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Acquisitions

ESI Group and Keysight Technologies take next step in acquisition process

22 September 2023

ESI Group and Keysight Technologies Inc announce the signature of a share purchase agreement for the acquisition by Keysight Technologies, Inc. of a majority stake in the capital of ESI Group SA at a price of 155 EUR per share. This step forward is made possible by the completion of the consultation of ESI Group's workers' council on September 19, 2023.

On June 29, 2023, ESI Group and Keysight Technologies, Inc. announced that Keysight had made a binding offer to certain shareholders of ESI Group (the "Sellers") to acquire a controlling block of ESI Group's share capital, representing in aggregate 50.6% of the share capital and 55.8% of the theoretical voting rights of ESI Group, at a price per share of 155 euros to be paid in cash, and in return for entering into exclusivity. Under Keysight's binding offer, the block acquisition, once completed, would be followed by the filing by Keysight of a proposed mandatory tender offer for the remaining shares of ESI Group outstanding at the time and, if the legal conditions are met at the end of the offer, a squeeze-out procedure and the delisting of ESI Group from Euronext Paris.

Obtaining the opinion of ESI Group's Workers' Council marks a new step enabling the signature, on 22 September 2023, of a share purchase agreement between Keysight and the Sellers relating to this controlling block of shares.

The acquisition is expected to be completed in the fourth quarter of 2023, subject to obtaining the necessary regulatory approvals. This would be followed by the filing of the tender offer. The market will be kept informed of the progress of this transaction and a detailed announcement will be made in due course.

ESI Group expresses its gratitude to its partners, shareholders, and all its stakeholders who support this strategic project.

Stratasys Completes Sale of Urethane Facilities

27 September 2023

Stratasys Ltd. ("Stratasys" or the "Company"), a leader in polymer 3D printing solutions, announced that on August 31, 2023 it completed the sale of the Stratasys Direct, Inc. ("Stratasys Direct") urethane facilities located in Poway, California to the Lamarjean Group, dba as PolyCraft Tech.

Stratasys Direct is the company's on-demand parts service bureau. The decision to sell the non-core Urethane facilities is part of an operational transformation effort that began in early 2023 and is intended to drive better focus, accountability, internal efficiency, and speed to customer, while simultaneously improving profitability.

"The closing of this transaction demonstrates the clear, decisive action we are taking to ensure our team focuses on delivering quality and specialized products to customers around the world,

and to improve the profitability of Stratasys Direct,” said Gurvinder Kahlon, General Manager and Vice President, Stratasys Direct. “Stratasys Direct has a strong foundation with a breadth of technological expertise, and I am confident in the opportunities ahead as we continue to take steps to drive stronger margins and position the business for future growth.”

“This is an important step in aligning the business to the company’s growth strategy and streamlining the organization for improved efficiency,” said Dr. Yoav Zeif, CEO of Stratasys. “The Stratasys Direct team is already improving our SAF and P3 technologies and they have grown key customer relationships through cross-selling. With even greater focus on the core strengths and technologies of Stratasys, the team will be even better positioned to provide customers with leading additive manufacturing solutions.”

Company News

3D Systems Announces CFO Transition

21 September 2023

3D Systems announced that Michael Turner is stepping down as the company’s Chief Financial Officer, effective October 15, 2023, to accept a new career opportunity. Andrew Johnson, 3D Systems’ executive vice president, chief corporate development officer, and chief legal officer, has been appointed interim CFO, effective October 16. The company has initiated an executive search to identify a permanent finance leader.

“I want to thank Michael for his dedication and leadership as we have executed on a finance transformation plan and operating performance improvements during his service to the company,” said Dr. Jeffrey Graves, president and CEO of 3D Systems. “I wish Michael continued success in the very exciting opportunity that he is taking as the next chapter of his career. I am pleased that Andy will assume the role of interim Chief Financial Officer. I have worked side-by-side with Andy over the last three years and expect this transition to be seamless as we continue to execute on our financial objectives and begin a search for a permanent replacement. Andy is a seasoned executive with over 17 years of experience with our company in multiple leadership roles, including leading corporate development and legal.”

In his role as Executive Vice President of 3D Systems, Mr. Johnson currently serves as Chief Corporate Development Officer and Chief Legal Officer for the company. Mr. Johnson joined 3D Systems in July 2006 and has served in increasing roles of responsibility in the corporate and legal departments including interim Chief Executive Officer from October 2015 until April 2016. In addition to earning his Juris Doctor from the University of Virginia, he earned a Master of Business Administration from the University of Michigan Ross School of Business, where he graduated with High Distinction.

Bechtle signs Science Based Targets Initiative (SBTi) commitment letter

26 September 2023

Bechtle has signed a commitment letter for the Science Based Targets Initiative (SBTi), pledging to pursue science-based climate protection targets and to undergo continuous audits by the globally recognised network. Once the IT service provider's own targets have been submitted, they will be validated by the SBTi based on current scientific consent on climate issues. The SBTi is a partnership between the global non-profit Carbon Disclosure Project (CDP), UN Global Compact, World Resources Institute (WRI) and the World Wide Fund for Nature (WWF) established in 2015 to help businesses define emission reduction targets in line with the latest climate science and the objectives of the Paris Agreement, which strives to limit the rise in global temperature to 1.5°C above pre-industrial levels.

By signing the SBTi's commitment letter, Bechtle is aiming to give more impetus to the objectives laid out in its Sustainability Strategy 2030, developing concrete targets and allowing these to be regularly reviewed on the basis of current scientific benchmarks. After signing, Bechtle now has 24 months to review its own targets and have them validated by the SBTi.

Guidelines for corporate responsibility

Bechtle began taking a systematic approach to sustainability as early as 2011, taking an initial stance through the Bechtle Sustainability Code—a set of principles published in 2013 to guide responsible and forward-thinking corporate management. The Bechtle Sustainability Strategy 2030 was then developed by August 2021 to serve as a benchmark for corporate responsibility across the Bechtle Group.

Four strategic areas of action

Introduced in its Sustainability Strategy, Bechtle has defined concrete objectives to be pursued from an ecological, economic and social point of view. It incorporates the UN Sustainable Development Goals (SDGs) and comprises four strategic areas of action—ethical business practices, the environment, people and digital future. Each field of action is backed by a programme that includes goals, milestones and operational measures.

DELTEK CELEBRATES THE CONSTRUCTION INDUSTRY DURING CONSTRUCTION APPRECIATION WEEK

21 September 2023

Deltek, the leading global provider of software and solutions for project-based businesses, is celebrating Construction Appreciation Week, September 18-23, 2023. Each year during the third week in September, the more than 11 million men and women who make up the construction industry are recognized for contributing to the development of the nation's infrastructure, facilities, products and services.

Deltek supports the thousands of trade and general contractors who trust Deltek ComputerEase to run their businesses efficiently and profitably, ensuring jobs are on time and on budget. Deltek ComputerEase is the leading tool for construction accounting, job costing, project management, payroll services, cloud hosting and more. The newly

released ComputerEase Field™ mobile app builds on existing ComputerEase capabilities, allowing contractors to streamline time and expense management while seamlessly connecting office operations to the job site via an easy-to-use app.

As a complement to its software offerings, Deltek also offers Deltek Pros™ for the construction industry – a unique program that connects Deltek customers with trusted accounting professionals from its ecosystem of vetted partners. Deltek Pros are experienced in meeting the unique needs of construction firms and are ComputerEase experts. The program provides construction professionals with an indispensable combination of industry and product expertise to help them manage the intricacies of payroll, reporting, and job costing. With Deltek Pros, contractors can eliminate generic third-party software tools while quickly maximizing the value of their investment in Deltek ComputerEase.

“Deltek is proud to shine a spotlight on the incredible work done by the construction industry, and we’d like to thank the thousands of companies using ComputerEase for their partnership. Our customers are doing incredible things every day and it’s a privilege for us to support them as they continue to grow,” said John Meibers, VP and General Manager of Deltek ComputerEase. “With the release of ComputerEase Field and our Deltek Pros program, we’re providing even more ways for construction professionals to better manage their jobs.

Deltek Builds on Its Momentum in the Construction Industry

Deltek ComputerEase was recently recognized by the peer-to-peer review site G2, securing four honors in G2’s Fall 2023 reports. ComputerEase was selected by users as the top product for “Ease of Use” and “Ease of Admin” scoring #1 in both categories of the G2 Project-Based ERP Usability Index and beating out the competition. Deltek ComputerEase was also named a Leader in both G2’s Fall 2023 Americas Grid® for Construction Project Management Software and Grid® Report for Construction Management.

Construction industry professionals can learn more about Deltek’s commitment to the industry, meet like-minded peers, and take part in sessions designed to help them maximize their ComputerEase investment at Deltek ProjectCon, the annual networking and learning event held from October 16-18 in Orlando. Attendees will be able to engage directly with speakers in ComputerEase-specific sessions designed to educate them on how to increase user adoption, improve processes, enhance data validation and boost visibility across their businesses. Deltek will also be sharing best practices for managing payroll, exploring field application enhancements, and giving a sneak peek at upcoming releases, along with expert tips to simplify day-to-day tasks within the ComputerEase solution.

Hexagon's Sixth Sense Announces Nine Startups to Transform Manufacturing Sustainability and Digital Reality

25 September 2023

Hexagon's Manufacturing Intelligence division announced the nine manufacturing startups chosen for its third Sixth Sense cohort. The selected companies were chosen from a highly competitive pool of hundreds of applicants, distinguishing themselves with groundbreaking

solutions addressing critical manufacturing challenges, with a focus on sustainability and digital reality.

The selected startups, which hail from seven countries, bring unique approaches to some of today's most critical manufacturing challenges, such as improving product sustainability, eliminating waste, capturing real-time data, automating design, and incorporating cobots into production lines. As part of the Sixth Sense program, they will gain access to Hexagon's invaluable market insights, accumulated over decades of collaboration with industry-leading technology giants, which will accelerate their journey to commercial success.

Hexagon, the industrial software leader that plays a pivotal role in manufacturing 90% of aircraft, 75% of smartphones, and 95% of all automobiles worldwide, launched Sixth Sense in January 2022. This initiative is designed to nurture startups within the manufacturing industry by supporting them with Hexagon's extensive resources.

The nine startups are:

- **Acerta Analytics, Canada:** Acerta Analytics provides advanced analytics solutions that leverage machine learning and artificial intelligence (ML/AI) to turn complex product data into actionable insights. The solution enables automakers and suppliers of complex vehicle parts to improve quality in manufacturing processes and supports early defect detection.
- **Circularise, Netherlands:** Circularise offers digital product passports for end-to-end traceability and secure data exchange in industrial supply chains. Its technology helps companies achieve transparency and sustainability by tracking the lifecycle of products and materials.
- **Dessia, France:** Dessia offers a platform featuring virtual "bots" that serve as companions to assist engineers in designing mechanical systems. These virtual assistants provide support and insights throughout the design process.
- **Flexxbotics, Boston, US:** Flexxbotics specialises in enabling high-mix automation-intensive manufacturers to create flexible next-generation machining environments. It utilises breakthrough FlexxCORE™ technology to seamlessly connect and coordinate collaborative robots with existing automation equipment, IT systems, and personnel to deliver autonomous process control.
- **Launchpad, Los Angeles, US:** Launchpad utilises AI and advanced simulation technologies to automate aspects of the design, procurement, and manufacturing process. Its focus is on concepts like mass customization, micro-factories, and software-defined robotics to create shorter supply chains, reduce waste, and deliver new features faster in the manufacturing industry.
- **Rafinex, Luxembourg:** Rafinex's stochastic AI topology optimization for safe, lightweight designs. This technology actively manages uncertainty and risks of real-life variability to create uniquely robust designs that remain safe even in off-design load conditions for

application in safety-critical performance sectors such as aerospace, automotive, and tooling.

- RV Magnetics, Slovakia: RV Magnetics has developed the world's smallest passive sensor based on MicroWire technology. This sensor combines unique capabilities from electromechanics, electronics, chemistry, physics, applied magnetism, and industrial design, offering diverse applications.
- ToffeeAM, London, UK: ToffeeAM provides state-of-the-art multi-physics generative design software for engineering. Its mission is to empower engineers to optimise engineering components and systems efficiently, enabling them to go further and faster in design processes.
- Zaptic, Manchester, UK: Zaptic provides job instruction and collaboration tools for frontline teams, along with a no-code toolkit designed to accelerate the digital transformation of daily operations. The solutions help organizations streamline processes and improve communication among frontline workers.

These startups will embark on an intensive 16-week journey as part of the Sixth Sense program, collaborating closely with Hexagon to refine their offerings. Ultimately, up to three winners will be selected from the cohort, granting them access to Hexagon's extensive resources for global expansion, including potential funding, worldwide office space, and Hexagon's comprehensive suite of products and services. Additionally, they will be showcased on Hexagon's open digital reality platform for manufacturing, Nexus, providing them access to world-class companies.

"For this third cohort, we've been on the hunt for new innovations that enable manufacturing leaders to lead the net-zero transition – especially with sustainable product design – and we're thrilled with the caliber of the startups we've found to participate," said Josh Weiss, president of Hexagon's Manufacturing Intelligence division. "Sixth Sense is designed to pinpoint emerging opportunities for greater innovation, and we're thrilled to give these companies that are poised for high-growth access to resources and customers that they typically wouldn't have at this stage in their lifecycle."

"Hexagon's commitment to nurturing innovation and driving sustainable manufacturing practices continues to shine through," said Milan Kocić, head of Sixth Sense, Hexagon. "Each of these startups has demonstrated their capacity to address pressing manufacturing challenges with creativity and determination. Much like our previous cohorts have addressed critical industry challenges, we believe these innovators will play a crucial role in shaping a sustainable future for the manufacturing industry."

Infosys collaborates with Microsoft to accelerate and democratize industry-wide adoption of generative AI

26 September 2023

Infosys, a global leader in next-generation digital services and consulting, announced that it is collaborating with Microsoft to jointly develop industry leading solutions that leverage Infosys Topaz, Azure OpenAI Service and Azure Cognitive Services. Both organizations are bringing

together their respective artificial intelligence (AI) capabilities to enhance enterprise functions with AI-enabled solutions across multiple industries. The integrated solutions will accelerate rapid democratization of data and intelligence that will help businesses increase productivity and drive new revenue growth.

Generative AI has opened new avenues of AI applications and key enterprise functions across industries, and Infosys is providing services, frameworks, solutions, and platforms in multiple application areas, such as semantic search, document summarization, contact center transformation, AI-augmented software development lifecycle (SDLC) and marketing content creation. For example, Infosys helped a leading financial services company implement an AI-based solution to generate document summaries and provide a semantic search capability using generative AI. This resulted in automated organization of documents, which significantly reduced efforts and improved productivity of their financial advisors.

Through the collaboration with Microsoft, Infosys Topaz is using Azure OpenAI Service and Azure Cognitive Services to augment its capabilities, in order to help enterprise customers transition from digital to AI solutions. The integrated solutions will boost customers' operational efficiency, decrease turn-around-time, future-proof investments, and open new business models.

Balakrishna D. R. (Bali), Executive Vice President and Global Head – AI and Automation, Application Development & Maintenance, Infosys, said, "Infosys Topaz is empowering businesses with improved operational efficiencies and reduced time-to-market for launching new products and services. It converges the power of Infosys Cobalt and data analytics to AI-power business and deliver cognitive solutions and intuitive experiences that revitalize growth. Through our strategic collaboration with Microsoft, we will continue to lead the generative AI revolution, helping businesses amplify human potential and navigate their next towards becoming AI-first enterprises."

Nicole Dezen, Chief Partner Officer, Microsoft Corp, said, "We're pleased to expand our collaboration with Infosys to deliver innovative solutions, utilizing Azure OpenAI Service and Azure Cognitive Services, that will help customers develop new business models, and realize new revenue streams. By harnessing the power of generative AI, Infosys will help customers accelerate growth and innovation."

Keysight and Synopsys Partner for IoT Device Cybersecurity

21 September 2023

Keysight Technologies, Inc. and Synopsys, Inc. are partnering to provide internet of things (IoT) device makers with a comprehensive cybersecurity assessment solution to ensure consumers are protected when devices are shipped to market. Under the arrangement, the Synopsys Defensics® fuzzing tool will be embedded as an option into the Keysight IoT Security Assessment solution.

