The future of engineering design is moving towards mechatronics; a multidisciplinary engineering approach that avoids splitting engineering into different departments. SolidWorks handles mechanical design efficiently and accurately, but the electrical and fluid content increasingly requires a specialized tool such as E³.WireWorks, especially for mixed electrical and fluid systems such as those found in the automotive and machinery industries. Having the ability to use E³.WireWorks in conjunction with SolidWorks allows mechanical, electrical, and fluid designers to work together for better collaboration with fewer design errors, rework, and warranty issues while enabling companies to speed up the design process.

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Zuken Appoints Head of Product Marketing for Europe and America

17 June 2010

[Zuken](#) has appointed Steve Chidester as head of product marketing for Europe and America.

Based in the Westford, Massachusetts office, Steve joins Zuken after working for Cadence Design

Systems for 17 years.

This new role is part of Zuken's strategic approach to becoming a more instrumental business partner, to further enhance customer satisfaction, and improve the company's position in the market.

Gerhard Lipski, CEO Zuken America and GM Zuken Europe, comments on the appointment "Zuken is a growing company seeking to improve market share and perceptions across the industries we serve. We believe in partnering with our customers to help them adapt to the changing business environment. With his long experience and industry knowledge, Steve will help us create a closer connection to the market, helping drive Zuken forward in Europe and America."

Steve attended Northeastern University and, in his 30 years in electronic design, has held numerous printed circuit design and marketing positions. At Cadence Design Systems, he was Product Marketing Manager for Allegro PCB products and Product Marketing Director for their library and data management solutions.

For more information about Zuken visit www.zuken.com

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Events News

CD-adapco to Demonstrate Battery Modeling Software at Engine Expo 2010

18 June 2010

CD-adapco will be demonstrating its new battery simulation software at **Engine Expo 2010**, taking place the 22nd to the 24th of June at the Messe Stuttgart in Stuttgart, Germany. Already regarded as a key event for car, bus and truck engine design and manufacturing, in 2010 the show becomes even more significant with the addition of a new pavilion dedicated to zero-emission powertrain technologies.

"It is difficult to find any auto OEM that does not have either electric vehicle (EV) in production or in advanced development," says Steve Hartridge, CD-adapco's Director for Electric and Hybrid Vehicles. "CD-adapco and Battery Design LLC formed a partnership in early 2009 to deliver an optimum fully coupled flow-thermal cell solution for large scale battery problems. I am delighted to be able to demonstrate this technology for the first time at Engine Expo."

This new tool will provide the automotive industry with the first comprehensive tool to enable the study of interactions between cells and batteries, and their automotive environment. Initial applications will focus on the critical thermal management issues that have a direct influence on both battery temperature and safety.

As well as battery modeling, CD-adapco will be demonstrating its range of engine modeling capabilities and expertise, including specialist combustion and emissions models, dedicated solution environments for Internal Combustion Engines (ICE), after-treatment and fuel cells. Visitors to their booth will also have the chance to meet CD-adapco's specialist engineers who have pioneered the use of CFD in areas such as ICE and Crankcase ventilation.

For more information on CD-adapco's Battery Simulation technology, please visit: <http://www.cd-adapco.com/battery/>

For more information on Engine Expo 2010 please visit: <http://www.engine-expo.com/>

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The CD-adapco booth at Engine Expo 2010 is Stand # 3145 located in Hall 3.

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CENIT Automotive Congress, Process Automation in the Auto Industry

June 2010

The CENIT Automotive Congress on Tuesday, 22 June 2010 at the Meilenwerk in Böblingen (near Stuttgart) will feature distinguished speakers – e.g. from Daimler AG or Engineering Bausch & Ziege GmbH – and will showcase concrete solutions for automated manufacturing processes in Germany's number one industry.

The sector meet includes an informative presentation program that will introduce current trends in simulating and automating complex robot and machine parks in the automotive industry. The event will focus on special sub-sectors such as seam sealing, varnishing, shell construction, prototype construction, and tooling.

CENIT's toolbox FASTSUITE Automotive will be among the showcased solutions. With FASTSUITE Automotive, CENIT presents a product portfolio that permits CATIA V5-integrated, geometry-based applications such as robot simulations and offline programming without data conversion.

"This industry congress is a logical continuation of our long years of commitment to creating efficient IT solutions for the auto industry", says CENIT CEO Kurt Bengel. "Our idea of hosting a wide-ranging exchange of thoughts and ideas between OEMs and suppliers is right on the mark – as shown by the fact that many enterprises from all over Germany have already registered for participation".

For your free of charge registration please visit the German website <http://www.cenit.de/automotive>

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COE 2010 Industry Workshop - Aerospace & Defense Call for Speakers is Open

June 2010

Submit an abstract to become a speaker and share your industry expertise with hundreds of Dassault Systèmes PLM solutions users at the:

[COE 2010 Industry Workshop - Aerospace & Defense](#)

October 11-12, 2010

Dallas/Ft. Worth Marriott Hotel & Golf Club at Championship Circle

Fort Worth, Texas

The following presentation tracks have been established for the Aerospace & Defense workshop. Consider these topics when [submitting your abstract](#):

Digital Manufacturing

Systems Engineering Physical Design

Post Delivery Product Support

Migration/Integration with CATIA V6 from Non-EM1 PDM System

CIMdata PLM Industry Summary

CATIA Analysis from a Designer Standpoint

Program Management

Processes for Dealing with Legacy Data

Large Assemblies and Knowledgware

Shipbuilding, Energy and AEC track: V4, V5 to V5 Evolution/Transition

Develop and Deploy

[Submit an abstract](#) of your presentation for consideration by the Workshop Planning Committee today.

Important Dates:

July 9, 2010: Abstracts due to COE Headquarters

August 2010: Accepted presenters will be contacted by COE Headquarters

September 27, 2010: Final presentation is due for inclusion in online proceedings.

Please note: Any session with a Dassault Systèmes employee as a speaker needs to be submitted separately. Please contact speakers@coe.org if you'd like to submit a session with a Dassault Systèmes employee speaker.

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Driving Dynamics and Real-Time Systems Modeling are Key LMS Topics at Vehicle Dynamics Expo 2010

14 June 2010

LMS International will highlight its comprehensive solution portfolio during the **Vehicle Dynamics Expo 2010** in Stuttgart, Germany. Interested participants will be able to attend expert presentations about the latest tools and techniques at the Open Technology Forum and visit the **LMS International stand (#5530)** for a live demo of an advanced real-time simulation model.

Participants interested in the latest engineering techniques regarding car body flexibility and its influence on vehicle dynamics will want to attend the Open Technology Forum presentation on June 22 at 11:45 given by Paolo di Carlo, LMS Engineering Services Chassis Group Team Manager. He will discuss in detail how best to use dedicated testing hardware to detect the structural effects and advanced 3D CAE techniques to analyze the body flexibility phenomena, which can affect overall ride and handling.

A second presentation at the Open Technology Forum on June 23 at 16:05 will highlight the [LMS Imagine.Lab AMESim](#) system simulation platform. Julien Lagnier, LMS 1D Simulation Vehicle Dynamics Product Manager, will present a simulated chassis subsystem design that works in real-time in a virtual road environment. The actual real-time LMS Imagine.Lab AMESim chassis model, complete with the subsystem structure, will be featured on the LMS International booth as well.

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47th DAC: Design Ecosystem Comes Together to Deliver Solutions from Design to Manufacturing

14 June 2010

CIMdata PLM Industry Summary

The 47th Design Automation Conference (DAC) which starts Monday, June 14 at the Anaheim Convention Center, Anaheim, CA, will be remembered as the year that front-end and back-end design came together, allowing attendees to see solutions that cover all processes from design through to manufacturing. EDA tool companies, intellectual property (IP) companies, and service companies will exhibit and present information on solutions that enable integrated circuit (IC) and system-on-chip (SOC) designers to optimize for performance and manufacturability at advanced process nodes. Major foundries are participating at an unprecedented level to help design team customers realize accelerated design, reduced design costs, faster system-to-IC implementation, and faster time-to-volume. For example:

- GLOBALFOUNDRIES will announce details of its partner ecosystem during DAC, going far beyond the design kits of the past to include EDA partners, IP partners, service partners, mask service partners, and assembly and test partners.
- TSMC has extended its Open Innovation Platform beyond its focus on power, performance and area considerations to move up to include electronic-system level design, virtual platforms, high-level synthesis, mixed-signal and RF design, and multi-die approaches using through-silicon via (TSV) manufacturing capabilities.
- TowerJazz will announce jointly with Cadence design kits for their SiGe BiCMOS process as a high-value feature to enable customers to quickly achieve system realization as part of Cadence's EDA360 vision.
- The Common Platform of IBM, Chartered, and Samsung, with its associated design ecosystem, will also be making an announcement at DAC regarding their latest collaborative efforts.

Other foundries also participating at DAC include X-fab Semiconductor Foundries and austriamicrosystems.

“The increasing involvement of foundries in creating partnerships between design and IP are lowering the barrier to building a system, all the way from concept to manufactured silicon,” said Sachin Sapatnekar, General Chair of the 47th DAC Executive Committee. “EDA is no longer just about the intricacies of producing silicon. It's pushing up to the system level, and at the same time, building on the foundry ecosystems so that complex designs can move smoothly into manufacturing.”

Additionally, as part of DAC's commitment to the design chain ecosystem, Thursday, June 17th, will be Embedded/SOC Enablement Day, which will include three sessions focused on embedded processor-based systems-on-chip and their enablement. The Embedded/SOC Enablement Day is a day-long track of sessions dedicated to bringing industry stakeholders together in one room to shed light on where SOC design is headed. IC design engineers, embedded systems designers, IP integrators, FPGA designers, design services companies, investors, foundry reps, and the media will hear from market leaders and network with each other. Presenters will focus on the optimization of embedded and application-domain specific operating systems, system architectures for future SOCs, application-specific architectures based on embedded processors, and technical/business decision-making in this domain.

The 47th DAC will be held at the Anaheim Convention Center, in Anaheim, CA, from June 13th – 18th, 2010. [The Embedded/SOC Enablement Day](http://www.dac.com) program details can be found at <http://www.dac.com>.

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SmartGeometry 2010 Conference Presentations on Generative Design Now Available Online From Bentley

17 June 2010

Bentley Systems, Incorporated announced that SmartGeometry 2010 Conference presentations on generative design, along with informative interviews of key conference participants, can now be viewed as videos, free of charge, at <http://www.SmartGeometryConference.com/2010>. This year's SmartGeometry Conference took place March 23-24 in Barcelona, Spain. At the conference, leading industry and academic experts from around the globe addressed the important issues driving the use of generative design technology and shaping the course of its development. The conference theme focused on working prototypes developed to prove and test concept and design.

Included in the videos are reviews of the work done at the companion event, the SmartGeometry 2010 Workshop, held March 19-22 at the Institute for Advanced Architecture of Catalonia. During this interactive program, Bentley's GenerativeComponents (GC) design software was used to produce working prototypes. To learn more about GC and download a GC technology preview release free of charge, visit <http://www.bentley.com/GC>

To access videos of the SmartGeometry 2010 Conference presentations in their entirety, along with interviews of key conference participants, visit <http://www.SmartGeometryConference.com/2010>.

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Tata Technologies 'BETTER INNOVATION' at PLM-Forum 2010 in Mannheim

15 June 2010

Tata Technologies announced that “BETTER INNOVATION on Tour,” its travelling presentation focusing upon its contributions to the development of the Tata Nano, the world's most affordable car, will make a stop at PLM-Forum 2010 on 16 June, in Mannheim, Germany. Mr. Warren Harris, Tata Technologies President and COO, will make the presentation – one of several keynote addresses scheduled for the event.

Using the Tata Nano, and the contributions that Tata Technologies made to put the vehicle into production and bring it to market, Mr. Harris will discuss the principles of frugal engineering, the creative application of PLM technology to enhance time-to-market while reducing development costs, and the importance of combining these elements to keep the German market competitive.

Tata Technologies played a key role in engineering the Nano, which is produced by Tata Motors in India, for the Indian market. The company is using the car to highlight its full-vehicle engineering and design capabilities to clients, engineering students and select automotive and engineering media.

BETTER INNOVATION on Tour kicked off in April, in the U.S., with visits to client sites in Illinois, Michigan, and a stop at SAE Headquarters in Warrendale, Penn. On 14 May, the tour visited “Goodyear Innovation Day,” at the Goodyear Innovation Center in Akron, Ohio; and 8-10 June, BETTER INNOVATION on Tour appeared at Auto21 in Windsor, Ontario, Canada as a part of that country's largest gathering devoted to automotive innovation and automotive component development.

“The innovative thinking that brought the Tata Nano to market is symbolic of what Tata Technologies has to offer the manufacturing industry,” said Warren Harris, Tata Technologies' President and COO. “Tata Technologies was front-and-center in engineering and developing the Nano; working closely with

CIMdata PLM Industry Summary

Tata Motors and with a significant number of the Nano project suppliers.”

[Tata Technologies](#) contributed to more than 18 patents on the Nano project, according to Harris, “Our work on the Nano is part of a sweeping wave of change within the automotive industry and within manufacturing overall – the use of truly global engineering resources.”

Follow BETTER INNOVATION on Tour on the BETTER INNOVATION website, <http://www.betterinnovation.com>, where visitors will find complete listings of tour stops, as well as photo and video galleries of BETTER INNOVATION on Tour events.

PLM-Forum 2010, hosted by Dassault Systemes, will take place 16-17 June and more than 600 attendees from Germany, Austria and Switzerland are anticipated. This PLM event is the largest of its kind in the German-speaking countries of Europe and will feature technology demonstrations, workshops and opportunities to network with leading industry professionals.

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Financial News

CIMdata Market Analysis: CAM Software Producer OPEN MIND – An Exception in Terms of Growth

15 June 2010

OPEN MIND Technologies AG is at the top of the list of leading global CAM software producers measured in revenue growth. The recently published “[NC Software and Services Market Assessment Report](#)” by CIMdata demonstrates OPEN MIND was the only leading CAM software producer able to increase revenue during the crisis year of 2009. With 150 employees, the CAM expert managed to expand its turnover from US\$31.5 million to US\$32 million in 2009. For 2010, CIMdata anticipates that OPEN MIND will improve in market shares and direct sales revenues from eighth to seventh place in a comparison of the world’s leading CAM producers.

Although the NC software market shrank by a total of 15.5 per cent in 2009, OPEN MIND’s annual turnover increased by 1.6 per cent over the same period. Furthermore, the CIMdata report predicted double-digit growth rates for the CAM specialist in 2010. Thanks to its streamlined structures and bundling of core competencies, OPEN MIND is the fastest growing company in its industry and has significantly overtaken its larger competitors.

