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## Acquisitions

### ***ZWSOFT Announces the Acquisition of VX***

25 August 2010

ZWCAD Software Co., Ltd (ZWSOFT) announced that it has completed its acquisition of VX Corporation, an American pioneering CAD/CAM solutions provider since 1985. The acquisition is a continuation of the China based 2D CAD solutions provider's recent rapid growth in the CAD/CAM market. Currently, ZWSOFT services over 180,000 users in 80 plus countries around the world and is aiming to become a leader in both the 2D and 3D CAD/CAM market.

VX Corporation was known for its 3D CAD/CAM solution based on their state-of-the-art VX kernel. The VX development team located in Florida will continue to create 3D CAD/CAM software as a division of ZWSOFT but will now be aided by a much larger International team. As a wholly owned subsidiary of ZWSOFT, the VX and ZWSOFT will adopt this technology for their latest product, ZW3D. This new all-in-one CAD/CAM solution will extend enterprise-level mechanical design and engineering capabilities to the desktop at a fraction of the cost of other comparable systems. Unlike other CAD/CAM companies, ZWSOFT now owns and controls its own proprietary kernel. This enables ZWSOFT to meet the growing demands of the manufacturing marketplace and accommodate business expansion.

ZWSOFT will release the ZW3D product line in September during the company's annual Global Partner Conference. ZWSOFT hopes to give ZWCAD customers a familiar interface for them to broaden their designs with a 3D solution, and improve on the services and features provided by VX Corporation to their loyal consumers.

VX Corporation Founder and CEO Mark Vorwaller had this to say, "The acquisition by ZWSOFT of VX is the next chapter in our company's history. I'm confident that the ZWSOFT vast resources and dedicated staff will be able to improve upon our VX kernel. I am sure our cooperative efforts will meet the needs and expectations of our loyal customers."

Similarly, CEO of ZWSOFT, Truman Du, said of the acquisition, "This marks a new era in ZWSOFT, by breaking into the 3D market, we are able to fulfill our company's pledge to CAD users around the world: to continue to develop the CAD industry and improve on all aspects of it. Our entrance to the 3D

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market marks another step forward in fulfilling that pledge."

## About ZWSOFT

ZWSOFT, headquartered in Guangzhou, has three branches in Beijing, Shanghai, and Wuhan. It also consists of a wholly owned subsidiary company that is headquartered in Melbourne, Florida. As a leading supplier of CAD/CAM software solution, the company employs over 400 staff and is supported by an international network of highly skilled strategic partners, distributors, and resellers.

ZWCAD is ZWSOFT's flagship product. It meets the needs of a broad base of target groups in 2D/3D design industries with 180,000 users throughout the world. ZWCAD is the leading brand in China's CAD industry, and it competes successfully in over 80 other countries. For more information, please visit <http://www.zwcad.org/>.

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## CIMdata News

### ***PDMbridge®: Bridging the Gap Between ECAD and PDM (CIMdata Commentary)***

24 August 2010

Electronic Design Automation (EDA) is a special domain where only the most seasoned Electrical Computer-Aided Design (ECAD) experts reside—at least that's what many electrical engineers would say. Perhaps there is some truth to this statement. An electrical engineer's need for vast libraries of components, specialized systems analysis functionality, and the inherent complexities related to the combination of electrical, software, and hardware components have all made their job increasingly complex and challenging. For many of today's ECAD experts these challenges represent a fact of their day-to-day work life. The rapid emergence of products that are comprised of electronics, mechanical, and software components has placed many of today's ECAD experts in the forefront of product development and this means providing them with tools that increase their connectivity to enterprise processes and data is more important than ever.

Product Lifecycle Management (PLM), which has traditionally been used to handle information and processes associated with mechanical design must now, more than ever, prove itself to be an effective tool in managing mechatronic designs (i.e., the synergistic combination of mechanical engineering, electronic engineering, and software engineering) and their associated development technologies (e.g., ECAD, MCAD, CASE, CAE, etc.). The growing recognition of the importance of managing this complex environment is leading companies to expand their view of PLM to include the management of electronic designs and components as well as the software executed on those components. To support this need, a number of the leading EDA solution suppliers have developed and delivered product data management (PDM) capabilities that not only manage their EDA environment but also provide an integration point to an organization's overall PLM environment. Additionally, some of the comprehensive PLM solution suppliers offer products that support full product data management (incorporating software and electronics into the product definition). Finally, it is important to note that even some of the focused PLM solution suppliers, like Productivity Engineering GmbH, have defined and brought to the market technology-based solutions that bridge the gap that exists between EDA tools, data and processes, and an organization's PLM environment.

Productivity Engineering, which is based in the southern German town of Herrenberg, began as an

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engineering design house specializing in the design of digital circuits. For years they have been best known by many within the electronics industry as experts in the design of application-specific (ASIC) and field-programmable (FPGA) circuit design. The PDMbridge, one of Productivity Engineering's business units, has gained great expertise in the support of various EDA integration requirements over the years. This experience has helped Productivity Engineering gain a great appreciation of the difficulties and nuances related to the management and sharing of EDA-related data (e.g., material records, BOM structures, associated documentation, etc.) with its clients and their product-related data management environments since the late 90's. In turn, this has led them to the recognition that the integration of an organization's EDA environment to its data management solution can offer significant benefits, especially those related to a gain in efficiency and reduction of cost within the context of an organization's electronic design related processes and operations. Productivity Engineering allows an organization to take advantage of the experience it has gained through the implementation of its PDMbridge software solution—a focused-PLM solution that provides a robust link between many of today's leading ECAD and PDM systems.

Productivity Engineering's PDMbridge solution has been designed to span the process and data management gap that often exists between ECAD and PDM. Productivity Engineering reports that it developed PDMbridge with the following objectives in mind:

- Enable a uniform data resource for components, parts lists, and ECAD-related documentation so that an electrical engineer has access to a single source of product-related data.
- Allow information to be maintained and updated centrally and synchronized via linked systems so that overhead related to keeping data resources up-to-date is minimized.
- Deliver an easy-to-use, task-based interface for data access and exchange where all required data is quickly and easily available, thereby streamlining product data management processes.
- Enable a process-centric integration between the electrical engineers' development environment and the enterprise's PDM solution so that the organization's overall development process efficiency will increase.

As mentioned above, the PDMbridge solution provides companies with a sound link between their ECAD systems and their PLM environment's PDM system. This link has been designed by Productivity Engineering to allow ECAD users to take full advantage of specialty tools while providing an environment where they can continue to use product knowledge to transform designs and associated data into information that can be managed and leveraged by their organization's PDM system. This integration approach should eliminate data re-entry errors and guarantee the transfer of data between the integrated systems in a clear, concise, and valid manner. During the transformation process, the data being transferred is formatted by the PDMbridge solution in a transparent and unambiguous manner, and communication via the available interfaces is bi-directional.

PDMbridge's ECAD to PDM link manages those processes which make it possible to assign part (i.e., material) numbers for new materials in the PDM system and to transfer parts lists. This capability is handled by PDMbridge's BOM Management module. The PDMbridge solution supports this process by automating a number of critical tasks, including the verification by the PDM system that all the parts on a parts list generated by the ECAD system are available and approved for use. If these conditions are not satisfied, the parts list is rejected by the PDM system. If these conditions are satisfied, the PDMbridge automatically updates the part list in the PDM system.

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At its core, PDMbridge provides a fairly extensive set of BOM management capabilities. Its BOM Editor provides electrical engineers with a rich set of BOM creation and structuring tools that can be easily customized to support an organization's specific and perhaps unique requirements. The structuring tools are highly configurable and support the rule-based transformation of BOM structures created in ECAD, the addition of non-modeled parts, etc. prior to the structure being transferred to PDM thereby providing a BOM workspace highly tailored and optimized for electrical engineers. Additionally, the BOM Editor provides the capability to cache BOM structures for later access and the ability of trigger certain PDM processes needed for synchronization (e.g., part creation and approval processes). Fundamentally, PDMbridge's BOM Editor is a flexible work-in-process BOM management module that provides the interface between ECAD and PDM thereby bridging the gap that often exists between the ECAD users, and an organization's enterprise PDM system and its BOM management capabilities.

In support of PDM to ECAD system data transfer and processes, PDMbridge's Component Management module is responsible for bi-directionally synchronizing the data records and classification information between the PDM system and the ECAD system. Additionally, component attributes managed by the PDM system are integrated into the ECAD library. This makes all material record data from the PDM system available (i.e., visible) to the ECAD user. The ECAD system user can therefore ensure that all parts used in a design are included as a material master record managed within the PDM system. Productivity Engineering sees the handling of physical library data, e.g., Footprints, Symbols, etc. as another essential element of the Component Management module. They have gained a significant amount of experience in this area during enterprise customer projects throughout the last few years.

PDMbridge also offers the Document Management module. This module can be used either as a publishing tool for ECAD designs or as a tool supporting hierarchical work-in-process (WIP) design structures. Individual handling of schematic and layout data, as well as intellectual property block handling, is also one of the benefits of the Document Management module—satisfying the need for global collaboration between the various stakeholders. PDMbridge can be configured to handle various kinds of ECAD-related derived data that can be stored and managed by the organization's PDM system and associated with the appropriate part records. The documentation can later be retrieved and special data records can be defined, e.g., for printed circuit board production, assembly, etc. Additionally, PDMbridge provides capabilities that support the scheduling of data synchronization (e.g., overnight batching of jobs).

PDMbridge has been designed with an open and flexible architecture, making it easy to integrate with ECAD and PDM Systems. Currently, PDMbridge supports standard integrations between a number of ECAD tools (e.g., Mentor Graphics Board Station, Expedition and Pads, Cadence Allegro, and Zuken CR5000) and PLM enabling solutions, namely SAP's PLM solution and Dassault Systèmes' ENOVIA SmarTeam solutions. Additionally, Productivity Engineering reports that PDMbridge's architecture has been designed to easily integrate other ECAD and PDM systems.

With PDMbridge, Productivity Engineering has clearly addressed many of the critical issues that must be solved when integrating ECAD and PDM. The tool offers a solid data and process management approach that is flexible for today's rapidly-changing development environments. Productivity Engineering's PDMbridge enables a fairly unique approach to ECAD to PDM integration that should prove to be valuable to organizations that require it.

## **About CIMdata**

CIMdata, a leading independent worldwide firm, provides strategic consulting to maximize an

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enterprise's ability to design and deliver innovative products and services through the application of Product Lifecycle Management (PLM) solutions. Since its founding more than 25 years ago, CIMdata has delivered world-class knowledge, expertise, and best-practice methods on PLM solutions. These solutions incorporate both business processes and a wide-ranging set of PLM enabling technologies. CIMdata also offers research, subscription-based services, publications, and educational services.

To learn more about CIMdata's services, visit our website at [www.CIMdata.com](http://www.CIMdata.com), follow us on <http://twitter.com/CIMdataPLMNews> or contact CIMdata at: 3909 Research Park Drive, Ann Arbor, MI 48108, USA. Tel: +1 (734) 668-9922. Fax: +1 (734) 668-1957; or at Siriusdreef 17-27, 2132 WT Hoofddorp, The Netherlands. Tel: +31 (0)23 568-9385. Fax: +31 (0)23 568-9111.

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## ***“Visualization for Everybody” by Peter Bilello***

4 April 2010

The following article by CIMdata President, Peter Bilello, appeared in the April 2010 issue of [Time Compression](#):

Product data is the lifeblood of the manufacturing organization. In too many cases, however, this critical data is not readily available to those without access to the CAD system on which the models and related product definition information reside. These individuals are too often deprived of direct access to product-related information, and in these situations, groups must often rely on static, paper-based drawings and other documents that often are inadequate for conveying the huge amount of dynamic data relevant to their work initiatives. This is especially cumbersome in communications between globally dispersed groups and facilities. Today more than ever, enterprises in all industries need to be able to view, print, markup, and collaborate on all types of data throughout their product-definition processes. This means providing access to it for people in disciplines inside and outside of product engineering, as well as to their extended enterprise of suppliers, partners, and customers.

### **The Power of Visualization**

As an element of Product Lifecycle Management (PLM), visualization technologies provide broad access to product definition information, helping workers detect and resolve problems early in the development lifecycle—and lets more people apply their knowledge and experience throughout the product definition lifecycle. Visualization brings high-quality information to multiple disciplines and allows users to contribute insights from their own areas of expertise to improve the product being developed.

Through the use of these visualization technologies, manufacturers can convey product definition information to non-engineering groups much more effectively through 3D-viewable data generated directly from CAD models. Depending on the particular needs of various groups, users can animate assemblies, rotate and zoom in for closer inspection of components, add color-coding, view cross sections, measure and annotate, ghost exterior parts to reveal interior details, and even do product fly-throughs. Part of the power of visualization also is that detailed product-related data (e.g., part attributes) can be linked to them and is just a mouse-click away.

### **Opportunities Inside the Company**

A wide range of downstream groups within a company can benefit from visualization capabilities: manufacturing engineering, shop-floor personnel, and maintenance and repair to name just a few. Other

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groups potentially benefiting from product data visualization include product packaging, technical publications, sales, marketing, procurement, quality assurance, and testing.

**Manufacturing Engineering.** For tooling engineers and process planners, who ordinarily don't have the same CAD systems as product designers, a multi-format visualization and collaboration application is a reliable means of gaining an early understanding of the product being developed—that they will be expected to produce. This allows them to provide feedback to the design team about the manufacturing implications of a design. They are able to develop tooling and process designs from high-quality, intelligent graphical data that includes product manufacturing information with fewer risks of error. They can then develop work instructions that include exploded views, drawings, renderings or other illustrations and instructions generated in the visualization tool directly from the engineering data. With the right visualization tool, they can generate BOMs for parts, sub-assemblies, or the entire product, whether those components were designed in one CAD application or several.