The global IoT device market is experiencing notable growth due to the rise in adoption of IoT devices and is projected to reach a market value of \$413.7 billion by 2031. According to Palo Alto Networks IoT Threat Report, the vulnerability of IoT devices makes them easy targets with

57% of IoT devices at risk of medium or high-severity attacks. With the proliferation devices and of IoT cyberattacks, device makers are increasingly in need of assessment tools to identify and remediate device security vulnerabilities. One component of an effective, comprehensive security assessment is fuzzing, an automated software testing method that injects invalid, malformed, or unexpected inputs into a device to reveal defects and vulnerabilities.

With the addition of Defensics to the Keysight IoT Security Assessment, users now have a complete, comprehensive solution that combines known vulnerability assessments with a versatile fuzzer that can analyze over 300 different technology protocols used across diverse industries to quickly test for unknown vulnerabilities and weaknesses. In addition to reporting security flaws uncovered through fuzzing, the solution detects potential exploits resulting from weak authentication and encryption, expired certificates, Android vulnerabilities and Android Debug Bridge (ADB) exposures, known Common Vulnerabilities and Exposures (CVEs), and embedded flaws in protocol stacks, such as Bluetooth Low Energy attacks like Sweyntooth and Braktooth.

In addition, the Keysight IoT Security Assessment solution makes it easy and cost-effective for manufacturers to test IoT devices now and achieve the new White House Cyber Trust Mark certification when it is released. This turnkey cybersecurity certification platform enables automated validation through a point-and-click interface, allowing device makers to quickly bring new IoT products to market without hiring a large team of cybersecurity experts.

Scott Johnson, Vice President of Product Management, Synopsys Software Integrity Group, said: "With billions of IoT devices in use and more on the way, security testing is more critical than ever to address new threats and evolving regulations. Our collaboration with Keysight will provide a comprehensive solution for customers that combines hardware and Defensics fuzz testing software to conduct automated IoT security testing."

Ram Periakaruppan, Vice President and General Manager, Network Test & Security Solutions, Keysight, said: "Securing IoT devices against attacks has become exponentially more difficult for manufacturers with the demand for new devices and increased functionality. By partnering with Synopsys to add their best-of-breed fuzzing tool, Keysight can provide device makers with a comprehensive security testing solution to identify previously unknown protocol stack vulnerabilities in their devices while assessing them for known threats, all from a single, easy-to-use interface."

LTIMindtree is 2.8 Times Water Positive, Ahead of Its 2030 Target

27 September 2023

LTIMindtree, a global technology consulting and digital solutions company, announced that it has been certified as Water Positive as part of its commitment to sustainability and responsible corporate citizenship. The company has achieved its 2030 target this year and has been provided with a 2.8 Water Positive Index, a gold standard in auditing and certification, by Green Carbon Energy & Environment Services (GCEES) for the financial year 2022-2023.

Water shortage is a significant crisis, and solving this is one of the attainments of the United Nation's Sustainable Development Goals (SDGs). This crisis affects the livelihood of

communities and is being increasingly reported as a financial risk to organizations. According to the Water Action decade initiative 2018-2028, there will be a steep fall of around 40 percent in freshwater availability by 2030, which alongside of rising population will push towards a global water crisis. Today, around 1.7 billion people live in river basins where water usage is far more than its rate of recharge.

Data by the United Nations suggests that 40 percent of the global population is directly affected by water scarcity, and the numbers are predicted to rise in the coming years. These shortages are manifested by a lack of reliable access to safe and affordable water in many urban areas, an increased pressure on water to grow food and sustain livelihoods in rural or semi-rural areas, and a rapid deterioration of the ecosystems that in turn, supply water and depend on water for their proper functioning.

“At LTIMindtree, our Environmental, Social & Governance (ESG) vision reflects our commitment to environmental stewardship, talent development, and community care while pursuing sustainable growth. Our goals are aligned to those of United Nations’ SDGs as we understand the environmental and economic impact that the impending crises can cause. Our efforts have been continuous and consistent, and we are honored to be certified as a Water Positive organization. We will continue our present initiatives and bring in newer ones to make a significant impact on the environmental crises,” said Paneesh Rao, Chief Sustainability Officer, LTIMindtree.

LTIMindtree aligns its sustainability goals and targets with UN SDGs and is consciously working on Sustainable Development Goal 6, indicating targets viz. 6.3, 6.4, 6.5, and 6.6 comprising of improving water quality, wastewater treatment, and safe reuse, increasing water-use efficiency and ensuring freshwater supplies, implementing Integrated Water Resources Management, and protecting and restoring water-related ecosystems.

LTIMindtree has year-on-year targets to maintain water neutrality and positivity for its office locations pan India. Various initiatives in line to mitigate the water usage and balance and surpass it effectively are – reducing freshwater consumption, increasing usage of recycled water, establishing rainwater harvesting in the LTIMindtree campuses, and constructing water harvesting structures for the community, which supports farming by increasing crop for two cycles thereby increasing income of farmers too. The freshwater consumption for all LTIMindtree locations is 2,08,974 KL, whereas the water conservation achieved through in-situ rainwater harvesting and community water conservation projects is 5,86,079 KL. This highlights a positive margin between the generation of harvested rainwater and consumption, contributing to the overall Water Positivity goal.

LTIMindtree’s assessment and certification by GCEES fulfill the requirements of ISO 14046:2014 (Environmental Management-Water footprint – principles, requirements, and guidelines). The study is a standalone assessment and not a part of a life cycle assessment, fulfilling the requirements of ESG and SROI principle. LTIMindtree will continue striving to grow its water positive status throughout its sustainability journey.

PlanHub Welcomes New Leaders for Construction Tech Innovation

26 September 2023

PlanHub, the leading preconstruction software as a service (SaaS) company, is thrilled to introduce three accomplished professionals who have joined its leadership team. With an impressive 490% growth over the past three years, PlanHub is strategically expanding its team to continue innovating and growing its market presence. Adding these seasoned leaders strengthens PlanHub's commitment to providing exceptional customer value and further sharing PlanHub's vision of innovation and transformation with its customers.

The visionaries helping to shape PlanHub's preconstruction evolution include Heather Adams, the newly appointed Vice President of Marketing, Tom Smart, who joined as Vice President of Sales, and Sid Nair, named Vice President of Product. Each of these new team members brings a wealth of experience to their respective roles and strategic insight from prior pivotal positions in emerging startups and industry giants from diverse industries such as real estate, agriculture, and software.

Ro Bhatia, CEO of PlanHub, expressed, "I am incredibly excited to announce the latest additions to our leadership team at PlanHub. With their expertise and dedication, we are confident that these exceptional individuals will move forward our vision of simplifying preconstruction for everyone.

Ro Bhatia, CEO of PlanHub, expressed, "I am incredibly excited to announce the latest additions to our leadership team at PlanHub. With their expertise and dedication, we are confident that these exceptional individuals will move forward our vision of simplifying preconstruction for everyone. Their contributions will undoubtedly make a significant impact on how contractors of all sizes manage their businesses and enhance efficiency. We aspire not only to be an industry leader but also to provide industry leadership, and these new team members will play a vital role in achieving that goal."

In response to the question regarding their decision to join PlanHub, the team provided the following insights:

Smart said, "Together, we will continue to solve business problems, sell innovative SaaS solutions, and empower our customers to thrive in a digital world."

"At PlanHub, we are bold, talented, and on a mission. We will not rest till we simplify preconstruction for contractors, owners, architects, suppliers – everyone," said Nair.

Adams emphasized, "My enthusiasm stems from not only raising awareness and adoption of PlanHub but also making this powerful platform accessible to SMB construction companies, potentially revolutionizing how they source and grow their businesses."

PlanHub is actively seeking new talent and eagerly anticipating the impact of new team members as it transforms and innovates the preconstruction tech industry.

Sandvik introduces new logotype and visual identity

21 September 2023

Sandvik presents a new visual identity. It highlights the company's commitment to lead the shift towards digitally driven and automated industries, and it is developed to suit the current position of the company as a technology leader enabling improved productivity, efficiency and sustainability for its customers.

Over the past few years, Sandvik has implemented a new strategy and defined a common purpose: We make the shift – advancing the world through engineering. This, in combination with fundamental changes like strategic acquisitions and the 2022 listing of business area Sandvik Materials Technology has reshaped the company and secured a strong foundation for the future.

“Sandvik has in many aspects become a new company in recent years. We have strengthened our world-leading positions through innovation and strategic acquisitions, and we want to continue to build our technology leadership and keep driving productivity and sustainability gains for our customers. Reflecting this, I am very pleased that we reveal a new, modern brand identity and logotype fit for our purpose and strategy,” says Stefan Widing, President and CEO of Sandvik.

Sandvik is on a path of transformation, building a unique position combining hardware with software and digital solutions in the mining, manufacturing, and infrastructure industries, with solutions improving sustainability and productivity for customers on a global scale. A crucial part of this is a focus on collaboration and co-creation to deliver these cutting-edge solutions.

The updated brand identity represents this new, modern Sandvik, and rests on three core elements - proactive partnerships, forward-thinking solutions, and sustainable progress. The logo is inspired by the 1962 Sandvik logo and is a tribute to the company heritage and history. A new symbol is also introduced, intended as the key bearer of the Sandvik brand and the mark of the corporate purpose. It represents “progress” and “circularity”, visually summarizing the commitment of Sandvik to advance the world through engineering.

Synopsys Appoints Ann Minooka as Chief Marketing Officer

28 September 2023

Synopsys, Inc. announced the appointment of Ann Minooka as the company's Chief Marketing Officer, reporting to Sassine Ghazi, president and COO of Synopsys. Minooka joins the company with more than two decades of marketing leadership experience in the semiconductor industry and is responsible for leading Synopsys' global brand strategy, communications, and marketing initiatives.

“Ann brings deep semiconductor industry experience and a strong track record of strengthening technology brands, revolutionizing digital marketing through data-driven insights and cultivating effective collaborations that drive impactful results,” said Ghazi. “Ann joins Synopsys at a time of unprecedented opportunity. She will play a critical role shaping our

strategy and elevating our brand positioning for not only our leading technology, but also how essential we are to the semiconductor innovation that powers our 'smart everything' world."

Synopsys is a deep technology company that has delivered state-of-the-art electronic design automation software, IP building blocks, and software security products to the semiconductor industry. For the last three and a half decades, Synopsys has established itself as the market leader in its field, enabling advancements in computing, artificial intelligence, and next generation silicon technology.

"Based on decades of driving innovation and building trust with its customers, Synopsys has earned a very special place at the heart of the incredibly important semiconductor industry," said Minooka. "It will be an honor to help elevate the Synopsys brand and shape the company's story for this exciting next chapter of innovation and growth."

Prior to Synopsys, Minooka held the position of CMO at Ampere Computing, where she played a pivotal role in crafting and promoting a differentiated corporate narrative, spearheading digital marketing strategies, and orchestrating highly effective demand generation campaigns. Prior to her tenure at Ampere, as CMO of Xilinx (acquired by AMD), she successfully repositioned the company as the leader in adaptive computing, established a robust demand generation infrastructure, and transformed the marketing organization from a cost center into a revenue-generating engine. Her extensive career journey also includes leadership roles at Cypress Semiconductors (acquired by Infineon), Synaptics, and LSI Logic (acquired by Avago). She holds a B.A. in Computer Science and an M.B.A. from Boston University.

Trimble and AGCO to Form Joint Venture to Better Serve Farmers Worldwide with Mixed Fleet Precision Agriculture Solutions

28 September 2023

Trimble announced a definitive agreement to form a joint venture (the "JV") with AGCO to better serve farmers with factory fit and aftermarket applications in the mixed fleet precision agriculture market. Trimble and AGCO's shared vision is to create a global leader in mixed fleet smart farming and autonomy solutions.

In aggregate, Trimble expects approximately \$3 billion in value from the transaction from pre-tax cash proceeds, Trimble's 15 percent stake in the joint venture, and the related commercial agreements.

Under the terms of the JV, Trimble will contribute its precision agriculture business ("Trimble Ag") excluding certain Global Navigation Satellite System ("GNSS") and guidance technologies and AGCO will contribute its JCA Technologies business, which is a leader in the development of autonomous software for agricultural machines, implement controls and electronic system components. Trimble will receive \$2 billion in pre-tax cash proceeds plus a 15% stake in the JV. In addition, the parties will enter into (i) a long-term Supply Agreement through which Trimble will provide the JV with key GNSS and guidance technologies ("Supply Agreement"), (ii) a Technology Transfer and License Agreement ("TTLA") to govern the licensing of Trimble trademarks and technology for use by the JV after the expiration of the Supply Agreement and

(iii) a Positioning Services Agreement through which the JV will serve as a channel partner to Trimble for its positioning services in the agriculture market (collectively, the "Commercial Agreements").

Delivering a Leading Portfolio of Agriculture Technologies

The JV will align two leading companies dedicated to serving farmers worldwide with cutting-edge technologies to help farmers drive productivity, efficiency and sustainability. For customers, the JV's technology is expected to offer seamless integration and connectivity across geographies, equipment brands and the crop life cycle. For dealers, it is expected to better serve farmers with a broad, complementary, and leading technology portfolio.

"Farmers today are looking for mixed fleet solutions across their tractors and the implements that they use to most efficiently and sustainably feed the world. We believe a joint venture with AGCO, complemented by the successful mixed fleet approach that they have developed with their Precision Planting business model, can help us better serve farmers and OEMs together," said Rob Painter, Trimble's president and chief executive officer. "Trimble has a rich history of forming and cultivating joint ventures with industry leaders such as Caterpillar, Nikon and Hilti and we are excited about this opportunity with AGCO and its family of leading brands. We look forward to beginning a new chapter with AGCO to bring precision agriculture to both the factory and to the aftermarket."

"The exclusive access to Trimble Ag products, combined with AGCO's existing Precision Ag offerings, accelerates AGCO's growth ambitions around autonomy, precision spraying, connected farming, data management and sustainability," said Eric Hansotia Chairman, President and CEO of AGCO Corporation. "All of these touchpoints will result in our team being even more farmer focused."

Transaction Expected to Result in a Stronger, More Focused Trimble

Following completion of the transaction, Trimble will continue to deliver its differentiated technologies at the intersection of the physical and digital worlds across its core businesses.

The transaction is expected to result in significant benefits to Trimble, including:

Simplifies Connect and Scale Strategy

- Streamlines portfolio and increases focus on priority growth areas
- Reduces exposure to hardware-centric agriculture market while retaining highly recurring revenue Positioning Services business
- Retains core GNSS IP and will continue to innovate and offer across served markets, including the JV

Enhances Financial Profile and Flexibility

- Results in a higher mix of software, services and recurring revenue from 66% to 72% on a pro forma basis
- Results in a higher mix of recurring revenue from 49% to 55% on a pro forma basis

- Over \$1.5 billion in net proceeds after tax used to repay \$1.1 billion in debt and repurchase shares

De-risks Trimble's Channel Transition in the Agriculture Market

- Provides opportunity to partner with a leading OEM focused on serving the mixed fleet across the globe
- Comprehensive plan with a major OEM provider reduces uncertainties from the Trimble aftermarket channel transition
- Maintains ongoing participation in a leading Precision Ag asset

Trimble Financial Details

Trimble's precision agriculture business, which has historically been reported as part of Trimble's Resources and Utilities reporting segment, is expected to generate fiscal 2023 revenues of approximately \$535 million and Adjusted EBITDA of approximately \$185 million as part of Trimble. For comparative purposes, after giving effect to the transaction as if it had occurred on the first day of fiscal 2023, Trimble estimates that it would have generated approximately \$65 million of revenue and approximately \$15 million of Adjusted EBITDA from the Supply Agreement.

Following the launch of the joint venture, Trimble's 15 percent interest in the net profits of the joint venture will be included in Trimble's income from equity method investments, net. For comparative purposes, after giving effect to the transaction as if it had occurred on the first day of fiscal 2023, Trimble estimates that it would have earned approximately \$25 million of equity income from its stake in the JV.