“Thanks to the major commitment of our employees and our clear concentration on the independent development of CAD/CAM solutions for digital manufacturing, we were able to continue growing, even in a difficult market environment. This focus on our core competence streamlines our structures and improves our processes enormously,” Hagen Rühlich, Technical Director at OPEN MIND, said of the success.

Additional information is available upon request or from our website at <http://www.openmind-tech.com>.

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ESI Group Q1 2010/11 Sales

15 June 2010

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- Significant upturn in the growth of Licences new business
- Slowdown in Services due to the economic situation
- Increased seasonal effect for Licences

“First-quarter sales, traditionally relatively non-significant, reflect distinct economic influences: a fall in Services activity mirroring the trend observed throughout the sector, but a strong level of repeat business for Licence sales and a significant upturn in new business. At the current time, we are confident that we will record a good global performance this financial year”.

Alain de Rouvray, [ESI](#) Group’s Chairman and CEO

Financial years to January 31

€ millions	Q1 2010/11	Q1 2009/10	Δ (actual)
Licences	11.0	11.1	-0.7%
Services	4.9	5.3	-7.6%
Total	15.9	16.4	-2.9%

Unaudited data

NB:

- *The period under consideration does not include any scope effect, with Mindware and Vdot’s activity consolidated within accounts from December 2008.*
- *As announced when FY’09/10 annual results were published, ESI Group has bolstered its presence amongst key accounts. Subsequently, like last year, the contribution of fourth-quarter, and hence annual, sales should increase and thus amplify the seasonal effect.*

Sales for the first quarter of the current financial year totalled 15.9 million euros, down -2.9% in actual terms and down -3.7% by volume (constant exchange rates) compared to the first quarter of the previous year. The evolution of the geographical split in activity reflects the return to buoyant growth in Asia compared to Europe or the Americas, which are continuing to be affected by the economic situation. Europe thus accounted for 37% of first-quarter activity, the Americas for 20% and Asia for 43%.

Licence sales totalled 11.0 million euros, stable in actual terms and up +3.5% if we restate the first quarter of 2009/10 for a 0.4 million euros contract recorded in this quarter that was then debooked during the second quarter of 2009/10 because of the renegotiation of the perpetual licence into an annual licence. Following this restatement, the level of repeat business remains at a very satisfactory 83% of Licence sales, compared to 86% for the first quarter of 2009/10. It is worth noting that Licences saw new business jump +28.9%, thanks to the arrival of new clients and sales of new products to existing clients.

Given the difficult economic environment, and in line with trends observed throughout the sector, Services activity was down by -7.6% in actual terms and -7.7% by volume. Services were notably affected by postponed contracts due to budget deferments. This activity represented 31% of total quarterly activity, versus 32% last year. This trend is expected to stabilise over the second quarter.

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Sopheon plc Annual General Meeting (AGM) Statement

15 June 2010

At the Annual General Meeting of Sopheon plc to be held later today, the chairman of the board will give shareholders an update and review of the business. This will include the following statement:

“As for many businesses, 2009 was a challenging year for Sopheon. Revenues totaled £8.3m, compared to £9.3m in 2008 and £6.3m in 2007. After reporting year-over-year revenue growth of nearly 50% in 2008, we were clearly disappointed by a decline, and the resultant impact on profitability. However, performance improved towards the end of the year, with 21 new and extension license orders in the fourth quarter, compared to a total of 27 for the first three quarters. In addition to this shift, careful cost adjustments taken during 2009 contributed to a positive EBITDA result for the second half of last year. Furthermore, due to these actions, operating costs, before the capitalization and amortization of research and development expenses, are expected to be of the order of £0.6m lower in the first half of 2010 compared to the first half of 2009.

Since the start of 2010, we have closed a total of 14 new and extension license orders. The total number of licensed customers to date now stands at 173, and the annual recurring revenue base from maintenance, hosting and rental licenses now stands at £3.9 million. Full year revenue visibility for 2010 from contracted business and recurring revenue streams has risen to £6.0 million. This continued evidence of commercial activity is encouraging. In this regard, we continue to work on several prospect opportunities which have the potential to close by the end of the quarter, and if concluded, would enable us to exceed the first half revenue performance of last year. Combined with our reduced cost base, this is expected to result in improved bottom line performance compared to last year. Nevertheless, wider market conditions remain uncertain. As we have noted in our previous announcements, predicting the timing and value of individual sales remains challenging, which can inevitably impact on revenue performance.

We entered 2010 having devoted considerable investment and effort to product development during the preceding year. Tangible results included the launch of Accolade® Idea Lab™, which brings to market the first integrated solution that both facilitates generation and development of ideas, and enables those ideas to be moved seamlessly into product development; release of a major new version of our Accolade Vision Strategist™ roadmapping software; significant changes to our core Accolade Process Manager™ software that deepen the differentiation and value proposition; and most recently launch of the www.isustain.com green chemistry website in partnership with Cytec Industries Inc and the Beyond Benign Foundation. In conjunction with these product advancements, we invested in new marketing capabilities that leverage emerging channels such as social media. We have also been working hard to improve the strength of our partner relationships, both at the reseller level and at the strategic level. All these areas have advanced well in 2010, and we continue to drive them forward with vigor.”

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Implementation Investments

Apache Design Solutions Chosen by Major CPU/GPU/APU Semiconductor Design Company as Global Supplier for Power Noise and Reliability Sign-off Tools

14 June 2010

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Apache Design Solutions announced that Advanced Micro Devices, Inc., the only company who delivers both x86 microprocessors and leading-edge 3D graphics, has chosen Apache as their global supplier of power supply noise and reliability sign-off products. Through close collaboration on analysis and optimization from RTL to silicon, Apache's PowerArtist, RedHawk, and Totem help AMD efficiently address power and noise challenges arising from digital, analog, mixed-signal, and custom IP design and SoC integration.

AMD uses PowerArtist to perform RTL power analysis and reduction to make trade-offs between power, area, and performance early in the design process. RedHawk enables early stage prototyping and optimization of the power delivery network, as well as supply noise and electro-migration (EM) sign-off. Totem provides transistor-level analysis of full-custom IPs and model generation for hierarchical SoC verification. AMD also generates Chip Power Models (CPM™) to achieve chip-package power and noise closure.

“AMD is committed to delivering innovative products to our customers by leveraging best-in-class architecture, circuit, design automation, and manufacturing technologies,” said Jim Miller, Corporate Vice President, Design Engineering at Advanced Micro Devices. “Our expanded relationship with Apache is critical to AMD's success in the sub-32nm era through the breadth and depth of their product offering and domain expertise, as well as through the quality and responsiveness of their R&D and support teams.”

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Aras PLM Solution Selected By Textron Defense Systems

16 June 2010

[Aras](#)® announced that Textron Defense Systems, an operating unit of Textron Systems, a Textron Inc. company, has selected the Aras Innovator suite on the Microsoft platform for enterprise PLM. Aras will support the Capability Maturity Model Integration (CMMI®) with capabilities including program management, risk management, configuration and change management, and product data management with CAD/EDA connectors to NX, Allegro, OrCAD, and PADS along with integration to SAP.

“Textron Defense Systems is committed to developing winning solutions to the most complicated engineering challenges and we believe Aras's approach to enterprise-wide PLM will help us deliver on that commitment,” said Chief Information Officer Tony DeGregorio of Textron Systems Corporation. “The enterprise open source approach and elimination of PLM license fees initially got our attention, however, what really drove our selection of Aras was the comprehensive PLM functionality and advanced technology.”

“Aras is designed to meet the uniquely complex requirements of global aerospace and defense organizations,” said Peter Schroer, President of Aras. “Aras provides A&D companies with a highly secure, robust PLM environment that automates critical business processes to improve information control and collaboration while improving visibility into program and project risks.”

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ASC Migrates Collins Class Digital Model to AVEVA Marine Environment

14 June 2010

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AVEVA Group plc announced that ASC, amongst Australia's most advanced naval warship and submarine builders, has successfully migrated the digital model of the Collins Class submarines from a legacy system to AVEVA Marine.

In 2003, ASC signed a multi-billion dollar Through-Life Support (TLS) contract with the Defence Materiel Organisation for design enhancements, maintenance and support of the Collins Class Submarines.

Following this, ASC recognised the need to further improve their ability to manage legacy data as well as new information arising from the TLS program. AVEVA offered them the opportunity to automate a transfer of the data model from their legacy systems into AVEVA Marine. This has allowed ASC to reuse the original Collins Class design data in an optimal way while providing the most advanced solutions for marine engineering of new programs.

Peter Finch, President, [AVEVA](#) Asia Pacific, said: "AVEVA Marine's open architecture enables integration with other third party solutions ensuring interoperability. This is especially important in the naval sector as a project's lifecycle from design to decommissioning may span over four decades. During this period, there are bound to be multiple systems used to design, build, maintain and upgrade the project."

Mr. Finch continued: "AVEVA Marine has been used in advanced navy projects in the US, Europe and Asia Pacific. It is well-suited to complex naval projects and supports global collaboration with multiple stakeholders and subcontractors in a secured environment."

Jack Atkinson, General Manager Design and Engineering, ASC, said: "AVEVA has been fast to respond to our needs. ASC continues to build a strong partnership with AVEVA, and this will ensure the ongoing success of ASC current and future projects."

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Autoliv Electronics America Upgrades to Mentor Graphics Valor vPlan Software for Machine Programming

17 June 2010

The Valor Division of Mentor Graphics Corporation announced that Autoliv Electronics America has upgraded to the [Valor® vPlan™](#) process engineering tools. Autoliv Electronics America, based in Southfield, Michigan, is a provider of automotive electronics parts and supplies.

The Valor vPlan product is a single solution that drives the manufacturing process by delivering a complete engineering flow from CAD to machine, covering surface mount technology (SMT,) through-hole technology (THT), and manual assembly. It delivers comprehensive and synchronized manufacturing process definitions (MPD) to the production floor.

Autoliv has implemented the Valor vPlan software for machine programming and related process documentation. The company will use the software to create programs and manage shape data for its Siemens pick-and-place machines globally.

"Valor's vPlan removes the NPI bottleneck, increases asset performance, both human and capital, and increases customer confidence," stated Joe Borland, engineering services and software applications manager at Autoliv Electronics America. "This leads to more business and higher revenue, all while simultaneously driving down the cost per unit."

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With the vPlan solution, Autoliv can access the Virtual Sticky Tape functionality offered by Valor to perform offline program validation for component off-set and rotations prior to sending a program to the Siemens SiPlace Pro product for manufacturing. Additionally, Autoliv now will have the ability to create template-based documentation tied directly to the manufacturing process as defined by the vPlan product.

The vPlan solution delivers a managed approach to the world of SMT planning and programming by providing better control and visibility of the engineering process with all key functionality available in one centralized solution. Engineers benefit from the ease and flexibility to provide innovative solutions to daily problems, improved product quality and performance created by the programs they generate, and faster response time needed to react to changing demands from customers. The vPlan technology allows engineers to focus on added-value tasks they are trained for, rather than chasing persistent and often repetitive problems.

“The Valor Division of Mentor Graphics is pleased that Autoliv elected to upgrade to vPlan, our latest software for assembly line process preparation,” said Dan Weitzman, regional business manager, Americas, for the Valor Division of Mentor Graphics. “With the implementation of vPlan, Autoliv will gain competitive advantages accelerating the new product introduction process, increasing the quality and accuracy of data sent to their Siemens assembly lines, and enabling complete template-based process documentation delivery to the factory floor.”

For more information on the Valor vPlan solution, visit the company website at <http://www.mentor.com/valor>.

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Building Glass Installer Harmon Rolls out PDF Editor Bluebeam PDF Revu

17 June 2010

Harmon, Inc., one of the nation’s largest full-service building glass installation, maintenance and renovation companies, is digitizing project workflows with Bluebeam® Software. The company is rolling out Bluebeam PDF Revu® to 200 users and plans to make Revu its primary PDF solution.

“Harmon selected Bluebeam for its robust, flexible PDF creation, markup and editing features that can be used across multiple departments,” said Roger Zinke, Senior Business Analyst at Harmon. “For example, Revu’s measurement tools make it the perfect solution for our sales team to complete project estimates, while its PDF creation and binding features are ideal for our administrators who create project reports.”

[Harmon](#) initially discovered Bluebeam at the recommendation of the firm’s CAD reseller, [Managed Design](#). “When Harmon asked us to suggest a PDF editor they could use companywide, we immediately thought of Bluebeam,” said Amy Jarvis, Managed Design Director of Sales. “Having been a Bluebeam Software Partner for six years, we trusted that Harmon would be impressed with Bluebeam’s unique product offering for the building industry.”

For more information about digitizing project workflows with Bluebeam go to <http://www.bluebeam.com>.

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Delcam's PartMaker Makes Aerospace Company More Productive

15 June 2010

Since implementing [Delcam](#)'s PartMaker CAM software in 2002, C&A Tool has not only been able to cope with the increased complexity of the aerospace parts made on the company's Swiss machines, it has also become appreciably more productive. The full story can be seen on Delcam TV at <http://www.delcam.tv/delcam-video.asp?VideoId=109>.

Founder and President Richard Conrow began his company 40 years ago in a garage in rural Indiana and grew it into a 530-employee organisation with 750,000 square feet of manufacturing space. A portion of the sophisticated manufacturing is carried out across a bank of twenty-seven state-of-the-art, multi-axis Star CNC Swiss-type lathes. The key to success in manufacturing highly complex, highly precise components on these machines is in developing NC programs for them quickly and efficiently. To this end, C&A Tool adopted PartMaker to automate its programming.

"We can take a complex part and have it programmed in a couple of hours. There is no way this could be done on the shop floor anymore," said Mark Simpson, Supervisor of C&A Tool's Swiss machining area.

An important factor is the Full Machine Simulation function that allows C&A Tool's programmers to simulate the machining of a part in a "virtual reality" environment on their PC away from the shop floor. The software allows them to see exactly how the part will look on an exact machine model, detecting any errors on the part or any collisions that may occur in the machine's working envelope, before setting up a job.

"With PartMaker, we can do more with less. The more time you take with the software, running the collision detection, the less time you spend in set-up," commented Nathan Esslinger, Manufacturing Engineer. "An extra twenty minutes on PartMaker can save eight hours in set up during the middle of the night when no one is here to help."

"The best way to evaluate the improvement is to look at programming time. We have cut programming time in half, easily," claimed Mr. Esslinger. "Now we're doing parts that we would have turned away previously because the programming would have been too difficult or time-consuming."

C&A Tool must not only be ultra-efficient in its programming but in its quoting process as well. By using PartMaker and by requesting solid models from customers rather than just part drawings, time cycles and quotations can be generated very quickly.