**Shop Floor.** Rework is the bane of manufacturing with its direct, negative impact on time-to-market, costs, and therefore on profitability. Often the cause of rework can be traced back to miscommunication due to incomplete, inaccurate, out of date, or unclear data. Although many organizations provide their shop and plant personnel with access to workstations on the shop floor and the ability to print drawings, a more powerful alternative is to install a multi-format visualization application on these workstations so machine tool operators can view and manipulate 3D or 2D design data. They can query it for dimensions, geometric tolerances, surface-finish quality, welding specifications, and other critical product manufacturing information. If the visualization application supports precise measurements they can obtain any useful dimension not appearing on the drawing. They also benefit from having access to the BOM and the tool path, setup, and jig information it contains.

**Maintenance and Repair.** Depending on the type of product or contractual arrangements, maintenance and repair activities may take place at the manufacturer's facilities, a sub-contractor's facilities, or the customer's site, but in all cases will require maintenance and repair documentation. This information can be delivered along with a multi-format visualization tool in the form of on-line manuals containing embedded engineering drawings and models of the product or installation. Maintenance and repair technicians then have access to very high quality product information that they can not only consult, but also manipulate and query.

## **Leveraging the Extended Enterprise**

More broadly, tremendous opportunities exist in utilizing visualization to convey product-related information across the extended enterprise including suppliers and contractors, customers, and product development partners at multiple dispersed sites.

**Suppliers and Contractors.** In a just-in-time, on-demand world, ensuring that sufficient capacity is available when needed means understanding how the product design impacts on manufacturing processes, equipment, and materials requirements. Whether production is handled in-house or contracted out, it is prudent to involve manufacturing engineering and outside contractors in product development activities as early as possible. For design organizations the challenge involves clearly communicating product definition information so quotes for production or outside design work are accurate. This challenge is typically met by delivering product definition information as engineering drawings or as 3D models. Of course, the manufacturer must be able to accept product definition information in its delivered form, and this has often meant deploying the same design software as used by the design and engineering organization, regardless of its suitability for manufacturing's own purposes. This issue is compounded for contractors who work with multiple customers who use a variety of design

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applications. A multi-format visualization tool provides an effective alternative by working around CAD format incompatibilities. Visualization applications with on-line, real-time collaboration features make it easy to bring stakeholders together to respond to questions, review design proposals, and refine design elements.

**Customers.** Increasingly, companies are involving their customers in the product development process in order to better capture and confirm requirements. These customers, however, may not have in-house design resources or expertise in the particular CAD applications the company uses. How, then, does one communicate product definition information effectively? Despite their underlying complexity, 3D models are particularly good at communicating design information, and unlike engineering drawings, no particular technical expertise is required to understand them since they provide a realistic view of designs. A multi-format visualization application with markup functionality can be used to enable both technical and non-technical people to work with information-rich product definition information in meaningful ways, bringing their particular expertise to bear on the product design.

**Product Development Partners.** Close collaborators, of course, aren't always close. They can be located within the same building but more often than not are out of town or possibly continents away. Additionally, they might be using different design tools. There are many times during the product development process when it is desirable to bring expertise from such partners in dispersed locations to bear on a design or manufacturing issue. Visualization tools that include markup functionality are a first step in establishing an efficient feedback mechanism among team members—tools that can also bring together product data that have been authored by various design tools. They make it easy for individuals to participate in workflows in an effective way, to provide input that can be shared conveniently with other members in a timely manner. Some situations, however, demand more immediate interaction. In these cases, real-time collaboration allows participants to co-view and annotate relevant information on-line as they exchange ideas and explore design alternatives using the markup features of their visual-collaboration tool.

## Selecting the Right Solution

The right visualization application for most organizations is the one that gives them the broadest insight into their products by supporting all of the types of data the product team and other members of the organization are likely to need. A good visualization tool serves the needs of product engineering, manufacturing engineering, the shop floor, sales, marketing, training, maintenance, customer service, and any other group that benefits from the use, re-use, or re-purposing of design and product-related data throughout a product's lifecycle. It enables employees involved in product development, product support and sales support to see product data without resorting to the authoring applications; to interact with it; to interrogate it; to engage other team members by providing feedback. To maximize the benefits it delivers to these organizations, any visualization and collaboration solution must integrate with a number of different host environments such as Product Data Management (PDM) and corporate portal systems. Ideally, integrations are available "off-the-shelf," but at the very least the visualization and collaboration solution should provide a robust application programming interface (API) for custom integrations by the vendor or by third parties.

PLM solution suppliers have been very active in developing and enhancing visualization tools and technologies for such applications, and multiple commercially available visualization solutions can be found. The capabilities of these commercial offerings vary according to the primary intent of their focus, and the particular constraints of various environments. So although a single approach may not solve all problems, there are clearly a variety of solutions available today that can be utilized to solve a particular

company's needs.

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## Company News

### ***ANSYS Ranked on FORTUNE 100 Fastest-Growing Companies List for Second Consecutive Year***

24 August 2010

ANSYS has been ranked number 39 on the 2010 FORTUNE 100 Fastest-Growing Companies list. The ranking includes ANSYS as the sole provider of product development software, a recognition that underscores the strategic value of engineering simulation as well as the ANSYS leadership position in this growing and critical market. This is the second consecutive year that ANSYS has been included in the elite FORTUNE grouping.

To qualify for 100 Fastest-Growing Companies, foreign or domestic organizations had to meet the following criteria: be trading on a major U.S. stock exchange; file quarterly reports with the SEC; have a minimum market capitalization of \$250 million and a stock price of at least \$5 on June 30, 2010; and have been trading continuously since June 30, 2007. The company must also have revenue and net income of at least \$50 million and \$10 million, respectively, for the four quarters ended on or before April 30, 2010. Finally, the company must have posted an annualized growth in revenue and earnings per share of at least 15 percent annually over the three years ended on or before April 30, 2010.

Companies that met these criteria were ranked by revenue growth rate; EPS growth rate; and three-year annualized total return for the period ended June 30, 2010.

“In the current economy, organizations need to launch superior products quickly under competitive, cost and regulatory pressures,” said Jim Cashman, president and CEO of ANSYS. “The fundamental value of ANSYS engineering simulation software is not in doing what you did yesterday 10 percent more effectively; it’s in terms of being able to do things in completely different ways, breaking the status quo, jumping to that next curve. Business as usual is not an option.”

ANSYS makes engineering simulation software that companies can use early on in the development process to predict how well a design might function and behave in the real world. Engineers and designers in a wide array of industries — including automotive, aerospace, biomedical, defense and electronics — use its products to help minimize costs and reduce the amount of time it takes to rollout a finished product.

The full list and related stories appear in the September 6, 2010 issue of FORTUNE, which is available now at <http://money.cnn.com/magazines/fortune/fortunefastestgrowing/2010/index.html>.

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### ***AVEVA Announces New Centre of Excellence for Owner Operators in the Oil and Gas Industry***

24 August 2010

AVEVA announced the opening of a new oil and gas Centre of Excellence for Operations Integrity Management (OIM) in Stavanger, Norway. Addressing the complex needs of long term asset management, the centre will work with owner operators to design and deploy software solutions that meet their unique data handover, enterprise asset management and decision support requirements.

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AVEVA's recently announced acquisition of the oil and gas business from ADB Systemer AS forms the foundation for the new facility. Leveraging the experience and proven software solutions from the ADB acquisition, the new AVEVA Centre of Excellence is being launched with more than 20 years of expertise in the oil and gas industry.

The mission of the Centre of Excellence is to share the collective knowledge of creating and maintaining operational information integrity with organisations around the world. Through the use of recognised industry standards and world class software and consulting services, owner operators can improve the quality of their operational information. Better information integrity translates directly to their bottom line through reduced risk, accurate reporting, minimised rework, and lower overall operating costs.

The AVEVA software and consulting services play a key role in the mission of the new Centre. The AVEVA NET, Technical Information Manager (TIM) and WorkMate products deliver asset performance management solutions within a highly intuitive environment. In combination with AVEVA's 3D design and visualisation products, no other company can deliver such a proven and comprehensive information integrity solution for oil and gas owner operators.

"The opening of our new Centre of Excellence in Stavanger is a major milestone for AVEVA," explained Trond Straume, Head of Centre of Excellence, OIM Solutions at AVEVA. "This is an exciting opportunity to bring together the extensive experience gained through the pioneering work done with our customers here in Norway. We look forward to working closely with our colleagues around the globe as part of our focus on Operations Integrity Management in the oil and gas industry. One of our greatest advantages is the strong foundation upon which the Centre is build. We already have an impressive list of industry-leading operators that are using our solutions on brownfield and greenfield sites as part of their company-wide initiatives for operational excellence. We are delighted to play such a key role with our current customers and look forward to building new partnerships in the future."

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## ***Deelip Menezes Evaluated 3D Graphics Performance of KOMPAS-3D***

23 August 2010

Deelip Menezes compared the graphics performance of more than a dozen most popular CAD systems, among them was KOMPAS-3D, 3D solid modeler from ASCON Group. For comparison he used the default graphics options as set up by the CAD vendor. "KOMPAS-3D's default graphics settings are just fine to get a good performance on large models" – said Slava Kashirsky, international product manager at ASCON.

The results of 3D graphic performance evaluating with videos are available at Mr. Menezes' portal - <http://www.deelip.com/?p=2896>

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## ***I-Cubed Expands Its Value Added Reseller Program to China***

23 August 2010

Integrated Industrial Information, Inc. (I-Cubed™), a company specializing in the integration and collaboration of enterprise systems, announced that Beijing BLead Technology Co., Ltd ("BLead"), based in Beijing, China, is the first Asian-based participant to join the company's Value Added Reseller

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(VAR) program.

BPlead, a Platinum PTC reseller, is focused on helping its manufacturing customers enhance the R&D management and operational capacity of their high-tech enterprises. BPlead begins its participation in the I-Cubed VAR program by reselling I-Cubed's CAD integration (CADi) software for Solid Edge. As an I-Cubed VAR for this product, BPlead can provide its customers a solution to synchronize the design and data management experience.

"I-Cubed's domain expertise in CAD integration and Windchill is unparalleled", says Mr. Xu Youli, VP of PLM Consulting and Service at BPlead. "Our new partnership with I-Cubed helps our customers in China improve their CAD data management within Windchill."

I-Cubed's VAR program enables selected resellers the opportunity to broaden their customer offerings by complimenting their own product portfolio with I-Cubed solutions. The newest product additions to I-Cubed's VAR program include CADi software, a solution to manage CAD documents and drawings in Windchill without leaving the native CAD tool's user interface, and SuppliPack™, a solution that accelerates technical data package creation with support for Model Based Definition.

"I-Cubed's VAR program is in sync with our partnerships with Enterprise software providers, such as PTC, as well as our commitment to developing products that integrate with best in class solutions, like Windchill®," says Tony Pease, VP of Business Development at I-Cubed. "With our recent product launches, it is critical to have global VARs as our local first points of contact for customers. Our partnership with BPlead has strengthened our global presence and we look forward to serving customers in the Asian market."

For more information about I-Cubed's solutions, visit [www.i-cubed.com](http://www.i-cubed.com). If you are interested in participating in I-Cubed's VAR program, please send a request to [partners@i-cubed.com](mailto:partners@i-cubed.com).

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## ***Magma Design Automation Joins Si2's Design for Manufacturability Coalition***

24 August 2010

The Silicon Integration Initiative (Si2) announced that [Magma® Design Automation](#) is the latest member of Si2's Design for Manufacturability Coalition (DFMC). Magma joins other key players in the semiconductor supply chain, including Cadence Design Systems, IBM Corporation, Intel Corporation, Mentor Graphics, STARC, Synopsys, Tela Innovations and Texas Instruments, as DFMC members.

On August 10 DFMC members unanimously approved a 60-day Intellectual Property review period for the first official release of the specification for OpenDFM, a high-level DRC language that can be translated into a variety of proprietary verification languages with no loss of accuracy or performance. OpenDFM, scheduled for release later this year with rapid adoption expected by all major EDA vendors, silicon foundries, and end-user companies, describes the patterns for physical verification at a higher level than traditional DRC rules and recent tests indicate it has the potential to reduce the volume of DRC rules by 10X-20X.

The next release of OpenDFM will add rules for Lithography, Chemical Mechanical Planarization and Critical Area Analysis. OpenDFM provides a compact notation for the description of the patterns of physical verification rules that include conditional rules and ranges of acceptable values.

DFMC's charter is to specify open standards for software interfaces between EDA software tools and

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manufacturing software. The specification includes standard terminology definitions, semantics and exchange formats for relevant manufacturing information. It also includes standard software application program interfaces (API) for models describing different manufacturing processes, yield mechanisms and circuit behaviors.

“The DFMC is producing important work for the industry and we are pleased to have all major EDA vendors united in this important effort,” said Steve Schulz, president and chief executive officer of Si2. “Each member company has committed to work together and to produce an inclusive approach to involve all stakeholders to create an industry-wide solution.”

By joining DFMC, Magma continues to support the industry-wide initiative toward developing a common runset language. “With increasing design rule complexity and number of rules at 65 nm and below, physical verification can become a bottleneck in the delivery schedule,” said Anirudh Devgan, general manager of Magma’s Custom Design Business Unit. “Our collaboration with other members of the DFMC to define the specification and ensure interoperability of Quartz™ DRC and Quartz LVS with OpenDFM demonstrates our commitment to providing designers with faster physical verification flows.”

Membership in the DFMC is open to all interested parties across the semiconductor supply chain. For more information, see: <http://www.si2.org/?page=491>.

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## ***Nemetschek North America, Inc. Changes Name to Nemetschek Vectorworks, Inc.***

25 August 2010

Effective today, Nemetschek North America has changed its company name to [Nemetschek Vectorworks, Inc.](#)

"We are best known for our flagship Vectorworks® product line, and incorporating this brand into our company name better reflects our focus," said CEO Sean Flaherty. "Our top three markets are Japan, USA, and Germany, and a company name that is product-based rather than geography-based indicates our mission more clearly while also clarifying our position within the Nemetschek group."

