

Innovation Webinar Talk: Recovery, New Reality and Resilience of Semiconductor Manufacturing Fab

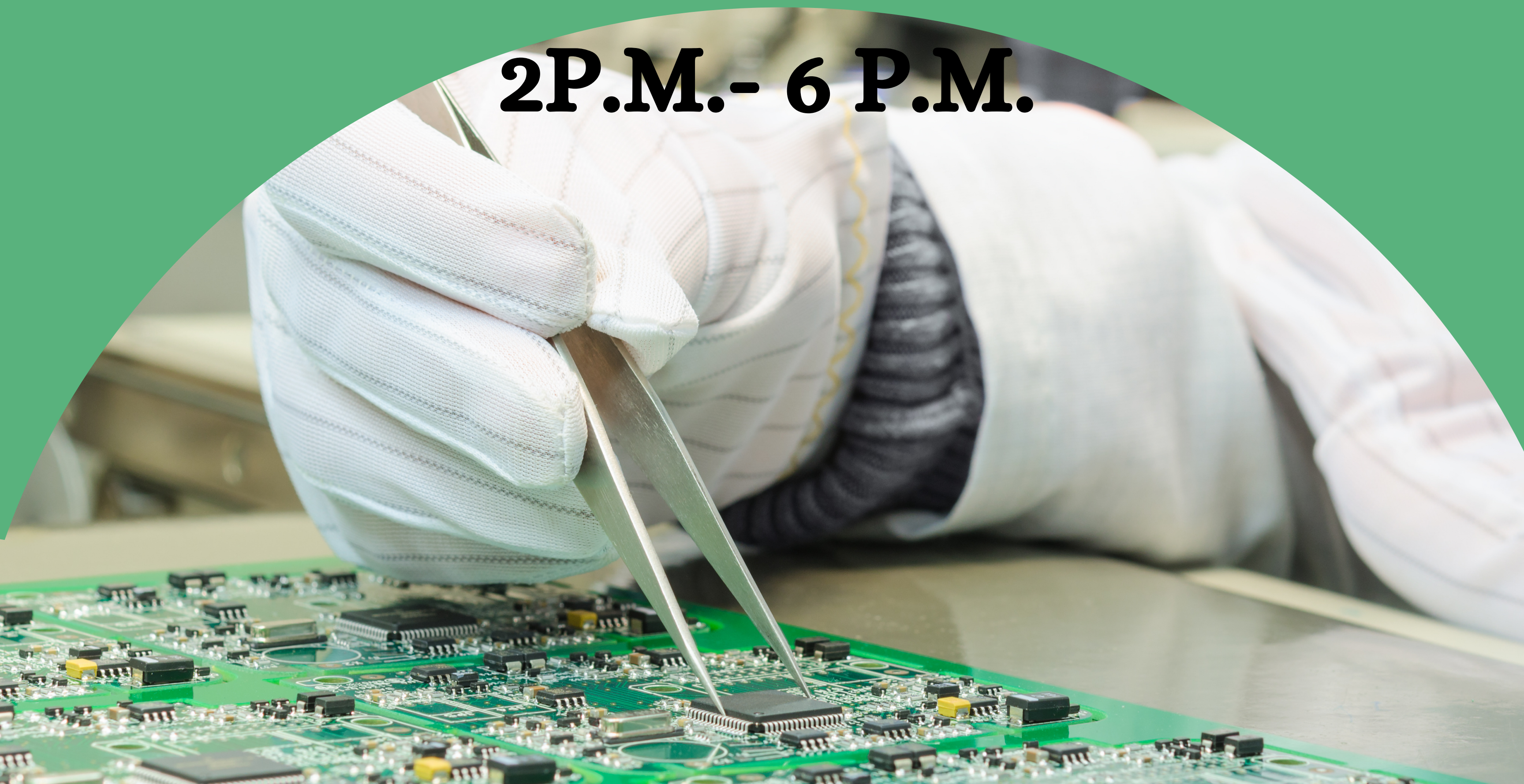
BEM APPROVED CPD/PDP: 2.5 REF. NO.: IEM21/HQ/221/T(W)

Invited Speakers:

**Mr. John Chin, Mr. Ronald Payumo, Mr. Todd Zhong
Mr. Yam Hong & Mr. Danny Tan**

7 July 2021, Wednesday

2P.M.- 6 P.M.



**Registration Fees
(effective 1st August 2020)**

Student Members : Free

IEM Members : RM 15.00

IEM Non Members : RM 70.00

Register online | www.myiem.org.my

TENTATIVE AGENDA

Time	Topic	Speaker
2:00pm	Welcome Speech	John Chin
2:05pm	Solution Overview	Edwin Kong
2:40pm	Digitization of Semiconductor FAB Electrical Distribution	Ronald Payumo
3:20pm	Q&A	
3:30pm	Evolution of Digital Modernization Solutions	Todd Zhong
4:20pm	Emerging UPS Technologies	Yam Hong
5:10pm	Q&A	
5:15pm	Cybersecurity Risk Assessment for OT Environment	Danny Tan
5:45pm	Q&A	
6:00pm	Wrap Up, End Session	John Chin

SYNOPSIS & SPEAKERS' DETAILS

Topic Title:

Digitization of Semiconductor FAB Electrical Distribution by Mr Ronald Payumo

Along with the rapid pace of techno-evolution, Semiconductor FABs become more and more complex so as the electrical distribution requirements. Semiconductor FABs require uncompromised power reliability. It is important to know how the electrical system is performing (in terms of power availability, quality and electrical asset health) and have sufficient backup power capabilities to sustain unforeseen utility service disruptions. Scalability of circuit loading and electrical capacity is also crucial to manage as process evolves over time where process tools/equipment are replaced or added in the production line. Likewise, Semiconductor FABs are electro-intensive industry where energy usage contributes to higher percentage of their CAPEX. With active energy management system in place, it can help Semiconductor FABs to capture potential savings. This topic will explain on how Semiconductor FABs can benefit and address the above-mentioned challenges when deploying a digitized electrical distribution.

Mr Ronald is the Global Solution Architect of Schneider Electric Semiconductor Segment. Before joining the Segment this year, he held two different positions in Schneider Electric; first as Lead Automation Engineer for Process Automation and later as Sr. Site Services Automation Engineer for Electrical Distribution and Substation Automation. Having exposed on different systems, he has gained his knowledge thanks to the hands-on experience and direct engagement on different projects and clients. With more than 11 years of experience, he has built a competency on system architecture design, systems integration and digitalization helping different customers.

Topic Title:

Evolution of Digital Modernization Solutions by Mr Todd Zong

Power distribution system today is no longer as simple as it used to be. With emergence of digitization, power distribution today is challenged to be more reliable, sustainable and effective. With more than 50 billion connected devices in the world today, it is highly critical that power infrastructure today to be IOT enabled. Existing facilities and infrastructure are quickly obsolescing and poses risk in keeping up with the energy demand. The complexity and sensitivity of loads today is putting most of the power distribution system into challenge in sustainability. This lecture will explain design concept and solution for digitizing your distribution system, how to effectively implement modernization in a simple and cost-effective way and how it will benefit your facility in driving safe, optimized and sustainable operation. As part of the course, will also touch based on predictive maintenance through interacting with connected devices.

Mr. Todd Zhong is an expert specializing in electrical distribution and data center service. He earned his master's degree in electrical engineering from Jiaotong University, Shanghai, China and MBA degree from University of Notre Dame in U.S. He previously worked in Alcatel Lucent for 15 years in different business roles as business strategy and development, product/offer marketing and project management. He joined Schneider Electric in 2011 and then is dedicated in developing the service biz in APAC countries. He owns vast knowledge of MV/LV prevention/predictive maintenance, obsolete equipment modernization, power audit and digital asset connection etc.

Topic Title:

Emerging UPS Technologies

The digitalization of the economy is driving rapid adoption of cloud computing and other disruptive digital technologies. This is accelerating and transforming the landscape of building and operating critical infrastructures. In addition, stakeholders have been challenged by the relentless drive towards costs optimization and ability to adapt to changing business needs without compromising availability. At the heart of it is the Uninterruptible Power Supply System - the lifeline keeping Critical Systems up and running 7x24. UPS technologies have been behind the curve in meeting these challenges until recently. We examine the emerging UPS technologies and Energy storage system in overcoming these challenges.

Since joining Schneider Electric in 1989, Mr. Yam has over 25 years of experience specializing in Data Centre, Critical Facilities & Infrastructures. During this time, he has roles spanning training, project management, sales, solution engineering and services. Currently Mr. Yam is responsible for formulating and executing business strategies to grow the Enterprise Power and Cooling business in the East Asian region. As a subject matter expert on Critical Power, he works closely with the Regional country teams and partners in designing and optimizing critical power and cooling solutions in the Data Centre and Secure Power space. Prior to joining Schneider Electric, Mr Yam had honed his technical skills and gained wide exposure with stints at various MNCs, namely, General Electric, Motorola & National Semiconductor. Mr Yam has a Bachelor's Degree in Business Administration from the RMIT University, Australia, Diploma in Electronics & Comms from the Singapore Polytechnic and a Diploma in Mgt. Studies from the SIM University, Singapore.

Topic Title:

Cybersecurity Risk Assessment for OT Environment

Completing a Cybersecurity Risk Assessment (CRA) is the first step in building a reliable and robust cybersecurity program and should be the starting point when applying cybersecurity requirements in an operational technology (OT) environment. Our CRA provides customers with an understanding of their cybersecurity risk posture by identifying gaps and key risk areas that need to be remediated. Additionally, our service provides recommendations and a roadmap to achieve your cybersecurity objectives. The Schneider Electric CRA is a non-invasive high-level assessment performed by Schneider Electric's OT cybersecurity experts. Our CRA aligns to controls categories found with industry best practices and standards such as IEC 62443, NERC CIP, CFATS and ISO27001.

Danny Tan has more than 20 years of Experience in Cybersecurity and he is now working as a Cybersecurity Business Consultant for Schneider Electric for the APAC region. He is constantly engaging the customers in the Enterprise and ICS sector across different business segments to share the experience in the cybersecurity risk especially in the ICS network towards digital transformation and help customers to work towards the industrial standard like IEC 62443 and NIST. Apart from the Cybersecurity for the OT network, he is practically having vast experience in doing the IT and OT convergence network.