In the current tight economic environment, C&A Tool has seen a big increase in quoting as customers look to shop for the most competitive prices available for engineered aerospace components. "Especially in this economy, a lot of people are passing parts around to get quotes. When we get a solid model, with PartMaker, instead of taking hours, quoting takes minutes," said Mr. Esslinger. This means C&A Tool can quote on more jobs and win more as well.

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Exa Corporation and Porsche AG Sign Multi-Year Partnership Agreement

16 June 2010

CIMdata PLM Industry Summary

[Exa® Corporation](#) announced that it has renewed and extended its technical and commercial partnership with [Porsche AG](#) of Weissach, Germany for two more years. This partnership enables Porsche to continue their advanced engineering process utilizing Exa's [PowerFLOW®](#).

Over the past few years, Porsche engineers have implemented Exa's suite of software tools for extensive engineering applications including: external aerodynamics, engine cooling, [thermal protection](#) and convective cooling. In anticipation of accelerated adoption of additional Exa applications, Porsche has extended its partnership with Exa to formalize a systematic simulation process for future car projects. New simulation applications such as [aeroacoustic](#) wind noise and brake cooling will also be incorporated into the Porsche digital design process.

"Exa, with its simulation tools, meets our extremely demanding needs in an almost perfect way and provides a strong and professional team to improve and develop the software tools in a future direction which matches our strategy and vision to the oncoming engineering challenges," remarked Armin Mueller, Head of Innovation and Concepts at Porsche AG. "Our partnership with Exa includes a novel business model that gives our engineers the necessary scale of access to their technology, enabling it to be a core piece of our product development process. Exa has been working together with Porsche to unlock the potential of true digital development, to enable us to fully be able to realize the benefits of a 'front-loaded engineering' process. Porsche and Exa share a common view on the remarkable impact that engineering simulation can make on an entire design and development process."

Jean-Paul Roux, Exa's President of European Operations commented, "We are honored by Porsche's decision to renew our partnership agreement--they have been a driving customer for Exa and share our vision. Porsche has committed to continued collaboration with Exa's development team, providing guidance and feedback on product plans as well as conveying relevant automotive industry issues, ensuring that future Exa solutions meet the needs of the automotive industry."

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Kinematic Automation Uses SolidWorks to Automate the Manufacturing of Life-Saving Diagnostic Products

16 June 2010

A drop of blood and a plastic strip the size of a matchstick can give a diabetes patient a world of life-or-death medical information.

Dassault Systèmes SolidWorks Corp. customer [Kinematic Automation](#) of Sonora, Calif., makes the precision machines that make these strips – for diabetes as well as cholesterol, pregnancy, HIV, and toxin testing. These systems treat, slice, and package test strips at rates of up to 50 strips per second each, with a total of approximately 8 billion produced per year. Approximately half the world's glucose strips are produced by Kinematic Automation machines.

"This is a highly competitive industry," said Kinematic Automation Mechanical Design Engineer Patrick Grimes. "It's vital to be first to market with the most reliable, serviceable, and highest-quality machines. [SolidWorks®](#) software helps us achieve these goals by enabling us to quickly model designs, communicate our intent to customers, make the necessary changes, and collaborate with our manufacturing team."

Kinematic Automation machines can have 5,000 parts. In designing them, the company has used SolidWorks to:

CIMdata PLM Industry Summary

- Shorten time to market by 30-40 percent;
- Reduce development cost by 25 percent; and
- Cut scrap and rework costs by 50 percent.

The company has also implemented SolidWorks Enterprise PDM data management software to automate the engineering change order (ECO) workflow and render it paperless. The automation of this previously tedious process will save the company time, money, and labor.

“We’re a lean company that is increasingly competitive nationally and internationally,” said Grimes. “Not only are we competing against other vendors, we’re competing against diseases that can be halted, reversed, or managed with the help of the proper diagnostics. SolidWorks is a critical ingredient in our life-saving mission.”

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Missouri River Energy Services Selects Open Text to Manage Content Growth, Meet Regulatory Requirements

16 June 2010

[Open Text™ Corporation](#) announced that Missouri River Energy Services (MRES), a regional energy organization based in South Dakota, has selected Open Text ECM Suite, Content Lifecycle Management to help manage the growing volumes of content stemming from organizational growth and increased regulatory requirements.

MRES is a not-for-profit, joint-action agency governed by the 60 member communities it serves in Iowa, Minnesota, North Dakota, and South Dakota. What started as a way for municipal energy providers to coordinate their efforts in negotiating the purchase of hydroelectric power generated at facilities along the Missouri River in the 1960s, has since evolved into a much larger role to supply its members with reliable, cost-effective, long-term energy and energy services in a fiscally responsible and environmentally sensitive manner. MRES has also expanded its role by participating in a regional transmission organization, developing gas and wind generation, and actively promoting energy efficiency in member communities.

As MRES has taken on this broader role, it faces growing regulatory requirements across multiple federal, industry, state and local government jurisdictions, and a significant expansion in the volume of content it must manage.

"None of this existed 10 years ago. It's all new," said Mrg Simon, Legal Director for MRES. "Even though we are a smaller organization, the amount of information we process and maintain is gargantuan. Everyone underestimates how much information this organization has. Long gone are the days when you had one person who not only knew everything but could also find everything."

One significant driver in the decision by MRES to strengthen its records management efforts was a lengthy discovery process involved with obtaining regulatory approval for a new power plant and associated transmission line. "During the course of the discovery, we had to literally plow through thousands of hits to figure out what was relevant," Simon said. "The process was very cumbersome and put a huge burden on our staff."

Another driver is that MRES now operates a variety of generating resources. "Regulatory compliance is

CIMdata PLM Industry Summary

a top priority for MRES, and maintaining detailed documentation is how we demonstrate our compliance with state and federal requirements and reliability standards," Simon explained.

To select the ECM solution that would best meet its needs, MRES worked with an outside consultant to evaluate its system needs, and solicit proposals from prospective vendors. From there, the utility invited the top three vendors to deliver presentations and demonstrations to an employee project team. Based on an evaluation form and both objective and subjective analysis, Open Text came out on top.

"One of the things that stood out for Open Text was that the records management functions worked in the background with the ability to accommodate the existing file structure. Other solutions added another layer," Simon said. "Open Text also stood out as very easy to use and would result in the least amount of changes for end-users. The project team felt that we wanted to keep as much of the look and feel of what we're currently doing so adoption would be faster and easier."

Other factors that weighed into the decision to select Open Text included integration with Microsoft Office applications, tools for managing confidential information, with a full audit trail, and the ability to place legal holds on documents.

MRES is currently in a pilot phase and plans to have its ECM solution, based on Open Text ECM Suite, Content Lifecycle Management, deployed and in operation by the end of 2011

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Project-Based Contractor Selects IFS Applications

15 June 2010

One of the world leaders in engineering and project management for the oil and gas industry, has selected IFS Applications as its new global enterprise applications system to support its growth and streamline its corporate processes in more than 20 countries. The contract includes licenses, maintenance and services for the next three years at a value in the range of 10-15 million Euros, out of which 2 million Euros will be booked as revenue during the second quarter.

The company will implement IFS Applications as part of its global growth strategy to support its activities carried out in challenging, global environments. It aims to streamline its processes, managing construction more efficiently and supporting further growth as an Engineering, Procurement, Construction, Installation (EPCI) contractor. The objective is to have an integrated project-oriented solution covering all aspects of its business. It will improve project performance through increased control over the five key success factors for project-based companies; risk, cost, cash, time and resources.

The solution includes IFS Applications components for financials, distribution, project (project finance & project execution), engineering & product design, manufacturing, maintenance, human resources, collaborative solutions, business performance.

IFS strategically targets suppliers to the Oil & Gas industry and has delivered solutions to the sector for many years. IFS offers a complete, integrated industry-specific solution that manages the entire project and asset lifecycle from engineering, project management, procurement, material management and fabrication to installation. Customers include Grenland Group, Babcock Engineering Services, Heerema Fabrication Group, Dresser-Rand, Yantai Raffles, STX Europe, Seawell, Apply Sørco, APL, Hertel, Bergen Group Rosenberg, BWO and Hamworthy Gas Systems.

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Sigma Design Leverages Tekton to Accelerate Runtime and Reduce Hardware Costs for Static Timing Analysis

14 June 2010

Magma® Design Automation Inc. announced Sigma Designs, a leading provider of system-on-chip (SoC) solutions used to deliver entertainment and control throughout the home, has adopted Tekton™ for its next-generation media processor SoCs. Sigma Designs selected Magma's new static timing analysis (STA) platform because it offers significantly higher capacity and dramatically faster runtimes without sacrificing accuracy.

With advanced process nodes, large numbers of process corners are not uncommon. Analysis of these corners is very computationally intensive because all the paths in the design need calculation with different parasitic information for each corner. By utilizing Tekton's multi-mode/multi-corner analysis capability, Sigma Designs engineers are able to run all their modes and corners on a single machine with just a single Tekton license. Recently, Sigma used Tekton on a 500,000-instance block targeted for one of its latest SoC designs. For the target process node, timing analysis was required on eight process corners with two functional modes. Tekton accomplished the required analysis in a single STA run that took only 20 minutes.

"Our customers demand high-performance, affordably priced chips that offer innovative new features," said Jacques Martinella, vice president of engineering of Sigma Designs. "To meet these demands and tight market windows we need design and analysis solutions that allow us to reduce our development costs and turnaround time. With Tekton, our static timing analysis runtimes are truly exceptional and we are able to analyze a large number of scenarios on a single low-cost machine, which helps us dramatically shorten our turnaround time and reduce the number of licenses and amount of hardware we need."

Tekton Multi-Mode/Multi-Corner Analysis Speeds Turnaround Times and Reduces Costs

Performing multi-mode/multi-corner or multi-scenario analysis is time consuming, expensive and cumbersome. Design teams are often forced to purchase many expensive servers and accompanying software licenses to parallelize the multi-scenario analysis in order to shorten run times. In some cases, design teams resort to using abstracted timing models to accelerate the analysis, but at the expense of accuracy. Tekton performs fast, multi-scenario analysis on a single machine and provides the accuracy of existing sign-off solutions. Over a variety of designs with up to 50 scenarios and design sizes up to 30M instances, Tekton performed timing analysis, with OCV and crosstalk enabled, in less than one hour on a single machine.

[Magma](#) will demonstrate Tekton and its entire line of chip design software in **Booth 602** at the **47th Design Automation Conference (DAC)** June 14-16 at the Anaheim Convention Center in Anaheim. For information about Magma's activities at DAC, visit <http://www.magma-da.com/DAC2010>.

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Strengthening of ESI's Position in Casting Simulation Among Spanish and Portuguese Foundries

16 June 2010

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Dedicated to the foundry challenges, [ESI's Casting Simulation Suite](#), including [ProCAST](#) and [QuikCAST](#), is a key solution to reduce manufacturing costs, shorten lead times for mold development and improve the [casting](#) yield and quality. The Iberian market has a high concentration of small to mid-size foundries supplying the industry worldwide. Recently, many of these Iberian foundries have decided to massively invest in simulation tools to optimize their processes.

Following the success of the three [Casting](#) seminars held in Vitoria, Zaragoza and Madrid in April 2009, and organized by [Análisis y Simulación](#), [ESI's Casting](#) agent in Spain, several sand foundries have chosen to invest in [ESI's Casting](#) software.

Sand Casting

[ESI's Casting](#) Simulation software enabled Suñer and DuritCAST to obtain accurate thermal and metal-flow predictions prior to tooling design. Process Engineers were indeed able to develop with confidence optimized risering systems for successful castings in a short period of time.

“We feel very confident with the simulation results obtained using ESI's Casting Solutions”, said Luis Sierra, responsible for the automatic process control at DuritCAST. “We have even decided to refuse validating new mold designs if a simulation has not been carried out in advance”.

One of company goals of Faed for the coming years is to improve its productivity and limit the number of real prototypes. Faed has thus planned to simulate all its cast iron and steel components with [QuikCAST](#), [ESI's](#) efficient solution for [Casting](#) Process Evaluation. Although Faed deals with massive components, weighing each several tons and measuring more than 5 meters long, the company is able to perform fast simulation in as little as a couple of hours. In addition, the new and powerful post-processing capabilities help foundry men to rapidly interpret results and track the porosities by scanning the entire component.

Grupo Fumbarri deals with cast iron components weighing up to 45 tons each and measuring more than 12 meters long. Using [ESI's Casting](#) Solutions, Grupo Fumbarri is able to design complex shapes while delivering accurate results at each step of the [casting](#) process.

At San Eloy Fundiciones, mold filling never exceed 10 seconds and filling time is one of their key process parameters to reduce production time. With the recent use of simulation, they have already achieved the conception of new gating systems, increasing their productivity without increasing the risk of oxide formation, i.e. preserving the part integrity.

Die Casting

One of the major concerns with permanent mold applications is to monitor the die temperature during the entire process. CIE Automotive has been intensively using simulation for many years to design its die cooling devices, specifically for the pressure die-casting process. They now use [ESI's Casting](#) Simulation software to model their semi-solid process with the SEED technology developed by Rio Tinto Alcan.

Investment Casting

Microfusión ALFA, major actor in the investment casting market, has been successfully using [ProCAST](#) for many years. Now the foundry has integrated the stress module in order to control the final shape, dimensions and stress concentration of their high quality components. This will help Microfusión ALFA make significant headway in their mold design to satisfy their customer's requirements for tight tolerances.

Copper Alloy foundries

Cast iron, steel, aluminum and superalloys foundries are not the only ones to adopt simulation tools; copper alloy foundries are also seizing the opportunity. Casuso Propellers, producing large castings made of Cupro Aluminum for the marine industry, have recently equipped their foundry with [QuikCAST](#) and collaborated with [ESI](#) and [Análisis y Simulación](#), to solve one of their main issues - the characterization of their material properties. By using the [ProCAST](#) reverse engineering capability, they were able to determine all the material properties needed to compare porosity prediction with experimental results.

“The use of ESI’s Casting solutions has become an essential decision tool that helps most of the Spanish and Portuguese foundries to get the right design while eliminating any risks,” declared **Emilio Mencia de Miguel**, Managing Director, ESI Spain.

For more information about [QuikCAST](#) and [ProCAST](#), please visit: www.esi-group.com/products/casting

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2Wire Leverages Oracle's Agile Product Lifecycle Management (PLM) 9.3 to Increase Productivity and Reduce Costs

15 June 2010

News Facts

To improve productivity across the entire product lifecycle, 2Wire, a leading provider of broadband solutions, has deployed [Oracle's Agile Product Lifecycle Management \(PLM\) 9.3](#), part of Oracle’s Product Value Chain solution.