Trimble's Resources and Utilities segment also includes (i) forestry solutions used in the global forest supply chain, (ii) utilities software and solutions used to enable geospatial-centric enterprise asset management and (iii) positioning services which enables precision GNSS positioning and includes recurring revenue encompassing CenterPoint RTX, RangePoint RTX and ViewPoint RTX, which will remain with Trimble following the transaction in addition to revenue and income from the Supply Agreement with the JV.

Timing and Approvals

The transaction is expected to close in the first half of 2024, subject to customary closing conditions including regulatory approvals.

Investor Conference Call

Trimble will hold a conference call on Sep. 28, 2023 at 12:30 p.m. ET to discuss the joint venture. An accompanying slide presentation will be made available on the "Investors" section of the Trimble website, www.trimble.com, under the subheading "Events & Presentations." The call will be broadcast live on the web at <http://investor.trimble.com>. Investors without internet access may dial into the call at (888) 660-6347 (U.S.) or (929) 201-6594 (international). The conference ID is 1043223. The replay will also be available on the web at the address above.

Trimble Technology Lab for Architecture and Construction Opens at Virginia Tech

29 September 2023

With a shared focus on educating the workforce of tomorrow, Virginia Tech and Trimble opened a state-of-the-art Trimble Technology Lab at Virginia Tech's Blacksburg campus. The multidisciplinary lab will bring industry-leading technology to Virginia Tech's students in architecture, building construction and construction engineering. The lab is jointly sponsored by the university's School of Architecture and Myers-Lawson School of Construction.

"Through partnering with Trimble, we will be able to provide students with cutting-edge tools and training to ensure that they graduate at the technological forefront of their respective creative disciplines," said Lu Liu, dean of the College of Architecture, Arts, and Design. "While our faculty are regular users of Trimble products already, the company's support of our college will accelerate faculty research and creative engagement in industry through its robust support network and professional development opportunities."

Located in Burchard Hall, the new lab comes after years of collaboration between Virginia Tech and Trimble in various areas of research. Most recently, associate professor Abiola Akanmu of the Myers-Lawson School of Construction published research on the utilization of mixed reality technologies for construction workers. Using the Trimble® XR10 HoloLens hardhat, her research explores the potential for training and upskilling workers in mixed-reality environments to lead to safer and smarter work on construction sites.

"Over the years one of the challenges we have had is access to the state-of-the-art software and hardware that are used by industry practitioners," said Akanmu. "Partnering with Trimble helps us prepare students to excel and innovate in the construction industry."

"Virginia Tech faculty have been conducting innovative research for several years using Trimble technologies so this is an excellent university for our newest Trimble Technology Lab," said Amy Northcutt, director of education and outreach at Trimble. "Working with both the School of Architecture and the Myers-Lawson School of Construction will increase the number of students learning about Trimble technology and preparing to make a difference in the industries we serve."

The lab includes a broad range of Trimble's industry-leading geospatial and construction solutions such as the Trimble® XR10 HoloLens hardhat, robotic total stations, 3D scanners and GNSS systems. Advanced software solutions include RealWorks® point cloud processing and analysis software, Trimble Business Center Infrastructure Construction edition, Tekla® Structures, Tekla Structural Designer, Trimble Connect® collaboration software, FieldLink Office, SysQue MEP design software, WinEst cost estimation software, Sefaira environmental design software, and the company's popular 3D modeling software, SketchUp, among other products.

Vectorworks Empowers Designers to Thrive in their Educational Journey

26 September 2023

This back-to-school season, global design and BIM software provider Vectorworks, Inc. invites all those involved in shaping the future of design to experience the freedom Vectorworks software delivers. Offering a uniquely uninterrupted workflow, Vectorworks allows future and current designers to master their processes faster and spend more time developing designs.

With a complete collection of tools and resources, students honing their skills, educators teaching design and administrators making license and infrastructure decisions can all benefit from Vectorworks' education-focused offerings this school year and beyond.

"Vectorworks software helps designers change the world, and we want to make sure that students and educators are included in this group to lead the transformation," said Vectorworks Academic Marketing Program Specialist Jennifer Hart. "We take pride in offering free access to our software and valuable resources that help aspiring designers worldwide unlock their full potential, from the very beginning of their educational journey to their successful professional careers. We also deeply appreciate educators' crucial role in shaping the next generation, and we are committed to providing them with the necessary tools, resources, and support to enhance their vital efforts."

Free Educational Licenses for Students and Educators

Students in most global markets can gain access to a free educational license of Vectorworks 2024, which offers a wide range of comprehensive solutions designed to streamline workflows, minimize effort, boost efficiency, increase precision and elevate organizational capabilities.

Students and educators who request an educational license will have access to Vectorworks Design Suite, Vectorworks' most robust offering that includes all the capabilities of Architect for architecture and interiors, Landmark for landscape design, Spotlight, Braceworks and ConnectCAD for entertainment design and Fundamentals. Additional entertainment industry add-ons, like Vision, Vectorworks' previsualization tool, are available upon request. Educators can also access free educational licenses to utilize for instruction. To request an educational license, students and educators must sign in using their Vectorworks account or create a new account.

Free Software for School Labs

Vectorworks is proud to provide full lab donations to colleges and universities in most global markets, allowing for guided instruction of Vectorworks software. Faculty in charge of computer labs can request free educational licenses of Vectorworks Design Suite and the entire entertainment design solution with Spotlight, Vision, Braceworks and ConnectCAD.

Gain a Competitive Edge with student2PRO

As students' academic careers come to an end, they can kickstart the next step of their professional careers with some financial assistance. Vectorworks' student2PRO program helps set recent graduates up for success with the design software and tools they need to stay ahead of the curve. Individuals who have recently completed a design-based program at a university,

college or post-secondary vocational school are eligible for a 40 percent discount off a Vectorworks professional annual subscription.

This advantage can help ease the transition from student to design professional, provide a competitive edge in the job market and boost graduates' careers while being budget-conscious. Vectorworks student2PRO offering also includes a one-time opportunity to convert all student projects to watermark-free professional files at no cost, free one-time access to an on-demand certification course and the accompanying certification test (a combined value of \$249 USD) and the latest in Vectorworks software upgrades, new content libraries, priority support, training resources and more.

Learn at No Cost with Vectorworks University

Vectorworks University, Vectorworks' completely free and self-guided training platform, offers the opportunity to gain new skills, access industry certifications and fine-tune workflows to optimize creative processes. Constantly updated with new content, including webinars, how-tos and feature highlights, Vectorworks University delivers hundreds of videos and is the best place to get acquainted with best-practice workflows, tool use and more. Beyond training, Vectorworks University offers many in-depth courses and the Vectorworks Certification Program. Endorsed by leading industry experts, a Vectorworks certification can help students increase their knowledge and skills, advance their careers and help them stand out.

The availability of educational licenses, lab licenses and recent graduate discounts vary by country.

Zsuzsanna Friedl becomes new Chief HR Officer at T-Systems

20 September 2023

New Managing Director HR from January 1, 2024

The Supervisory Board of T-Systems International GmbH has appointed Zsuzsanna Friedl as the new Managing Director Human Resources. She will assume her new position in Bonn on January 1, 2024. Georg Pepping, who will remain in the position until the end of 2023, is leaving Deutsche Telekom at his own request after 26 years of service.

Key role in the company's development into a sustainable growth enterprise

Zsuzsanna Friedl comes from Deutsche Telekom's Hungarian subsidiary Magyar Telekom. She had been Chief HR Officer there since 2017. Prior to that, she held various HR leadership positions at top employers such as General Electric and Microsoft for over two decades. At T-Systems, Zsuzsanna Friedl will be responsible for all HR activities as Chief HR Officer. She will play a key role in the company's development into a sustainable growth enterprise. Her focus will be on workforce development and talent management to support the evolution and succeed in the market as an integrated IT services company.

"I am very much looking forward to my new role at T-Systems. I want to get involved in forward-looking initiatives to make the company sustainably fit for growth in the future fields of digitalization. My strategic priorities will include culture change and high employee engagement. Together with the team, I will look for experimental, innovative approaches to

make T-Systems even more attractive as a magnet for talent.”

-Zsuzsanna Friedl, new Managing Director HR from January 1, 2024 at T-Systems

Al-Saleh: “Ideal person to take over strategic HR work“

“I am very pleased that we are able to announce an internal candidate to succeed Georg Pepping at an early stage,” said T-Systems CEO Adel Al-Saleh. “With her many years of international professional experience and familiarity with the Group, she is the ideal person to take over strategic HR work and support our growth path. I am very much looking forward to working with her and wish her every success in this responsible role. I would like to thank Georg Pepping for his many years of commitment to Deutsche Telekom and wish him all the best for his professional and private future,” said Al-Saleh. Georg Pepping has been part of the T-Systems management team as Managing Director Human Resources since September 2010.

Event News

Aras Connect European Tour 2023 to Explore the Future of Digital Transformation

27 September 2023

Aras, which provides the most powerful low-code application platform to design, build, and operate complex products, is taking the show on the road. [Aras Connect 2023](#) will be stopping in six European cities throughout October and November, bringing together hundreds of industry experts, leaders, and peers to explore new strategies of designing, building, and operating complex products in the future.

In an ever-changing economic environment, successful companies are those that know how to adapt to frequent and unpredictable changes. Faced with this growing uncertainty, decision-makers must solve a strategic equation: how to build a business resilient to today's unexpected crises, while transforming it sufficiently to fit for tomorrow's challenges.

Aras Connect 2023 will take place in the following European cities:

- [Oct. 4 in Stockholm, Sweden](#)
- [Oct. 11 in Birmingham, UK](#)
- [Oct. 19 in Monticelli Brusati, Italy](#)
- [Nov. 1. in Vantaa, Finland](#)
- [Nov. 7-8 in Frankfurt, Germany](#)
- [Nov. 14 in Paris, France](#)

For more information, and to register for any of these events, please visit the [Aras Connect event page](#).

COMSOL Announces Program for COMSOL Day: Aerospace & Defense

26 September 2023

COMSOL, developer of the COMSOL Multiphysics® simulation software, has announced that COMSOL Day: Aerospace & Defense will be held on Thursday, October 5, from 11 a.m. to 4:30 p.m. EDT. This online event will feature keynote speakers from NASA Ames Research Center, Northrop Grumman, and Raytheon Technologies. The event will also include COMSOL-led technical sessions covering how multiphysics modeling benefits the aerospace and defense industry.

The first keynote talk, titled "COMSOL Multiphysics® for Circuit Board Thermal Analysis", will be held by Russell Rioux of Northrop Grumman. The presentation will focus on the thermal analysis of circuit board models that have thousands of parts, each with individual power dissipations and properties. Rioux will explain how complex circuit board layers are incorporated into the models using the image processing functionality in COMSOL Multiphysics® in order to reduce model meshing while maintaining physical accuracy.

Later in the day, Hannah Alpert of NASA Ames Research Center will hold her keynote talk, "Thermal Modeling of a Compressor for CO₂ Removal in the International Space Station". She will highlight the use of multiphysics simulation in the research and development of contaminant removal technology, which is critical to support systems that enable humans to live and work in outer space.

In the final keynote talk, "Multiphysics and Metamaterials: Applications and Opportunities", Scott Sorbel of Raytheon Technologies will discuss the use of metamaterials and metasurfaces in the industry and go over how understanding the multiphysics aspect of these systems is vital for both performance verification and manufacturability.

"We are looking forward to hearing the speakers discuss the use of multiphysics simulation in their projects," said Ryan Durac, aerospace and defense account manager at COMSOL. "This industry is known for its high demands for accuracy and reliability, and simulation enables engineers and researchers to build trust in their designs. This is especially important when the devices are intended for use in challenging environments, such as in orbit or under water."

In addition, the COMSOL-led sessions will cover the following topics:

- Modeling in aerospace and defense with COMSOL Multiphysics®
- Metamaterials
- Composite materials
- MEMS
- Optimization
- Heat transfer in spacecraft
- Acoustics and aeroacoustics
- Low-frequency electromagnetics

A Q&A session will follow each keynote talk and technical presentation. Additionally, there will be an open-discussion session where attendees can ask a panel of COMSOL staff any questions they may have.

[View the COMSOL Day Program Details](#)

Registration is free of charge.

Contruent Headlines Second Annual Project Controls Expo USA

28 September 2023

Contruent, the SaaS company that develops industry-leading capital project management software solutions which enable owners and EPCs to build mega-construction projects with greater precision and speed, proudly takes the stage as the headline sponsor for Project Controls Expo USA 2023, hosted at Nationals Park in Washington, D.C.

With a global presence and a decade of convening project controls leaders, Project Controls Expo will celebrate its second annual expo in the USA. Attended by over 800 delegates, the expo draws influential leaders across industries, including construction, mining, oil and gas, utilities, and defense.

Among the event's 50 speakers, four are from Contruent's leadership team. During Day 2 of the event, Contruent CEO, Ryan Kubacki, will open the day with remarks. Following his remarks, Rich Humphrey, Chief Product Officer at Contruent, will present "Building Digital Trust in Project Controls," offering valuable strategies on leveraging technology to instill trust in project data at every stage.

"We are thrilled to be back at PCE USA as the headline sponsor," said Ryan Kubacki, CEO at Contruent. "As a company, we're committed to driving forward innovation and collaborating with professionals across the industry to achieve the best solutions. PCE USA provides the perfect platform to exchange ideas, gain new perspectives, and learn from some of the most impressive leaders in the space – and we are proud to be part of its impact."

On Day 3 of the event, Andy Verone, Chief Strategy Officer at Contruent, will give remarks to kick off the day. Later in the day, Karl Vantine, Chief Customer Officer at Contruent, will present "How to Get Business Value out of Change Management."

The event will also feature keynote speakers, panel discussions, workshops, and numerous networking opportunities.

Everything you need to know about Solid Edge 2024, launching Oct. 11

25 September 2023

Anthony Johnson announced on the Siemens Blog that there will be an event on October 11 to announce the release of Solid Edge. Anthony says, "During the event, you'll get a close-up look at some of most exciting new features and enhancements coming your way in the new release. You can also ask questions and engage directly with Siemens experts via live chat."

Read the full blog post here: <https://blogs.sw.siemens.com/solidedge/everything-you-need-to-know-about-solid-edge-2024-launching-oct-11/>

Trimble Leaders Highlight the Unique ‘Journeys’ of the Supply Chain During Opening Session of its 2023 Insight Tech Conference + Expo

25 September 2023

Trimble opened its **2023 Insight Tech Conference + Expo** with Trimble leaders Rob Painter, president and CEO, and Ron Bisio, senior vice president of Trimble’s Transportation sector, talking about the challenging and transformative journeys in the transportation industry, the increased pace of change and their shared commitment to moving the industry forward.

In Monday’s Opening Session, Painter and Bisio detailed Trimble’s successes over the last year in connecting the digital and physical worlds to make fleets safer, more efficient and more sustainable. Bisio highlighted the significant progress of Trimble’s Transportation Cloud and how connected workflows are being utilized by customers, such as Dart, Tri-National and Crete, to operate better, faster, safer and more efficiently.

“The transportation industry is incredibly dynamic and ever-changing, making it critical to stay ahead of the curve, while staying true to the industry’s day-to-day needs,” said Rob Painter. “At Insight this year, we are focused on the importance of partnership and making connections to uncover new opportunities to use technology to drive efficiencies across the supply chain and improve the world around us.”

Insight spans four days of networking, inspiring speakers, and educational sessions on navigation and routing, safety and video solutions, sustainability, ELD compliance, predictive analytics, autonomy, fleet maintenance, and more. Additionally, leaders from Transporeon, which was acquired by Trimble earlier this year, will be presenting several sessions that cover the Transporeon Transportation Management Platform, building partnerships in freight management, AI automation of the procurement and quotation process, and incorporating sustainable practices.

Trimble continues to focus on collaboration by welcoming experienced professionals within the transportation industry to its annual conference, including customers, integration partners and providers of competing solutions, with the belief that together, we can move the industry forward.