Designers in 85 countries use Vectorworks software. In addition to English, the products are available in Japanese, German, French, Dutch, Italian, Spanish, Portuguese and Norwegian. With a global network of distributors and resellers, the Vectorworks product line is one of the most broadly sold design solutions available.

Over the course of the next month, Nemetschek Vectorworks will transition all branding and communications materials to reflect the new name.

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## ***Siemens PLM Software Enhances Market Presence and Expands Customer Service Resources***

23 August 2010

[Siemens PLM Software](#) announced the appointment of Phoenix PLM , EnDuraSim and ADA CADPartners as new reseller service partners to significantly strengthen its customer-service and technical resources across Australia.

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Siemens PLM Software appointed these highly experienced partners following an extensive review to identify ways to enhance customer support and expand regional resources. In addition to appointing new resellers, Siemens PLM Software also increased its local professional capabilities by bringing on board a new professional services team led by a senior regional director for Australia & New Zealand.

Siemens PLM Software reseller service partners and customers will also gain access to a globally ranked, technical regional support center. The telephone support center will operate during Australian business hours. Siemens PLM Software will also have a local support account manager dedicated to partner and customer needs.

“Siemens PLM Software is committed to using our channel centric strategy to continually enhance customer access to our industry leading PLM technology,” said Rajiv Ghatikar, vice president and general manager, ASEAN/Australia, Siemens PLM Software. “The new appointments, dedicated customer-support and service initiatives expand our reach and execution capability to help customers leverage PLM to capitalize on growing market opportunities.”

Phoenix PLM, a KarelCAD group company, will sell and support a full range of Siemens PLM Software turnkey solutions including NX™ software, the company’s flagship computer-aided design, manufacturing and engineering analysis (CAD/CAM/CAE) solution, and Teamcenter® software from offices in Auckland, Adelaide, Brisbane, Melbourne, Perth and Sydney.

EnDuraSim, a Siemens PLM Software CAE solution partner, has been appointed as Tier 1 reseller based in Sydney. It will specialize in Siemens PLM Software's computer aided engineering (CAE) portfolios including NX Nastran® software, Femap® software, NX CAE and NX Advanced Simulation.

ADA CADPartners, based in Brisbane, will sell and support Teamcenter and Teamcenter® Express software in Queensland.

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## ***Siemens PLM Software Names Chuck Grindstaff as President***

26 August 2010

[Siemens PLM Software](#) announced it has promoted Charles C. “Chuck” Grindstaff, currently executive vice president of Products and Chief Technology Officer, to president. Grindstaff’s appointment takes effect October 1 upon the beginning of Siemens’ new fiscal year.

Grindstaff has worked in increasingly senior positions with Siemens PLM Software over 32 years and is recognized throughout the PLM industry for his visionary and thought leadership. Click [here](#) to see full [bio](#).

Grindstaff succeeds Dr. Helmuth Ludwig, who Siemens Industry Automation today announced would head its global Communications team. Ludwig, who has served in increasingly senior positions with Siemens since 1990 and who joined Siemens PLM Software as president in 2007 soon after its acquisition by Siemens, will focus on working with each of the division’s four business units to provide a range of strategic communications services. His appointment is also effective October 1. Click [here](#) to see full bio.

“Today’s announcement marks a strong endorsement of the success of integrating Siemens PLM Software into Siemens as well as Siemens PLM Software’s ability to out-perform the competition,” said Anton S. Huber, CEO of the Siemens Industry Automation Division. “Through Tony Affuso’s, our

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chairman and CEO, and Chuck's leadership, Siemens PLM Software will continue to capitalize on its superior technology and thus help Siemens continue to push forward in the industry software space. At the same time, Helmuth's deep knowledge of the company and its industries will support strong growth for the division's global business units. This is a win-win for Siemens and its commitment to customer success."

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## ***Tsinghua University Team Wins Inaugural CIBE and Bentley Future Cities China Student Design Competition***

27 August 2010

The Center for International Business Ethics ([CIBE](#)) in Beijing, the Dynamic City Foundation, and Bentley Systems, Incorporated announced that the project designed by the student team from the Architecture Department of Tsinghua University won top honors in the inaugural Future Cities China design competition. The competition was open to all students studying architecture and engineering in institutions of higher education, but all essay submissions had to be in Chinese. The program challenged students to use their design skills, along with Bentley software, to provide a master plan for the sustainable university campus of tomorrow. The goal was to create a campus that could serve as the cornerstone of a modern "green" Chinese city and help address the many challenges associated with complex, inner-city environments. Nearly 200 student teams from more than 70 universities submitted projects to the competition, which an independent panel of distinguished jurors narrowed to eight finalists. The finalists, which represented Beijing University of Civil Engineering and Architecture, China Agricultural University, Harvard University, Jiangnan University, Tsinghua University, and Xi'an Jiaotong University, competed in a three-day forum held 24-26 August. The winning team receives an all-expense-paid, one-month internship at the U.S. headquarters of Bentley Systems in Exton, Pennsylvania, U.S.A.

The teams consisted of up to three students, plus a professor or infrastructure professional as mentor. Each team submitted a proposed conceptual master plan for the sustainable university campus with the following elements:

- A logistic concept for the public space of the Future Cities campus, including its connections to the surroundings and a basic understanding of the landscape;
- A general massing study for the school's architectural program;
- An essay that describes the proposal's core concept, how the campus relates to the surrounding area and infrastructure, and how the proposal is sustainable.

The project site, Shuang Hua Yuan, is an underdeveloped plot in the heart of Beijing. It is disconnected from the city by large arteries, yet accessible by public transportation. The heavy infrastructural lines increase the complexity of the site, dividing it into four plots, typical of post-industrial cities in China. Alternatively, the site offers an open and green area on the edge of the central business district.

The winning university campus design project, titled "School in Between," cultivated an integrated or holistic approach to urban issues. In this design, the university is no longer the ivory tower. Rather, it assumes the role of intermediary for cultural exchange and provides space and facilities for the environment around it.

Second- and third-place honors went to the teams from Beijing Institute of Civil Engineering and

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Architecture and Xi'an Jiaotong University, respectively. Each member of these two teams receives a one-month internship at a Bentley office in China.

## About Dynamic City Foundation

The Dynamic City Foundation (DCF) is a research and design institute focused on the rapid transformation of China's urban landscape. In 2003, the DCF began the Urban China 2020 project, an in-depth study of the effects of China's flash urbanization and how designers can respond to this process. To achieve this, the DCF established <http://www.burb.tv>, an online collaboration platform for open-source research and design. The objective of building 400 new cities by the year 2020, as formulated by the former Chinese Minister of Civil Affairs, provides this project with its research framework. For additional information about DCF, visit <http://www.dynamiccity.org>.

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## ***Windcad in France Joins Aras Partner Program***

26 August 2010

[Aras](#)® announced that Windcad, an Autodesk partner and service provider located in Provence, France, has joined the Aras Partner Program. Windcad adds the Aras PLM software suite to its line of Autodesk offerings, which include Inventor, AutoCAD and a range of other tools for managing, viewing and sharing technical documentation.

Windcad is committed to excellence and prides itself on continuous improvement. The company applies its advanced skills and specialized knowledge to deliver a full range of services including training, consulting, development and implementation.

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## Events News

### ***AVEVA Brings Together Industry Specialists to Share Knowledge on Emerging Engineering Technologies in Australia***

23 August 2010

AVEVA Group plc announced the successful conclusion of its Engineering Information Management (EIM) Conference 2010 series in Perth and Melbourne. This high calibre event attracted over 120 delegates in the two cities where key customers and industry peers shared success stories and exchanged knowledge on emerging technologies and best practice.

Among the highlights of the conference were these key customer presentations;

Building a sustainable, fully digital operational Plant by Woodside Energy, illustrating how they successfully built a sustainable, fully digital operational plant, as well as the benefits in and the future of using AVEVA technologies.

The value of P&ID data interfacing with the AVEVA PDMS model by WorleyParsons and AVEVA Joint development, where the business benefits of interfacing external P&ID's to the 3D Model were demonstrated.

Otway Transition Project - Managing the migration of Engineering Information by Origin Energy

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focusing on the challenges faced during the acquisition of Otway asset and the importance of quick and accurate transition of engineering information to Origin's target systems, with minimal impact on operations and ownership handover.

Endeavour - the Project Knowledge Centre by Aker Solutions presented the project knowledge and management environment of "Endeavour" which enabled secure access of controlled documentation, design data, procurement data and 2D/3D CAD data via a browser without the need for a locally installed application.

The presentations above and conference as a whole demonstrated the real benefits of AVEVA solutions to businesses and showcased new technologies capable of driving global projects, reducing lead times and improving productivity and quality.

Richard Beck, Vice President and Country Manager, AVEVA Australasia, said: "We are very pleased with the outcome of EIM 2010 conference series and valuable experiences shared during these two days. I'm assured the knowledge learned will benefit of our business as well as our customers."

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## ***Delcam to Highlight Medical Machining Solutions at OrthoTec Europe***

24 August 2010

Delcam's Healthcare Division will demonstrate its technology for the manufacture of medical devices at the OrthoTec Europe exhibition to be held in Zurich on 29th and 30th September. Products to be highlighted will include the most recent releases of Delcam's PowerMILL and PartMaker CAM systems.

PowerMILL is Delcam's system to generate toolpaths for the machining of complex shapes quickly and efficiently, while PartMaker is Delcam's software to automate the programming of the complex multi-axis, turn-mill centres and Swiss-type lathes often found in the medical device sector.

The integrated PartMaker-PowerMILL solution provides a powerful system for automating the programming of complex multi-axis turn-mill equipment and Swiss-type lathes. The combination provides medical device manufacturers with an unlimited range of machining capability.

Delcam established its dedicated Healthcare Division in 2009, to provide a greater focus on this increasingly important part of its business. The new Division helps companies across the medical, dental and associated industries to apply Delcam's expertise and experience in taking advantage of the latest design and manufacturing techniques.

"Companies in the healthcare industry face the same demands from their patients that our traditional engineering clients see from their customers for faster delivery of better and cheaper products," explained Delcam's Managing Director, Clive Martell. "Patients want to receive higher quality products and services, and they want to complete their treatment in the shortest-possible time. At the same time, healthcare companies are under pressure to provide this higher quality at lower cost and to increase their productivity to meet the growing demand. These requirements can only be met through the application of more advanced and more automated technology."

Multi-tasking machines are being used increasingly in the medical and dental industries, to the extent that over 70% of Delcam's PartMaker software, the company's dedicated system for this class of equipment, is sold into the sector. Applications include the manufacture of all types of medical and

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dental screw, prosthetics, and components for medical equipment.

Delcam is also seeing increased sales of its dedicated software for the healthcare industry. This range includes the DentCAD and DentMILL programs for the design and manufacture of dental restorations and the OrthoModel and OrthoMill software for the creation of orthotics.

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## ***Delcam Sales Partners Celebrate Success in China***

24 August 2010

Representatives of [Delcam](#)'s network of Sales Partners in China met in Beijing last week to celebrate the company's success in the region so far this year and to be trained on the new software releases planned for the coming months. Software sales have increased by more than 60% in the first six months of this year compared to the first half of 2009.

One highlight of the year was reaching 1,500 customers in China. To mark this achievement, a presentation was made to the 1,500th customer, Zhejiang (Taizhou) Jianli Mould Co., Ltd., by Her Majesty's Ambassador to China, Sebastian Wood CMG, during the UK Advanced Engineering China Showcase held in Shanghai. This mouldmaking company is typical of the hundreds of smaller toolmakers and subcontractors that are adopting Delcam software to increase productivity, improve quality and reduce lead times.

However, Delcam's customers also include many of the country's larger organisations such as China First Auto Works, Xi'an Aircraft Industry Group, Changchun Railway Vehicles, Dongfang Electrical Machinery, Gree Electrical Appliances, Foxconn Technology Group, one of the world's leading manufacturers of mobile phones, and Pou Chen, one of the world's major producers of footwear.

These customers are supported by 50 sales and support offices throughout the country. The Delcam China subsidiary is based in a head office in Beijing, with regional offices in Shanghai, Shenzhen, Chengdu, Xi'an, Wenzhou, Qingdao and Quanzhou. In addition, the Delcam Hong Kong and Delcam Taiwan joint ventures operate two offices each in mainland China, and there are more than 30 reseller offices in the country.

This number of resellers has expanded rapidly over the past twelve months, in particular because several of the leading SolidWorks resellers in China have added the new Delcam for SolidWorks integrated CAM system to their product ranges. In addition, more Chinese metrology companies have standardised on Delcam's PowerINSPECT inspection system as the companion software for their equipment.

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## ***How do you **Greenlight** a Green Initiative?***

August 2010

Find out as Nicola Colombo, Selerant's CSO examines how to implement EcoSustainability initiative through a PLM solution at the [LCA Food Show](#).

**When:** September 22-24, 2010

**Where:** Università degli Studi di Bari  
Palazzo Ateneo

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## ***ICAM to Release CAM-POST V19 at IMTS 2010***

24 August 2010

**ICAM Technologies Corporation** (ICAM) announced that it will release \*CAM-POST® V19, the latest version of its NC post-processing development software, at **IMTS 2010 (Booth E-3917)**.

CAM-POST V19 is an interactive NC post-processing development and management software that interfaces with the most popular CAD / CAM / PLM systems, CNC controllers and machine tools.

CAM-POST V19 forms an integral part of ICAM's "Integrated PSE" suite of products that provides a unique environment for Post-processing, Simulation and Emulation inside a single software platform.

"Integrated PSE" also provides the means to compute in-process stock geometry to identify, list and display surface gouges, excess material, inaccessible areas and rapid-motion collisions at any time during the post-processing and verification phase.