Operating in an increasingly complex global marketplace, 2Wire sought an enterprise PLM system that could help drive profitable innovations, mitigate risk and lower development and product costs.

By leveraging the productivity-enhancing innovations in Agile PLM 9.3, 2Wire has been able to improve collaboration and productivity across its rapidly expanding global design team while reducing management costs.

The new Web 2.0 user interface controls and enhanced user personalization delivered by Agile PLM 9.3 have improved usability and increased accessibility, helping 2Wire to drive collaboration.

Simplified access through a Web based client further increases productivity by allowing users to access Agile PLM documents directly from their desktop or link the new PLM system to existing document vaults.

2Wire has also been able to reduce management costs and significantly reduce deployment and training time by leveraging user training management improvements within Oracle Agile PLM 9.3 including personalized context help through the Oracle User Productivity Kit (UPK) and video quick tours.

By providing an enterprise PLM backbone that integrates other applications and hundreds of productivity-enhancing innovations, Agile PLM 9.3 has enabled 2Wire to stay competitive in an increasingly competitive global marketplace by increasing productivity across the entire product lifecycle.

2Wire first invested in Oracle in 1999 and is currently using a range of Agile PLM 9.3 modules

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including Agile Product Collaboration, Agile Product Cost Management, Agile Quality Management and Agile Product Governance and Compliance.

Oracle's Product Value Chain solution includes Oracle's Agile PLM, Oracle Product Hub, Oracle's AutoVue Enterprise Visualization and Oracle Product Data Quality. This gives customers a comprehensive solution to manage all product information, integrated product lifecycle processes, secure collaboration, data quality and knowledge management across the product value chain – including design, supply and demand functions.

Supporting Quote

"Oracle's Agile PLM applications are critical to our business and we have been very impressed with the innovative enhancements delivered in the latest release," said John Hitchcock, senior manager of Configuration Management at 2Wire. "The upgrade was seamless and with the new usability, access and training enhancements, we were able to transition users quickly and easily. As we continue to expand our global design team, these enhancements will also help, as they reduce management costs, make the system more accessible to a larger user group and drive productivity across the product lifecycle."

Supporting Resources

[Read more about Agile PLM 9.3 User Productivity Tools](#)

[Download Oracle Agile PLM 9.3 Executive Brief](#)

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Wintegra Selects Magma's Quartz DRC and Quartz LVS to Accelerate Physical Verification of Low-Power, High-Performance 65-nm Chip

14 June 2010

Magma® Design Automation Inc. announced that Wintegra, a leading provider of access processing semiconductors and software for next-generation telecommunication infrastructure solutions, has successfully taped out its latest low-power, high-performance 65-nanometer (nm) chip using Magma's Quartz™ physical verification products. With Quartz DRC's and Quartz LVS's advanced capabilities, Wintegra was able to quickly sign off on the design using TSMC 65-nm runsets.

"As we integrate more features, our designs are getting larger, more complex. To meet our time-to-market windows we need a fast, high-capacity physical verification solution," said Yoram Yeivin, senior vice president of Engineering at Wintegra. "Magma's Quartz DRC and Quartz LVS provide the ultra-fast turnaround time and performance we need. Plus, with the excellent support Magma provided during the flow development and deployment and the availability of sign-off runsets from TSMC's website, Quartz DRC and Quartz LVS were very easy to adopt."

Quartz DRC and Quartz LVS: Fastest Fully Scalable Physical Verification

Magma's Quartz DRC and Quartz LVS products are architected to process integrated circuit (IC) designs of any size, at any technology node, in the least amount of time. Magma's is a truly scalable physical

verification solution, able to provide turnaround time that is up to an order of magnitude faster than existing solutions while using existing computer resources. The Quartz tools are fully compatible with third-party IC implementation flows and can read file formats used by traditional physical verification tools.

Magma will demonstrate Quartz DRC and Quartz LVS and its entire line of chip design software in **Booth 602** at the **47th Design Automation Conference (DAC) June 14-16** at the Anaheim Convention Center in Anaheim, Calif. For information about Magma's activities at DAC, visit www.magma-da.com/DAC2010.

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Product News

Agilent Technologies Offers Industry's First Automatic IBIS-AMI Model Generation Capability in an ESL Design Flow

14 June 2010

Agilent Technologies Inc. announced that its SystemVue Electronic System-Level (ESL) design software, version 2010.07, will automatically generate IBIS Algorithmic Modeling Interface (IBIS-AMI) models. IBIS-AMI, a modeling standard for serializer-deserializer (SerDes) transceivers, was created to enable fast, statistically significant analysis of high-speed digital chip-to-chip links. For the first time, IC manufacturers will be able to automatically generate IBIS-AMI models for their chips as a natural outcome of an ESL workflow.

“IC vendors are adopting IBIS-AMI models because unlike proprietary encrypted models, IBIS-AMI models are ‘write once, run anywhere’ and therefore avoid duplication of effort,” said Colin Warwick, signal integrity application manager with Agilent’s EEs of EDA organization.

Since the IBIS-AMI models are compatible with statistical channel simulators, they allow customers to create ultra low BER contours in seconds, rather than the days or weeks it would take with a netlist model. The drawback used to be that AMI models were hard to create. With SystemVue 2010.07, models are compiled directly and automatically from the exact same ESL model used to specify the original implementation.

“The ability to generate AMI models in SystemVue without having to hand-code in C is an exciting prospect,” said Manuel Luschas, signal integrity manager, Netlogic Microsystems. “Even more compelling is that we can now quickly explore the SerDes design space at the algorithmic level in an ESL design flow. Previously, we would have had to do such exploration at the implementation level where revisions are painfully slow.”

High-speed digital chip I/O pins are increasingly making use of sophisticated signal-processing techniques (e.g., pre-emphasis, adaptive equalization and clock-data recovery phase-locked-loops). This technique helps to mitigate impairments due to chip-to-chip connection. To use the new I/O capabilities to their fullest extent, signal integrity engineers require accurate models of the IC that can be used for system simulation in their EDA tools. The models act like an “executable datasheet” for the IC.

Design and verification of chips with high-speed digital SerDes transceivers is one of the applications that will benefit from Agilent’s SystemVue IBIS-AMI model generation capability. SerDes transceivers are found in almost all consumer and enterprise digital products produced today, from laptop computers

and data center servers to telecommunication switching centers and Internet routers. The timely availability of the SystemVue generated models will help manufacturers of these products arrive at an optimum design through rapid and complete exploration of the design space. Unlike proprietary channel simulators offered by some IC vendors, EDA tools like Agilent's Advanced Design System allow 'mix and match' modeling, for example, a transmitter from one IC vendor and a receiver from another.

Agilent's SystemVue is a leading EDA environment for ESL design. For a free information package on SystemVue in AMI applications, visit <http://www.agilent.com/find/eesof-ami-model-gen> or contact a local Agilent representative.

U.S. Pricing and Availability

Agilent's SystemVue 2010.07 with AMI Modeling Toolkit will be available as a customized solution in the third quarter of 2010. Contact a local representative for pricing.

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ArchiCAD 14 Fosters Open Design Collaboration between Architects and Engineers

11 June 2010

GRAPHISOFT announced ArchiCAD® 14, the latest version of its architectural design software. ArchiCAD 14 offers intelligent workflow solutions to the extended design team.

ArchiCAD 14 continues delivering productivity improvements for architects throughout the full cycle of the BIM workflow with a specific focus on completing the integration of the architectural workflow with the engineering world.

ArchiCAD 14 turns IFC technology into full-fledged workflow solutions enabling collaboration with engineers regardless of their discipline or the name and version of the application they prefer working with. This "open" approach to interdisciplinary collaboration greatly broadens designers' options for real Integrated Project Delivery (IPD) resulting in faster delivered projects and significantly less coordination errors.

"Building Information Modeling (BIM) has created unprecedented potential for design collaboration between the various trades," said Miklós Szövényi-Lux, Vice President of Product Management at GRAPHISOFT. "With ArchiCAD 14, GRAPHISOFT helps designers realize the true potential of model based collaboration by turning simple "file compatibility" between architectural and engineering software into intelligent "workflow solutions" for industry-first open design collaboration."

Open Design Collaboration

ArchiCAD 14 introduces workflow solutions that help bridge the different requirements for BIM models between architects and the various engineering disciplines of the AEC industry. Model mapping, element classification, IFC reference model version tracking and change management support help the coordination between architects and engineers become a smooth and automatic process. ArchiCAD 14 also moves forward with developments to its BIM Server based Teamwork solution, further optimizing the management of design teams working on shared BIM projects.

Best-in-Class BIM Workflow

ArchiCAD 14 also delivers a wide array of productivity improvements focusing on the most requested global and local customer wishes. Enriched details to modeling construction elements, better 3D

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visualization, enhanced 2D drafting, improved handling of libraries and library parts, and refined user interactions are all included in the impressive list of productivity improvements. The results are faster and more polished design and documentation workflows with improved communication capabilities both with clients and consultants, making ArchiCAD 14 the premier BIM solution for architects worldwide.

Availability

ArchiCAD 14 will be available for purchase worldwide as of June 1st. Physical shipment of localized versions will start on June 9th with the INT, US, GER, AUT, AUS and NZE versions. Following a tight release schedule, all 26 local versions are planned to reach the market by the end of Q3 2010. For more information, please visit: www.graphisoft.com/products/archicad/

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ARM, IBM, Samsung, GLOBALFOUNDRIES and Synopsys Announce Delivery of 32/28nm HKMG Vertically Optimized Design Platform

14 June 2010

ARM, IBM, Samsung Electronics, Co., Ltd., GLOBALFOUNDRIES and Synopsys, Inc announced the delivery of the industry's first complete vertically optimized 32/28 nanometer (nm) design platform. Demonstrating the strength of the collaboration established and announced at DAC a year ago, the companies are collectively providing a technology enablement solution for the design and manufacturing of advanced mobile and embedded devices.

The solution consists of optimized high performance, low-power processor and physical IP from ARM; tool enablement, connectivity IP and integrated design flow from Synopsys; and 32/28nm low-power process technology from the Common Platform alliance of IBM, Samsung and GLOBALFOUNDRIES. The Common Platform 32/28nm process uses a high-k metal gate approach to address the limitations of polysilicon technology. It leverages the research and development efforts of the IBM joint technology development alliance to offer a high-performance, low-power manufacturing platform.

The 32nm technology is scalable to 28nm for area optimization. Customers can seamlessly transition to 28nm technology without the need for a major redesign and with lower risk, reduced cost and faster time-to-market.

This complete solution demonstrates the important role industry collaboration has in addressing the increasing complexity of SoC design as technology migrates to smaller geometries. The platform leverages:

- ARM® Cortex™ high-performance, low-power processor architecture and optimized suite of physical IP, including standard cells, power management kit, memory compilers and interface IP, for the 32/28nm HKMG process. The ARM IP contribution delivers valuable low-power and system cost benefits. All physical IP are readily accessible on DesignStart - <http://designstart.arm.com>
- Synopsys Lynx Design System, enabled by the Galaxy™ Implementation Platform with IC Validator In-Design physical verification, and the Synopsys DesignWare® portfolio of interface IP. This RTL-to-GDSII implementation solution reduces risk and total design costs for optimized 32/28nm HKMG ARM Cortex processor-based SoC designs.
- 10 test chips produced through the three-way collaboration in 32 and 28nm HKMG process technology.

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Producing these chips has helped validate the design platform, including Common Platform PDKs, ARM Physical IP and Cortex processors, Synopsys Interface IP, core tool enablement and design methodology for accelerating first customer silicon success.

- 32nm low-power HKMG process technology is currently factory-qualified by Samsung 28nm low-power HKMG process technology to be factory-qualified at GLOBALFOUNDRIES and Samsung in Q1 2011. The 32/28nm process technologies, featuring the innovative Gate First approach to HKMG, offer significant improvements in performance and power consumption when compared to the 45/40nm technology generations.

- A standardized platform to manufacture 28nm low-power HKMG semiconductors for a new generation of mobile devices, providing the flexibility of multi-sourcing based on the planned synchronization of fabs by members of the Common Platform alliance.

- Demonstrations and technical sessions of this comprehensive 32/28nm enablement platform will be shown at the 2010 DAC in the ARM-Common Platform-Synopsys booth (#586) “32/28nm Delivered” exhibit. On Tuesday, June 15, the companies will host an access innovation luncheon - where executives from the five allied companies will detail the benefits of 32/28nm HKMG and the accessibility of the enablement platform. Online registration is required at:

<http://www.synopsys.com/Community/Partners/CommonPlatform/Pages/DAC10CPlunch.aspx>

Related announcements and additional details can be found at the following links:

- Samsung Electronics Qualifies Foundry Industry’s First 32nm Low Power High-K Metal Gates Logic Process and Design Ecosystem:-

http://www.samsung.com/us/business/semiconductor/newsView.do?news_id=1162

- Samsung Electronics Achieves First-Pass 32nm Silicon Success Using Synopsys Galaxy Implementation Platform:- <http://synopsys.mediaroom.com/index.php?s=43&item=812>

- Synopsys Delivers Optimized Lynx Design System for Common Platform 32/28-nm Technology:-

<http://synopsys.mediaroom.com/index.php?s=43&item=816>

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Bentley Announces Availability of V8i (SELECTseries 1) Versions of MXROAD and MXROAD Suite

17 June 2010

Bentley Systems, Incorporated announced the immediate availability of the V8i (SELECTseries 1) versions of Bentley MXROAD and MXROAD Suite – both of which provide advanced string-based modeling that enables the rapid and accurate design of all road types. These updates continue the evolution of Bentley’s MX product line by including Bentley’s Roadway Designer functionality, which provides 3D parametric modeling tools for resurfacing, restoration, and rehabilitation projects. The new releases also add a full-featured geospatial information management system – to address the unique and challenging needs of organizations that map, plan, design, build, and operate transportation systems – and are integrated with the ProjectWise collaboration services. ProjectWise provides distributed project teams with improved engineering content management and collaborative workflows that enhance productivity and the quality of deliverables.

Ron Gant, Bentley global marketing director, said, “Streamlined and intuitive, Roadway Designer offers the most advanced 3D modeling capabilities available in civil engineering for interactive 3D, constraint-

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driven design with intelligent components. This proven technology empowers civil engineers and designers to control the entire modeling process – visually, graphically, interactively, and dynamically.”

Especially suited to the newest construction technologies, the tools provided by the new versions of MXROAD and MXROAD Suite embrace advanced techniques for automated machine guidance. This lets transportation designers more quickly, efficiently, and cost-effectively respond to the constraints and demands of constructing and maintaining roads and bridges.