“In the last year, I traveled across North America to gather direct input from our customers. Their collective input encouraged us to keep moving forward, keep moving faster and drive better results,” said Ron Bisio. “We’ve been innovating our solutions to deliver value faster and more seamlessly. With the evolution of the Trimble Transportation Cloud, we are poised to be an even better partner to our customers, helping them increase their network, better connect their back-office to the cab, and plan for the future.”

The 2023 Insight Tech Conference + Expo is taking place September 24 - 27 at The Venetian in Las Vegas. In addition to numerous learning and networking opportunities, attendees will have the opportunity to hear from keynote speaker Mark Gallagher, a Formula 1 executive, who will

talk about using data to better manage risk and safety for drivers. He will also preview the first-ever Formula 1 Las Vegas Grand Prix coming up in November.

Financial News

Accenture Reports Fourth-Quarter and Strong Full-Year Fiscal 2023 Results

28 September 2023

Accenture reported financial results for the fourth quarter and full fiscal year ended August 31, 2023.

Click to download the [Q4 FY23](#) and [Full FY23](#) earnings infographics.

HONEYWELL TO RELEASE THIRD QUARTER FINANCIAL RESULTS AND HOLD ITS INVESTOR CONFERENCE CALL ON THURSDAY, OCTOBER 26

28 September 2023

Honeywell will issue its third quarter financial results before the opening of the Nasdaq Stock Market on Thursday, October 26. The company will also hold a conference call at 8:30 a.m. EDT.

Presentation Materials / Webcast Details

A real-time audio webcast of the presentation can be accessed at <http://www.honeywell.com/investor>, where related materials will be posted prior to the presentation and a replay of the webcast will be available for 30 days following the presentation.

Implementation Investments

A New Partnership for Digital Design & Product Development eXcellence

21 September 2023

Jama Software®, the industry-leading requirements management and traceability solution provider, and Engineering Group's Industries eXcellence division, a global leader in the field of engineering services, design automation solutions, and Industry 4.0 technologies, jointly announce a strategic consulting partnership to transform the way industrial organizations design, develop, and deliver innovative products to the market.

Product complexity is rapidly increasing across industrial sectors, requiring tight coordination across engineering disciplines to ensure on-time, quality product delivery. The partnership between Jama Software and Engineering Industries eXcellence aims to address this challenge by offering an integrated suite of solutions that enable companies to manage complex product development lifecycles with unparalleled precision, collaboration, and scalability.

Jama Software's requirements management platform, Jama Connect®, provides a collaborative environment for teams to define, design and develop their product visions. By maintaining Live Traceability™ across a best-of-breed ecosystem, Jama Connect enables organizations to

navigate the intricacies of modern product development, leading to faster time-to-market and improved product quality. Engineering Industries eXcellence, with its rich experience in engineering services and global network of digital transformation experts, brings a wealth of knowledge in product design, systems engineering, and technology consulting.

“We are excited to partner with the Engineering Group to deliver a holistic approach to intelligent engineering management that leverages Jama Software’s best-in-class technology with Industries eXcellence’s industrial sector expertise,” said Tom Tseki, CRO of Jama Software. “This collaboration represents our commitment to helping organizations bring innovative products to market faster, with higher quality and greater efficiency.”

“This strategic partnership with Jama Software represents an exciting step towards bringing true model-based systems engineering services capabilities to our global industrial customer base. Jama Software’s advanced technology complements and augments our existing Design Automation offering, enabling extended requirements management traceability across a wide range of the tools our engineering-driven manufacturing customers use today to design and innovate their products,” said Tim Rohach, VP of Business Development & Partnerships for North America of Engineering Industries eXcellence.

Through this partnership, clients will benefit from the synergy between Jama Software’s innovative requirements management and traceability platform and Engineering Industries eXcellence’s deep industry insights, resulting in comprehensive solutions tailored to meet the unique challenges of their respective markets.

Accenture Supports Largest Migration of Electronic Medical Record System to Microsoft Azure

27 September 2023

Accenture supported the Mount Sinai Health System (Mount Sinai) with the migration of its enterprise electronic medical record (EMR) system, Epic, to the Microsoft Azure cloud environment. This marks the largest production instance of Epic running on Azure, a significant development in the complex healthcare industry.

Working in collaboration with Accenture, Avanade and Microsoft, one of New York City’s largest academic medical systems kicked off its transformation journey to the cloud last year to enable innovation at a faster pace and ultimately improve healthcare access, experiences and outcomes. Accenture is leading the development and implementation of the strategic transformation, which also includes the migration of Mount Sinai’s clinical applications to the cloud. On an ongoing basis, Accenture will provide cloud managed services, including server management and support for migrated workloads; automation and analytics; storage and backup operations; and database support.

Kristin Myers, executive vice president, chief digital and information officer, and dean for digital and information technology at Mount Sinai, said, “We prioritized moving our Epic EMR system to Azure as a key component in creating secure, connected and insight-driven healthcare experiences for our patients. This digital transformation is allowing us to leverage new

technologies—like artificial intelligence—to improve our business structure and drive efficiencies to deliver on our mission of providing compassionate care.”

The transition of Mount Sinai’s EMR system to the cloud allows access to patient information from anywhere at any time, which will lead to improved care coordination and collaboration for better patient outcomes. In addition to substantial cost savings achieved from reducing on-premise infrastructure, the implementation is improving Mount Sinai’s systems resiliency and reducing cybersecurity risk through modern architectures, continuous monitoring, and enhanced security measures and protocols.

As part of the transformation, Accenture and Mount Sinai are also building a foundation for artificial intelligence (AI) and other advanced technologies to drive innovation. This will allow Mount Sinai to adapt to changing trends by expanding and scaling new services and capabilities that meet patient and clinician needs. The move is also creating sustainability benefits through the reduction of carbon emissions.

Rich Birhanzel, Accenture’s global healthcare industry lead, said, “Healthcare organizations today are focused on expanding access to affordable care, creating better patient experiences and improving clinical outcomes. Achieving these things requires continuous innovation, data insight and integration as well as new ways of working. With this strategic migration of clinical applications, Mount Sinai is embracing the power of cloud and the innovation it can drive in care delivery.”

ANZ Selects HCLTech To Advance Workplace Experience

22 September 2023

HCLTech, a leading global technology company, and ANZ, one of Australia’s four largest banks and the largest banking group in New Zealand and the Pacific, have expanded their relationship with a new engagement that will transform ANZ’s digital employee experience across 33 countries. HCLTech leverages next-generation technologies including extended reality, GenAI and IoT-powered workspaces to enable experiential, sustainable and inclusive workplaces for enterprises.

“We’re excited to continue our long-standing and strong relationship with HCLTech. ANZ is committed to leveraging technology to deliver employee-centric services, and HCLTech’s deep domain expertise will accelerate this journey,” said Vinit Jha, Domain Lead, Employee Experience, ANZ.

“We are delighted to expand our decade-long relationship with ANZ and support its next stage of digital transformation as it focuses on fostering a better digital experience for its employees and customers,” said Michael Horton, Executive President and Country Manager, Australia and New Zealand, HCLTech. “This engagement represents one of the largest digital workplace transformations and managed services engagements in the region.”

HCLTech will provide ANZ with digital workplace services and experience management across end user devices and applications including laptops, mobile phones and tablets.

Dairy Digitises Through the Infor Multi-Tenant Cloud

27 September 2023

Infor®, the industry cloud company, announced that dairy processor Cremo SA has selected Infor CloudSuite Food & Beverage. The company is implementing Infor's cloud native and purpose-built food and beverage industry solution to optimise its processes and ensure product quality is always up to meet the highest standards.

Cremo is the second-largest milk processor in Switzerland, headquartered in Villars-sur-Glâne (Canton Fribourg). The company employs around 750 people across several production sites in Western Switzerland. Cremo is particularly proud of its culture of bilingualism (German and French) as well as its strong connections to milk producers. Not to forget the products: Based on a tradition of almost 100 years, they are made exclusively in Switzerland and 100 percent from Swiss milk.

To meet customer requirements and guarantee the flow of information within the company, a secure and powerful IT infrastructure was needed. The previously used enterprise resource planning (ERP) system could no longer meet the requirements in terms of process optimisation and product quality.

Infor CloudSuite Food & Beverage is specifically tailored to the needs of the food and beverage industry and provides unique capabilities for dairies. Thanks to Infor's public cloud strategy, Cremo can adopt best practices and capabilities that have proved itself at many food and beverage manufacturers and, more specifically, dairy processors. The solution meets the industry's expectations of innovation, traceability, regulatory requirements, margin pressure and transaction speed. The scalability and security of the multi-tenant industry cloud platform powered by Amazon Web Services (AWS) were further reasons that made Infor the right choice.

To ensure the success of this project, Cremo and Infor identified the relevant value drivers and held workshops with the process owners at Cremo to understand their way of working. This made it possible to evaluate the level of coverage of Infor CloudSuite Food & Beverage. The business units have already gained initial insights into how the solution works.

"The Infor team has established itself as a real partner. The methodology of the project had a particularly high added value for us: Through workshops, the employees immersed themselves in the solution very quickly," said Frédéric Siffert, Cremo's ERP project manager. "Infor listened to us and provided expert advice throughout the process."

"With its industry-specific public cloud service, Infor CloudSuite Food & Beverage is tailored to the needs of the dairy industry. Many specific processes are already integrated in the standard, which minimises the need for customisation," says Nicolas Rollet, Infor account manager for food & beverage DACH. "Conducting workshops with the project team showed us how many of the processes we can map in the standard. In addition, the team on site already has a good impression of what it's like to work with the solution."

Duluth Trading Co. Boosts Product Development Efficiency with Centric PLM

26 September

Centric Software® is delighted to announce the release of a success story about its customer, Duluth Trading Co.

Founded in 1989 and based in Mt. Horeb, Wisconsin, the company offers high quality, solution-based casual wear, workwear and outerwear for the outdoor enthusiast, along with innovative tools, ingenious gadgets, luggage and bags for men and women “who lead a hands-on lifestyle and who value a job well-done.” Products are available through Duluth’s website, catalogs and retail locations.

Brigid Gibson, Product Continuity Manager at Duluth Trading Company and the PLM manager for the company, talks about how they had multiple versions of files, sketches, tech packs which inevitably led to confusion and errors. “We were developing product, but it wasn’t very efficient for the growth that we were trying to build with Duluth.”

When Gibson began with the company, she found that people were working outside the system. Of the design team, Gibson says, “They had their own little charts of all the styles that they were developing for a season.” She dug down to find out the reasons for each of the spreadsheets people were using and tackled them one by one. Gibson was able to easily configure the system herself to reflect the specific needs of individual users, getting rid of spreadsheets and driving efficiency into the process.

The company has grown in volume and new categories over the years. Says Gibson, “We’re able to scale faster than the amount of people because one designer and one tech designer can develop more styles per season because of the improvements that PLM has given us.”

Find out how else Centric PLM has streamlined workflows, including the way vendors work with Duluth, faster time-to-market and what about Centric PLM garners executive support.

El Florido Boosts Its Supply Chain with Infor WMS

26 September 2023

Infor®, the industry cloud company, announced that El Florido supermarket chain has chosen Infor WMS (Warehouse Management System) solution to optimize its operating times throughout the supply chain. The solution will be implemented by Infor partner Cerca Technology, a leader in cutting-edge technology for supply chains in Latin America.

The supermarket chain, located in Baja California Norte in Mexico, dedicated to the commercialization of meat-based products and groceries, aims to streamline the times for the assortment in stores, increase the fill rate, a key indicator that establishes the percentage of the merchandise delivered of any given order, obtain a complete visibility of the inventory, and support branches with effective sourcing.

The business that began as a meat distributor grew to the point of needing to diversify its portfolio, including other product lines. This facilitated its expansion in cities including Tijuana, Tecate, Rosarito, Ensenada and Mexicali, up to 50 branches.

To meet the needs of all branches, the company established a logistics operator in 2016, DFL Logistics, a company that manages inventory for all logistics operations that supply all branches, for both groceries and perishable products.

With El Florido's constant growth, it was necessary to implement a leading solution to digitize all processes for supply, demand planning, storage, and the delivery of orders.

The challenges faced in distribution centers

Due to the growth and limitations of its internal development, several errors were detected in the distribution centers such as: the existence of phantom inventory, codes that were in a transfer state, and difficulties in filling orders, among others. Therefore, the company decided to look for a solution to overcome the challenges that arose. Although its system was friendly and functional, it was overstretched to efficiently handle the expanding operation. The developers tried to find temporary solutions within the system, but this resulted in a repetitive process that affected the timing and delivery of orders. These problems became more frequent, inconsistencies began to severely impact the operation.

In addition, the procedure for measuring productivity in the distribution center was very complex, making it difficult to optimize processes in the operation. All tracking was done manually and relied on basic estimating tools. This involved a considerable investment of time.

How Infor WMS and Cerca Technology benefit El Florido

Through references and searches, the team in charge of the project at El Florido identified all the needs to be covered with a WMS. Misael Verduzco, logistics manager of DFL Logistics, highlighted that "the use of tools such as WMS are of great help, because it takes advantage of automation, reduces operating costs, increases efficiency, improves responsiveness and decreases complexity for effective distribution center management."

"We are confident that this new implementation will be successful. As inventory accuracy improves, the entire supply chain will benefit," He added. "What impressed us the most was the attention we received from Cerca Technology from the beginning. Follow-up, interest and participation were crucial in making the decision. Even when visiting our operations, they understood our needs closely, which resulted in a proposal very grounded to reality. We always felt supported."

Infor WMS provides real-time information, which helps El Florido measure processes and productivity accurately, centralize procedures, and provide greater flexibility in the planning and attention of orders from its customers. Likewise, it is expected to achieve control of cargo transport units (containers) and manage the registration in its warehouses, from entry to unloading.

Wilson Ortiz, manager of professional services at Cerca Technology, pointed out that "once the team knew the interface of Infor WMS, and observed that it was intuitive and easy to use, adapting to it was more seamless versus competing solutions."

When referring to the future of the operation, Verduzco and his team are aware that implementation of Infor WMS is only the first step of the digital transformation to reach the

performance and processes that are required and integrate a system that supports transportation management.

Alejandro Luna, country manager of Infor Mexico, explains that “Infor WMS will benefit the activities of the distribution centers of El Florido in an integral way. This solution combines warehouse assortment with integrated labor management and analytics to reduce complexity and enable optimized operational execution. Infor WMS is a state-of-the-art, best-in-class warehouse operations solution around the world, designed with ease of setup and intuitive use in mind.”

DFL Logistics has a team of more than 210 people, while the El Florido business group, as a whole, employs approximately 3,500 people. El Florido has two distribution centers of 10,000 square meters each, where 80 percent of the space is destined to groceries and the remaining 20 percent to perishable products. The company handles a total of 2,500 SKUs in groceries and 120 SKUs in perishables. Its transport fleet has 27 vehicles, 42 boxes and 8 double-trailer equipment.

HEXAGON US FEDERAL SELECTS DELTEK COSTPOINT GOVCON CLOUD MODERATE TO DELIVER COMPLIANT, SECURE ACCOUNTING SOLUTION

26 September 2023

Deltek, the leading global provider of software and solutions for project-based businesses, announced that Hexagon US Federal, an independent subsidiary of Hexagon Corporation exclusively focused on bringing the broad range of Hexagon technologies to the US Federal government and its partners, has selected Deltek Costpoint GovCon Cloud Moderate (GCCM) as its cloud-based accounting solution, after an extensive review of other options on the market.

With multiple offices and hundreds of employees across the US, it was critical that Hexagon US Federal had a best-in-class ERP to support its next phase of growth and digital transformation. Hexagon US Federal had already been trusting Deltek Costpoint for decades to provide a secure, compliant, all-in-one accounting solution. When it was time for Hexagon US Federal to move to the cloud to automate business processes, integrate business application systems and alleviate on-premise costs, the company reviewed multiple solutions on the market.

Costpoint GovCon Cloud Moderate was the company’s clear choice for a robust, cloud-based solution to facilitate an overall digital transformation. Costpoint offered a lower total cost of ownership, with the ability to improve scalability and security, while streamlining back-office processes with built-in functionality without requiring multiple third-party integrations for reporting.