Based on current NC manufacturing challenges faced by leading companies in the aerospace and automotive industries, CAM-POST V19 incorporates numerous technological enhancements and functions specifically catered to this evolving market.

Building on its advanced "forward-looking" features such as path planning and rotary axes pre-positioning / winding, developed to enhance the machining process while avoiding dwell marks, over-traveling and rotary repositioning, "Integrated PSE" V19 offers an array of new features to its end-users including:

- Mill / Turn Simulation with Material Removal
- Built-in support for Mill / Turn sub-spindle or back spindle
- Probing Simulation
- RTCP and LCS Support
- New flexible GENER & CeRun user interface layout
- Windows XP, Vista and 7 compliant installation and operation

"Version 19 of [ICAM's](#) "Integrated PSE" provides our customers with a powerful software tool allowing for post-processing and simulation with G-code verification for advanced machining applications including Mill / Turns," says Brian Francis, ICAM's Director of Research and Development. "We will be demonstrating the new features of version 19 at IMTS 2010, so drop by to take a first look."

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## ***Surfware Announces Okuma to Showcase Unprecedented Material Removal Rates with the Millac-44H Using TRUEMill Technology at IMTS 2010***

26 August 2010

**Okuma America**, in cooperation with the **TRUEMill Division of Surfware Inc.**, will be demonstrating material removal rates machining titanium on the Millac-44H at the **Okuma America booth #S-8500 at IMTS 2010**.

The LIVE machining sessions at the show will be demonstrating that the OKUMA Millac-44H, in cooperation with the TRUEMill Milling technology will increase material removal rates, decrease cycle times, while at the same time extending cutting tool life, in machining even the toughest materials like titanium. The new compact, high speed, OKUMA Millac-44H, at 11 hp, will be machining 6AL4V titanium at a rate of 180ipm with a ½” dia. endmill at a 1” depth of cut, achieving peak material removal rates of 6.03 in<sup>3</sup>/min.

These live demonstrations at IMTS will also prove that the Millac-44H’s small machine footprint makes it a suitable addition to even small shops that need high performance capabilities in addition to the larger manufacturing facilities machining components for the aerospace and medical industries. The combination of these two complementary technologies will provide machine shops with not only increased speed and material removal rates, but also unsurpassed control and quality.

According to Rod Tojdowski, Engineering Manager for Okuma America, “The Millac-44H OKUMA is available with both the Okuma OSP/THINC and Fanuc Controls. The 20 hp, 12,000 rpm utilizes the CAT 'Big Plus' Spindle which provides the flexibility of feeds and speeds needed to cut work-pieces of steel, aluminum, stainless steel, high-temperature alloys and exotic materials such as titanium and hastelloy. Machine performance is essential today, with the Millac-44H you will also be able to monitor and improve your machines utilization, make a plan - monitor the plan, evaluate and analyze the results.”

For additional information, visit <http://www.okuma.com/home.html> or visit the Okuma online IMTS showroom.

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## ***Synopsys to Host First Synposium Virtual Event***

23 August 2010

Synopsys, Inc. announced it will be hosting its first Synposium, a virtual trade show event where attendees around the world can learn about Synopsys' EDA software, IP, prototyping and services from the convenience of their desks. During the first three days of the event, Synopsys staff will be available to chat online in this interactive online format. Synposium attendees can view the materials on-demand through December 3, 2010.

**What:** Synopsys Synposium, a Virtual Event

**When:** August 31-September 2, 2010

On-demand through December 3, 2010

## Live Event

**Hours:** August 31: 9:00 a.m. to 5:00 p.m. PT  
September 1: 1:00 p.m. to 9:00 p.m. PT  
September 2: 6:00 a.m. to 2:00 p.m. PT

Register at: <http://synopsyssynposium.veplatform.com/>

## Symposium Highlights:

- Synopsys 20/20 Vision discussion with Dr. Aart de Geus, CEO and John Chilton, Sr. VP of Marketing and Strategic Development
- Auditorium presentations on:
  - Low power design challenges
  - 32/28nm design solutions
  - Verification with VCS
  - IC Compiler In-Design solutions,
  - AMS verification challenges
- Two exhibit halls with 16 virtual booths
- Publications library
- Networking lounge
- Online chat capabilities

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## Financial News

### ***Aspen Technology Announces Date of Fourth-Quarter Fiscal 2010 Financial Results Release, Conference Call and Webcast***

27 August 2010

Aspen Technology, Inc. announced that it will release financial results for its fourth-quarter fiscal 2010, ended June 30, 2010, before the U.S. financial markets open on Thursday, September 2, 2010.

In conjunction with this announcement, AspenTech will host a conference call and webcast on September 2, 2010, at 8:00 a.m. (Eastern Time) to discuss the company's financial results, business outlook, and related corporate and financial matters.

The live dial-in number is (877) 245-0126, conference ID code 97523083. Interested parties may also listen to a live webcast of the call by logging on to the Investor Relations section of AspenTech's website, <http://www.aspentech.com/corporate/investor.cfm>, and clicking on the "webcast" link. A replay of the call will be archived on AspenTech's website and will also be available via telephone at (800) 642-1687 or (706) 645-9291, conference ID code 97523083 through September 9, 2010.

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## ***Gerber Scientific, Inc. Reports Improved Year-over-Year Fiscal 2011 First Quarter Results***

26 August 2010

Gerber Scientific, Inc. reported revenue and earnings results for its fiscal 2011 first quarter ended July 31, 2010.

Summary of Results from Continuing Operations for FY 2011 First Quarter versus FY 2010 First Quarter

- Reported revenue increased 8.2% to \$118.3 million from \$109.4 million driven by volume improvements and \$0.6 million of license revenue. Unfavorable foreign currency impacts decreased revenue by approximately \$3.4 million, or 3.2%;
- Gross profit was \$36.0 million or 30.4% of sales versus \$31.9 million or 29.1% of sales. Gross profit and margin in the current quarter benefitted from improved sales volume and sales mix and were moderated by \$0.7 million of unfavorable foreign currency impacts;
- Selling, general and administrative (SG&A) expenses were \$28.3 million, or 23.9% of sales, compared with \$23.8 million, or 21.8% of sales. The increase in SG&A was primarily due to the restoration of approximately \$2.0 million in wage reductions and other temporary savings related to labor costs that were in place during the prior year first quarter. In addition, commissions and marketing expenses increased by \$1.4 million due principally to higher commissions, which reflected the higher sales volume and an increase in sales from channels with higher commission levels. Current quarter SG&A also included an \$0.8 million accrual for incentive compensation under the Company's 2011 incentive compensation plan and \$0.5 million of expenses from an acquisition completed after the fiscal 2010 first quarter. These increases were partially offset by \$0.6 million in exchange rate fluctuations;
- Operating income was \$2.8 million compared with \$3.6 million. Current quarter operating income was negatively impacted by \$0.5 million of restructuring and other expenses. On a currency adjusted basis,

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operating income was \$2.9 million;

- Income from continuing operations was \$1.6 million, or \$0.06 per diluted share, and included the net benefit of \$0.7 million principally from unrealized foreign exchange gains related to cross border loans, compared to \$1.3 million, or \$0.05 per diluted share, which included a loss of \$0.7 million principally from unrealized foreign exchange related to cross border loans. Net income for the current quarter was \$1.5 million, or \$0.06 per diluted share, compared with \$0.5 million, or \$0.02 per diluted share;
- Net cash flows from operations, less capital expenditures, decreased \$6.1 million to \$7.2 million, from \$13.3 million in the prior year, due principally to higher accounts receivable collections in the fiscal 2010 first quarter;
- Total outstanding debt was reduced by \$7.0 million to \$38.0 million.

"We were very encouraged by the Company's performance this past quarter and remain cautiously optimistic that the recovery is underway in our markets," said Marc Giles, Gerber Scientific President and Chief Executive Officer. "Similar to last quarter, we posted solid improvement in our key financial metrics - on a currency neutral basis, revenue was up 11.4% and gross profit was up \$4.8 million, reflecting increased demand across nearly every product category and operating segment. In addition to the top line improvement, our continued focus on manufacturing cost reductions and working capital management is paying off and, as a result, our currency neutral gross profit margin was up 100 basis points and we generated \$7.2 million of net operating cash flow. This performance allowed us to reduce our outstanding debt by \$7 million during the quarter - and brings our total debt reduction in the past 15 months, despite the challenging operating conditions, to \$35.5 million - or down nearly 50%."

### **Outlook and Guidance**

"Looking ahead, we expect to continue to benefit from the improving market conditions we've experienced over the last two quarters, as well as from our operational initiatives," said Mr. Giles. "Orders in our fiscal first quarter and order backlog at the end of the quarter remain strong. We are seeing significantly increased demand from several of our key geographic and market segments. At our Gerber Technology business unit, orders and sales are up significantly. Revenue from China, which is an important growth market for us, was up 62% at GT and 70% companywide from a year ago in the first quarter. Our new Yunique PLM software business continued to gain market momentum as we signed four new customers this past quarter, bringing total new customers to 11 since our November acquisition."

"In our Sign Making and Specialty Graphics segment we are seeing noticeable growth in aftermarket product sales. While capital equipment financing remains an issue for many of our customers, we are seeing some slight improvement in new equipment demand, and market reception for our new Gerber CAT UV printer, which was introduced this past quarter, was positive. Our Ophthalmic Lens Processing segment is reporting significantly higher unit sales of lens finishing systems, finally indicating recovery

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in its markets, and is readying for the fall season when they will attend two important trade shows. Moreover, it is quite encouraging that Gerber Coburn's retail customers are reporting positive comparable store sales after a difficult two years."

Giles concluded, "While we are seeing continued improvement in the markets we serve, macroeconomic developments remain uncertain and, as a result, we will manage our expenses and investments carefully. We continue to pursue permanent structural cost reduction opportunities, and have identified and are executing a number of actions that will benefit us throughout the year, especially in the last half of fiscal 2011. This, combined with a continuation of the favorable growth trends exhibited thus far in the fiscal year, should allow us to deliver sustainable, year-over-year revenue and operating profit improvement excluding the effects of restructuring charges."

## Quarterly Conference Call

Gerber Scientific's quarterly earnings conference is scheduled for today at 10:00 a.m. ET. The Company will also provide a live webcast of the call which may be accessed through the Company's website (<http://www.gerberscientific.com>). A webcast replay of the call will also be available for ninety days, as well as a conference call transcription, which will be available three business days after the conference call, on the Company's website under the Investor Relations tab.

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## ***Magma Reports \$32.6 Million First-Quarter Revenue, Exceeding Guidance***

26 August 2010

Magma® Design Automation Inc. reported revenue of \$32.6 million for its fiscal 2011 first quarter, ended Aug. 1, 2010, up 13 percent from the \$28.8 million reported in the year-ago first quarter.

"We're pleased that we again met or exceeded all our financial guidance and are off to a good start for the year," said Rajeev Madhavan, Magma chairman and chief executive officer. "The increasing traction of our products and the positive reaction we experienced at June's Design Automation Conference indicate we are on the right track to increasing revenue, while continuing to improve our profitability."

## **GAAP Results**

In accordance with generally accepted accounting principles (GAAP), Magma reported a net loss of \$(3.3) million, or \$(0.06) per share (basic and diluted), for the first quarter, compared to a net loss of \$(4.3) million, or \$(0.09) per share (basic and diluted), for the year-ago first quarter.

## **Non-GAAP Results**

Magma's non-GAAP net income was \$2.9 million for the quarter, or \$0.06 per share (basic) and \$0.05 per share (diluted), which compares to non-GAAP net income of \$1.7 million, or \$0.03 per share (basic and diluted), for the year-ago first quarter.

Non-GAAP net income for the first quarter of fiscal 2011 excludes the effects of amortization of developed technology, amortization of intangible assets, stock-based compensation, amortization of debt issuance costs and debt discount/premium accretion, loss on extinguishment of debt, charges associated with equity and other investments, restructuring charges and the related provision for income taxes.

Non-GAAP net income for the first quarter of fiscal 2010 excludes the effects of amortization of developed technology, amortization of intangible assets, stock-based compensation, amortization of debt issuance costs and debt discount accretion, acquisition-related expenses, charges associated with equity

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and other investments, restructuring charges and the related provision for income taxes. A reconciliation of our non-GAAP results to GAAP results is included in this press release.

In the first quarter, Magma generated cash flow from operations of approximately \$1.4 million.

During the first quarter, Magma repaid the \$23.2 million remaining balance of its convertible notes which were due on May 15, 2010. Also during the first quarter, Magma repurchased \$2.75 million aggregate principal amount of its convertible notes due in May 2014. Additionally, in the second quarter of fiscal 2011 to date, convertible notes due in May 2014 totaling \$10.7 million in face value were converted into shares of the company's common stock. In the conversion of notes due in May 2014, Magma prepaid the note holders a portion of their future interest. The company, from time to time, may enter into additional transactions in the future with respect to the repurchase or conversion of the \$13.2 million remaining balance of convertible notes due May 2014 whenever conditions are sufficiently attractive.

## **Business Outlook**

For Magma's fiscal 2011 second quarter, ending Oct. 31, 2010, the company expects total revenue in the range of \$33.0 million to \$33.5 million. GAAP net loss per share is expected to be in the range of \$(0.07) to \$(0.06) and non-GAAP earnings per share (EPS) are expected to be in the range of \$0.05 to \$0.06.

Magma is adjusting its outlook for fiscal 2011, ending May 1, 2011. For fiscal 2011 the company now expects total revenue in the range of \$132.0 million to \$135.0 million, an increase from the previous guidance range of \$130.0 million to \$133.0 million. The company now expects fiscal 2011's GAAP net loss per share to be in the range of \$(0.18) to \$(0.17), compared to a previous expectation of a net loss per share in the range of \$(0.16) to \$(0.14). The company now expects fiscal 2011's non-GAAP EPS to be in the range of \$0.24 to \$0.25, compared to the previous expectation of non-GAAP EPS in the range of \$0.18 to \$0.20.