The updated MXROAD products also include mapping functionality tightly integrated with civil engineering for the creation, maintenance, and analysis of geospatial data. The geospatial data can then be edited with the precise, CAD-level accuracy required for engineering. This means users can easily integrate data from a wide variety of sources into engineering and mapping workflows.

Innovative 3D modeling tools enable users to create and edit extensive 3D spatial models within the engineering design application to support analysis such as shadow, massing, line of sight, disaster mitigation, and wind studies. They also can be used to create complex civil engineering models, while mapping functionality handles attribution and storage of data in DGN or DWG files, or natively in Oracle Spatial.

Gant continued, “This evolution of MXROAD also provides further integration with Bentley’s ProjectWise collaboration services. ProjectWise is used to better connect people with information across project teams. When connected by ProjectWise, engineers, architects, and contractors can easily manage, find, share, and visualize CAD and geospatial content, project data, and Microsoft Office documents. ProjectWise capabilities include central engineering content management and local caching servers for fast file access, plotting and publishing servers for reduced distribution costs, and a web server for streamlining access to content.”

The newest versions of MXROAD also extend supported environments to include AutoCAD 2010. In addition, innovative data acquisition, geometry, visualization, drafting functionality, and interface tools further broaden the scope of Bentley’s transportation solution.

Gant concluded, “Bentley’s civil engineering software enables project teams to reuse design data during construction, avoiding rework and reducing costs. At the same time, it empowers them to work more efficiently and effectively in collaborative workflows – increasing quality and enhancing profitability – while being more ecologically aware in their design and construction work. Ultimately, this leads to the delivery of intelligent infrastructure that is better performing and more sustainable.”

About Bentley MXROAD and MXROAD Suite

Bentley MXROAD is an advanced, string-based modeling tool that enables the rapid and accurate design of all road types. With MXROAD, users can create design alternatives to achieve the ideal road system. Upon selection of the final design alternative, MXROAD automates much of the design detailing process, saving time and money.

Bentley MXROAD Suite combines all of the functionality of MXROAD with PowerSurvey, an all-in-one, standalone survey solution; MXRENEW, a complementary solution that fits new design onto existing roads for rehabilitation and reconstruction; and MXURBAN, parametric design software for roads in cities and urban areas.

For additional information about MXROAD, visit <http://www.bentley.com/MXROAD>. For additional information about MXROAD Suite, visit <http://www.Bentley.com/MXROADsuite>. For additional information about ProjectWise, visit <http://www.bentley.com/ProjectWise>. For additional information

about Bentley Map, visit <http://www.bentley.com/Map>.

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Cadac Organice's Compatibility Program for SharePoint 2010 and Office 2010

16 June 2010

Cadac Organice BV, Microsoft Gold Certified Partner and developer of [Cadac Organice](#), a SharePoint based engineering document management solution, and her technology partners announce their compatibility program for SharePoint 2010 and Office 2010.

Microsoft officially introduced SharePoint 2010 and Office 2010 on May 12th 2010. Both SharePoint 2010 and Office 2010 include changes and new features and functionalities that offer new opportunities for end users. Cadac Organice and her [technology partners](#), developing specific features and functionalities for the Cadac Organice Product Suite, have examined the changes and new features and functionalities, and have defined a compatibility program, to introduce compatibility with SharePoint 2010 and Office 2010 in two steps.

As a first step, Cadac Organice will introduce Cadac Organice Explorer 2010 R2 in September 2010. This new release will be compatible with sites that have been built in SharePoint 2010 based on the feature set of WSS 3.0 or MOSS 2007 and without yet using the new features and functionalities of SharePoint 2010.

As a second step, new features and functionalities in SharePoint 2010 will be supported in subsequent releases of Cadac Organice Explorer, starting with Cadac Organice Explorer 2010 R3 that is expected in Q1 2011. This release will also fully support Office 2010. The support of new SharePoint features and functionalities will include among others: document sets, external data service and managed metadata.

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Cadence Delivers Extensive Support for TSMC Analog/Mixed-Signal Reference Flow 1.0 for 28nm Process

11 June 2010

[Cadence Design Systems, Inc.](#) announced its support for TSMC Analog/Mixed-Signal (AMS) Reference Flow 1.0 for advanced 28-nanometer process technology. The collaboration between Cadence and TSMC on this new reference flow will help accelerate time to market for advanced mixed-signal designs, help reduce redundant investment in design infrastructure and improve return on investment.

“The collaboration with Cadence is integral to the success of our customers delivering advanced analog/mixed-signal designs,” said Tom Quan, deputy director of design methodology and service marketing at TSMC. “The TSMC AMS Reference Flow for 28 nanometer represents the industry’s most complete methodology for creating, verifying and producing silicon that takes advantage of the latest process technology. We look forward to continuing our work with Cadence and the entire TSMC Open Innovation Platform ecosystem to ensure that our technologies keep pace with emerging design challenges and maximize our customers’ investment in design infrastructure.”

The reference flow enhancements deliver significant assistance to design teams tasked with achieving efficient and cost-effective Silicon Realization, a key pillar of the Cadence EDA360 strategy.

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Cadence mixed-signal technologies provide extremely comprehensive support for TSMC's new 28-nanometer reference flow, addressing the steps required to get a design into silicon. The collaboration between Cadence and TSMC directly addresses the increasing complexity and integration in analog and mixed-signal functionality in the silicon designs used in wireless, networking, consumer and other applications.

“With the increasing complexity of wireless, networking, consumer and CPU designs, the analog and mixed-signal IP can represent more than 50 percent of a chip design,” said Sandeep Mehndiratta, group director of product management at Cadence. “Cadence’s support of TSMC AMS Reference Flow 1.0 optimized for TSMC silicon technology delivers a comprehensive design, verification and implementation solution to our customers for realizing highest quality advanced mixed-signal designs on 28 nanometers.”

The TSMC reference flow incorporates the broad suite of Cadence technology offerings from the Virtuoso platform, delivering extensive coverage for design, verification and implementation of AMS IP on 28 nanometers. Based on proven methods for advanced 28-nanometer designs, Cadence technology, in collaboration with TSMC, enables schematic design, AMS verification, RF and transient noise analysis, yield sensitivity analysis, constraints-driven layout, analog placement and routing, physical verification, DFM-aware parasitic extraction, IR drop and electromigration analysis.

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Cadence Kick-Starts UVM Adoption with Open-Source Reference Flow Contribution to UVM World

11 June 2010

Cadence Design Systems, Inc. announced the industry’s most comprehensive open-source reference flow for system-on-chip (SoC) verification using the [Universal Verification Methodology](#) (UVM) standard. The unique flow enables engineers to adopt advanced verification techniques with reduced risk and deployment effort while meeting critical time-to-market requirements.

In support of the Cadence EDA360 strategy for delivering SoC Realization capabilities, UVM Reference Flow 1.0 provides a SoC design and UVM-compliant testbench components as open source for users to learn and apply advanced verification techniques. Users will be able to download the environment and instrument the UVM verification components to the design. This provides practical hands-on experience for applying the technology in an executable form when run on a UVM-compliant simulator. All code is provided in clear-text form so users can make modifications, apply different verification scenarios and precisely see the results of those changes.

The UVM, adopted recently by the Accellera standards organization, is built largely on the framework of the Open Verification Methodology (OVM) that Cadence® co-developed.

“Cadence has a rich history of improving functional verification productivity,” said Olivier Haller, verification manager at STMicroelectronics. “The reference flow will make it easier and faster to adopt UVM for verifying our chips. ST plans to use this UVM reference flow to demonstrate our own advanced methodologies as well as for internal training purposes. There is now a very complete reference available for both IP- and SoC- level verification challenges.”

SoC Realization is one of the key capabilities outlined in the EDA360 vision, with IP and SoC verification as critical steps. UVM Reference Flow 1.0 provides a real-world example that addresses key challenges engineers face. It provides the ability to exercise verification techniques, validate verification

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re-use, manage low-power modes typical in today's SoCs, ensure verification scalability from block to system and improve verification productivity. Based on the proven Incisive® Verification Kit, the reference flow includes both design and verification IP from Cadence that was converted to open source and contributed to www.UVMworld.org, a Web site supporting the new UVM standard.

“With today's wireless and consumer chip designs becoming increasingly complex, development teams are under growing pressure to apply more effective verification methods and technology,” said Thomas L. Anderson, verification product management director at Cadence. “The UVM Reference Flow enables the SoC Realization capabilities of EDA360 by creating a comprehensive environment to ease adoption of advanced techniques.”

The new UVM Reference Flow 1.0 will be featured at the Design Automation Conference (DAC), scheduled for June 13 to 18 in Anaheim, Calif. More information on the conference can be found at www.dac.com.

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Cadence Delivers TLM-Driven Design and Verification, 3D-IC Design and Integrated DFM Capabilities to TSMC Reference Flow 11.0

11 June 2010

Cadence Design Systems, Inc. announced that transaction-level modeling (TLM)-driven design and verification, 3D-IC implementation and integrated DFM are among the many cutting-edge Cadence® technologies and flows that have been incorporated into TSMC Reference Flow 11.0. The Cadence contributions aid in the design, implementation, verification and signoff of complex 28-nanometer chips from TLM through GDSII. Supporting the EDA360 vision, these additions to the TSMC flow help the two companies' mutual customers reduce the design cycle for implementing complex high-performance, low-power, mixed-signal chips. Cadence support for the new reference flow marks the company's latest step in delivering key elements of the EDA360 vision.

“Cadence and TSMC have worked together to reduce development costs for our mutual customers by helping them migrate to a higher-level of abstraction and advanced process nodes,” said ST Juang, senior director of Design Infrastructure Marketing at TSMC. “With the addition of Cadence tools and solutions, TSMC Reference Flow 11.0 comprehensively addresses vital design concerns and increases design productivity by enabling ESL design and verification and 3D-IC integration to become part of the mainstream flow.”

The EDA360 vision calls for a collaborative ecosystem that enables System to Silicon Realization. The Cadence contributions to the TSMC Reference Flow can help customers achieve those goals faster and more cost-effectively through the fast creation, reuse and integration of large digital, analog, and mixed-signal IP blocks.

Comprehensive TLM-Driven design and verification and 3D-IC Design Solutions

TSMC's new reference flow leverages the capabilities of Cadence TLM-driven design and verification technologies and methodology. Complete TLM-to-GDSII design is enabled by raising the level of design abstraction from RTL to TLM, and through the methodology deployment of Cadence high-level synthesis, early power trade-offs and optimization, and metric-driven functional verification. Advanced 3D design capabilities include physical design and implementation; RC extraction; analysis of timing, signal integrity, IR drop, electromagnetic and thermal analysis; and physical verification.

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Customers can benefit by migrating to a higher level of abstraction because it increases their design and verification productivity for new IP creation and reuse from system-level design to physical implementation. Unique Cadence engineering change order (ECO) capabilities help eliminate unnecessary iterations for faster time to market. The 3D-IC design capabilities improve implementation decisions for ensuring optimal performance and power tradeoffs in packaging. With design-for-manufacturability solutions integrated into implementation tools, designers can safely complete their block- or chip-level designs to meet time-to-volume targets.

New Capabilities for Low-Power, Advanced-Node and Mixed-Signal Design

Cadence also has worked with TSMC to bring additional support for low-power, advanced-node and mixed-signal designs. In the area of low power, enabled by the Common Power Format (CPF), the flow now supports power state validation and IP library view support. Advanced node support now includes litho hot-spot fixing using iLPC and dummy metal/via insertion with stand-alone GDS utility in automatic place and route tool. For system-in-package (SiP) mixed-signal designs, there is packaging support with SiP die/package floorplanning, mixed-signal IR drop and advanced SiP static timing analysis. These new reference flow elements offer design teams greater visibility and predictability from system level through signoff; help optimize tradeoffs in power, performance and area; and aid in maximizing the potential yield.

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CONTACT's New PDM/PLM Release Features Pioneering Product Innovations

14 June 2010

With CIM DATABASE 2.9.8, CONTACT Software GmbH launches its most comprehensive update ever. The new PDM/PLM platform release boasts with a multitude of new modules and functions for the management of product data, development projects and engineering processes. This includes the unique CONTACT Workspaces for collaborative design and CAD data management, Enterprise Search for extremely fast retrieval through the entire database, Mobile PDM and ad-hoc workflows. With Project Office, CONTACT also introduces far reaching innovations for its 360° project management module, such as the multi-project cockpit and a resources planning facility. Also included are elementary platform innovations such as the CIM DATABASE next generation multi-site solution. Altogether, the new release delivers its customers unprecedented gains in functionality, performance, adaptability and productivity.

The recently announced Workspaces technology constitutes CONTACT's new, open architecture for CAD data management and collaborative product development. It radically simplifies product design for individual users, teams and partner networks. It enables efficient collaboration amongst designers without impairing compliance and data validity requirements within the company's PLM backbone. Workspaces support a totally new collaborative approach with partners and sub-contractors, reducing costs and saving time.

Requirements on target driven project management are enormous, considering the complexity of today's products and processes. With its integrated project, process and product projections, CONTACT's Project Office enables structured collaboration across multiple disciplines, departments, domains and locations. The 360° perspective supports project management in real-time, trimmed to the specific demands of project managers, controllers and project teams. The now integrated Earned Value Analysis allows the compilation and presentation of concise data for controlling milestones, costs and work

CIMdata PLM Industry Summary

progression in real time. Project Office supports now hierarchical resource planning across a company's overall project portfolio and resources, thus enabling optimal deployment of all world-wide distributed development capacities.

With Enterprise Search, CIM DATABASE 2.9.8 provides a new, straight forward interface for the combined full text and Meta data retrieval with exceptional performance and efficiency. The solution excels through its central, easy and fast access to all or ad-hoc selectable PDM object types such as documents, articles, projects, open issues etc. Enterprise Search enforces the company-wide access restrictions and delivers comprehensive search capabilities using wildcards, fuzzy search and drill down through freely combinable master data.

Furthermore, users profit from the new PowerReports by which data from within CIM DATABASE is extracted and graphically displayed for reporting and further processing into Excel or PDF. The now available Mobile Client enables users to freely select segments of the PDM database such as all relevant data along a complete project structure for subsequent offline-usage, including modifications and amendments. Typical examples are on-site engineering and support for travelling sales and service personnel or project managers. The novel ad-hoc Workflows render the compilation and activation of processes as easy as writing an e-mail. As a process control facility, CIM DATABASE monitors the workflow and selectively engages involved employees via its inbuilt task management. Furthermore, the new CIM DATABASE version supports single sign-on in ActiveDirectory and Kerberos environments.

“2.9.8 offers our customers a whole range of new and far-reaching product innovations which support them in an unprecedented way to develop products faster and on target” explains Frank Patz, head of software development with CONTACT. “We are convinced that the new release delivers numerous significant benefits for both users and companies.”

