

# Agenda

08:30 - 9:30am	<b>Check-in, Exhibits &amp; Networking</b>
09:30 - 9:45am	<b>Welcome / Introduction</b>
9:45 - 10:15am <b>SIEMENS</b> <i>Ingenuity for life</i>	<b>Thorsten Buchta, Siemens</b> <i>Keynote Presentation: Digital Enterprise Suite for Electronics Industry</i> <p>Digitalization is changing everything! It changes the way we think, the way we do business, but also the way we work. Different disciplines involved in the introduction of new products addressing product design, which subsequently determines the planning, engineering and execution of production. Instead of thinking in silos, Siemens' answer towards the requirements of Industry 4.0. is called the Digital Enterprise Suite: An integrated approach to digitalization involving all designated parties throughout the product life cycle and establish a collaboration platform, which not only reduces time-to market, but also contributes towards future product developments. During the lecture the audience will learn about the holistic concept of the Siemens Digital Enterprise Suite, including its cornerstones Product Life-cycle Management, Manufacturing Execution Management, and puts an emphasis on Total Integrated Automation as the fundamental component during the engineering and execution phase of today's state-of-the-art manufacturing facilities.</p>
10:15 - 10:45am 	<b>Hoa Nguyen, OK International</b> <i>Industrial 4.0 IPC CFX</i> <p>IPC CFX Process Control and Traceability - Metcal Real Time Risk Mitigation in Hand Soldering Application.</p>
10:45 - 11:15am	<b>Refreshment Break with Exhibits</b>
11:15 - 11:45am <b>YXLON</b>	<b>Keith Bryant, Yxlon International</b> <i>Industry 4.0 For Inspection</i> <p>There is a lot of interest about "Smart Factory" but there are some issues which need to be resolved before this can become a reality. In line inspection systems will become the sensors for i4.0 quality control so they need to be able to feedback more data than is currently available. also these machines are not able to find 100% of defects due to issues of speed or type of operation. AOI can only see what is visible so interconnects on QFN's and BGAs are invisible. In Line X-ray results are compromised by the need for speed and this leads to false fails and escapes. This paper will explore these issues and look at solutions to overcome them.</p>
11:45 - 12:30am	<b>Networking with Exhibits</b>
12:30 - 1:30pm	<b>Networking Luncheon</b>
1:30 - 2:00pm 	<b>Jason Sciberras, Saline Lectronics</b> <i>An insider's perspective on the smart factory journey for a mid-volume, high-mix EMS supplier.</i> <p>Saline Lectronics was one of the first low to mid-volume electronics manufacturing organizations to implement a smart factory solution.</p> <p>Shedding light on the complex and interconnected nature of rolling out a connected factory, Jason Sciberras will share insights and lessons learned from Lectronics' smart factory solution. Dissecting the benefits of a real-time connected factory including JIT inventory, real-time material information, and M2M communication, this talk will provide concrete examples to implement Industry 4.0 solutions.</p>
2:00 - 2:30pm 	<b>David Bergman, IPC</b> <i>IoT2: IPC-CFX Standards Update for Industry 4.0</i> <p>This session describes how new standards are simplifying M2M communications &amp; solutions in the Factory. IPC-CFX is an electronics manufacturing industry developed standard forming the foundation/backbone of Industry 4.0 Applications. IPC-CFX simplifies and standardizes machine to machine communication while also facilitating machine to business/business to machine solutions. IPC-CFX can simply be described as a standard providing a purpose, working components, benefits, with several applications and sustainability.</p>
2:30 - 3:00pm	<b>Refreshment Break with Exhibits</b>
3:00 - 3:30pm 	<b>David Suh, Koh Young America, Inc.</b> <i>Using Analytics to Overcome Production Challenges and Enable a Smart Factory</i> <p>The electronics industry is acutely aware of the manufacturing challenges faced because of a shortage of skilled employees. While leading industry organizations like IPC are tackling the issue with education and training initiatives, it is not enough. Equipment suppliers, including Koh Young Technology need to work diligently to strengthen Machine-to-Machine (M2M) communication implementation. Initiatives like the IPC CFX and IPC-Hermes-9852 standards underpin the efforts within the industry to develop a transparent factory floor. These M2M communication standards, guided in part by Industry 4.0, are quickly altering the manufacturing process by improving metrics like first pass yield and throughput by applying autonomous process adjustments. Far beyond an automatic line changeover, this two-way communication will allow equipment to automatically adjust production parameters to increase board quality and lower costs. As part of this mission, Koh Young designed a software suite called KSMART, which forms the foundation for its smart factory and will revolutionize PCBA process optimization.</p>
3:30 - 4:00pm	<b>Summary of Day / Closing Remarks</b>
4:00 - 5:30pm	<b>Networking Reception with Exhibits</b>