A schedule showing a reconciliation of the projected non-GAAP EPS to GAAP EPS results is available in the unabridged press release. A Financial Data Supplement containing additional second quarter and full fiscal year 2011 guidance, as well as detailed financial information intended to provide guidance and further insight into our business is available online in the Investor Relations section of the Magma website.

## **GAAP Reconciliation**

Magma provides non-GAAP financial information to assist investors in assessing its current and future operations in the way that Magma's management evaluates those operations. Magma believes that this non-GAAP information provides useful information to investors by excluding the effect of some expenses that are required to be recorded under GAAP but that Magma believes are not indicative of Magma's core operating results, or that are expected to be incurred over a limited period of time.

Magma's management evaluates and makes operating decisions about its business operations primarily based on bookings, revenue and the core costs of those business operations. Management believes that the amortization of developed technology and intangible assets, stock-based compensation, in-process research and development expenses, amortization of debt issuance costs and debt discount/premium accretion, charges associated with equity and other investments and related legal expenses, acquisition-related expenses, asset impairment charges, restructuring charges and the related provision for income taxes, and other significant unusual items are not operating costs of its core software and service

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business operations. Therefore, management presents non-GAAP financial measures, along with GAAP measures, in this earnings release by excluding these items from the period expenses. The income statement line items affected are as follows: (1) cost of revenue, licenses; (2) cost of revenue, bundled licenses and services; (3) cost of revenue, services; (4) operating expenses, research and development; (5) operating expenses, sales and marketing; (6) operating expenses, general and administrative; (7) operating expenses, amortization of intangible assets; (8) operating expenses, restructuring charge; (9) other income (expense), net; (10) provision for income taxes and (11) net income (loss) per share.

For each such non-GAAP financial measure, the adjustment provides management with information about Magma's underlying operating performance that enables a more meaningful comparison of its financial results in different reporting periods. For example, since Magma does not acquire businesses on a predictable cycle, management excludes acquisition-related charges, such as amortization of intangible assets, to make more consistent and meaningful evaluations of Magma's operating expenses. Similarly, since Magma does not undertake significant restructuring or realignments on a predictable cycle, management would have difficulty evaluating Magma's profitability as measured by gross profit, operating profit, income before taxes and net income on a period-to-period basis unless it excluded these charges. Management also uses these measures to help it make budgeting decisions between those expenses that affect operating expenses and operating margin (such as research and development, sales and marketing, and general and administrative expenses), and those expenses that affect cost of revenue and gross margin (such as product development expenses).

Further, the availability of non-GAAP financial information helps management track actual performance relative to financial targets, including both internal targets and publicly announced targets. Making this non-GAAP financial information available also helps investors compare Magma's performance with the announced operating results of its principal competitors, which regularly provide similar non-GAAP financial information.

Management recognizes that the use of these non-GAAP measures has limitations, including the fact that management must exercise judgment in determining whether some types of charges, such as stock-based compensation relating to stock grants and acquisition-related charges, should be excluded from non-GAAP financial measures. Management believes, however, that providing this non-GAAP financial information facilitates consistent comparison of Magma's financial performance over time. Magma has historically provided non-GAAP results to the investment community, not as an alternative but as a supplement to GAAP information, to enable investors to evaluate Magma's core operating performance in the way that management does.

### **Conference Call**

Magma will discuss the financial results for the recently completed quarter, along with forward-looking guidance, during a live earnings call today at 2 p.m. PDT, available live by both webcast and telephone. To listen live via webcast, visit the Investor Relations section of Magma's website at <http://investor.magma-da.com/medialist.cfm>.

Following completion of the call, a webcast replay of the call will be available at <http://investor.magma-da.com/medialist.cfm> through Sept. 2, 2010. Those without Internet access may listen to a replay of the call by telephone until 11:59 p.m. PDT on Sept. 2 by calling:

U.S. & Canada: (800) 642-1687, code #92502057

Elsewhere: (706) 645-9291, code #92502057

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The unabridged press release with financial tables is available [here](#).

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## ***Sopheon Results for the 6 Months to 30 June 2010 Business Review and Outlook***

26 August 2010

### **HIGHLIGHTS:**

- Revenue: £4.7m (2009: £4.1m)
- EBITDA profit: £0.6m (2009: EBITDA loss £0.3m)
- Loss before tax: £0.1m (2009: Loss £1.0m)
- Twenty-four license transactions completed including extension sales.
- Revenue visibility for full-year 2010 now stands at £8.2m. This is up from £6.0m reported in mid-June at the Company's Annual General Meeting and almost equals Sopheon's total revenues for the full year 2009 which was £8.3m.
- The licensee base now stands at 178.
- Cash at 30 June stood at £1.7m.
- Launched [www.isustain.com](http://www.isustain.com) in partnership with Cytec Industries and the Beyond Benign Foundation, a site that enables users to assess the sustainability of product formulations through an iSUSTAIN Green Chemistry Index rating.

Sopheon's Chairman, Barry Mence said: "We are delighted to report much-improved results with revenues up and costs down. After some very tough spending adjustments taken in 2009, it is also gratifying to see a return to growth and such strong improvement in our bottom line performance. Our expanded solution introduced in 2009 is generating increased sales both from our client base and new clients. Revenue visibility for the full year is already close to last year's total revenues with four months of selling to go."

### **CHAIRMAN'S STATEMENT**

#### **TRADING PERFORMANCE**

After a tough year in 2009 consolidated revenues for the first half of 2010 were £4.7m, compared to £4.1m for the same period last year and £4.3m in the first half of 2008. Both new and existing customers made material license commitments. This resulted in an overall revenue mix among license, services and maintenance amounting to 36:27:37 respectively, compared to 30:26:44 during the first half of 2009.

Sales performance during the six-month period included 24 new and extension license orders, up from 17 the year before. The Company also added a number of consultancy and services contracts. In 2009, market conditions contributed to customer terminations of some maintenance, hosting and rental contracts. As a result, we entered 2010 with a recurring revenue base of £3.7m. At mid-year point, our recurring base has increased to £3.9m as new sales offset a small number of terminations. Revenue visibility has improved to £8.2m compared to £6.0m at the time of our Annual General Meeting in June.

The level of continued commercial activity is very encouraging. Our sales pipelines for the third quarter and beyond are healthy and are expected to drive additional increases in revenue visibility between now and the end of the year. Nevertheless, wider market conditions are still uncertain. As we have noted in

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our previous announcements, predicting the timing and value of individual sales is challenging, and this can consequently impact on revenue performance in a particular period.

Approximately 60% of revenues during the first half of the year were generated by US operations, with the balance predominantly from Europe. This distribution is generally consistent with prior periods. The Alignment solution acquired in June 2007 accounted for 9% of total revenues recorded in the first half of 2010 compared to 11% in 2009 as a whole. Gross profit, which is arrived at after charging direct costs such as payroll for client services staff, was £3.5m. That compares to £2.8m for the same period in 2009, representing a rise in gross margin percentage from 67% to 75%. We expect the gross margin percentage to continue to fluctuate from period to period, in line with variation in our revenue mix.

## **OPERATING COSTS AND RESULTS**

Due to the headcount adjustments made last year, our cost base has changed. Total staff count at the start of 2009 was 105. During the year, we reduced staffing to 100 at the end of June, and then again to 84 by the end of December. This has remained the same for the first half of 2010. All areas of the business were affected, but as noted in previous announcements, we did not make reductions in product development until late 2009 in order to continue investment in expanding the breadth and reach of our solutions, as described later in this report. Looking ahead, if market conditions continue to improve, we will consider modest new recruitment and subcontracting activity in our product development and professional services teams before the end of the year.

The overall operating result for the business during the period was a profit of £36,000 (2009: loss of £892,000). After net finance costs, which include interest on debt taken on to finance the Alignment acquisition, the final loss before tax reported for the period is £96,000 (2009: loss of £990,000). This result includes interest, depreciation and amortisation costs amounting to £679,000 (2009: £658,000). The EBITDA result for the first half of 2010, which does not include these elements, was a profit of £583,000 (2009: loss of £330,000).

## **CORPORATE AND BALANCE SHEET**

Net assets at the end of the period stood at £2.7m (2009: £3.1m). Cash resources at 30 June 2010 amounted to £1.7m (2009: £1.6m). Approximately £0.5m was held in US dollars, £0.8m in Euros and £0.4m in Sterling.

Intangible assets at 30 June 2010 stood at £4.1m (2009: £4.2m). This includes (i) £2.5m being the net book value of capitalised research and development (2008: £2.3m) and (ii) £1.6m (2008: £1.9m) being the net book value of Alignment intangible assets acquired in 2007.

As part of the funding raised for the Alignment acquisition, Sopheon secured \$3.5m of medium-term debt from BlueCrest Capital Finance LLC ("BlueCrest"). The debt is being repaid in 48 equal monthly instalments and is secured by a debenture and guarantee from Sopheon plc. BlueCrest also offered the enlarged Group an additional revolving credit facility secured on accounts receivable. This has been renewed through June 2011 with a facility limit of \$1.25m. At 30 June 2010, the balances outstanding on the medium-term debt and revolving credit facility were \$1.1m (2009: \$2.0m) and \$1.0m respectively (2009: \$0.7m). The equivalent figures in Sterling are £0.7m (2009: £1.2m) and £0.7m (2009: £0.4m) respectively.

## **MARKET AND PRODUCT**

Major analyst organisations such as Forrester and Gartner see deepening traction and expanding opportunity particularly in Sopheon's segment of the PPM market. In December 2009, Forrester noted

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increasing interest and investment in project and portfolio management tools for product development (PPM) and in the same month Gartner noted that software that supports product strategy and planning is gaining attention from prospective manufacturing end-users. Forrester also identified Sopheon as one of the clear market share leaders in the PPM space. From a vertical market standpoint, we continued to see good results during the period in our original key markets of chemicals, food and beverage, and consumer products. Activity during the period also provided further evidence that we are making significant inroads into the aerospace, defence and high technology markets.

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™, the first integrated solution that both facilitates generation and development of ideas, and enables those ideas to be moved seamlessly into product development; the release of a major new version of our Accolade Vision Strategist™ strategic product planning software; significant changes to our core Accolade Process Manager™ software that deepen its differentiation and value proposition; and most recently, the launch of the [www.isustain.com](http://www.isustain.com) green chemistry website in partnership with Cytec Industries Inc and the Beyond Benign Foundation. The site enables users to assess the sustainability of product formulations through an iSUSTAIN Green Chemistry Index rating. Users that wish to migrate beyond a basic level of interaction with the site are required to enter into paid-for subscriptions. In conjunction with these product and service 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.

## **OUTLOOK**

Our decision to maintain investment in product development during the difficult months of early 2009 has yielded important competitive advantages and business benefits. We have also continued to invest in marketing and partner initiatives which, along with the product investments, have contributed to further strengthening our strategic position. Sopheon offers the only software suite in the industry to provide all-in-one support that encompasses innovation strategy, ideation and execution. This highly differentiated value proposition has been affirmed by our customers and by the business analyst community.

The market is responding favorably to new enhancements to our products. Our sales pipeline continues to show encouraging levels of activity that we believe indicate a resurgent focus amongst large corporations on product innovation as a strategic priority. As always, the challenge is to convert this activity into signed contracts. Nevertheless, full year revenue visibility for 2010 at £8.2m already stands close to the 2009 full year performance of £8.3m. A return to growth will also drive the need for additional resources to deliver our solutions and services. As noted earlier in this report, we will consider careful expansion in resources to meet this requirement, during the second half of the year.

After a difficult time in 2009, including some very tough spending adjustments, it is gratifying to see a return to growth and such a strong improvement in our bottom line performance. We look to the future with renewed confidence.

## **Barry Mence**

Chairman, 26 August 2010

### Visibility

Visibility at any point in time comprises revenue expected from (i) closed license orders, including those which are contracted but conditional on acceptance decisions scheduled later in the year; (ii) contracted

services business delivered or expected to be delivered in the year; and (iii) recurring maintenance, hosting and rental streams. The visibility calculation does not include revenues from new sales opportunities expected to close during the remainder of 2010.

For unabridged press release with financial tables, click [here](#).

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## Implementation Investments

### *Astronauts Stay Strong with Help from SolidWorks*

23 August 2010

Though phenomenally fit, astronauts grow weak after prolonged missions in zero gravity. To help combat muscle atrophy, a Spanish company using [SolidWorks® software](#) has developed a sophisticated system to test their strength in space.

Called [MARES](#), the Muscle Atrophy Research and Exercise System was developed by [NTE-SENER](#) for the [European Space Agency \(ESA\)](#). MARES consists of an adjustable chair with a system of pads, levers, electronics, software, and a motor that tests a dozen muscle groups for weakness and exercise benefits. It was launched last April aboard the NASA Discovery Space Shuttle and will soon be installed in the European Columbus Module of the International Space Station.

“SolidWorks has been a great change from our previous CAD software,” said NTE-SENER Mechanical Engineer Albert Catalan. “It helped us quickly create concepts, review them in vivid 3D detail with NASA, and develop a very sophisticated design, simulating real-world forces on the MARES system along the way.”

The design requirements were rigorous. MARES needed to restrain the astronaut, limit motion to the tested muscles, ensure user safety, deliver power-assisted resistance, and handle any astronaut between the fifth and 95<sup>th</sup> height percentiles. The system also needed to be modular so astronauts could assemble, disassemble, stow, and operate it.

NTE-SENER used SolidWorks to achieve several design goals:

- Ensuring proper fit in the space shuttle by seamlessly exchanging data with SolidWorks users at NASA.
- Packing myriad components into the shuttle’s restricted space.
- Detecting any interference among parts.
- Reducing risk of failure and injury by analyzing the effect of real-world physical forces on the MARES system (using [SolidWorks Simulation](#) software).
- Easily accommodating several parts designed by another engineering firm.
- Sharing data with manufacturing partners in their preferred form, whether SolidWorks model, STEP file, or drawing.