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Covisint and PROSTEP AG Join Together to Enhance Supplier Collaboration

June 2010

Covisint announced that it will globally offer PROSTEP AG's data transfer application, OpenDXM® GlobalX which is now available through AppCloud® - its third-party application exchange. Covisint made the announcement at the Odette25 Conference - Forging the links of the Future Supply Chain - in Munich, Germany.

OpenDXM® GlobalX, will be accessible through Covisint's AppCloud® service, it will provide the data transfer functionality of PROSTEP's data exchange technology to Covisint's large manufacturing ecosystem. Covisint's AppCloud®, part of Covisint's platform-as-a-service offering ExchangeLink™, brings together best-of-breed applications for a variety of industries including manufacturing and healthcare--using a multi-vendor ecosystem approach. AppCloud® provides the “network effect” to users; allowing applications to be easier to buy, with faster delivery, and at a lower cost.

Supporting information sharing across the largest B2B ecosystem of manufacturers worldwide, Covisint OEM and Supplier Collaboration Services offer cloud based on-demand connectivity and communication to 300,000 users at 30,000 locations in 88 countries worldwide. The world's leading OEMs and suppliers rely on Covisint OEM & Supplier Collaboration Services to reduce the cost, complexity and risk of information and application sharing -all through an industry-proven, on-demand web environment.

CIMdata PLM Industry Summary

OpenDXM® GlobalX is a complete solution for the automated, reliable, secure and convenient exchange and conversion of engineering data. It resolves a long-standing issue faced by the industry of automating and securely exchanging engineering data inside an organization or across the extended enterprise. Specifically within the Product Design and Engineering function, the time and resources required for accessing customers' CAD and PLM systems in order to push and pull product data is unmanageable.

“We are pleased to offer our OpenDXM® GlobalX application through the Covisint platform due to its vast size and established user base. It will provide rapid exposure of our solution to this community and easy access through single sign on. This is of tremendous benefit to those companies that strive to streamline processes, reduce time for product development and minimize staff size to remain competitive,” said Bernd Pätzold, CEO of PROSTEP AG.

PROSTEP AG

PROSTEP AG offers customers from the aerospace, automotive, shipbuilding and mechanical engineering industries excellent solutions for supplier communication and integration solutions for CAD and PDM, this making e-engineering a reality. OpenDXM®, a data exchange platform is installed more than 250 times and is used by more than 100,000 users worldwide.

Learn more at <http://www.prostep.com>



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D-Cubed: Latest Release of the 2D DCM, Version 57.0

Released May 2010

Siemens PLM Software announces the latest release of the 2D Dimensional Constraint Manager, a software component that controls 2D parametric sketches in 2D and 3D design environments. [Learn More](#)



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Fujitsu Releases New Virtual Product Simulator

15 June 2010

[Fujitsu Limited](#) and [Digital Process Ltd.](#) announced the joint development of a new virtual product simulator (VPS), a 3D virtual verification simulation tool that employs computer simulation to support the virtual manufacturing of mobile phones, copy machines, and other products. The new software will be released in August under the name V15L10 in Japan.

The new software package helps manufacturers prepare for production during the development of complex products, such as copy machines, which contain more than 30,000 densely packed components. The package achieves a display performance of approximately ten times that of existing software. As well, functions such as the assembly process review feature have been significantly enhanced. Customers can now effortlessly perform assembly order reviews for an entire large-scale product in 3D.

The integration of production preparation processes, such as manufacturing resources and line balancing reviews, accelerates product development and allows companies to quickly begin development. Furthermore, the software contributes to the environment by reducing the amount of resources used

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during prototype manufacturing.

Background

As VPS can display detailed data for the electrical wiring and circuit boards inside of a product, it is employed during production preparation mainly in ways that 3D CAD cannot be used. This includes conducting assembly order reviews as well as the preparation of manufacturing and service documentation. However, the growing complexity and scale of products has challenged the ability of existing VPS software packages to review products in their entirety due to limited display performance. There is also growing momentum behind finding ways for companies to limit their prototype manufacturing because of environmental considerations.

Fujitsu and Digital Process have released the new VPS software, V15L10, in order to support the environmentally-friendly activities of companies and to help them to improve the efficiency of their product manufacturing.

Product Features

1. Optimally simulates the assembly of large-scale complex products in 3D

Display performance has been improved in order to make 3D simulations of complex products containing as many as 30,000 components, equivalent to the number of parts in a copy machine, more optimal. A number of steps were taken to enable the rotation and translation of objects to smoothly follow the user's mouse movements, even with extremely complex products, thereby enabling a display response that is approximately ten times faster than previous packages. In addition, CAD conversion has also been greatly improved to boost performance. Users can now perform assembly process reviews that incorporate data from an entire product, as well as produce animated images and conduct design reviews. This allows customers to improve the quality, cost, and delivery of their products.

2. Extensive support for production preparation

By utilizing the assembly process review features of the VPS/Manufacturing optional module which assists with on-screen reviews, users can easily edit the breakpoints between processes while checking the details and number of steps in each. This allows assembly process verification that takes into consideration the efficiency of line balancing. In addition, with improved features for allocating and assessing resources (both people and equipment) for each process, it is possible to look at the 3D models and calculate the number of people needed on the production line. When combined with already available functions, these features allow companies to conduct a coherent production preparation process, enabling them to accelerate the frontloading of production preparation work, as well as helping them to quickly start production and improve yield rates once full-scale production has begun.

21st Design Engineering & Manufacturing Solutions Expo

This software will be on display at the 21st Design Engineering & Manufacturing Solutions Expo, running from June 23-25 in Tokyo.

Pricing and Availability

Product Name	Pricing in Japan (excluding tax)	Availability
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VPS V15L10	Digital Mockup	JPY 2.5 million	End of August 2010
	Manufacturing	JPY 4 million	End of August 2010

* Pricing above is for a single-client license. VPS/Manufacturing requires VPS/Digital Mockup

Sales Target

5,000 licenses over the next three years

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Latest Release of the D-Cubed PGM, Version 57.0

Released May 2010

Siemens PLM Software announces the latest release of its Profile Geometry Manager (PGM), a software component that adds a range of productivity tools to CAD/CAM applications. [Learn More](#)

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Lattice Technology Releases XVL System Toolkit ver. 3.1

15 June 2010

Lattice Technology® Inc. released XVL System Toolkit version 3.1.

XVL System Toolkit is an enterprise integration platform that allows digital mockup, visualization, and technical documentation workflows to be integrated within existing enterprise IT platforms such as SAP®, TeamCenter®, Windchill® and others. The Toolkit is delivered as 3 technologies: XVL Processor, XVL Reducer and XVL Filter. When integrated within a system, these tools are triggered to automate the creation and output of enhanced 3D manufacturing data and technical documentation, check 3D data for interferences and so on, and allow 3D data to be redacted according to predefined rules to protect IP or reduce file size.

The new update of the XVL System Toolkit allows 3D data in the XVL v.10 format to be used during automated interference checking between parts, sub assemblies and assemblies. Another new feature is for geometry difference detection to be automated in a workflow. This is where two versions of the same 3D data are compared and visually reported to show where changes have occurred in the design. In addition, improvements to process list import and parts list export have been included.

XVL System Toolkit is a powerful device for manufacturers needing to streamline and automate the creation of documentation when design and other data changes, while working within an existing enterprise IT infrastructure. Combined with the XVL format, it enables 3D data to be usable with industry's smallest 3D file size with no loss of accuracy, and yet be delivered as highly productive manufacturing data and technical documentation instantly to all stakeholders in the manufacturing supply chain.

Find out more about XVL System Toolkit at

http://www.lattice3d.com/products/products_systemtoolkit_3d_software.html.

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Magma, GLOBALFOUNDRIES and Virage Logic Deliver Reference Flow for GLOBALFOUNDRIES 65-Nanometer Low-Power Process

14 June 2010

Magma® Design Automation, GLOBALFOUNDRIES and Virage Logic announced the availability of a Unified Power Format (UPF)-compliant RTL-to-GDSII reference flow. This automated, comprehensive solution streamlines the design and manufacture of ICs that incorporate Virage Logic's intellectual property (IP) and are manufactured in GLOBALFOUNDRIES' 65LPe 65-nanometer (nm) low-power process technology.

This integrated RTL-to-GDSII reference flow is based on Talus® 1.1, the current release of Magma's IC implementation system, and leverages Talus Design for synthesis, Talus Vortex for physical design and Talus Power Pro for power optimization. The reference flow supports power intent through the UPF standard, incorporating multiple voltage domains, retention cell management, insertion of automatic level shifters and isolation cells, power switches, well tap cells and on-chip variation. Talus 1.1 also supports the CPF standard for power intent.

To validate the flow, a reference design incorporating Virage Logic SiWare standard-cell and SiWare memory IP was implemented in the Talus system using a UPF-compliant low-power design intent specification. The reference design met GLOBALFOUNDRIES' technical specifications including all low-power requirements.

"Creating a comprehensive low-power flow that delivers good performance is a challenging task," said Premal Buch, general manager of Magma's Design Implementation Business Unit. "The Magma-GLOBALFOUNDRIES-Virage Logic collaboration will help designers address these challenges by enabling them to quickly implement their low-power designs within Magma's Talus flow and take advantage of the low-power performance of the GLOBALFOUNDRIES 65LPe process."

"Our customers not only need advanced low-power solutions, they need to hit their critical market windows on time with reliable predictability," said Walter Ng, vice president, IP Ecosystem at GLOBALFOUNDRIES. "The reference low-power design implemented with Magma's Talus system and the Virage Logic library enables our customers to quickly take full advantage of GLOBALFOUNDRIES proven 65LPe process."

"Our mutual customers are increasingly being driven to reduce both dynamic and standby power consumption," said Brani Buric, executive vice president of Marketing and Sales of Virage Logic. "This new Magma-GLOBALFOUNDRIES-Virage Logic 65LPe reference design flow enables them to use the UPF standard along with our SiWare™ Memory and SiWare™ Logic to meet their low-power design requirements."

Availability

SiWare Memory compilers and SiWare Logic libraries enable SoC designers to optimize for power, performance, area and yield and are available to customers for the GLOBALFOUNDRIES 65LPe process through Virage Logic's foundry sponsored IP program. The reference flow is available from Magma, GLOBALFOUNDRIES and Virage Logic upon request.

Magma will demonstrate its entire line of chip design software in **booth 602** at the **47th Design Automation Conference (DAC)** June 14-16 at the Anaheim Convention Center in Anaheim. For more information on Magma's activities at DAC, visit <http://www.magma-da.com/DAC2010>.

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Magma Offers Free Trial of Titan Mixed-Signal Platform in Latest Phase of "Titan Up!" Program

14 June 2010

Magma® Design Automation Inc. announced the opportunity to download a free-trial version of the Titan™ Mixed-Signal Platform and analog design accelerators. This is the next phase of the "Titan Up!" program, which aims to educate analog designers about the latest technologies for analog and mixed-signal design.

Completing a simple online request lets designers use the software for 60 days at no charge. The "Titan Up!" free trial includes a software download and tutorial. Designers install the Titan Mixed-Signal Platform, along with Titan ADX and Titan AVP analog design accelerators. The tutorial guides them through creating and optimizing an analog design circuit using a prepared design example and Magma's FlexCell analog IP technology.

The "Titan Up!" program is available to current and prospective Magma customers. Designers can access the software as well as the "Titan Up!" online quizzes by visiting <http://www.magma-da.com/TitanUp>.

Analog design has traditionally been a manual, time-consuming task and reusing analog IP has been difficult, if not impossible. The Titan family of analog/mixed-signal design solutions delivers breakthrough capabilities, including layout-aware schematic design; rapid design exploration and optimization; dramatically improved productivity for layout designers; analog design reuse; and automated process migration. To highlight these solutions, the interactive "Titan Up!" program includes a series of online quizzes and a free trial of the Titan software, providing a designer-friendly introduction to Magma's analog/mixed-signal design solutions.

Magma will demonstrate Titan and its entire line of chip design software in **Booth #602** at the **47th Design Automation Conference (DAC)** June 14-16 at the Anaheim Convention Center in Anaheim, Calif. For information about Magma's activities at DAC, visit <http://www.magma-da.com/DAC2010>

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Magma's Titan and FineSim Validated for TSMC's First Analog/Mixed-Signal Reference Flow for 28-nm Processes

14 June 2010

Magma® Design Automation announced TSMC has validated the Titan™ Mixed-Signal Design Platform and FineSim™ SPICE and FineSim Pro circuit simulation products for TSMC's first Analog/Mixed-Signal (AMS) Reference Flow inclusion, targeting its most advanced 28-nanometer (nm) process technology. The TSMC AMS Reference Flow 1.0 aims to address advanced process effects to accelerate next-generation analog/mixed-signal IC designs. The combination of the AMS Reference Flow and Magma's Titan Mixed-Signal Design Platform and FineSim circuit simulator provide users with an integrated front-end and back-end analog design solution that accelerates time-to-market by improving designer productivity and enabling analog design reuse.

TSMC AMS Reference Flow 1.0 offers an advanced multi-vendor AMS design flow fully integrated with a TSMC AMS design package to manage the growing complexity of process effects as well as

design complexity in 40-nm and 28-nm process nodes.

Titan and FineSim provide an integrated analog design and simulation platform that complies with the requirements of the TSMC AMS Reference Flow 1.0. Leveraging the fast, accurate FineSim circuit simulation tool, Titan performs analysis of yield, multi-process corners and noise effects. The Titan physical design capabilities include constraint-driven analog placement and routing technology for fast layout prototyping and semi-automatic rule-driven layout assistance.

"Selecting Titan and FineSim for the AMS Reference Flow is another valuable result of our ongoing collaboration with Magma to enhance analog and mixed-signal design methodologies," said S.T. Juang, senior director of Design Infrastructure Marketing at TSMC. "We're pleased to continue to strengthen the relationship between the two companies for the benefit of our mutual customers."

Magma Analog/Mixed-Signal Product Support for AMS Reference Flow 1.0

The TSMC AMS Reference Flow 1.0 is supported by key Magma products.

FineSim Pro and FineSim SPICE work with Titan to enable SPICE-level simulation and post-layout simulation with extracted parasitics.