Deltek Costpoint is the government contracting industry’s leading solution that delivers more innovation and greater intelligence at every stage of the project lifecycle. It centralizes the management of projects, people and finances, and scales seamlessly as needs grow, enabling small to enterprise size businesses to win new contracts, manage project profitability and improve customer satisfaction. Additionally, the integrated cloud offering enables the secure storage of contract data and is consistently enhanced through cybersecurity compliance

controls equivalent to NIST SP 800-171 and NIST SP 800-53. Costpoint GovCon Cloud Moderate provides additional protections by supporting compliance with federal contract regulations including DFARS 252.204-7012 (protection of CUI and CDI data), ITAR data protection, and the anticipated CMMC requirements.

“When I look at the possibilities with Costpoint, there is nothing else on the market that compares to it for government contractors. There just isn't,” said Becky Harris, Chief Financial Officer at Hexagon US Federal. “Compliance was a significant factor in our decision. As a federal contractor, Hexagon is required to protect sensitive data and be prepared for audits of our data security practices. Deltek’s GCCM cloud has implemented very stringent cybersecurity controls that will help us achieve our compliance requirements, including CMMC, while facilitating a cloud-based, cradle-to-grave lifecycle of core back-office business processes with all the data integrations.”

“We’re proud to have built a product that, time and time again, is proven to be the gold standard for government contractors,” said Todd Walker, Vice President of Product Management at Deltek. “We’re thrilled that Hexagon US Federal has decided to continue leveraging Deltek Costpoint – after reviewing it against our competitors – to provide the company with the best of both innovation and compliance as they make the shift to the cloud.”

NRMA Enhances Customer Engagement with Informatica’s AI-Powered Intelligent Data Management Cloud

21 September 2023

Informatica, an enterprise cloud data management leader, announced that the National Roads and Motorists’ Association (NRMA), Australia’s largest member-owned organization, has chosen Informatica’s AI-powered data management cloud platform Intelligent Data Management Cloud (IDMC) to enhance customer engagement across multiple lines of business such as roadside assistance, travel, tourism and lifestyle services.

With 2.77 million members, the NRMA had more than 3,000 data sets and over a decade-old on-premises technology architecture that was hindering the organization’s business growth. Since implementing Informatica’s IDMC to support the NRMA’s single data strategy and single data platform for data management, user productivity has already increased ten-fold and data ingestion and data transformation load times have reduced by 60%, achieving faster processing and analysis of data for quicker insights and decision making.

With a modern data management platform featuring self-service functions, data silos are removed and data is democratized across the organization for key IT and business users including data engineers, system integration architects and the marketing team. Users can access and deliver high-quality, reliable data in minutes instead of days to support marketing campaign launches and generate trusted data for seamless claim settlements and membership redemptions, which enhances the customer experience.

“Focusing on customer experience and product innovation is paramount in the highly competitive insurance market,” said Vamsi Krishna Dhalli, Senior Data Manager, Technology at

the NRMA. “Our data across business units used to be siloed and fragmented, but now with Informatica’s IDMC we are better connected with our data to better serve our customers with personalized value. Adopting a low-code/no-code approach in our integration environment enabled us to scale, innovate and remain agile to meet market demand, while automation has helped free up our IT resources for higher-value tasks.”

“Informatica is pleased to work with the NRMA to help overcome their data challenges by operationalizing their processes through our AI-powered IDMC platform to drive actionable business insights,” said Richard Scott, Group Vice President at Informatica Asia Pacific. “Data needs to be unlocked to drive the trust and connection with customers, and we’re happy to partner with the NRMA to bring our data management expertise while delivering fit-for-business data to create better member experiences.”

Rockwell Automation Partners with BIC to Drive Digital Transformation and Efficiency through Plex MES

25 September 2023

Rockwell Automation, Inc., the world’s largest company dedicated to industrial automation and digital transformation, announced the successful one-year implementation of the Plex Manufacturing Execution System (MES) at BIC, a world leader in stationery, lighters, and shavers, at its plant in Bizerte, Tunisia.

BIC’s primary business drivers for digitalization and transformation are the standardization of production processes and integration across machines, people, and business layers. Plex MES was selected for its broad functional scope and technical capabilities, with cloud-based Software as a Service solution offering comprehensive support to BIC’s standardization process.

Malte Dieckelmann, Vice President of Enterprise Software Sales, EMEA, explains, “Our collaboration with BIC marks a major milestone in digitally transforming its manufacturing operations. By leveraging Plex MES, BIC can transition to a more efficient, standardized, and paperless system. This development not only improves operations but also aligns with our shared focus on innovation and efficiency.”

The deployment of Plex MES began in 2020 with a pilot project at BIC’s production facility in Bizerte, Tunisia. The Plex MES system offers live reporting, enabling real-time visibility, automation of data collection, and tracking of production KPIs. The benefits of this project include improved inventory control, waste reduction, reduced error from manual processing, and overall equipment efficiency (OEE). It has also allowed for the automation of production integration, a significant change for people on the shop floor.

Rogelio Demay, Senior Manager Information Technology Manufacturing, at BIC, states: “Our journey towards digital transformation is fundamentally about integrating people and technology to improve operations. The shift from a paper-based system to Plex MES has been a tremendous step towards self-sufficiency, enabling us to react swiftly to issues, drive continuous improvement, and ultimately enhance efficiency.”

Plex MES also serves as a foundation for BIC's broader Smart Manufacturing Initiative, including the integration of additional elements within the factory to help shift from a paper-based system to Plex MES and support self-sufficiency with a 360-degree view of the factory floor.

Rockwell Automation has been a key partner in this initiative, supporting BIC's vision of connecting operational technologies and the IoT world, bridging the gap between these two spheres and seamlessly integrating them into the company's operations to provide one single source of truth for manufacturing data.

Demay adds, "We value our past while embracing innovation, with a focus on breaking down silos to integrate technology and people. We believe our people are the first factor for success and integrating MES with daily routines is our way forward to improve operational efficiency."

BIC is poised to continue this digital transformation beyond the Bizerte plant and Dafni Vakasi, Smart Manufacturing Manager at BIC described how this approach will be applied across the other BIC factories in Athens, Manaus, and Mexico with the Plex MES solution playing a major role in the journey. The expansion will also deliver benefits beyond BIC's factory walls, helping to integrate suppliers on one side and delivery on the other to fully realize the goals of Industry 4.0, including driving actionable insights from data to empower decisions. With Rockwell Automation's support, BIC's journey is set to revolutionize its operations and establish a new standard in the manufacturing industry.

Simulations Plus Receives New FDA Grant Award

21 September 2023

Simulations Plus, Inc., a leading provider of modeling and simulation solutions for the pharmaceutical, biotechnology, chemicals, and consumer goods industries, announced it has been awarded a new funded grant from the U.S. Food and Drug Administration (FDA). The grant will be used to validate and define best practices for physiologically based biopharmaceutics/pharmacokinetics (PBBM/PBPK) modeling workflows to simulate virtual bioequivalence (VBE) studies in support of regulatory biowaivers.

The scientific team at Simulations Plus, with partners from the FDA, industry, and academia, will apply public and proprietary datasets to validate the ability of GastroPlus® and other software to predict inter- and intra-subject variability when performing virtual population simulations. Enhancements to the existing VBE simulation engine within GastroPlus will be implemented, and best practices will be defined for VBE evaluation using mechanistic PBBM/PBPK approaches. The goal of this work is to inform regulatory decisions and guide innovator and generic drug developers in the design of VBE studies for distinct types of drug products.

Dr. Frederico Martins, Principal Scientist and LATAM Scientific Lead, PBPK Solutions, and Principal Investigator for this grant, said: "At the recent PBBM/PBPK workshop sponsored by the University of Maryland Center for Excellence in Regulatory Science and Innovation (M-CERSI) and the FDA, it became clear that regulatory agencies worldwide are actively promoting the increased adoption of VBE approaches in numerous ways. The many case studies presented at the workshop, nearly all of which utilized GastroPlus simulations, firmly reinforced

GastroPlus as the leading software platform for drug product development. With this new award, we are poised to shape industry best practices and define innovative workflows for leveraging *in vitro* systems and *in silico* models to further reduce regulatory burden and minimize the need for human studies.”

FDA scientific and program staff will actively collaborate with Simulations Plus and others from industry and academia. Dr. Martins, with assistance from Simulations Plus colleagues Dr. Maxime Le Merdy , Dr. Géraldine Cellière , and Mr. James Mullin , will coordinate all activities of the award.

“With a rich and enduring history of fruitful partnerships with the FDA, we have consistently demonstrated our commitment to collaboration and excellence in research and regulatory affairs,” added Dr. Le Merdy, Associate Director, Research & Collaborations of PBPK Solutions. “Our mission with this award is clear: to set the industry standard and provide invaluable guidance for all companies navigating the regulatory assessment of new and generic formulations. By diligently striving to make all forthcoming enhancements accessible to industry, nonprofit organizations, and academic researchers, we will enable the advancement of modeling and simulation applications. This commitment ensures that the benefits extend not only to those within the scientific community but also reach patients worldwide.”

Funding for this collaboration is made possible by the Food and Drug Administration through grant award 1U01FD007906-01. Views expressed in this press release do not necessarily reflect the official policies of the Department of Health and Human Services; nor does any mention of trade names, commercial practices, or organization imply endorsement by the United States Government.

Spanish Manufacturer Cosentino Taps DXC Technology to Transform Operations with Automation and Robotics

27 September 2023

Cosentino, a leading global manufacturer based in Spain, has transformed its operations through business process automation and robotization services with DXC Technology, a leading Fortune 500 global technology services provider.

A family-owned producer of innovative and sustainable surfaces for architecture and design, Cosentino distributes its products and brands in more than 120 countries. DXC has reinforced Cosentino's digital transformation journey, a major component of the group's strategic growth plan, by helping it realize value from investments in automation.

DXC's consulting and digital engineering teams deployed automation technology that has optimized key business processes for Cosentino's global operations and distribution facilities. This will deliver a long-term reduction in time and costs, eliminate errors, and enhance business productivity, competitiveness, and profitability.

With a physical presence in more than 40 countries, modernized analytics dashboards will improve Cosentino's business management capabilities by providing real-time performance

data and timely insights to make faster, better decisions and improve relationships with customers, partners, and suppliers.

"For five years, we have maintained sustained double-digit growth, and we want this growth to be scalable and sustainable over time. This required digitizing, redefining, and automating many of the operational processes we have in our organization," said José Manuel Rodríguez, CIO at Cosentino Group.

DXC has implemented artificial intelligence (AI), using an optical character recognition tool, to automate and speed up business processes that require reading and interpreting documents such as contracts, orders, payroll, delivery notes, and signatures. It has also introduced process mining technology to uncover new opportunities for efficiency, and robotic process automation to increase productivity with more efficient and agile operations.

More than 170 bots have been deployed so far, automating 231,000 operations and processes. This has allowed Cosentino to free up more than 42,000 hours of work. Using a "Robotics-as-a-Service" pay-per-use model, Cosentino can scale and manage its need for DXC's solutions based on the actual processing hours consumed.

"We are working closely with Cosentino to implement AI, automation and robotics throughout its key business processes," said Marc Román, Head of DXC's Hyperautomation Practice at DXC Technology Spain. "The next step is to extend the program throughout the organization which will allow Cosentino to continue growing sustainably."

"Hyperautomation is enabling us to accelerate our digital transformation journey as well as improve business results and build better business cases," added Rui Novais, Director of Technology and Applications at Cosentino Group.

Trimble and Kyivstar Partner to Provide GNSS Correction Services for Agriculture, Construction and Geospatial Applications in Ukraine

26 September 2023

Trimble and Kyivstar, Ukraine's largest telecommunications company, are partnering to install a new Continuously Operating Reference Station (CORS) network to provide Global Navigation Satellite System (GNSS) correction services across the country. Available to users as an annual subscription service, the new network will be built using Trimble's hardware and software positioning technology, which provides customers with easy and reliable high-accuracy real time or post-processed GNSS corrections data for agriculture, construction, geospatial, Internet of Things (IoT) and other commercial operations.

"We understand how important it is to invest in Ukraine's economy right now, which is why we continue to launch technological solutions that will help businesses work even more efficiently," says Illya Polshakov, new business development director of Kyivstar. "I am sure that the RTK correction signal service will facilitate the work of our customers from various industries."

As part of a revenue-sharing model with Kyivstar, the network will be installed on Kyivstar's communication towers and will use Trimble Alloy™ reference receivers and Trimble Zephyr™

model 3 antennas. Trimble Alloy delivers current and near-future constellation GNSS tracking, absolute positioning capabilities and user-friendly design. The Zephyr 3 antenna's capabilities provide optimal functionality in permanent installations. The network will also leverage the Trimble Pivot® Platform software, a solution that manages CORS stations and generates highly-accurate GNSS corrections to provide the network operator and end users with a reliable, seamless and efficient workflow.

“For agriculture, construction, geospatial and IoT professionals who rely on centimeter-level accuracy, the Kyivstar network will provide a robust and reliable positioning solution,” said Oliver Casabianca, vice president, Trimble Positioning Services. “This will help their customers optimize workflows, improve productivity and deliver operational efficiency.”

The first phase of the installation will include 41 communication towers and is expected to be completed by the end of this year. The second phase will consist of 150 additional towers and is expected to be completed in 2024. Subscriptions to the service will be available through Kyivstar. Trimble's local geospatial distributor KMC Ltd. will provide maintenance and support to Kyivstar.

Product News

Aurigo Software Upgrades Engage Offering to Democratize Community Feedback Process

20 September 2023

Aurigo Software, the leading provider of capital planning and construction management software for infrastructure and private owners, announced major updates to Aurigo Engage, its AI-based community engagement platform for public agency officials seeking feedback on projects and initiatives. The latest version of Engage will allow professionals in communications, planning, and project management to instantly sign up and begin using the software through an automated onboarding experience. Users may also opt for a free 30-day trial of the software before deciding to purchase.

Gathering feedback is mandatory on many projects in public works, education, and healthcare to ensure active participation in the design and delivery process. Public agencies need their constituents to weigh in on a project's specific function, location, and impact on the community. Annually, tens of thousands of initiatives across the country go through this process. Traditionally, surveys, web forms, and in-person and virtual townhalls have been used to gather this data.

“Digitizing the community engagement process allows more of the public to participate in the initiatives that matter to them,” said Balaji Sreenivasan, CEO and founder of Aurigo Software. “Engage harnesses the power of AI so that officials can easily gauge public sentiment across their entire community and incorporate that feedback into their projects quickly.”

Engage is an all-in-one public involvement platform that lets city and county governments, departments of transportation, metropolitan planning organizations, and other agencies

publish their upcoming projects and initiatives online. Members of the public connect to the platform through social media and provide feedback instantaneously. Using sentiment analysis and emotion AI, Engage categorizes, ranks, and displays feedback data so that agencies can quickly determine how best to respond. The system features an interactive, map-based public commenting portal, promotion tools, and real-time dashboards and reporting.

Since launching Engage in 2022, the company has been working on several enhancements based on feedback from customers. The latest version of the platform includes the ability for users to sign up for a full-featured, 30-day trial of the software. Users will be taken through an automated onboarding process to help setup and promote their first public campaign. Engage also now offers multilanguage capabilities, including Spanish and French. The system can be used for a single initiative or an entire program consisting of multiple projects that require input.

Engage is one of several Aurigo products bolstered by the increase in public investment since the passing of the bipartisan Infrastructure Investment and Jobs Act in November 2021. The firm offers capital planning, project management, and right of way solutions to customers across the United States and Canada, including departments of transportation in Nevada, Utah, and Massachusetts, and the cities of Houston, Las Vegas, and Seattle.

Cadence AI-Powered Virtuoso Studio Supports RF and mmWave Design Reference Flows for TSMC N16RF, N6RF and N4PRF

25 September 2023

Cadence Design Systems, Inc. announced it has collaborated with TSMC to integrate the new Cadence® Virtuoso® Studio into the TSMC N16 mmWave design reference flow and N6RF design reference flow, and added support for the N4PRF design reference flow. With this latest development in Cadence's and TSMC's long history of collaboration, joint customers now have access to complete RF design reference flows on the N16, N6, and N4PRF processes for developing optimized, highly reliable, next-generation RFIC designs for use in radar, 5G and WiFi-7 wireless applications for the mobile, automotive, healthcare and aerospace markets. Mutual customers are already using the design reference flows and corresponding TSMC process design kits (PDKs) for RFIC design projects.