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“SolidWorks has helped us quickly and cost-effectively develop an important system that could dramatically improve the quality of space exploration and the health of our astronauts,” said Manuel Canchado Morales, head of NTE-SENER’s mechanical engineering department. “And the things we learn in space could be useful on the ground, both for astronauts and the rehabilitation community. The research could ultimately refine care for victims of paralysis, trauma, or prolonged immobilization.”

NTE-SENER relies on authorized SolidWorks reseller [CimWorks](#) for ongoing software training, implementation, and support.

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## ***BMW Gets Faster Inspection with Delcam’s PowerINSPECT***

27 August 2010

[Delcam](#)’s PowerINSPECT inspection software is being used on two Zett Mess AMPG measuring arms to inspect chassis prototypes in the “Process Technology Prototype Development” of the BMW Group. The system gives faster results, and is so easy to use that it is suitable for both inspection specialists and for production experts who haven’t had training in measurement technology.

PowerINSPECT is a leading global hardware-independent software for the inspection of prototypes, tooling and production samples against CAD data. It works with a wide range of inspection devices, including static coordinate measuring machines (CMMs), and optical and laser-based systems, but is best known as the preferred software for portable inspection arms. The combination of the portability of the inspection arms and the easy-to-use software makes it practical to make many more inspections than is possible with a dedicated CMM that might be located at a considerable distance from the point of manufacture. By allowing more inspections and by giving real time results in an easy-to-understand format, PowerINSPECT allows problems to be identified earlier and corrected at lower cost.

For all types of inspection, PowerINSPECT offers two key benefits; a fast and simple, interactive method of collecting the data required and a range of levels of reporting. During the inspection, the CAD model of the part is displayed on the computer screen. All results are displayed instantly on the model so the user knows immediately that he has measured the required point. This instant feedback also allows the operator to take additional measurements in areas where the initial results indicate potential problems.

At BMW, every new chassis prototype is received by the development team as a CAD file, which is used to weld the design. Welding distortions of 3mm are the norm and have to be eliminated in a continual process of welding – inspection – correction – inspection. In the past, the inspection process for some of the parts required up to two hours; now, with PowerINSPECT, only five minutes are needed. This gives significant time savings since up to five inspection passes are required per component.

“Users are able to measure out the coordinates much faster,” said Stefan Schneider, Application Engineer, at Delcam GmbH. “Every measured point can be compared to the CAD data with PowerINSPECT. The inspection software immediately and precisely shows the deviations within the specified tolerances.”

In addition, every measurement is saved in PowerINSPECT. The software documents each modification in such a way that it becomes clear in which direction a point has to be moved in order to implement a specific change.

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PowerINSPECT offers not only comprehensive functionality but also the simplest possible operation. “Many inspection programs are complicated to use,” claimed Mr. Schneider. “PowerINSPECT’s ease of use is essential for situations like that in BMW’s chassis prototype development, where both metrology specialists and production staff need to use the software.”

Easy operation and the shortest-possible learning curve allow casual users to be able to work accurately and efficiently with the measuring equipment. After only two days of training, BMW employees could use PowerINSPECT in combination with the Zett Mess arm.

Another benefit is that PowerINSPECT does not require the parts to be held in a specific fixture. Its best-fit routines mean that inspection can be undertaken in any position. In addition, the arm and software make it possible to inspect two parts simultaneously on one table. If the alignment between the two parts is known, the user can switch between the two inspection sequences.

It is also much quicker to add extra points into a measurement sequence. The additional data can be incorporated with the earlier measurements and the combined results displayed immediately, instead of having to re-measure the whole part. Similarly, it is possible to change the datum being used for the inspection and PowerINSPECT will quickly regenerate the inspection report.

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## ***Chinese Mold and Machine Tool Manufacturers Choose WorkNC CAM Software***

24 August 2010

Chinese machine tool manufacturer Ningbo Haitian Precision Machinery, and moldmaker Nantong Rugao Chaoda Machinery, both selected Sescoi’s [WorkNC CAM software](#) to program their CNC machinery.

Chaoda Machinery, based in Jiangsu, produces all types of molds for automotive interior trim as well as tool inspection and automation equipment. Customers include BMW, Mercedes-Benz, General Motors and Ford, and it exports its products to more than 30 different countries.

The company found that the automation in WorkNC greatly simplifies programming. Dynamic stock models enable the software to know where material needs to be removed. Automated toolpath strategies then produce safe and fast cutterpaths with the minimum of programming input. Mr XiaoMing Li, the head of CNC programming at Chaoda Machinery says, “Automation makes it easy for us to consistently produce high quality molds as it eliminates many possible sources of error. Our customers demand excellence, and WorkNC enables us to provide it. Many of them have been impressed with the quality of finish we can achieve.”

For the complex shapes cut by Chaoda Machinery, collision detection and avoidance is important. WorkNC continuously checks the tool and its holder against the dynamic stock model. This allows the company to use the shortest and most rigid cutters possible without the risk of a collision, thanks to the reliability of WorkNC. Mr XiaoMing Li adds, “We can machine with absolute confidence, which allows several machines to be monitored by one operator. Combining this with no time lost through CNC program prove out results in significantly improved machine utilization.”

The size and complexity of some of the molds produced by Chaoda Machinery require very long toolpaths, so speed of calculation is important. Mr XiaoMing Li says, “Calculation speeds in WorkNC are twice those of our previous software and we are looking forward to the new parallel processing in the latest version, which will give us a further step change improvement.”

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Ningbo Haitian Precision Machinery, located in Ningbo, China, manufactures CNC lathes and turning centers, as well as horizontal and vertical machining centers. It employs 200 people and has a turnover of 100 million Yuan, projected to grow to 1 billion Yuan within four years. Haitian collaborates with Japanese and Taiwanese machine tool manufacturers and suppliers to ensure that its machines are of the highest quality. Its research and development center uses these links to assist it in its design processes, so that it can build the latest technological advances into the machinery it supplies.

The 5-axis machining of large components is an important stage of manufacture for Haitian. The company decided to invest in three seats of Sescoi's WorkNC CAM software to include the [Auto 5](#) module for automatic 5-axis CNC machining. This software automatically changes 3-axis toolpaths into continuous 5-axis. The company says, "WorkNC is very easy to use, which saves a lot of the time and cost involved in training engineers and the Auto 5 module brings 5-axis machining well within our capabilities." 5-axis machining enables the company to produce components in one operation. Multiple setups are unnecessary, eliminating the time lost between operations and the extra tool changes involved. It also removes the chance of introducing errors during resetting.

WorkNC Auto 5 includes collision avoidance technology dedicated to the limits of each machine tool. Extra flip and rotate movements are automatically added to avoid collisions and to keep the machinery running as smoothly as possible. Ningbo Haitian Precision Machinery says, "Our team of engineers thinks that WorkNC gives us the very best 5-axis programming technology and that it is the perfect CAM software for our application. We are delighted with the service and local support we receive from Sescoi, and we anticipate continuing to work closely with them for the foreseeable future."

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## ***First Acquisition by Human Solutions and assyst***

25 August 2010

For the first time, Human Solutions and assyst have combined forces to acquire a new customer - the JK Defence & Security GmbH of Kempen, Germany.

The company is a specialist equipment supplier for military personnel and security installations. JK Defence works in close cooperation with end users to develop customer-specific solutions for tactical items and apparel.

In future, solutions from one source will encompass JK Defence's entire production chain, from product development to sales solutions - and the solutions will be flanked by 3D body scanners for body measurement. For the first time ever, an integrated overall solution addressing processes all the way from scanning to pattern construction and fit visualization (with vidya) will be delivered and installed.

Human Solutions will provide 3D body scanning solutions for the contact-free, three-dimensional scanning of the human body and the automatic calculation of body dimensions - plus INTAILOR, a superbly efficient infrastructure for the electronic processing of orders.

assyst will complement this by providing the solutions for computer-assisted pattern construction, the individualized adaptation of patterns and 3D avatars (based on the body scanning data) for 3D simulation and fit visualization.

Together, Human Solutions and assyst can offer all the services necessary for integration, installation and training.

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“This acquisition - the first achieved by the combined efforts of assyst and Human Solutions - confirms our belief that our two companies together possess a powerful synergy effect, one which can create a great deal of added value for our customers when properly utilized”, said Dr. Andreas Seidl, Managing Director of the Human Solutions Company and assyst. “We are also delighted to have acquired JK Defence as a new customer. The company is from the defense technology and security sector, a branch which has outstanding prospects for the future”, Dr. Seidl concluded.

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## ***Imaginestics to Create Design Conversion Software for Defense Logistics Agency***

24 August 2010

Imaginestics, LLC announced that the U.S. Defense Logistics Agency has awarded Imaginestics a contract for the development of a Supplier Productivity System (SPS) that will take two-dimensional raster drawings of parts for legacy warfighter systems and represent them as three-dimensional models, ready for use by computer-aided design (CAD) software. The contract has been awarded as part of Phase II Small Business Innovation Research (SBIR) funding.

The Defense Logistics Agency (DLA) is tasked with providing logistical support for U.S. military forces. The DLA manages almost 100 percent of the consumable items used by the military and around 84 percent of the military’s spare parts, all of which are used to support ongoing military operations and maintain weapons systems. Associated with the nearly five million items the DLA manages are approximately 107 million sheet images of engineering data, the majority of which are in two-dimensional (2D) “raster” format, which provides an electronic picture of a drawing blueprint and other technical documents.

According to Natalie Seiling, the DLA SBIR Project Manager, “Two-dimensional raster images are problematic for both us and our suppliers for a number of reasons. The images may be illegible or difficult to interpret. Manufacturers who want to make a bid to produce the parts must first re-create the design in CAD software in order to provide a bid or develop production plans. These factors and others raise the sustainment cost and lead time to acquire the essential parts used to sustain the Department of Defense’s (DoD’s) weapons systems.”

The software application being developed by Imaginestics will give the suppliers to the Defense Logistics Agency and other defense procurement agencies a semi-automated way to create 3D models from the 2D raster drawings and make data contained in the drawings and technical documents available in electronic format that can be utilized by both suppliers’ and defense agencies’ present-day CAD applications. The goal of the system is to improve productivity while reducing turnaround time in both the pre- and post-award processes, while helping defense agencies and depots streamline procurement and reduce overall unit cost.

“In our Phase I Research, we studied the feasibility of this kind of system, and we found that there’s significant interest on both the supplier and the defense agency sides in solving this problem,” says Nainesh Rathod, CEO of Imaginestics. “We’ve developed a one-of-a-kind technology for extracting shapes from exactly these kinds of two-dimensional drawings, which we use in our shape search technology today. With this support from Department of Defense we have a chance to leverage our technologies to help DoD cost-effectively communicate with suppliers the complex tech data packages associated with part procurement.”

Natalie Seiling says that from the DLA perspective, “Due to the sheer volume of engineering data we

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have, we need to look at advanced technologies that will allow the DoD to convert legacy, two-dimensional data to modern three-dimensional models in cost-effective ways.”

Department of Defense sponsor Ed Kincaid of Oklahoma City Air Logistics Center at Tinker Air Force Base adds that, “Tinker Air Force Base performs overhaul and repairs on approximately 129 aircraft, 260 Engines, and 69,000 component parts per year, and time is of the essence in every repair we make or part we need to source. We’re dealing with highly complex assemblies and components with large numbers of drawings, and we’re looking to the SPS from Imaginestics to give us the much-needed speed and accuracy in design conversion that is lacking today.”

## **About Defense Logistics Agency**

As the Department of Defense’s combat logistics support agency, DLA provides the Army, Navy, Air Force, Marine Corps, other federal agencies, and joint and allied forces with a variety of logistics, acquisition and technical services. The agency sources and provides nearly 100 percent of the consumable items America’s military forces need to operate, from food, fuel and energy, to uniforms, medical supplies, and construction and barrier equipment. DLA also supplies more than 80 percent of the military’s spare parts.

Headquartered at Fort Belvoir, Va., DLA has about 26,000 employees worldwide. DLA’s business revenues were nearly \$38 billion in Fiscal Year 2009. For more information about DLA, go to [www.dla.mil](http://www.dla.mil) or [www.facebook.com/dla.mil](http://www.facebook.com/dla.mil).

## **About VizSeek**

VizSeek solutions are currently used by top government agencies and industrial leaders. VizSeek, a wholly owned subsidiary of Imaginestics, LLC, is a privately held company, headquartered at the Purdue Research Park in West Lafayette, Indiana. More information on VizSeek and its products is available at <http://www.vizseek.com>.

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## ***RICOH Achieves Full Test Coverage with Ultra-Low Pin Count Using Mentor Graphics Tessent TestKompress***

23 August 2010

Mentor Graphics Corporation announced that Ricoh Company, Ltd. has employed the [Tessent™ TestKompress®](#) solution for an RF product currently under development to achieve full coverage in final IC testing using only three I/O pins. In addition, the solution reduces the number of pattern loads needed for complete testing from ten to only four, providing a 60 percent reduction in manufacturing test time.

“Previously we were unable to meet our objective of 100% scan test coverage during final package test because we were severely limited in the number of I/O pins available for testing,” said Fumiaki Kadowaki, Manager in Ricoh’s Imaging System LSI Development Center, CAD Engineering Section. “Tessent TestKompress provided an alternative that allowed us to continue to use our existing test equipment, reduce the SCAN test interface to only three pins, and still reduce our test time. In addition, the Mentor solution provides us with excellent test failure diagnosis capability based on normal production test data, without having to run special failure analysis runs on failed parts.”