- FineSim Pro provides circuit-level simulation, enabling the simulation of the most challenging analog mixed-signal design with SPICE accuracy and unprecedented performance.
- FineSim SPICE leverages Magma's Native Parallel Technology (NPT) to provide the accuracy, speed and capacity needed to simulate the most challenging analog designs.
- The Titan Mixed-Signal Platform includes the following products:
 - Schematic Editor (SE) is a complete and powerful schematic editor, facilitates quick schematic capture and editing, advanced search and replace, easy hierarchy traversal and design management. It has full support for buses and bundles, inherited connections and netlisting of various formats.
 - Analog Simulation Environment (ASE) is a specification-driven, test-based analog simulation environment, empowers organized design verification across different operating conditions. Pass-fail indicators locate the failing cases and indicate final signoff with respect to the specifications. Features such as simulator-independent tests and device under test (DUT)-based test mapping help migrate the test benches across different versions of the design.
 - Schematic-Driven Layout (SDL) enables the creation of a connectivity-aware layout using PCells. Cross-probing, flyline displays during move and wiring, check and update of design data and opens and shorts locator functions minimize the physical verification loop by ensuring a layout-vs.-schematic (LVS)-correct layout. Pattern-based device module generation accelerates the analog layout placement. Titan SDL also allows one instance to be bound to many instances between the schematic and layout.
 - Layout Editor (LE) provides a complete set of features to accomplish full-custom layout design in fewer clicks. Its high capacity and speed provides mixed-signal chip integration within a single environment. Titan LE also provides advanced features like live-DRC, automatic guard-ring creation, net tracing, PCell abutment and interactive wire creation that includes bus routing.
 - Analog Virtual Prototyper (AVP) includes a detailed device placement engine that produces a high-quality, DRC-clean layout. The powerful constraint-based placement can handle various placement styles including area, row and stack for new layouts.
 - Shape-Based Router (SBR) provides constraints such as shielding, differential pair routing, star and

matched routing, enabling this shape-based router to achieve highly precise analog routing results.

More information on Titan, FineSim SPICE, FineSim Pro and the TSMC 28-nm AMS Reference Flow 1.0 will be available in **Magma's booth 602** and the **TSMC Open Innovation Forum booth 294** at the **47th Design Automation Conference (DAC)** June 14-16 at the Anaheim Convention Center in Anaheim, Calif. For information about Magma's activities at DAC, visit www.magma-da.com/DAC2010.

Availability

Titan and FineSim are currently in production release. The TSMC AMS Reference Flow 1.0 will be available in limited release and at no charge to selected customers early in the third quarter of 2010. General release is targeted for the fourth quarter of 2010. Customers may access the AMS Reference Flow 1.0 at the TSMC Online customer design portal <http://online.tsmc.com/online/> or contact sales and support representatives for details.

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Mentor Graphics Extends TSMC Reference Flow 11 with Support for ESL and Integrated Design and Manufacturing Closure

14 June 2010

Mentor Graphics Corporation announced it has further expanded the range of technologies included in TSMC Reference Flow 11.0. The expanded Mentor track provides a complete front-to-back solution with new support for the [Vista™ platform](#) and the [Catapult® C synthesis](#) tool, expanded low power and 28nm routing features in the [Olympus-SoC™ place and route system](#), and the [Calibre® InRoute](#) solution, which provides Calibre signoff analysis and automated repair integrated in the Olympus-SoC physical design system.

“Mentor’s Reference Flow 11.0 track has expanded to cover the entire IC design and verification cycle, from electronic system level design through functional verification, implementation and test,” said S.T. Juang, senior director of Design Infrastructure Marketing at TSMC. “As TSMC customers move to 28nm and beyond, they want tools that allow them to work at higher levels of abstraction, and give them confidence that their designs can meet performance and low power goals and achieve yields that TSMC processes are capable of delivering. The Mentor Reference Flow 11.0 track meets those requirements.”

Electronic System Level Design, High-level Synthesis and Functional Verification

The Vista electronic system level (ESL) design and verification platform supports optimizing performance and power at the architectural level on a TLM2.0 transaction-level platform. The Vista platform also enables validation and debug at the TLM level and supports virtual prototyping for early software validation and debug.

For the TSMC ESL verification reference flow, the Vista platform facilitates reuse of C++ models and stimulus functions in the Vista TLM2.0 models, and the validation and debug at the TLM level of the assembled transaction level platforms. In addition, the Mentor ESL flow allows reuse of the Vista platform created TLMs in Open Verification Methodology (OVM) block level configurations running on the Questa® functional verification platform and the reuse of C++ models in the Catapult C SCVerify flow.

The Catapult C synthesis tool synthesizes ANSI C++ code to production quality RTL, significantly

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reducing the time to verified RTL without sacrificing quality of results (QoR). In the HLS RF11 flow, a production quality design and verification flow is established showing C code to gates targeting TSMC 65nm and 40nm low-power process technologies. A key new feature shown is integration with the TSMC Memory Compiler to provide on-the-fly memory generation for verification and RTL synthesis. The flow includes Catapult C libraries for TSMC standard cell and memory libraries, which are central to the Catapult C technology-aware, high-level synthesis engine. In addition, Reference Flow 11.0 illustrates Catapult C's ability to explore various power, performance and area implementations, which allows designers to manage algorithms, control-logic and low-power implementations to achieve full-chip applicability.

Mentor's Questa functional verification platform is a comprehensive ESL to RTL to gate-level verification solution. The Questa platform promotes efficient ESL verification reuse supporting stimulus and reference model reuse from ESL through RTL to gate-level descriptions based on the OVM. Users write their testbench and reference models once. As the design is refined from high-levels of abstraction to gate-level implementation, the built-in multi-lingual features of the Questa platform give users smooth and seamless transition for significantly reduced errors associated with hand recoding and increased productivity.

For low-power design, Mentor's [0-In® Formal](#) tool with Clock-Domain Crossing and AutoCheck features are included for formal verification.

IC Implementation, Physical Verification and Testing

New capabilities in the Olympus-SoC place-and-route system make it ready for TSMC's most advanced processes including complete support for TSMC 28nm routing rules, stage-based on-chip variation (OCV) tables for clock and data paths, and context-dependent timing, power and placement. In addition, low-power design flow is enhanced with support for UPF-based IP models, advanced nested voltage islands (donut shapes), and multi-vendor UPF interoperability. The Olympus-SoC product now provides complete support for TSMC's iDRC, iRCX, iPRT, and iLPC formats, as well as enhanced DFM utilities applied during routing.

Also new in Reference Flow 11.0 is the Calibre InRoute manufacturing closure platform, which enables designers to natively invoke Calibre tools within the Olympus-SoC place and route system to achieve true manufacturing closure during physical design. A new Calibre Pattern Matching product integrated with Calibre InRoute and Olympus-SoC enables correct-by-construction design by recognizing and eliminating restricted layout patterns that can cause DRC/DFM violations.

The Calibre nmDRC, nmLVS, and xRC tools have been enhanced for TSMC's through-silicon via (TSV) offerings with new automation for verifying multi-die circuit implementations. In addition, the Calibre LFD tool now also supports TSMC's iLPC format.

For silicon test and diagnosis, the Tessent™ product line has expanded support for hierarchical test including enhanced at-speed scan test with both embedded compression and logic built-in self-test (BIST). Reference Flow 11.0 also includes new capabilities for comprehensive embedded memory BIST, and a complete boundary scan implementation flow.

“Mentor's complete system-to-silicon track in Reference Flow 11.0 allows us to address our mutual customers' biggest challenges for 28nm, especially managing the complexity of design from the system level all the way to IC implementation and testing,” said Walden C. Rhines, chairman and CEO, Mentor Graphics. “Our close collaboration with TSMC allows us to close the loop between designers and foundries with tools that help our customers get their products to market faster with higher performance,

lower power consumption and greater reliability.”

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Mentor Graphics Provides Comprehensive Verification Support in TSMC Analog/Mixed Signal Reference Flow 1.0

14 June 2010

Mentor Graphics Corporation announced corporate-wide support for TSMC’s new Analog/Mixed-Signal (AMS) Reference Flow 1.0, including analog IC simulation, physical and electrical verification, high-accuracy extraction and design for manufacturing (DFM).

“We are very pleased with the Mentor solutions that have been incorporated into our first Analog and Mixed-Signal Reference Flow,” said S.T. Juang, senior director of Design Infrastructure Marketing at TSMC. “The unique capabilities provided by Mentor help ensure that our mutual customers are able to create high performance designs that will take full advantage of TSMC’s process. Moreover, full compatibility and integration between the [Calibre® platform](#) and all other design flows minimizes the learning curve for designers, while allowing them access to an industry-leading verification solution.”

The ICanalyst™ product provides a robust AMS functional verification platform for multi-process corner analysis and design document generation. With the tight integration with simulation engines and databases, the ICanalyst product delivers productivity improvements for analog/mixed-signal verification with its scenario manager and re-usable configurations. The [Eldo® simulator](#) handles netlists with large numbers of parasitic RC elements, and offers 3x speed gain with multi-threading technology for analog block level simulation. The [ADiT™ simulator](#) enables top level PLL simulation and 50x speed improvement over SPICE.

The new Calibre xACT 3D parasitic extraction tool delivers field solver level accuracy with the performance of a rule-based solution. This gives designers the quality extraction they need for sensitive analog circuits, such as convertors and matching circuits, and for critical digital nets. As part of the Calibre family, the Calibre xACT 3D product is not only a full-function extraction platform, it is integrated with Calibre nmLVS to provide a complete solution for analog designers.

Mentor’s Calibre PERC tool enables automated electrical rule checking and circuit verification to ensure designs meet TSMC’s requirements in the area of analog layout guidelines. The product’s unique ability to combine topological and geometric checking in a hierarchical design allows it to flag complex errors so designers can easily debug and improve overall circuit quality, making Calibre PERC the only product capable of doing these checks in TSMC’s AMS 1.0 reference flow. As part of the Calibre platform, it is tightly linked to physical verification and parasitic extraction tools to ensure an efficient design flow.

The Calibre nmDRC and nmLVS products are also part of the TSMC 28nm AMS Reference Flow. Moreover, the Calibre platform is the physical verification platform used to validate TSMC PDKs (Process Design Kits), which provide the models used in their first AMS Reference Flow.

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Mentor Graphics’ Olympus-SoC Place and Route System Now Supported by X-FAB

15 June 2010

CIMdata PLM Industry Summary

Mentor Graphics Corporation announced that X-FAB Silicon Foundries now supports Mentor's [Olympus-SoC™ place and route](#) system across X-FAB's wide range of advanced modular CMOS process technologies for digital and analog/mixed-signal (AMS) applications.

The Olympus-SoC system efficiently meets place and route challenges of sophisticated mixed-signal designs targeting X-FAB processes at 0.35 and 0.18 micrometers. Features in the Olympus-SoC product, such as multi-corner-multi-mode (MCMM) optimization for timing, power and signal integrity, on-chip variation support, concurrent timing and leakage optimization, and MCMM clock tree synthesis (CTS), ensure the largest and most complex designs can be fully optimized for performance, power and reliability, and made extremely robust for high-yield manufacturing.

In conjunction with X-FAB process technology, the Mentor Graphics IC design flow extended with the Olympus SoC product can help designers achieve higher productivity and reduce time to market with comprehensive, verified custom implementation solutions. X-FAB's analog and mixed-signal technology is ideally suited for industrial, automotive and telecommunication applications. Based on a mixed-signal CMOS process, X-FAB's technology features core and process modules such as low Vt, low leakage, embedded non-volatile memory and high-voltage options. In addition, X-FAB offers a standard or thick top-metal layer, PIP (Polysilicon-Insulator-Polysilicon) and MIM (Metal-Insulator-Metal) capacitors, and high-resistance polysilicon. A variety of MOS and bipolar transistors also is available.

The Olympus-SoC solution for digital ASIC and mixed-signal SoCs joins other Mentor Graphics IC design solutions supported by X-FAB, including the [IC Station® schematic and custom layout](#) editor, the [Eldo® SPICE simulation](#) tool, the [Questa® AMS functional verification](#) tool, and the [Calibre® physical verification](#) and DFM platform. Complete design kit support for Mentor tools, including the Olympus-SoC product, is available at the X-FAB Technical Information Center on X-FAB's internet portal.

According to Thomas Ramsch, director of design support at X-FAB, "Our large, growing and diverse global customer base depends on us to deliver competitive technology and cost-optimized solutions. Customers who use Mentor Graphics EDA tools for IC design, including the Olympus SoC P&R system, can benefit from X-FAB's collaboration with Mentor to provide leading-edge CMOS technology and a productive, modern AMS implementation solution."

"We are very excited to support X-FAB and its customers in their adoption of Olympus-SoC," said Pravin Madhani, general manager of the Mentor Graphics place and route group. "We built Olympus-SoC from the ground with the flexibility to address specialized applications such as X-FAB's analog/mixed-signal and high-voltage IC business. X-FAB's customers will benefit from Olympus-SoC's extremely robust feature set and its seamless integration with the Calibre verification platform. Olympus-SoC is proven in numerous production tapeouts in multiple applications and across multiple nodes."

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Oracle Introduces Oracle's Primavera P6 Analytics

16 June 2010

CIMdata PLM Industry Summary

News Facts

To help organizations obtain up-to-the-minute information about their project portfolios, and in turn make better project investment decisions, Oracle announced availability of [Oracle's Primavera P6 Analytics](#).

Oracle's Primavera P6 Analytics is a new business intelligence solution that enables organizations to identify issues and uncover trends to reveal valuable insights into project and program performance.

This new solution provides management-by-exception capabilities through interactive dashboard reports, enabling organizations to benefit from enterprise-level reporting across the portfolio and insight into project trends and history.

The solution enables users to conduct root cause analysis and take corrective actions by drilling directly from the Oracle Primavera P6 Analytics dashboard into [Oracle's Primavera P6 Enterprise Project Portfolio Management](#) solution.

Oracle's Primavera P6 Analytics Details and Features

With more than 80 standard pre-built analytical views, Primavera P6 Analytics users can identify projects that do not align to strategic objectives, are over-budget or under-performing, and then make the necessary course corrections. If needed, companies can add to the pre-built views by quickly and easily customizing additional views and dashboards.

A common Web-based portal helps ensure that users can quickly and easily access and navigate their dashboards and reports.

The solution is based on Oracle Business Intelligence Enterprise Edition Plus (Oracle BI EE), which helps ensure that Primavera P6 Analytics leverages best in class BI technology that reduces implementation time for future integrations.

Oracle BI EE's ability to support Oracle and non-Oracle applications and data sources enables Primavera P6 Analytics to match project data with information from different systems in the enterprise, such as financial and customer data, enabling organizations to create a single source of truth for their projects and programs.

By providing transparency into project portfolio performance and a single source of truth, Primavera P6 Analytics adds value to existing Oracle Primavera P6 Project Portfolio Management deployments by enabling managers to identify greater efficiencies and potential ROI on their projects.