The Cadence RFIC solution supports TSMC's advanced processes and features automation capabilities to help customers spend less time developing and integrating critical RF functionality into their designs. The solution supports all aspects of RF design, including passive device modeling, assisted layout automation, and electromagnetics (EM) simulations.

The flows are supported by the latest version of the Cadence Virtuoso Schematic Editor and can deliver unmatched productivity benefits. Additionally, the flows enable a seamless integration between the Cadence EMX® Planar 3D Solver and Quantus™ Smart View tools for full-circuit extraction without parasitic double counting. The flows are newly enhanced to use purpose mapping for intelligent device scaling when migrating schematics between technology nodes. Purpose mapping allows designers to capture the purpose of devices so that they may be scaled

correctly upon process migration, according to their function in the circuit. Furthermore, a new advanced results reviewer provides valuable insight into design sensitivities such as managing corner simulations, and achieving design centering and circuit optimization. The flows also include the Cadence Virtuoso ADE Suite and the integrated Spectre® X Simulator and RF Option.

“Throughout our long-standing and productive collaboration with Cadence, the goal has always been to facilitate customer productivity and innovation by providing design flows that simplify and accelerate the development of advanced ICs,” said Dan Kochpatcharin, head of the Design Infrastructure Management Division at TSMC. “By integrating Cadence technologies into our leading-edge RF design flows, customers will be able to meet industry demand for next-generation RFICs that provide low-power, high-performance connectivity to mobile, 5G and WiFi-7 applications.”

“TSMC and Cadence customers are under tremendous pressure to rapidly develop RFIC designs in support of booming demand for 5G and other types of wireless connectivity,” said Tom Beckley, senior vice president and general manager in the Custom IC & PCB Group at Cadence. “Working closely with TSMC, we have updated our RF reference flows to leverage the unparalleled power of our latest release, Virtuoso Studio. We continuously listen to our mutual customers to understand their real-world design requirements, and their feedback has enabled us to tailor our flows so they can deliver leading-edge designs in a timely manner.”

Cadence Custom/Analog Design Migration Flow Accelerates Adoption of TSMC Advanced Process Technologies

25 September 2023

Cadence Design Systems, Inc. announced the expansion of its node-to-node design migration flow based on the Cadence® Virtuoso® Studio, which is compatible with all TSMC advanced nodes, including the latest N3E and N2 process technologies. This generative design migration flow was developed by Cadence and TSMC to provide joint customers with a simplified and automated approach to migrating custom and analog IC designs among TSMC’s advanced process technologies. Customers already using the flow have successfully reduced migration time by up to 3X when compared with manual migration.

Virtuoso Studio facilitates the migration of schematic cells, parameters, pins and wiring from one TSMC process node to another. The Virtuoso ADE Suite’s simulation and circuit optimization environment then tunes and optimizes the new schematic to ensure the design achieves all required specifications and measurements. Cadence and TSMC customers can then automatically recognize and extract groups of devices in an existing layout, and apply them to similar groups in the new layout, using Virtuoso Layout Suite’s generative design technology.

This flow allows customers to migrate a wide range of analog designs on TSMC process technologies. TSMC process nodes supported by this flow include:

- N40 to N22
- N22 to N12

- N12 to N6
- N6 to N4
- N5 to N3E
- N4/N5 to N3E
- N3E to N2

“Many TSMC customers are looking to migrate legacy designs to TSMC advanced processes to take full advantage of the higher performance and lower power benefits that TSMC provides,” said Dan Kochpatcharin, head of the Design Infrastructure Management Division at TSMC. “We have worked closely with Cadence to offer our mutual customers the ability to easily migrate their valuable custom IP. These enhanced PDKs and methodologies simplify and accelerate the design migration process and speed time to market.”

“Through the expansion of our collaboration with TSMC on custom/analog process migration, our joint customers benefit from our generative technologies that make custom/analog migration simpler and less time-consuming,” said Tom Beckley, senior vice president and general manager in the Custom IC & PCB Group at Cadence. “Using our new Virtuoso Studio, we’ve developed an advanced migration flow to help our mutual customers be more productive and meet stringent time-to-market goals.”

Cadence Virtuoso Studio supports the Cadence Intelligent System Design™ strategy, enabling system-on-chip (SoC) design excellence.

EPLAN Data Portal Update 02 September 2023

26 September 2023

463 manufacturers and more than 1,500,000 data sets are available with the update September 21, 2023.

Updates and new data

- ABB LTD – 72 new and 929 updated data sets with relays, contactors, sensor, switch and pushbutton
- Bachmann electronic GmbH – 10 updated data sets with web terminals
- Banner Engineering Corporation – 1 new data set with signal devices
- BLOCK Transformatoren-Elektronik GmbH – 68 new and 33 updated data sets with transformers
- Fuji Electric FA Components Co., Ltd. – 644 new data sets with switches
- Grace Technologies – 1 updated data set with a test device
- ifm electronic gmbh – 22 new and 2 updated data sets with sensors, switches and pushbuttons

- Lenze SE – 1 new data set with PLC
- Mitsubishi Electric – 65 new and 30 updated data sets with protection devices
- Murrelektronik GmbH – 25 new and 28 updated data sets with relays, contactors and general
- Phoenix Contact GmbH & Co. KG – 11 new and 296 updated data sets with busbars, protection devices, terminals, voltage sources and generators
- Pilz GmbH & Co. KG – 1 updated data set with relays and contactors
- Rittal GmbH & Co. KG – 97 new and 197 updated data sets with housings, enclosures and lock systems
- Saginaw Control & Engineering – 5 updated data sets with housings
- SCHNEIDER ELECTRIC FREN – 94 new and 1 updated data set with relays and contactors
- Siemens AG – 16 new and 46 updated data sets with PLC, voltage sources and generators
- WAGO GmbH & Co. KG – 3 new and 12 updated data sets with terminals

Summary

- 0 new manufacturers
- 18 updated manufacturers
- 1,526 new data sets
- 3,652 updated data sets
- 0 deleted data sets
- 2,525 new parts with EDS
- In total 904,437 parts with EDS
- In total 311 manufacturers with EDS parts
- In total 1,502,504 data sets live in EDP

Fiix by Rockwell Automation Announces Its First Artificial Intelligence Predictive Maintenance Software, Asset Risk Predictor

28 September 2023

Rockwell Automation, Inc., the world's largest company dedicated to industrial automation and digital transformation, is excited to launch a new game-changing artificial intelligence (AI) product, Asset Risk Predictor, from Fiix by Rockwell Automation, securing its position as an industry trailblazer in maintenance software.

Asset Risk Predictor (ARP) is the newest product to hit the market under the Fiix by Rockwell Automation name. This second offering from Fiix uses AI sensor data, machine recipe, and

operational environments to predict asset health so users can spot and eliminate failure before it happens. The tool is powerful enough to learn the signs of equipment failure in as little as seven days, predicting breakdowns days in advance, and built so anyone can act on the insights in seconds.

"I'm thrilled that we've developed Asset Risk Predictor (ARP), a cutting-edge AI solution," said Liudmila Domakhina, group product manager, Fiix by Rockwell Automation. "ARP empowers customers to transition to predictive maintenance, saving on monitoring costs and preventing downtimes. It's a testament to our commitment to innovation in the maintenance industry."

By showing users the daily risk level for each asset they monitor, they can expect fewer breakdowns, and spend less time setting up manual inspections. Other benefits include lowering the spend on resources and production time on unnecessary maintenance, removing the guesswork from traditional predictive maintenance.

Asset Risk Predictor can be purchased and used independently from a Fiix computerized maintenance management system (CMMS) or can be seamlessly integrated into the CMMS. When Asset Risk Predictors are connected to a CMMS, users can react to potential failure faster by automatically creating work orders in your CMMS.

Infosys Launches Industry Cloud to Catalyse Digital Transformation of the Commercial Airline Industry

27 September 2023

Infosys, a global leader in next-generation digital services and consulting, announced the launch of Infosys Cobalt Airline Cloud (ICAC) a first-of-its-kind industry cloud offering designed for commercial airlines to help them accelerate their digital transformation journey. Infosys has leveraged its deep domain experience and expertise in the travel and hospitality sector to build ICAC, which will aim to deliver personalized experiences, optimized operations, and net zero journeys for clients.

The ICAC platform is built on composable architecture principles that draw from the overall framework of Infosys Cobalt, a set of services, solutions and platforms for enterprises to accelerate their cloud journey. ICAC provides solutions, APIs and re-usable business assets that can be used for:

- Transforming the legacy workloads through disassembling and creating composable functional capabilities, enabled by cloud technologies.
- Addressing the key areas of business process efficiency and customer experiences, with an aim to provide tangible improvements in existing processes
- Improving customer experiences by ensuring accuracy in baggage delivery, leveraging precision-based gate to gate bag transfers, helping reduce Missed Bag Rate (MBR) in hub airports by up to 50 percent

- Efficiency in operations by reducing Unit Load Device (ULD) misplacement and losses, to less than 2 percent, from the current industry average of more than 5 percent, through tracking and tracing methods enabled through machine learning
- Ensuring smooth operations and enhancing passenger safety by leveraging AI for crowd control, theft, security, and reducing cost of manual airport operations
- Optimising network and route planning to help in decarbonization efforts and emission control

Additionally, Infosys will combine its industry-specific knowledge, technological capabilities, and key elements of Infosys Cobalt to help airline companies transform their business landscape, foster poly-cloud opportunities, and innovate at scale, with regulatory and security frameworks.

Fernando Rocha, CIO, Aeroméxico Airline, said, "We are excited to collaborate with Infosys to leverage the solutions, reference architectures and blueprints of the Infosys Cobalt Airline Cloud. We believe that this platform will enable us to quickly adapt to changing market dynamics, enhance customer experiences, and drive profitable growth."

Ashiss Kumar Dash, EVP & Global Head - Services, Utilities, Resources and Energy, Infosys, said, "The launch of Infosys Cobalt Airline Cloud is a significant milestone in our journey of digital innovation. This pioneering industry cloud solution demonstrates our commitment to empowering the airline industry with a scalable and flexible IT ecosystem that caters to the unique challenges faced by the industry. ICAC offers a pre-configured solution and allows our clients to reduce costs, while continuing to innovate to meet the changing demand environments."

Introducing Cortona3D RapidAuthor 14.3: new Applicability Editor, automatic generation of IPC Pages from ModelView in PLM XML, composite illustration, enhanced 2D authoring, and more

26 September 2023

Cortona3D introduces the latest iteration of its technical documentation software, RapidAuthor 14.3. This release brings an array of enhancements designed to streamline the process of creating high-quality 3D animated and traditional 2D technical documentation.

A notable advancement has been made in S1000D authoring with the introduction of the Applicability Editor in version 14.3. This tool streamlines applicability management, eliminating manual XML writing. Users can effortlessly create data module and content applicability by utilizing parameters from the applicability cross-reference table (ACT) data module. The editor enables the definition of applicability through a hierarchy of logical statements and facilitates populating the product cross-reference table (PCT) data module. The Applicability Editor is available in RapidManual, RapidCatalog, and RapidText.

RapidCatalog and RapidIllustrator users now have the power to create composite illustrations—combinations of diverse product and component views. These composite illustrations update automatically and enable the utilization of reusable templates across projects.

In RapidAuthor 14.3, users can generate vector illustrations with raster background, expedite common tasks in the Document Editor using new buttons, create more lifelike animations with the Phantom Box object, and much more.

Cortona2D Editor Pro introduces new functionality for splitting lines, single-segment polylines, and polybeziers into a specified number of equal segments. It also offers the capability to divide multi-segment polylines, polybeziers, arcs, and ellipses into individual segments.

Furthermore, the 2D Editor now supports masks to conceal elements within an image, a custom color palette, new Halo styles, enhanced editing of raster 2D images, and more.

Automated generation of IPC-pages directly from the root JT's ModelView during PLM XML file imports is now a feature in RapidAuthor 14.3 for Teamcenter. This process requires specific settings in the corresponding import profile. JT Reference Sets are also supported in this version.

RapidAuthor 14.3 offers substantial enhancements in authoring S1000D and DITA content within Active Workspace.

Keysight EDA 2024 Integrated Software Tools Shift Left Design Cycles to Increase Engineering Productivity

26 September 2023

Keysight Technologies, Inc. introduces Keysight EDA 2024, a tightly integrated suite of electronic design automation (EDA) software tools that ensures first pass success. This new integrated EDA software facilitates a "shift left" approach to increase productivity for engineers developing high speed, high frequency products in multiple applications.

Shift left is an established electrical engineering practice that moves design validation forward in the development cycle to accelerate time-to-market. The rising complexity of electronic systems demands that designers complete as much validation in the virtual domain where it is easier and more cost-effective to correct functional and physical issues. Implementation of accurate modeling and simulation methodologies that create virtual prototypes and digital twins is essential to handling complexity. Key to building accurate models and faster simulations is incorporation of actual measurement data into the design and validation process in virtual space.

Keysight EDA 2024 software includes new system and circuit design workflow integration, power amplifier modeling and simulation optimization, and Satcom design evolution enhancements. The improvements expand on the software automation, intellectual property and design data management, and simulation acceleration capabilities previously announced. Powered by Keysight measurement science, the new tools provide engineers with a comprehensive solution that speeds virtual prototype creation with highly accurate validation prior to building physical prototypes and starting volume production manufacturing.

Keysight EDA 2024 software suite offers the following shift left updates:

Streamlining System and Circuit Design Workflows

The RF System Explorer integrates system architecture exploration and analysis features from SystemVue into Advanced Design System (ADS) to enable design sharing between system and circuit level workflows. RF System Explorer allocates a hierarchical subsystem and parameters to a circuit designer to change radio frequency (RF) block parameters or select the analysis path without impacting the overall architecture. Circuit designers can incorporate their circuit design or derived behavioral model into the allocated subsystem for RF verification and optimization.

Connected workflows between SystemVue and ADS enable designers to extract models of the circuit design and simulate them using RF System Explorer. Streamlined workflows provide more efficient communication between architects and subsystem engineers in enterprise teams. System architects pre-configure their own templates in SystemVue for more effective collaboration with their RF circuit design teammates. Engineering teams also avoid duplication of results visualization in ADS. The API-based tool integration maintains an open environment with the option for third-party software connectivity.

Optimizing Wide Bandgap Power Amplifier Modeling and Simulation

Like RF System Explorer's workflow integration, the Digital Pre-Distortion (DPD) Explorer and DPD Designer tools optimize power amplifier design methodology across levels of abstraction. These tools enable power amplifier designers working on broadband applications -- including 5G FR2, DVB-S2X, and WLAN -- to leverage a new Dynamic Gain Model that accounts for non-linear memory effects in topologies such as GaN Doherty.

Compact waveforms deliver unparalleled simulation speed and DPD optimization that improves the entire power amplifier design and validation process. DPD Explorer and DPD Designer utilize the same precise measurement science and algorithms found in Keysight's PNA-X to ensure high performance results for adjacent channel power ratio (ACPR) and error vector magnitude (EVM) metrics.

Evolving Satcom Design for 5GNTN, DVB-S2X, and Phased Array Applications

SystemVue enhancements address 5G non-terrestrial network (NTN), DVB-S2X, and phased array development projects.

For 5G NTN, SystemVue updates the 5G New Radio (NR) simulation library with 1024 QAM modulation for 3GPP Release 17 and associated MCS table. The library supports full end-to-end physical layer system simulation of various NTN deployments, a new 5G channel model, and an advanced transceiver. The channel model for NTN provides all the propagation characteristics to model a variety of satellite links. It supports large path delay, large-frequency Doppler Shift, and satellite trajectory visualization.