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8:30 - 9:30am	<b>Exhibits &amp; Networking</b>
9:30 - 9:45am	<b>Welcome / Introduction</b>
9:45 - 10:15am <b>SIEMENS</b> <i>Ingenuity for Life</i>	<p><b>David Rogers, Siemens</b> <i>Unleashing the Potential of the Digital Twin in Production</i></p> <p>Virtually every company is talking about innovation and digitalization. And a major driver is the so-called Digital Twin. While talking about this Industry 4.0 enabler, most people have one benefit in mind: Aggregating the data in a cloud &amp; integration of artificial intelligence for future enhancements which lead to an optimization of the operation. Another one is the simulation of a product and derive the behavior in certain conditions. Both are covering only one certain aspect of the product lifecycle from product design to production execution while there is so much more possible by utilizing the concept of the digital twin in the production engineering phase via Virtual Commissioning.</p> <p>Streamline the activities of all disciplines involved in the physical commissioning of their automated production systems, reducing errors and increasing the speed in which they bring automated manufacturing systems online by writing the controller program and building the machine at the same time. During this presentation the audience will learn about the different digital twin concepts and benefits during product design, production planning, production engineering and production execution with a focus on virtual commissioning of a CAD model via the actual controller code. Further it will be demonstrated how develop and leverage connected intelligent products, processes, and services through closed-loop innovation by the usage of the digital twin.</p>
10:15 - 10:45am  NANODIMENSION	<p><b>Simon Fried, Nano Dimension</b> <i>Precision Additive Manufacturing of Multilayer and Non-Planar Circuits</i></p> <p>In a world that demands ever faster product development cycles, greater IP security and the ability to make things differently, precision additive manufacturing of circuitry offers revolutionary answers to challenges both old and new. The session will introduce systems, materials and processes underlying the ability to 3D print multi-material electrically functional circuits and discuss the opportunities this brings.</p>
10:45 - 11:15am	<b>Refreshment Break with Exhibits</b>
11:15 - 11:45am  AEGIS SOFTWARE	<p><b>Bob Miklosey, Aegis Software</b> <i>Industry 4.0 for Everyone: Digital Transformation that Drives Real Business Value</i></p> <p>Changing customer expectations are forcing manufacturers to rethink their operations to innovate faster and bring connected products to the connected customer. Customers have more choices than ever before, and competitive intensity is rising all over the world. Manufacturers need to adapt quickly to dramatically shorten time-to-market and maximize productivity, ultimately exceeding customer expectations. Executives are recognizing that primarily focusing on cost control is not in line with value creation in the long term. One of the biggest challenges facing executives today is determining the right digital infrastructure that aligns with their customer and growth strategies. The good news is that the Industry 4.0 journey doesn't have to be overwhelming, and is achievable for manufacturing companies of all sizes, not just the large enterprises with large budgets and IT teams. During this session you will gain insights into the strategies, guidelines, and technologies required to create a truly smarter digital factory that drives real value and differentiation.</p>
11:45 - 12:30am	<b>Networking with Exhibits</b>
1:30 - 1:30pm	<b>Networking Luncheon</b>
1:30 - 2:00pm  KIC® Making Ovens Smarter™	<p><b>MB Allen, KIC</b> <i>The Smart Factory - Let's Get Started</i></p> <p>Industry 4.0, IIoT, IoT, Smart Factory, Made in China 2025. It's all the buzz but what are these trends? Do they relate to me and my manufacturing environment? Is this something we Must implement? What would the benefit be to my company? How does it all come together? These questions and more will be covered during this presentation and will include an example of 'Smart Factory' technology.</p>
2:00 - 2:30pm  wipro	<p><b>Damodar Sahu, Wipro Limited</b> <i>Digital Strategist &amp; Partner – IoT, AI, ML &amp; Blockchain   Manufacturing SBU   Wipro Limited</i></p> <p>Intelligent factory / The Future of Factories</p>
2:30 - 3:00pm	<b>Refreshment Break with Exhibits</b>
3:00 - 3:30pm	<p><b>Hassan Aluraibi &amp; Dr. Dongkai Shangguan, Flex</b> <i>Our Journey Towards Industry 4.0</i></p> <p>An introduction to the Flex vision of Industry 4.0, including a high level over-view of our journey, and a "call to action", sharing the needs and wants of EMS manufacturers to create the factories of the future.</p>
3:30 - 4:30pm	<b>Summary of Day/ Feedback</b>