Supporting Quote

“Without clear visibility into project trends and issues, it is very difficult for organizations to efficiently manage the performance of their project portfolios,” said Joel Koppelman, senior vice president and general manager, Oracle's Primavera Global Business Unit. “The addition of Oracle's Primavera P6 Analytics to Oracle's enterprise-class PPM suite helps overcome this challenge by significantly reducing project portfolio management blind spots. Furthermore, with pre-built analytics and flexible and intuitive dashboards, organizations can immediately begin to realize greater efficiencies through a level of transparency and visibility that was simply not possible until today.”

Supporting Resources

[Oracle Primavera Enterprise Project Portfolio Management](#)

[Oracle Primavera P6 Enterprise Project Portfolio Management](#)

[Oracle Primavera P6 Analytics Datasheet](#)

[EPPM Blog](#)

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PrimeTime 2010 Scales Timing Analysis Beyond 500 Million Instances

14 June 2010

Synopsys, Inc. unveiled new PrimeTime® HyperScale technology that enables static timing analysis (STA) to scale beyond 500 million instances. PrimeTime HyperScale technology provides design engineers the insight required to solve many of the timing integration and closure problems they face with today's large system-on-chip (SoC) design flows while delivering a 5 to 10X boost in performance and capacity.

PrimeTime HyperScale technology fits with today's large SoC physical implementation flows where designs are implemented in blocks and then assembled at the chip-level for final timing closure and signoff. It improves the timing closure process by providing design engineers a better mechanism to look at block-level timing in the context of the full-chip timing earlier in the design process. By directly reusing block-level timing analysis and constraints, the HyperScale technology enables a 5 to 10X boost in full-chip STA runtime and capacity without the accuracy limitations in current modeling techniques. Its auto generation capabilities provide design engineers with accurate and up-to-date timing contexts for the chip and block throughout the design process, leading to better decisions and enabling fewer iterations to reach timing closure.

"We have been working with Synopsys to address the challenge of scaling timing analysis and signoff processes as our designs approach half a billion instances," said Jim Miller, corporate vice president, Design Engineering at Advanced Micro Devices. "We see the PrimeTime HyperScale technology as a natural fit to deliver long-term scalability by better matching the physical implementation and timing analysis methodologies, allowing us to begin the timing closure process much earlier in the flow. We are excited at the prospects for PrimeTime HyperScale technology, and have high expectations for the potential runtime, capacity, and productivity benefits that may be possible from this approach."

The new PrimeTime HyperScale technology enhances the existing Galaxy™ Implementation Platform by providing more precise timing context to drive timing closure in IC Compiler. In addition, the HyperScale technology works with existing PrimeTime features like signal integrity (SI) analysis, advanced on-chip variation (AOCV) analysis, multi-scenario analysis and threaded multicore analysis, enabling design teams to further boost STA productivity and improve overall timing closure turn-around-time.

"As SoCs continue to increase exponentially in complexity, scalability of the design flow is a crucial factor in maintaining productivity," said Antun Domic, senior vice president and general manager, Synopsys Implementation Group. "By adding HyperScale technology, the 2010.06 release of PrimeTime includes a significant innovation to extend STA scalability for the next five to 10 years. This release represents an important milestone in delivering higher design team productivity both today and in the future."

In related announcements today, Synopsys revealed two other productivity enhancements to its Galaxy Signoff product portfolio. New Rapid3D technology incorporated in Synopsys' StarRC™ Custom parasitic extraction solution provides up to a 20X extraction speedup for sub-45nm custom IC design

and library characterization. In addition, the latest release of Liberty™ NCX provides up to a 7X boost in characterization speed while providing the most efficient composite current source (CCS) models for IC Compiler physical implementation and PrimeTime timing analysis, enabling designers to quickly achieve timing closure and improve productivity.

Availability

The PrimeTime HyperScale technology is in limited customer availability and available to select customers in the PrimeTime SI 2010.06 release.

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Right Hemisphere Contributes Visualization Technology to SAP's Complex Assembly Manufacturing Solution (CAMS)

17 June 2010

[Right Hemisphere](#)® announced that its visualization technology is being integrated into the complex assembly manufacturing solution (CAMS) 7.1 software from SAP AG. CAMS 7.1 is scheduled to include an enhanced version of the Right Hemisphere Deep View™ software. The planned integration will standardize the viewer across all of the applicable modules in the CAMS suite. Right Hemisphere's technology delivers a host of enhanced communication and collaboration capabilities, including more visual information to help improve decision making and reduce errors across the enterprise.

"Our strategy is to complement SAP's manufacturing execution and business solutions with best-in-class technologies from our partner ecosystem," said Magnus Bjorendahl, global director, Aerospace & Defense solutions, SAP. "The result is a set of well-matched technologies that increase production responsiveness and improve operational excellence for our aerospace and defense customers. Integrating Right Hemisphere's advanced 3D viewer with the CAMS suite will enhance our solution by enabling business and visual data to flow harmoniously across the enterprise."

Today at the Solution Summit for Aerospace and Defense, being held in Dallas, Right Hemisphere is giving attendees a look at the viewer capabilities that are scheduled to ship with CAMS 7.1. For example, Right Hemisphere will show how Deep View generates and displays 3D animated work instructions to help accelerate shop-floor assembly procedures and reduce errors.

SAP's CAMS will be the next major SAP solution to integrate Right Hemisphere's visual enterprise technology. In 2008, SAP signed an OEM agreement to license Right Hemisphere's 2D and 3D visualization technology. The SAP® Product Lifecycle Management (SAP PLM) application was the first SAP enterprise application to integrate and take advantage of Right Hemisphere's 3D platform. Building on this relationship, Right Hemisphere is working on additional ways to visually enhance business processes across the SAP solution suite.

The integration of Right Hemisphere's 3D viewing technology in both the SAP PLM and CAMS solutions will allow users to incorporate Right Hemisphere client and enterprise software products with their IT infrastructures. With Right Hemisphere's Deep Exploration™ client software and Deep Server™ enterprise software deployed, customers can leverage visual product information directly sourced from engineering to eliminate some of the inefficiencies and duplication of effort that occur further downstream in the enterprise.

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Synopsys Delivers Optimized Lynx Design System for Common Platform 32/28-nm Technology

14 June 2010

[Synopsys, Inc.](#) announced it is delivering an optimized, pre-validated design environment for the Common Platform alliance (CPA) 32/28-nanometer(nm) high-k metal gate (HKMG) technology based on Synopsys' Lynx Design System. Accomplished under a multi-year collaboration with ARM and the Common Platform alliance [IBM, Samsung Electronics, Co., Ltd., GLOBALFOUNDRIES], the optimizations to the Lynx Design System and its Galaxy™ Implementation Platform-enabled flow for ARM's advanced physical IP and the ARM Cortex™ A9 MPCore processor reduce risk and total development cost for advanced 32/28nm system-on-chip (SoC) designs.

Synopsys' support for the HKMG 32/28-nm technology includes:

- An optimized Lynx Design System
 - A flow configured for the pre-validated ARM CPA 32/28-nm LP standard cells and memories, which expedites design setup and start
 - Baseline design checks and guidelines for the CPA 32/28-nm LP node that speed design closure and tapeout
 - A performance- and power-optimized implementation flow for the ARM Cortex-A9 MPCore processor that targets GHz+ results using ARM physical IP
 - An environment for full SoC integration of processors, peripherals and interface IP
- Full Synopsys Galaxy Implementation Platform enablement for the 32/28-nm LP technology
- Silicon-proven Synopsys DesignWare® connectivity IP, such as USB 2.0 On-the-Go (OTG) PHY

"Along with our partners in the Common Platform alliance, we have collaborated with Synopsys to tune the Lynx Design System and DesignWare connectivity IP for 32/28-nanometer low-power process technology," said Andy Brotman, vice president of Design Infrastructure at GLOBALFOUNDRIES. "Our customers are now able to immediately benefit from the unique advantages of ARM physical IP and Synopsys tools, flows and IP for a low risk, scalable path to implementing their designs in our 28 nanometer HKMG technology."

"Through early and deep collaboration between ARM, Synopsys and the Common Platform alliance, designers have a rich design environment for 32/28 nanometer SoCs that takes full advantage of the IP, tools and process technology," said Simon Segars, EVP and GM, physical IP division at ARM. "The jointly-optimized design flow in the Lynx Design System aims at achieving gigahertz-plus results 'out of the box' with ARM physical IP for our Cortex-A9 MPCore advanced processor, which is at the heart of leading mobile SoC designs."

CIMdata PLM Industry Summary

"By leveraging the collaborative strengths of ARM, the Common Platform alliance and Synopsys, we are delivering a production-ready design solution that enables our mutual customers to adopt the latest technologies for their most advanced chips," said John Koeter, vice president of Marketing for the Solutions Group at Synopsys. "Building on silicon-proven products such as the Lynx Design System, Galaxy Implementation Platform tools and DesignWare IP enables our customers to mitigate their project risks and streamline their implementation process."

Availability

The Synopsys Lynx Design System is available immediately from Synopsys: <http://www.synopsys.com/lynx>. ARM physical IP for the 32/28-nm HKMG process is readily accessible from ARM through DesignStart: <http://designstart.arm.com/>. The CPA 32/28-nm LP HKMG process and enabled PDKs are available from respective CPA companies: GLOBALFOUNDRIES, IBM and Samsung.

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Synopsys Unveils Galaxy Characterization Solution for Standard Cells, Complex Macros and Memories

14 June 2010

Synopsys, Inc. introduced its Galaxy Characterization Solution. The Galaxy Characterization Solution is a comprehensive suite of tools architected to generate compact, highly-accurate libraries for the design and implementation of complex system-on-chips (SoCs). Today's SoCs require libraries that contain hundreds of gigabytes of timing, power, noise and process variation data to ensure the chip meets all performance criteria. The Galaxy Characterization Solution is the only solution that can reduce the library size by an average of 4X and deliver precise timing, noise and power models for standard cells, macros and memories in the compact composite current source (CCS) library format.

The Galaxy Characterization Solution is based on Synopsys' golden-accuracy HSPICE® circuit simulation, technology-leading StarRC™ extraction, NanoTime transistor-level timing and Liberty™ NCX library modeling technologies. The compact CCS models generated by the solution feed into the IC Compiler physical implementation and PrimeTime® signoff tools, enabling designers to quickly achieve timing closure and improve productivity.

As process geometries shrink to 28 nanometers (nm) and below and clock frequencies rise, it is essential to account for signal integrity (SI) and variation effects in the timing and noise model libraries to ensure proper silicon performance. As a result, library sizes can quickly explode from tens of gigabytes to hundreds of gigabytes. This poses a dilemma for the designer who needs accuracy but can't handle the enormity of the library or a potential increase in run time. To address this, Liberty NCX generates a compact CCS model that can reduce the library size by an average of 4X without impacting accuracy. In addition, Liberty NCX has been tuned for noise model generation, resulting in up to a 7X speedup. PrimeTime and IC Compiler readily process the compact CCS format, saving valuable run time, disk space and, ultimately, engineering costs.

"[Synopsys'](#) unique combination of technology and innovative methodologies enables the Galaxy Characterization Solution to deliver a comprehensive characterization capability that covers all aspects of designers' needs," said Dr. Antun Domic, senior vice president and general manager, Synopsys Implementation Group. "High-precision compact CCS models for power, timing and noise, combined with the seamless handoff to PrimeTime and IC Compiler allow designers to implement their SoC

designs with a high degree of confidence."

Today, the Galaxy Characterization Solution supports timing, power and noise models for standard cell libraries. Upcoming releases will provide timing and noise models for complex macros and embedded memories and will employ the NanoTime static timing engines to generate the results.

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Synopsys Unveils StarRC Custom 3D Extraction Delivering 20X Speedup

14 June 2010

Synopsys, Inc. unveiled Rapid3D technology, a new 3D fast field solver engine fully integrated into Synopsys' StarRC™ Custom parasitic extraction solution. Building on the gold standard Raphael NXT engine, Rapid3D technology delivers attofarad accuracy and significant speedup by incorporating the latest advancements in 3D field solver algorithms. These algorithms take full advantage of modern multicore hardware to solve the accuracy and runtime challenges of sub-45-nanometer (nm) extraction for custom IC design and IP characterization.

Rapid3D technology is embedded as a standard feature in StarRC Custom, providing users reliability, leading parasitic modeling and standard interfaces to achieve silicon accuracy and improved productivity. On customer designs, the advanced Rapid3D algorithms have shown up to 20X runtime improvement in single processor core performance. In addition, Rapid3D technology has demonstrated near-linear multicore scalability, with up to an additional 54X boost in performance on 64 cores. The multicore technology takes advantage of optimized multi-threading to maximize throughput, even on memory-constrained compute resources.

"Due to increasing parasitic effects at advanced process technologies, it is becoming harder to achieve accuracy and faster turnaround time for any leading-edge designs," said Eugene Chen, director of CAD engineering at Altera Corporation. "StarRC Custom with Rapid3D technology provides the speed and accuracy we need to help us achieve first-pass success and maintain a competitive advantage. In our evaluation, the Rapid3D technology delivered 13X faster runtime on a single CPU core."

Synopsys developed the StarRC Custom Rapid3D technology to enable custom designers to not only achieve faster 3D extraction, but also empower them to accelerate overall design turnaround time through productivity links with Synopsys' technology-leading implementation, simulation and analysis solutions. These include integration with the Galaxy Custom Designer® solution for in-design 3D extraction, optimized links with the CustomSim™ simulator for high-performance and high-accuracy simulation of memory and SoC custom designs, and an interface with the NanoTime™ transistor-level timing analysis solution for signal integrity signoff of custom digital circuits. In addition, Rapid3D technology seamlessly connects with the new Liberty™ NCX solution (also announced today) to significantly speed up the development of more accurate, compact and performance-efficient libraries for Galaxy™ implementation and signoff tools, including the PrimeTime® static timing analysis suite.

"The introduction of StarRC Custom Rapid3D technology reinforces Synopsys' commitment to provide innovative technologies that deliver silicon accuracy as well as a significant reduction in design cycle time," said Bijan Kiani, vice president of product marketing at Synopsys. "The customer results we've seen to-date have been very encouraging, and we look forward to bringing this breakthrough technology to all StarRC Custom users."

About StarRC Custom

CIMdata PLM Industry Summary

StarRC Custom provides the foundation of Synopsys' extraction tool suite, which also includes StarRC and StarRC Ultra. StarRC Custom offers extraction for high-accuracy custom analog/mixed-signal (AMS) and digital designs. StarRC offers full-chip gate-level and transistor-level extraction, and StarRC Ultra supports advanced analysis capabilities. The tools incorporate technologies such as highly-scalable multicore processing, custom layout integration, hierarchical extraction, feature-scale chemical-mechanical polishing (CMP) effects modeling and variation-aware extraction to enable designers to achieve signoff accuracy while meeting their stringent tapeout schedules.

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