SystemVue reduces risk, cost, and time-to-market testing satellite payload, gateway, and user equipment (UE) receiver designs with 3GPP 38.811 compliant models in simulation. Satcom system engineers can evaluate design performance under varied channel impairment conditions in minutes and optimize link closure margins. The comprehensive 5G NTN solution,

including Keysight PropSim emulation and Ansys STK interoperability, enables simulation of all orbital parameters, high-velocity satellites, high-altitude platforms, and long-distance links.

For DVB-S2X, SystemVue links with Keysight Signal Studio and vector signal analysis (VSA) software tools enabling designers to create a complete digital twin for satellite digital video broadcast. The integrated solution features a new model for Satcom channel modeling, a user-friendly graphical interface that supports parameter configuration and intuitive navigation, VSA Flex Frame presets designed explicitly for DVB-S2/S2X that speed signal analysis, and DVB-S2X source and receiver supporting low signal-to-noise and bit error rate. No scripting is required to integrate the SystemVue design environment with signal generation and analysis tools in a unified simulation and testing ecosystem.

For phased array, SystemVue allows fast and easy design capture with efficient simulation of complex systems containing hundreds or thousands of RF elements and paths. SystemVue simulates active impedance correlated against Keysight and third-party finite element method (FEM) simulators. Active impedance simulation is enhanced by including X-parameters with load-pull data, which increases the modeling accuracy of the interaction between the power amplifiers and the active array impedance. Load pull modeling creates the most accurate phased array digital twin, with hardware verified by Keysight instrumentation. SystemVue has also added a new automated MDIF import capability, facilitating the consumption, manipulation, interpolation, and slicing of data such as S-parameters or other model files.

SystemVue's powerful phased array simulation and visualization capabilities provide accurate analysis of beam directivity pattern and array configuration. Earlier insights into key beam forming metrics for optimization and decision-making saves cost by reducing expensive testing in anechoic chambers. Designers can also confirm array performance through SystemVue integration with Ansys STK for scenarios and Keysight EXata for network simulation.

Niels Faché, Vice President and General Manager, Keysight EDA, said: "Domain context matters as design engineers strive to meet rising complexity challenges and boost their productivity. The breadth of improvements we've packed into Keysight EDA 2024 is aimed squarely at our customers' major pain points—faster time-to-market, first pass success, automated, integrated, and open workflows, and high speed and high frequency performance. We've invested heavily in software R&D to create whole product solutions spanning design, emulation, and test disciplines, and incorporating our deep workflow know-how into the early stages of product development. It's not just plain vanilla shift left, but rather shift left powered by measurement science and application domain expertise that customers count on Keysight EDA to deliver."

Keysight, Synopsys, and Ansys Accelerate RFIC Semiconductor Design with New Reference Flow for TSMC's Most Advanced 4nm RF FinFET Process

27 September 2023

Keysight Technologies, Inc., Synopsys, Inc., and Ansys announced a new reference design flow for TSMC N4P RF, the silicon foundry's most advanced 4 nanometer (nm) radio frequency (RF) FinFET process technology. The reference flow is based on the Synopsys Custom Design Family

and integrates the Ansys multiphysics platforms, which provides a complete RF design solution for customers seeking an open RF design environment with higher predictive accuracy and productivity. It provides designers with a choice of best-in-class solutions and includes validated integrations with radio frequency integrated circuit (RFIC) design and interactive electromagnetic (EM) analysis tools from Keysight and signoff power integrity and EM modeling from Ansys.

Next-generation wireless systems feature higher bandwidth, more connected devices, lower latency, and broader coverage. Design complexity of RF integrated circuits used for wireless data transmission such as transceivers and RF front-end components continues to grow. Higher circuit frequencies, smaller feature sizes, and complex layout-dependent-effects make high speed design physics challenging, requiring more accurate and comprehensive modeling and simulation to achieve the highest performance and robust product reliability.

The TSMC 4nm RF design reference flow improves design turnaround time and layout productivity in the Synopsys Custom Compiler™ design and layout environment. Reference design flow certification includes rigorous validation of TSMC's 4nm RF process design kit (PDK) using critical design components including sub-6 GHz low noise amplifiers (LNAs) and LC-tuned voltage-controlled oscillators (LC VCOs). The reference flow features industry-leading tools that enable efficient passive device synthesis, EM model extraction, thermal-aware electromigration analysis extended to include device metal, and post-layout extraction with correct handling of circuit under inductor (CUI) structures.

In addition to Synopsys Custom Compiler, the open, modern reference flow incorporates:

Golden signoff accuracy circuit simulation performance from Synopsys PrimeSim™ simulation tools and PrimeSim™ Reliability Environment, and signoff physical verification and extraction solutions from Synopsys IC Validator™ and Synopsys StarRC™.

Ansys Totem™ provides thermal-aware signoff electromigration verification and power integrity analysis (EM/IR). RaptorX™ and Exalto™ provide signoff electromagnetic modeling, with unique CUI features enabling significant area and cost reductions of up to 50%. VeloceRF™ delivers fully automatic silicon layout synthesis for electromagnetic devices including multi-layer inductor spiral, baluns/transformers, and transmission lines to enable the highest circuit performance and accuracy.

Keysight PathWave ADS RFPro provides rapid, interactive EM-circuit co-simulation and analysis to find and fix layout-dependent-effects up front in the development cycle. PathWave RFIC design (GoldenGate) supports harmonic balance simulation in early chip design and verification process.

“Keysight, Synopsys, and Ansys have expanded their strategic technology collaboration with TSMC to deliver the next level in RF design for advanced 4nm RF technology,” said Niels Faché, vice president and general manager at Keysight EDA. “We’ve witnessed RF designers struggling to use older-generation solutions and flows that were never intended for today’s 5G/6G system-on-chip and RF subsystem designs. New layout-dependent-effects make detailed simulation and modeling that is signoff accurate a must-have. Other commercial tools and

workflows do not always include these newest foundry requirements, and often lack the capacity to model modern analog designs with hundreds of coupled signal ports.”

“Synopsys, Ansys, and Keysight have harnessed decades of expertise in custom analog, RF, and multi-physics design to reduce risk and accelerate success for our mutual customers,” said Sanjay Bali, vice president strategy and product management EDA group at Synopsys. “Our latest collaboration with Ansys and Keysight on the new RF design reference flow supporting TSMC’s advanced 4nm process node provides an open and optimized flow that delivers exceptional quality-of-results for advanced 5G/6G wireless systems.”

“Multiphysics raises novel challenges for our customers to optimize power, area, reliability, and performance as RF frequencies climb into the millimeter wave and sub-THz range,” said John Lee, vice president and general manager, electronics, semiconductor, optics business at Ansys. “First-pass customer success depends upon applying best-in-class solutions across the design flow. In partnership with Keysight and Synopsys, Ansys is working closely with TSMC to make our industry-leading power integrity and electromagnetic modeling technology available in a custom design flow that responds to the needs of high-speed circuit designers.”

MathWorks Introduces Simulink Fault Analyzer and Polyspace Test in MATLAB and Simulink Release 2023b

21 September 2023

MathWorks unveiled Release 2023b (R2023b) of the MATLAB® and Simulink® product families today. R2023b introduces two new products and several major updates that provide new functionality that streamlines the workflows of engineers and researchers.

Simulink Fault Analyzer™ enables systematic fault effect and safety analysis using simulation. The new product performs fault injection simulations without modifying engineering designs. Engineers time or trigger faults by specific system conditions and can perform safety analyses, such as Failure Mode and Effects Analysis (FMEA), while leveraging simulation. Simulink Fault Analyzer helps engineers create and document formal connections between faults, hazards, fault detection and mitigation logic, and other artifacts when paired with Requirements Toolbox™.

“The growing complexity of design models makes simulation a critical engineering tool,” said MathWorks Director of Technical Product Marketing Dominic Viens. “R2023b’s new products and updates were built to simplify Model-Based Design and help engineers and researchers deliver their best work.”

R2023b also includes Polyspace Test™, a new product that empowers engineers to develop, manage, and execute C and C++ code tests in embedded systems. Users can create stubs and mocks to isolate and verify components under test using the Polyspace xUnit API or a graphical test authoring editor. Polyspace Test also lets engineers execute tests on host computers or embedded targets, automate test execution, and link tests to requirements for traceability.

R2023b also includes major updates to popular MATLAB and Simulink tools, including:

- Aerospace Toolbox™ empowers engineers to propagate and visualize orbits of satellite constellations and to perform line-of-sight (LOS) and eclipse analyses.
- Receive historical and market data using the Bloomberg Hypermedia API with Datafeed Toolbox™.
- With DO Qualification Kit, aerospace engineers can now qualify Polyspace Test according to DO-178C and DO-330 Standards.
- Predictive Maintenance Toolbox™ now extracts physics-based features from motors and rotating machinery.
- Signal Integrity Toolbox™ allows engineers to automate simulations, analyze data, and create visualizations from the MATLAB command line.
- Simulink Desktop Real-Time™ now empowers engineers to execute real-time tests from Linux desktop computers.
- Wavelet Toolbox™ now enables engineers to apply wavelet and time-frequency analysis using apps. The toolbox also now uses automatic feature extraction for AI workflows.
- Wireless engineers can design and implement 5G, satellite, WLAN, and custom OFDM-based communication subsystems for FPGAs, ASICs, and SoCs with Wireless HDL Toolbox™.

Matterport Announces the Next Generation of AI-Powered Real Estate Insights, Now in Beta

26 September 2023

Matterport, Inc. introduces the next generation of intelligent digital twins with powerful new capabilities fueled by the company's rapid advancements in AI and data science. Now in beta, customers can access automated measurements, layouts, editing, and reporting capabilities generated from their digital twins. Automation marks a significant breakthrough, saving customers time by eliminating the need for manual measurements and reporting by automatically processing the millions of 3D data points captured with a Matterport digital twin.

Accurate room-by-room measurements are one of the most common and time-consuming requests from buyers to understand whether a property suits their needs. Now, customers can automatically generate 2D and 3D layouts that identify and label the details of a property including walls, the type of room, length and width, and total square footage. These details allow a buyer to quickly assess a property, while enabling property marketers to accelerate home listings and sales with instant at-a-glance property overviews and Multiple Listing Service (MLS) data. New customization capabilities allow property managers to edit layouts to optimize the functionality of a space or surface details that guide the development, renovation or remodeling of interior and exterior spaces.

"I'm excited to see the progression of our digital twins helping customers put AI and automation to practical use for their properties," said RJ Pittman, Chairman and CEO of Matterport. "Instant access to room dimensions, total square footage by room, floor, and the

entire space, builds upon one of our most popular features - Measurement Mode. With our new intelligent digital twins, our customers get hundreds of useful measurements, room names, print-ready layouts and more - automatically. With these new 'power tools' we're driving customer productivity through the roof!"

Matterport's new AI-powered capabilities are made possible through the company's technical leadership in spatial data, computer vision, and deep learning. Cortex, the company's AI-engine, brings it all together to create thousands of digital twins every day, trained with Matterport's massive spatial data library. At more than 33 billion square feet of spaces in the real world digitized, Cortex will continue to learn, grow, and define the future of the digital twin for years to come.

ModuleWorks and Cetim Partner on Costing Software

25 September 2023

Cetim, the Technical Centre for Mechanical Industries, has integrated ModuleWorks Self-Driving CAM into its TechniQuote cost estimation software. The self-driving technology with built-in toolpath generation simplifies and speeds up cost estimations for milling.

Machine shops and sub-contractors use TechniQuote cost estimation software to generate detailed cost breakdowns and make informed decisions about pricing, process optimization and resource allocation for mechanical manufacturing. To generate an estimate, users load a CAD model and set up the machining scenarios. For milling jobs, the integrated Self-Driving CAM enhances TechniQuote with pre-defined machining templates to simplify and accelerate the cost estimation process.

"Estimations based on toolpath data are more accurate than those based on other costing methods, but both skill in machining and time are required to enter relevant CAM parameters. With machining rules and data provided by TechniQuote and with Self-Driving CAM, users now just select very few parameters that control pre-defined CAM templates. This greatly speeds up the estimation process and users can respond rapidly with accurate pricing," says **Hervé Lallemand**, Costing Product Manager at Cetim.

"Toolpath-based cost estimation is a novel application of our Self-Driving CAM, and it's great to see how TechniQuote is using it to further automate and simplify its costing workflows," says **Soroosh Eghbali**, Head of Technology CAM Automation at ModuleWorks.

TechniQuote uses automatic feature recognition in addition to the machining templates to help engineers quickly set up and run comparative cost analyses. The integrated Self-Driving CAM is built upon the ModuleWorks toolpath algorithms which deliver precise information on the length and complexity of the toolpath, enabling TechniQuote to accurately estimate the total machining time as well as other cost factors such as tool wear, waste material and overall energy consumption.

Rockwell Automation Revolutionizes Edge Computing for Logix Controllers with New Embedded Edge Compute

28 September 2023

Rockwell Automation, Inc., the world's largest company dedicated to industrial automation and digital transformation, is proud to announce the release of its Embedded Edge Compute module (EEC), setting a new standard for edge computing capabilities. Designed to empower businesses and developers with improved processing power and versatility, this module opens a world of possibilities for edge computing applications and enables information technology (IT)/operational technology (OT) convergence at the Logix level for more direct control monitoring.

Key features and benefits of the Embedded Edge Compute module include:

- **High-performance Computing:** Powered by a high-performance processor and advanced computing architecture, the EEC module delivers exceptional speed and efficiency, enabling businesses to process complex tasks and data-intensive applications with ease.
- **Compact Form Factor:** The compact design of the Embedded Edge Compute module allows for easy integration into space-constrained environments. Its small size and low power consumption make it ideal for edge devices, enabling users to bring powerful computing capabilities closer to the data source without compromising on performance.
- **Scalability and Flexibility:** The EEC module offers a modular design and ability to host FactoryTalk® Optix™ and FactoryTalk® Remote Access™, which allows for seamless scalability, enabling users to easily adapt to changing computing demands.
- **Enhanced Connectivity:** The EEC module provides a wide range of connectivity options, facilitating comprehensive data exchange and enabling advanced IoT and automation applications.

"Our mission with the Embedded Edge Compute Module is to provide a cutting-edge solution that empowers our customers to embrace the full potential of edge computing while maintaining compatibility and ease of use," said Stefano Schiavella, product manager, Rockwell Automation. "We believe EEC will revolutionize the way Logix Controllers interact with modern technologies and unlock new opportunities for efficiency and productivity."

Siemens and TSMC collaborate to help mutual customers optimize designs using foundry's newest advancements

27 September 2023

Siemens Digital Industries Software announced new certifications and collaborations with longtime partner TSMC, resulting in the successful qualification of multiple industry-leading Siemens EDA product lines for the foundry's latest process technologies.

“TSMC’s collaboration with design ecosystem partners like Siemens helps our mutual customers remain at the forefront of technology innovation,” said Dan Kochpatcharin, head of the Design Infrastructure Management Division at TSMC. “This close partnership provides customers with proven design solutions that allow customers to more fully leverage the significant performance and power efficiency advantages of TSMC’s advanced process technologies.”

Calibre certified for TSMC’s N2 process

Siemens’ industry-leading Calibre® nmPlatform tool for integrated circuit (IC) verification sign-off is now fully certified for TSMC’s most advanced N2 process, including Calibre® nmDRC software, Calibre® YieldEnhancer™ software, Calibre® PERC™ software and Calibre® nmLVS software – all of which are now in place for the earliest adopters of this advanced new process technology offering from TSMC.

TSMC and Siemens have also collaborated to certify Siemens’ mPower™ analog software for transistor-level electromigration and IR drop (EM/IR) sign-off using TSMC’s N4P process. This achievement allows mutual customers to apply mPower’s unique EM/IR signoff solution to their next-generation analog or radio frequency (RF) designs.

Collaboration for Siemens’ Solido Design Environment and Analog FastSPICE TSMC’s N4P, N3E and N2 custom design reference flow (CDRF) works now with Siemens’ Solido™ Design Environment software for advanced variation-aware verification at high sigma. In addition, Siemens’ Analog FastSPICE platform for circuit verification of nanometer analog, RF, mixed-signal, memory, and custom digital circuits has successfully achieved TSMC certification for the foundry’s advanced N5A, N3E, N3P and N2 processes. As part of the CDRF flow for TSMC’s N4P, N3E and N2 processes, Siemens’ Analog FastSPICE platform now supports TSMC’s Reliability Aware Simulation technology, which addresses IC aging and real-time self-heating effects among other advanced reliability features.