The new test flow overcomes previous limitations of test equipment hardware, test pattern generation

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software and test pin availability by employing patented Embedded Deterministic Test (EDT) technology in the TestKompress tool. This approach combines a small amount of on-chip circuitry (generated by TestKompress in RTL) and unique test pattern generation algorithms to load highly compressed test patterns onto the chip with only a few I/O channels. Using one pin for scan-in, one for scan-out, one for clock and two for test mode control, the low pin count solution still managed to reduce the number of pattern loads from ten to four due to the extremely high compression achieved using Tessent TestKompress. With future refinements to further increase compression, Ricoh expects to eliminate additional pattern loads completely, further reducing test times and increasing test throughput.

“Our customers are realizing fundamental improvements in test coverage and test throughput, thus improving test quality and reducing cost at the same time,” said Greg Aldrich, Director of Marketing for Mentor’s silicon test solutions. “With the ability to operate from a single scan channel and still provide very high levels of test time and data compression, Tessent TestKompress offers the flexibility to effectively test the broad range of devices with varying requirements that exist in today’s markets.”

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## ***Synopsys DesignWare SATA IP Enables First-Pass Silicon Success for Global Unichip Corporation***

25 August 2010

[Synopsys, Inc.](#) announced that Global Unichip Corporation (GUC) has achieved first-pass silicon success for its GP5080 Solid State Drive (SSD) system-on-chip (SoC) utilizing the complete Synopsys DesignWare® SATA IP solution, consisting of controller, PHY and verification IP. GUC, a leading full-service SoC design foundry, determined that Synopsys' DesignWare SATA IP was superior in quality, power consumption, performance and feature set. SATA interoperability was a key requirement for GUC, and Synopsys was the only provider to offer an integrated solution consisting of a controller and PHY IP that has passed the SATA International Organization (SATA-IO) Building Block interoperability testing, an independent demonstration of full SATA functionality. By integrating Synopsys' DesignWare SATA IP solution into GUC's SSD SoC Platform, GUC was able to focus their internal expertise on delivering their SSD SoC platform within an aggressive six-month development time-to-market window.

With the mobile mass storage market transitioning from the conventional Hard Disk Drive (HDD) to the SSD, GUC set out to develop an SSD SoC solution that would meet the high-performance and low-power requirements of mobile applications such as netbooks, mobile internet devices (MIDs) and high-speed pen drives. Its flagship, GP5080 SoC platform, provides designers with a solution that requires significantly less power than competitive products and provides high data system throughput of more than 120 MB/s in sequential read and over 80 MB/s in sequential write with 4-channel NAND Flash access.

"Low system power consumption is a key requirement for us. Synopsys' DesignWare SATA IP solution is 50 percent lower in power and 30 percent lower in area compared to competitive solutions," said Michael Chang, vice president of the R&D Division at Global Unichip Corporation. "With very aggressive time-to-market windows, GUC relies on Synopsys' high-quality, silicon-proven SATA IP solution which helps us achieve the first-pass success and meet our project schedule. Synopsys' DesignWare IP is definitely a brand we can trust."

"As leading companies such as GUC continue to create innovative products, it's crucial they have access to high-quality IP that enables them to reduce integration risk and focus internal resources on their core

competencies," said John Koeter, vice president of marketing for the Solutions Group at Synopsys. "Synopsys provides our customers with high-quality interoperable IP solutions that will help semiconductor companies meet their design goals and deliver differentiated products to the market faster."

The DesignWare SATA IP offering consists of host and device digital cores, as well as PHYs for major foundries from 130nm to 40nm and verification IP that are compliant to SATA (including eSATA) 2.6/3.0 and AHCI specifications. The comprehensive SATA IP solution supports 1.5 Gb/sec, 3 Gb/sec and 6 Gb/sec transfer speeds. Synopsys helps reduce integration risk by providing SATA IP solutions that are silicon-proven and shipping in volume production in multiple designs.

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## Product News

### ***AVEVA Announces Release of AVEVA NET Portal 4.5 with Powerful New Decision Support Interface***

24 August 2010

AVEVA announced the release of AVEVA NET Portal 4.5. This new release has a highly configurable user interface designed specifically to improve the accessibility of objects and documents used in complex engineering projects and throughout the long-term operation of such assets. The new interface allows both plant and marine companies to monitor and improve the quality of their engineering information in order to make earlier, better-informed decisions that save time, cut cost, and reduce project and operational risk.

AVEVA NET Portal 4.5 uses AVEVA's object-based technology to link related project and asset documents and information in a single comprehensive view. AVEVA NET Portal 4.5 automatically identifies and dynamically indexes the relationships between objects and their associated documents such as schematics, 3D models, equipment specifications, project schedules, maintenance records, and vendor catalogues. The new user interface allows for the creation and configuration of multiple "dashboards" to suit different roles within the organisation. This ensures that system users are given only the information they need to efficiently perform their particular tasks.

The new AVEVA NET Portal 4.5 is delivered with a complete set of standard reports that monitor the accuracy and completeness of project information. For the first time, both Project and Information Managers can quickly assess the state of their project's data landscape, easily identify the level of tag completeness and track project trends. Inconsistent data standards and potential data integrity issues are reported and poor performers in the supply chain easily identified. These reports help companies to improve their overall performance by providing quantifiable statistics that eliminate project guesswork and enable more accurate business performance measurements.

"The design of the new AVEVA NET Portal 4.5 interface was significantly influenced by input from our customers and partners." explained Simon Bennett, AVEVA NET Product Strategy Manager, "Being able to capture in a single view all of the related information on tags and objects and to dynamically identify incomplete or inconsistent information is enormously beneficial. This new interface is much more than just an improved look and feel. It will help our customers to unlock the complex interdependencies of their engineering information. With AVEVA NET Portal 4.5 you can much more easily pinpoint problems and make business or design decisions much earlier in a project, when changes

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are less costly and disruptive to schedules. The ability to customise the interface for different project and operational roles enables the right information to be provided to the right people at the right time. AVEVA NET Portal 4.5 will make a major contribution to information quality and business process optimisation for our customers. "

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## **Concepts NREC Now Shipping Agile Engineering Design System® 2010**

26 August 2010

[Concepts NREC](#)(CN) is now shipping the latest version of the Agile Engineering Design System ([AEDS 2010](#)), the only commercially available turbomachinery design system that integrates the complete engineering process through to manufacturing. AEDS 2010 includes upgrades to all its major modules. Turbomachinery engineers, designers, and manufacturers will benefit from the improvements included in AEDS 2010.

Concepts NREC will host a free four-hour [webinar](#) on September 15 to demonstrate AEDS 2010's many upgraded features and benefits. To register for the Concepts NREC AEDS 2010 webinar, go to: <http://tinyurl.com/AEDS2010>.

"Every year, we survey our users to address current market needs," says Mark Anderson, Vice President of Software for Concepts NREC. "We're seeing more and more requests for CAD compatibility and data transfer to other geometry and analysis software products as well. People want to move their data around seamlessly from one software package to another."

Concepts NREC's AEDS 2010 software covers all aspects of turbomachinery design and analysis. Its integrated computer aided engineering (CAE) tools help in development of rotating machinery such as turbines, compressors, fans, and pumps from preliminary design, detailed design, computational fluid dynamics (CFD), and finite element analysis (FEA) to optimization.

The top new features in AEDS 2010 are:

- **Meanline Radial Design Using COMPAL®, RITAL™ & PUMPAL®** - Meanline changes for better initial designs for pumps, and a new simplified fixed efficiency model
- **Meanline Axial Design Using AXIAL™ & PUMPAL** - New macro functions for more flexibility in design mode and localized design mode iterations
- **Detailed Design Using AxCent®** - Splitter cutback option to take advantage of advanced manufacturing techniques that define edges independently of ruled surface lines, the ability to represent a cutback surface as an impeller and diffuser combination (typical of a "downhole" design), tandem blade options, volute step geometry option for a step or shelf on either (or both) sides of the volute for pump-style types, and a new asymmetric volute type using a volumetric intersection technique to define the three-dimensional (3D) shape
- **Computational Fluid Dynamics (CFD) Using Pushbutton CFD®** - Improved clearance gap grid topology using degenerate cells to reduce grid skewing; better splitter grid generation via a new distribution scheme for impellers with splitters; full 360-degree CFD solutions encompassing every flow passage (most immediately useful for off-design volute analysis, but applicable to any machine design); and increased computational efficiency through better parallel calculations, 64-bit executables, and LINUX-based options

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- **Faster Toolpath Computation Using MAX-PAC™** - Upgraded toolpaths that compute up to 40% faster than with previous versions

## Availability and Purchasing

Concepts NREC's new Agile Engineering Design System Software 2010 is available for lease or purchase via the company's worldwide sales offices and authorized distributors. Purchase prices per module start at \$15,000. For a sales contacts and distributors, go to <http://www.conceptsnrec.com>.

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## ***Geometric Releases eDrawings Professional for Autodesk Inventor Version 8.0***

25 August 2010

[Geometric Limited](#) announced the release of [eDrawings](#) Professional for Autodesk Inventor version 8.0 with support for Autodesk Inventor 2011.

eDrawings is the first email enabled collaboration tool designed to ease the sharing and interpretation of 2D and 3D product design data.

The new version of eDrawings Professional for Autodesk Inventor includes:

- Support for Autodesk Inventor 2011
- Functionalities to export Bill of Materials information from Inventor to eDrawings
- Support for measurement of Assembly features, surfaces and 3D curves
- Upgrade of eDrawings viewer version to eDrawings 2010 SP3

For a free 15-day trial, please visit <http://edrawings.geometricglobal.com>. For pricing and purchase options please contact [ed.sales@geometricglobal.com](mailto:ed.sales@geometricglobal.com)

eDrawings Publishers are also available for [Pro/ENGINEER®](#), [CATIA V5®](#), [NX®](#), [Autodesk Inventor®](#), [SolidEdge®](#), [Google SketchUp®](#), as well as for [STEP/IGES/STL](#) and [DWG/DXF](#) files.

With eDrawings Publishers designers can:

- Generate ultra compact eDrawings (up to 95% compressed) for sharing over email
- Share and receive feedback on product designs with review-enabled eDrawings, and collaborate with unlimited number of recipients
- Manage, track, and merge comments from different team members
- Measure part, assembly and drawing geometry
- Use Dynamic Cross Sectioning and Hide/Show/Move components for understanding assembly structure
- Visualize drawings effectively with 3D Data, Layouts and 3D Pointer tool
- Insert Stamps, Password Protect, and Disable Measurement for protecting sensitive design data

For more information on eDrawings, please visit <http://edrawings.geometricglobal.com>.

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## ***Magma Announces Quartz iPOP Initiative -- Delivers "Improved Productivity, Operability and Performance" for Faster, Higher Capacity Physical Verification***

23 August 2010

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Magma® Design Automation Inc. launched Quartz iPOP, the "improved Productivity, Operability and Performance" initiative to facilitate designers' adoption of the Quartz™ DRC and Quartz LVS software for designs targeted at 65 nanometers (nm) and below. Magma's Quartz products, the first truly scalable physical verification solutions, handle larger designs and provide turnaround time up to an order of magnitude faster than traditional solutions – without sacrificing accuracy or requiring additional hardware. These capabilities provide the improved productivity and performance necessary to cope with the higher verification burden for designs at 65 nm and smaller without increasing the physical verification budget.

"The proportion of design activity at smaller geometries continues to increase. Just to maintain the same level of productivity means the physical verification needs to get faster," said Anirudh Devgan, general manager of Magma's Custom Design Business Unit. "Because the Quartz line is the only set of products that is fully scalable, it's the best verification option as design geometries shrink."

## **Foundry Report: 40-nm Wafer Shipments up 30 Percent**

In its second quarter 2010 earnings report, TSMC revealed that 43 percent of its revenue comes from its 65- and 40-nm process nodes, and the number of 40-nm wafer shipments increased by 30 percent over the previous quarter. The adoption rate of advanced process nodes is accelerating, and many wireless, networking, graphics and other high-volume semiconductor companies have already migrated to 65-nm and smaller process technologies.

## **Faster, Higher Capacity Physical Verification Required at 65-nm and Below**

The number of transistors that can be placed on an integrated circuit doubles approximately every 2 years – consistent with the predictions of Moore's Law. At 65 nm and below, the rule complexity and number of rules increase significantly. As a result, the cost of hardware and software, along with the runtime required for physical verification may quadruple as customers move to each new process node. At 65 nm and below, traditional physical verification solutions fail to meet capacity, turnaround time and accuracy requirements.

"At 65-nm and below, IC size and design rule complexity make physical verification an even tougher, time-consuming challenge – frequently pushing chip delivery past acceptable deadlines," Devgan said. "With easy access to Quartz DRC and Quartz LVS through the Quartz iPOP program, designers targeting 65-nm and smaller processes can experience firsthand the tremendous time- and cost-saving advantages of the industry's fastest, fully scalable physical verification solution."

## **Quartz iPOP: Better ROI, New Licensing Model and Free Trial of Quartz DRC and Quartz LVS**

The iPOP program is designed to demonstrate the superior productivity and performance delivered by [Magma's](#) Quartz DRC, Quartz LVS and Talus® qDRC physical verification solutions, and to ease adoption of the Quartz product the iPOP program features a new licensing model that enables designers to increase the return on investment (ROI) in Magma's physical verification tools.

The Quartz products have been proven to provide sign-off quality results across a wide range of customers, design styles and process nodes. Quartz DRC and Quartz LVS enjoy broad foundry support and can be used for sign-off or in conjunction with third-party physical verification tools. Users of Magma's Talus IC implementation system can achieve additional improvements in turnaround time and predictability with Talus qDRC, which provides Sign-off in the Loop™ physical verification. Unlike traditional tools, Talus qDRC runs during placement and routing to immediately identify and correct design rule violations, allowing Talus to generate sign-off-clean designs.

In addition to a new licensing model, the iPOP program features a free trial of the Quartz DRC and Quartz LVS software and an online quiz that lets designers demonstrate their knowledge of physical verification and enter into a monthly drawing for an Apple iPad. Designers can request the Quartz software evaluation and take the quiz by visiting [www.magma-da.com/QuartziPOP](http://www.magma-da.com/QuartziPOP). Only current and prospective Magma customers are eligible to win. No purchase necessary to enter, play or win. A purchase will not improve chances of winning.

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## ***Magma's Titan Qualified for TowerJazz Reference Flow***

24 August 2010

[Magma@ Design Automation](#) announced TowerJazz, the global specialty foundry leader, has qualified the Titan™ Mixed-Signal Design Platform for TowerJazz's Power Management Analog/Mixed-Signal (AMS) Reference Flow and process design kits (iPDKs) for its 180-nanometer (nm) technologies. Magma's Titan software and TowerJazz's foundry technology provide mutual customers with a comprehensive design and manufacturing solution that enables users to accelerate the design-to-silicon process and achieve first-time silicon success.

TowerJazz's Power Management AMS Reference Flow includes a comprehensive design flow and a Band Gap Reference design that demonstrates an effective methodology when taking advantage of TowerJazz's advanced Power Management process. With detailed flow steps and tools such as Titan that are qualified for TowerJazz's 180-nm Power Management process iPDK, the reference flow provides TowerJazz and Magma customers faster turnaround time.

"By working together to provide out-of-the-box flows, and create and qualify iPDKs for the most advanced power management offering, TowerJazz and Magma offer mutual customers a faster, more reliable path from design to volume production," said Ori Galzur, vice president of Design Center and iPDK Development at TowerJazz. "Having such a reference flow enables customers to easily design into the complex technologies that TowerJazz develops using automated best-in-class EDA tools."

"By automating key steps in the design process, Titan enables designers to quickly explore the design space and find the optimal solutions," said Anirudh Devgan, general manager of Magma's Custom Design Business Unit. "The combination of Titan with TowerJazz technology makes it easier for our customers to develop highly differentiated and more profitable mixed-signal systems-on-chip (SoCs)."

## **TowerJazz 180-nm Process and Features**

[TowerJazz's](#) 180-nm Power Management process is a cost-effective solution which offers modular add-ons such as a unique zero-mask-adder multi-programmable non-volatile memory (NVM) solution, thick copper-top metallization for high current drive, and optional 1.8V gate for heavy digital power management ICs. In addition, it offers scalable LDMOS devices that provide excellent area optimization of the power devices for up to 60 volts, all with very low mask count.

## **Titan: Accelerating Analog Design**

The Titan environment includes the comprehensive Titan Mixed-Signal Design Platform and a set of breakthrough point-tool technologies known as the Titan Accelerators. The Titan Mixed-Signal Platform is the industry's first true mixed-signal design platform. It integrates implementation and verification while delivering first-time-correct, predictable mixed-signal designs. The Titan mixed-signal platform includes a schematic editor, a complete analog simulation environment, schematic-drive layout and

layout editor. This platform is tightly integrated with the Talus® digital implementation tools and provides a chip finishing flow to deliver a comprehensive mixed-signal design platform.

Titan Accelerators are advanced technology solutions that dramatically improve analog/mixed-signal design productivity and reuse. The Titan Accelerators can be used separately as point tools to augment existing tool flows, or combined to create a comprehensive high-performance analog/mixed-signal design environment. The family of products includes the Titan Analog Design Accelerator (ADX) design and optimization tool that enables analog design reuse, the Titan Analog Virtual Prototyper (AVP) layout-aware schematic design tool that performs simultaneous electrical and physical co-design for rapid schematic-to-layout convergence, the Titan Analog Layout Accelerator (ALX) that automates migration of analog cell layouts to new process technologies while preserving design intent, and Titan Shape-Based Router (SBR) that automates difficult routing tasks to deliver a 10X improvement in routing productivity.

The Titan Mixed-Signal Platform and Titan Accelerators are fully compatible with TowerJazz's 180-nm Power Management design flow.

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## ***MathWorks Launches Turnkey Solution for Rapid Control Prototyping and Hardware-in-the-Loop (HIL) Simulation***

25 August 2010

[MathWorks](#) announced the availability of xPC Target Turnkey, a fully assembled, real-time testing solution for rapid control prototyping and hardware-in-the-loop (HIL) simulation using [Simulink](#). xPC Target Turnkey combines [xPC Target](#) from MathWorks with real-time target machines and I/O modules provided by [Speedgoat GmbH](#) to form a complete real-time testing solution.

Configuring a real-time test system involves the time-consuming and resource-intensive process of evaluating software platforms, hardware technologies and options, and project requirements. xPC Target Turnkey is optimized for Simulink and xPC Target, enabling engineers to use a customized Speedgoat target machine to interactively design, prototype, and test Simulink models in real time with hardware. Each real-time target machine is assembled based on the project specific performance, I/O connectivity, and environmental requirements.

“In our experience, this combination of Simulink tools and a Speedgoat real-time target machine promotes rapid design iteration and significantly reduced the time we spent on controls concept development, machine testing, and data analysis,” said Corey Quinnell, systems engineer at INCOVA Technologies, a manufacturer of hydraulic controls and subsidiary of HUSCO International. “Our task was to design and implement an intelligent valve control system for large hydraulic machinery and, with the xPC Target Turnkey solution, we were able to drop our development time by 50% and complete design modifications in an hour.”

“Engineers need the capability to test their designs with hardware,” said Michael Vetsch, CEO at Speedgoat GmbH. “A high-performance real-time testing environment that connects Simulink and Stateflow models to physical systems is a powerful technique to execute those tests, and verify that the design works as intended. We are excited to partner with MathWorks, offering our fully assembled, real-time target machines to meet varying levels of performance and environmental requirements.”

“Engineers today must anticipate real-world scenarios, test against a growing list of requirements, and

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quickly incorporate changes to reduce overall development time and costs. Key to this is the ability to work with an integrated real-time testing environment,” said Brett Murphy, technical marketing manager for verification, validation, and test, MathWorks. “xPC Target Turnkey allows engineers to focus on their design goals instead of hardware specifications and offers wide-ranging connectivity and performance in a turnkey solution that spans both hardware and software.”

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## ***Mentor Graphics Collaborates with GLOBALFOUNDRIES to Provide Easier Debugging Capability to IC Designers***

26 August 2010

Mentor Graphics Corporation announced it has collaborated with GLOBALFOUNDRIES to create a facility called Graphical Design Rule Manual (GDRM) that helps IC designers rapidly debug layout design rule violations by integrating the Calibre® RVE™ results viewing environment with GLOBALFOUNDRIES’ electronic design rule manuals. With GDRM, designers using the Calibre RVE tool to correct DRC hotspots can automatically access detailed GLOBALFOUNDRIES textual and graphical reference information about the specific rules generating the violations. By providing instant access to relevant information, the solution allows designers to fix errors more quickly and reduce time to signoff.

“The manufacturing variability issues of advanced process nodes has led to an exponential explosion in the complexity of design rules, resulting in longer physical verification debugging cycles,” said Andy Brotman, vice president of design infrastructure at GLOBALFOUNDRIES. “To counteract this trend, GLOBALFOUNDRIES is investing in unique capabilities aimed at helping GLOBALFOUNDRIES customers get to market more quickly. Our GDRM effort with Mentor is a good example of how our collaboration with ecosystem partners addresses specific bottlenecks and improves the overall design-to-silicon flow.”

“To make it easier for the industry to take advantage of advanced processes such as those being offered by GLOBALFOUNDRIES, we’re striving to make all facets of design enablement more seamless and productive,” said Michael Buehler-Garcia, director of marketing for Calibre design-side products at Mentor Graphics. “Cooperation to make DRC debug a faster and simpler process for custom designers is just one example of Mentor’s and GLOBALFOUNDRIES’ commitment to providing real-world solutions to the foundry ecosystem.”

The Calibre RVE integration with GLOBALFOUNDRIES’ GDRM is being shown in the [Mentor booth](#) at the **Global Technology Conference** on September 1 in Santa Clara, California. For more information on GTC 2010, visit: <http://www.globalfoundries.com/gtc2010/>.

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## ***New Study Shows 44 Percent Productivity Improvement With AutoCAD LT 2011***

24 August 2010

Demonstrating productivity gains ranging from 16 to 90 percent, [Autodesk, Inc.](#) unveiled the results of a new study that documents the time-saving features of its AutoCAD LT 2011 software. In the study, David S. Cohn, an independent consultant, compared AutoCAD LT 2011 to AutoCAD LT 2008 for

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creating standard drawings, revealing overall productivity gains of 44 percent for users moving from AutoCAD LT 2008 or earlier versions to AutoCAD LT 2011.

Based on user feedback, Autodesk updated the latest version of AutoCAD LT with key features designed to help save time and boost productivity. Object and layer transparency, external reference highlighting, enhanced hatch commands, and Microsoft Windows 7 support all contribute to making drafting with AutoCAD LT 2011 faster and easier. Cohn found that these time-saving enhancements can mean major cost savings.

“One could argue that by upgrading to the latest release, customers will actually save money because the features and functions of the new software would enable them to complete their work faster than would be possible had they used an earlier version of the software,” said David Cohn. “Most users will be able to get more work done faster by upgrading to AutoCAD LT 2011.”

Through communication in the field and via online channels like the AUGI (Autodesk User Group International) wish lists, Autodesk turned to its core user base to provide input for developing the latest version of AutoCAD LT with functions and features that help improve professional drafting productivity. Several of these performance-enhancing upgrades to AutoCAD LT 2011 were documented in the study, including:

- New block editor functions which synchronize how users add attributes and modify default values adds 66 percent productivity gain.
- Improvements to the graphical user interface deliver a 43 percent productivity increase.
- The ability to preview hatches and control transparency boosts productivity by 36 percent.
- Productivity gains of 46 percent through use of the grip editing tool to modify the angle and origin of hatch patterns.
- PDF underlay capabilities yield productivity increases of 40 to 92 percent.

In a real-world context where time is money, these productivity gains can translate into a positive return on investment for users upgrading to AutoCAD LT 2011, and free up time for increased innovation.

The full study is available for download at: <http://autocad.autodesk.com>

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## ***PLCS Requirements in US DoD Projects***

20 August 2010

In a recent document issued July 20, 2010, by the Department of Air Force, which relates to “Acquisition and Sustainment Life Cycle Management”, the following requirements are included;

3.91.1.1. The PM shall require the use of International Standards Organization (ISO) 10303, Standard for Exchange of Product (STEP) Model Data, AP239, Product Life Cycle Support, for engineering data.

3.91.1.2. Legacy system modifications shall implement ISO 10303 for new engineering data to the maximum extent feasible. Conversion to ISO 10303 for the entire legacy system is encouraged when

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supported by a positive business case analysis (BCA).

3.95.1. The PM shall address industrial base constraints in the LCMP. This should address mitigation to ensure that the system(s) can be supported during its life cycle. Open systems design, including Modular Open Systems Approach (MOSA), can help mitigate the risks associated with technology obsolescence and diminishing manufacturing capabilities by avoiding being locked into proprietary technology or by relying on a single source over the life of a system. Incremental development also should be considered to alleviate obsolescence concerns.

The Complete Document is available at: <http://www.af.mil/shared/media/epubs/AFI63-101.pdf>

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## ***Synopsys Announces Immediate Availability of DesignWare MIPI M-PHY IP in 40-nm Process Technology***

24 August 2010

Synopsys, Inc. announced immediate availability of the DesignWare® MIPI M-PHY® IP for next-generation high-speed interfaces based on the newly ratified MIPI® Alliance M-PHY specification. With this latest addition to the DesignWare MIPI IP portfolio, Synopsys is the first provider to offer a comprehensive solution of a controller and PHY IP for both the MIPI DigRF(SM) v3 (2.5G/3.0G) and v4 (4G) standards. Incorporating both standards in a mobile device brings the benefit of the faster 4G standards while preserving broad coverage by using 2.5G/3.0G as a fallback mode. The configurable MIPI DigRF V4 Master Controller and M-PHY hard macro are compliant to the MIPI Alliance specifications. Utilizing a single-vendor solution enables designers to lower the risk and cost of integrating these MIPI interfaces into baseband and application processor integrated circuits (ICs), speeding time-to-market of advanced semiconductor solutions for LTE and Mobile WiMAX.

The DesignWare MIPI M-PHY implements all required physical layer functionality defined in the MIPI DigRF v4 specification. The DesignWare MIPI M-PHY is designed to meet the stringent power consumption guidelines of the MIPI M-PHY specification, keeping the energy expenditure below 15pJ/bit for typical LTE applications. The integrated analog Phase Lock Loop (PLL) and biasing block are designed to help guarantee the integrity of the high-speed clocks and signals required to meet the strict timing requirements of the protocol, affording designers a robust and low risk solution. In addition, the DesignWare MIPI M-PHY supports the optional dithering functionality defined in the MIPI DigRF v4 specification to further lower Electromagnetic Interference (EMI).

"As an active contributor to the MIPI working groups, Synopsys continues to make solid contributions that support the MIPI Alliance portfolio of specifications," said Joel Huloux, chairman of the MIPI Alliance. "Synopsys is speeding the adoption of the new M-PHY interface into mobile devices and helping designers benefit from the latest functionality offered by the MIPI-based technology."

"To address the growing usage of multimedia content in mobile devices, designers are using standards-based interfaces from the MIPI Alliance to help them meet the increased data throughput requirements for mobile terminals targeting 4G standard air interfaces," said John Koeter, vice president of marketing for the Solutions Group at Synopsys. "Synopsys is playing a key role in supporting the MIPI ecosystem by providing designers with high-quality DesignWare MIPI IP consisting of DigRF v3/v4, CSI-2, D-PHY, and M-PHY IP, enabling them to lower the risk of integrating MIPI interfaces into their designs."

### **Availability**

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The DesignWare MIPI M-PHY is available now in leading 40-nanometer process technologies. The DesignWare MIPI IP for DigRF v3/v4, CSI-2 and D-PHY are available now. For more information, visit: <http://www.synopsys.com/mipi>.

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