Investment in place and route continues with N3 certifications for Aprisa

Reinforcing its strong commitment to investing in the digital implementation space, Siemens today announced yet another milestone for its Aprisa™ place and route solution with TSMC’s certification of the tool for the foundry’s N3E process. The N3E certification, together with Aprisa’s industry-leading ease-of-use, can help customers accelerate their migration to this node.

“TSMC’s pace of innovation is remarkable, and we are proud to work with this partner for the benefit of our many mutual customers,” said Joe Sawicki, executive vice president, IC-EDA for Siemens Digital Industries Software. “Optimizing our EDA solutions for TSMC’s latest processes helps us provide our mutual customers with innovative solutions that satisfy their challenging and rapidly evolving market and business requirements.”

TSMC certifies Siemens’ advanced 3DIC solutions

Siemens today also announced it has made substantial progress with TSMC in certifying several of Siemens’ 3DIC solutions for TSMC’s advanced 3DFabric™ technologies. TSMC has certified 3Dblox 2.0 with Siemens’ Calibre® 3DSTACK software for physical analysis and circuit

verification. This certification includes support for inter-chiplet DRC and LVS checks as requirements for TSMC 3DFabric technologies.

In addition, TSMC recently certified an array of Tessent™ 3DIC solutions including Tessent hierarchical DFT, Tessent Multi-die with enhanced TAPs (test access ports - IEEE 1838 compliant), native flexible parallel port (FPP) support using streaming scan network (SSN) and IEEE 1687 JTAG network technologies. Both partners are strengthening their commitments to investing in building 3DIC testing ecosystems under TSMC 3Dblox, which includes known good die (KGD) loopback test and physical aware die-to-die fault detection and diagnosis utilizing BMAP and PMAP standards.

SLICE THROUGH PRODUCT CONCEPTS IN VIRTUAL REALITY – PLUS MORE KEYVR UPGRADES

26 September 2023

KeyVR, our proprietary virtual reality platform, empowers users to share, explore and edit product concepts in a connected VR environment. Our most recent KeyVR update, released this month, provides impressive new tools and user experience upgrades.

NEW KeyVR Tool: Cut Plane

The new Cut Plane tool cuts straight through objects, revealing the inner workings of the product. The plane can be moved around like any other object in the scene. This means you can cut through objects at any angle and orientation, and you can adjust the plane free-hand or with the same precise snapping system KeyVR provides for movement and rotation of objects in the scene.

Even better, the Cut Plane also works in KeyVR Connect, where multiple users can see the cutting effect and reposition the plane together.

User Experience Upgrades

Improved Pointer Tool

Newer KeyVR users can accidentally select tools, change settings and/or fly or teleport far away from the product that they want or are meant to look at. Now, the Pointer tool can be used in those cases, allowing the user to only point at parts of the product. KeyVR also now provides a *Lock* mode that ensures the user can't select a different tool other than the one selected.

How it works: The Pointer tool shows an arrow if any of the buttons on the controller are pushed. It does not matter which button is pressed, making it even easier to use. The user cannot modify the scene or move themselves in any way with this tool. With the optional *Lock* mode enabled, the user cannot, by themselves in VR, get out of the Pointer tool, making for a completely remote-controllable session.

The Pointer tool also works in KeyVR Connect multi-user sessions, allowing multiple users to better discuss the product they are reviewing. All users can then point to elements while talking about them, and each user's pointer has its own color.

Improved Bloom and Emissive Graphics

KeyVR now supports emissive materials. These don't cast actual light or shadows, but simply show up as colorful, bright surfaces, like in KeyShot. KeyVR also now automatically applies a *Bloom* effect to particularly bright parts of the image. This is similar to the Image Style effect called *Bloom* in KeyShot.

Note: The *Bloom* effect in KeyVR is not driven by the actual Image Style effect in KeyShot. Instead, it's automatically applied where the image is particularly bright. In other words, it works analog to the *Bloom* effect in KeyShot Web Viewer.

Quality of Life Updates

Object Outlines

The new Object Outlines feature adds a selection outline to any modifiable object in the scene, depending on the currently active tool. This way, the user can point at anything they see, and instantly know that it can be modified with the current tool – just by noticing if outlines show up around the object or not.

Object Outlines make it much easier to work with new and/or larger scenes. The selection outlines are also a visual effect used in KeyShot to visualize what part is selected and active, making for a more consistent look and feel between KeyShot and KeyVR.

Synopsys and TSMC Advance Analog Design Migration with Reference Flow Across Advanced TSMC Processes

25 September 2023

Synopsys, Inc. announced its analog design migration flow is enabled across TSMC's advanced process technologies, including N4P, N3E, and N2. The analog design migration flow, part of the Synopsys Custom Design Family, includes a machine learning-based schematic and template-based layout migration solution to speed up overall analog design migration tasks. As part of the design migration solution, the integrated parasitic-aware, AI-driven optimization technology helps overcome the manual and iterative effort typically required to tune analog designs to meet all specifications. Using the flow, engineers can optimize their design in the new technology node while shaving weeks off engineering time and effort.

"With the significant performance and power efficiency advantages of TSMC's most advanced process technologies, design teams can bring innovative chips to life that are in high demand for today's smart, connected, and compute-intensive applications," said Dan Kochpatcharin, head of the Design Infrastructure Management Division at TSMC. "Our long history of collaboration with Synopsys continues to benefit mutual customers who are migrating existing analog designs to next-generation TSMC processes, with productive and time to market gains."

"Increased chip complexities, engineering resource constraints, and tighter delivery windows are driving companies to AI-driven solutions to help accelerate quality of results and time to results," said Sanjay Bali, vice president of Strategy and Product Management for the EDA Group at Synopsys. "Our collaboration with TSMC on the analog design migration flow for

TSMC's N4P, N3E, and N2 processes enables mutual customers to unlock massive productivity gains with efficient migration of their designs from node-to-node."

Enabling Efficient Migration of Analog and IP Designs

Last fall, Synopsys was recognized as a TSMC OIP Partner of the Year; among the achievements highlighted was the certified Synopsys Custom Design Family, which provides machine learning-based schematic and template-based layout migration capabilities for efficient reuse of existing IP when migrating analog designs across TSMC advanced nodes. Key components of the analog design migration flow include Synopsys Custom Compiler design and layout solution, Synopsys PrimeWave™ design environment, and Synopsys PrimeSim™ circuit simulation solution, which are enabled for all TSMC advanced FinFET technologies and deliver a performance advantage in SPICE, FastSPICE, and mixed-signal simulation.

Facilitating an Early Start on Designs

With the availability of interoperable process design kits (iPDKs) tuned to TSMC's N4P, N3E and N2 processes, analog design teams can start their projects earlier and be on a highly productive path. Mutual customers using the iPDKs can use the best-in-class tool in their flows, simplify the development flow, and cut turnaround time. In addition, an enabled RFIC reference flow for the TSMC N4P RF FinFET process, developed in partnership with Ansys and Keysight, is now available for TSMC customers to accelerate RF designs. The open RF design flow enables RF SoC design engineers to meet performance, power efficiency, and time-to-market requirements.

Synopsys and TSMC Collaborate to Accelerate 2nm Innovation for Advanced SoC Design with Certified Digital and Analog Design Flows

25 September 2023

Synopsys, Inc. announced that its digital and custom/analog design flows are certified for TSMC's N2 process technology, enabling faster delivery of advanced-node SoCs with higher quality. Both flows are seeing strong momentum, with the digital design flow achieving multiple tape-outs and the analog design flow adopted for several design starts. The design flows, powered by the Synopsys.ai™ full-stack AI-driven EDA suite, deliver a significant lift in productivity. Synopsys Foundation and Interface IP in development for the TSMC N2 process will help reduce integration risk and speed time to market for advanced HPC, AI, and mobile SoCs. Additionally, Synopsys AI-driven design technologies, including Synopsys DSO.ai™, are enabled to fast-path the optimization of N2 design to improve the power, performance, and area.

"High quality-of-results and faster time to market for advanced SoC designs are hallmarks of TSMC's and Synopsys' longstanding collaboration," said Dan Kochpatcharin, head of Design Infrastructure Management Division at TSMC. "We work closely with our design ecosystem partners like Synopsys to deliver a full-spectrum of best-in-class solutions for TSMC's most advanced process technologies, providing our mutual customers a clear advantage in meeting the silicon demands of high-performance applications, along with a proven path to rapidly migrate their designs from node to node."

"The Synopsys digital and analog design flows for the TSMC N2 process represent a significant investment by Synopsys across the full EDA stack, helping designers jumpstart their N2 designs, differentiate their SoCs with increasingly better power, performance, and chip density, and accelerate their time to market," said Sanjay Bali, vice president of Strategy and Product Management for the EDA Group at Synopsys. "Our close collaboration with TSMC through every generation of TSMC's process technologies enables us to deliver unmatched EDA and IP solutions that customers need to innovate and strengthen their competitive advantage."

Efficient Reuse of Designs from Node to Node

The Synopsys analog flow enables efficient reuse of designs from node to node on TSMC advanced processes. As part of the certified EDA flows, Synopsys provides interoperable process design kits (iPDKs) and Synopsys IC Validator™ physical verification for full-chip physical signoff.

Synopsys Unveils Industry's Broadest Portfolio of Automotive-Grade IP on TSMC's N5A Process Technology

26 September 2023

Synopsys, Inc. announced the industry's broadest portfolio of automotive-grade Interface and Foundation IP for TSMC's N5A process. Together, Synopsys and TSMC are helping to power the next generation of software-defined vehicles by enabling long-term reliability and high-performance compute requirements of automotive system-on-chips (SoCs).

"TSMC has worked closely with our design ecosystem partners to provide the automotive semiconductor industry with cutting-edge solutions in IP, EDA, and manufacturing technologies," said Dan Kochpatcharin, head of the Design Infrastructure Management Division at TSMC. "Synopsys' portfolio of automotive-grade IP for TSMC's N5A process enables automotive chip innovators to accelerate the design of their safety-critical SoCs while taking advantage of N5A's significant performance, power efficiency, and logic density boost."

"New generations of automotive SoC designs will need to support massive amounts of safety-critical data processed at extreme speeds and with high reliability," said John Koeter, senior vice president of marketing and strategy for IP at Synopsys. "Synopsys' high-quality, automotive-grade Interface and Foundation IP on TSMC's N5A process enables automotive OEMs, Tier 1s, and semiconductor companies to minimize IP integration risk and help meet the required functional safety, performance, and reliability levels for their SoCs."

Synopsys IP on the TSMC N5A process is designed and tested to the AEC-Q100 reliability and automotive Grade 2 temperature standards for ambient -40°C to 105°C, helping to ensure reliability of advanced driver assistance systems (ADAS), highly automated driving (HAD) systems, and zonal SoCs. The Synopsys IP portfolio meets the ISO 26262 standard for random hardware faults, enabling automotive OEMs, Tier 1s, and semiconductor companies to accelerate the development and assessment of their safety-critical SoCs and reach their designs' functional safety Automotive Safety Integrity Level (ASIL) targets. Automotive-grade Synopsys IP, which has been integrated into more than 100 ADAS chips, is part of Synopsys' automotive SoC and software development offering that includes design, verification,

electronics digital twin, and prototyping solutions to accelerate development of chips for software-defined vehicles.

The new Agacad UI: simplicity at the forefront

25 September 2023

Renata Jočienė of Agacad announced the implementation of a new User Interface for all Agacad products on the Agacad Blog. Renata says, "With the new UI, everything is about simplicity. We structured it differently so that it is more intuitive and easier to use. And easier on the eyes, too."

Read the full blog post here: <https://agacad.com/blog/the-new-agacad-ui-simplicity-at-the-forefront>

Trimble and Meta Bring SketchUp to Meta Quest VR Headsets

27 September 2023

Trimble announced the launch of SketchUp Viewer for Meta Quest 2, Meta Quest Pro and Meta Quest 3, a powerful, immersive way to view and present 3D SketchUp models in virtual reality (VR). SketchUp Viewer for Quest enables interior designers, architects, engineers, and construction (AEC) professionals using a Quest VR headset to engage colleagues and clients in experiential design reviews for more informed decision-making and collaboration on the go, in the office, or on site.

With SketchUp Viewer for Quest, both technical and non-technical users can experience designs in an immersive environment without the need for complex controls or powerful desktop machines. In contrast to traditional architectural representations that may be difficult for clients to understand, VR enables architects and designers to showcase their designs and convey design intent by enabling the client walkthrough and experience the design in a true-to-scale environment. Using SketchUp Viewer for Quest helps improve communication and collaboration with colleagues and clients. It makes it possible to iterate faster on designs, spot and avoid costly errors and explore ideas in real time.

"Meta has been at the forefront of growing VR adoption by making the technology easy to use, accessible and affordable," said Chris Cronin, vice president and general manager of Trimble SketchUp. "Collaborating with Meta to create SketchUp Viewer for Meta Quest is an important milestone toward making it easier for design and AEC professionals to tap into the power of VR as a rich, immersive way to experience, share and collaborate on SketchUp models."

In addition to native SketchUp tools, SketchUp Viewer for Quest includes features, such as tabletop and presentation modes, that offer architects and designers multiple ways to present their designs. With tabletop mode, users can walk around the SketchUp model and view the design as a virtual scale model. Presentation mode can be used to curate a client's virtual walkthrough, complete with a simple user interface and easy-to-use controls.

"We're already seeing the value of virtual reality in architecture and design, whether it's exploring ideas, solving problems or showcasing designs in the best possible light," said Jamie

Keane, director of Product Management at Meta. "We believe the combination of SketchUp and Meta Quest will create new opportunities for connection and collaboration. We look forward to working with Trimble to bring transformative technology to architecture and design professionals and their clients."

Zuken Introduces AI-Powered PCB Place and Route Technology for CR-8000

19 September 2023

Zuken Inc, a leading provider of electronic design automation solutions, introduces a revolutionary approach to AI-assisted PCB design. The new technology, called AIPR, an acronym for Autonomous Intelligent Place and Route, will be provided as part of Zuken's established CR-8000 PCB engineering and design platform. It will enable new levels of PCB design efficiency and accuracy by harnessing machine learning.

The new Autonomous Intelligent Place and Route product will be comprised of a new routing engine called Smart Autorouter that leverages machine learning based on an innovative technology, dubbed the Brain. The latter will be introduced in 3 stages starting with the Basic Brain, and the future extensions Dynamic Brain and, ultimately, Autonomous Brain.

Elevating Design by learning from Design Expertise

The first stage, the Basic Brain revolutionizes PCB design at the foundational stage by learning from Zuken's library of design examples and existing design expertise. Seamlessly integrated into the robust CR-8000 platform, Basic Brain enhances the user experience by routing the design utilizing the Smart Autorouter based on learned approaches and strategies.

Fusing AI with Design Experience

In the second stage, Zuken's Dynamic Brain will learn from newly created PCB designs, utilizing past design examples and integrating them into AI algorithms. Combining customers' best practices with AI insights will result in accelerated design iterations and notable enhancements in overall productivity, all within the framework of the CR-8000 platform.

Autonomous Brain: Redefining AI Evolution

The third and final stage is the Autonomous Brain, an AI-driven powerhouse in continuous learning mode, pushing the boundaries of creativity. The Autonomous Brain's capability to self-improve with each project will herald a new era of AI-driven innovation and is available exclusively within Zuken's CR-8000 platform.

With the new CR-8000 AIPR platform Zuken underlines commitment to delivering heightened efficiency, accuracy, and technological progress to address the ever-increasing challenges of electronic design. Kazuhiro Kariya, Sr. Managing Executive Officer, and CTO of Zuken Inc., commented: "Our three-stage AI approach will empower designers with an enhanced toolkit within the CR-8000 platform, accelerating design cycles and unlocking new dimensions of creativity."

Autonomous Intelligent Place and Route with Smart Autorouter and Basic Brain products will be available in Q1 2024. The Dynamic Brain and Autonomous Brain products will be available in future releases.