

## Detailed Day-by-day Presentation Schedule of 3D PEIM 2021

JST - Japan Standard Time	US EDT - US Eastern Daylight Time	CEST - Central European Summer Time	Session # & Topic and Speaker Code	Presentation Type	Name	Affiliation	Title
<b>Day 1</b>			<b>S1: Plenary I</b>				
June 21st Monday	June 20th Sunday	June 21st Monday		Chair	Tsuyoshi Funaki	Osaka University	
9:00 AM (Tokyo)	8:00 PM (US EST)	2:00 AM (Berlin)	S1.P1.J	Symposium Plenary Speaker 1	Yoshikazu Takahashi	Tohoku University, Japan	Optimal modularization technology for the latest WBG devices
9:40 AM	8:40 PM	2:40 AM	S1.P2.J	Symposium Plenary Speaker 2	Yasuchi Shinjima	MRISE Technologies	Automotive Semiconductors in the CASE era and its "Jisso" technologies
10:20 AM	9:20 PM	3:20 AM		Coffee Break			
<b>Day 1</b>			<b>S2: System Integration &amp; Thermal Management</b>				
				Chair	Christina DiMarino	Virginia Tech	
10:35 AM (Tokyo)	9:35 PM (US EST)	3:35 AM (Berlin)	S2.I1.U	Invited 1	Courtney Furnival & Arnold Aldeman	Semiconductor Packaging Solutions & Anagnosis	Inevitability of Near Chip-Scale High Power GaN & SiC Packages Replacing Even Newer WBG Traditional Modules
11:00 AM	10:00 PM	4:00 AM	S2.I2.J	Invited 2	Alberto Castellazzi	Kyoto University	Opportunities and challenges of integrated WBG power electronics development
11:25 AM	10:25 PM	4:25 AM	S2.I3.J	Invited 3	Tetsuro Ogushi	Lotus Thermal Solution	Thermal Solution for Cooling of Electronic Equipment Using Lotus-type Porous Copper Heat Sink
11:50 AM	10:50 PM	4:50 PM	S2.I4.J	Invited 4	Michihiro Shintani	NAIST	Investigation of BTI-induced Threshold Voltage Shift for Power MOSFETs during Switching Operation
12:15 PM	11:15 PM	5:15 AM		Lunch Break			
<b>Day 1</b>			<b>S3: Multiphysics Design &amp; Tools</b>				
				Chair	Michihiro Shintani	Nara Institute of Science and Technology	
1:30 PM	12:30 AM	6:30 AM	S3.K.J	Session Keynote	Tom Hara	Mentor Graphics (Siemens)	Thermal Fluid Simulation Modeling and Structural Analysis of Double-sided Cooling Power Module Based on Thermal Transient Test
2:00 PM	1:00 AM	7:00 AM	S3.I1.J	Invited 1	Tsubasa Matsumoto	Kanazawa University	Diamond MOSFET for Next-Generation Power Devices
2:25 PM	1:25 AM	7:25 AM	S3.I2.J	Invited 2	Kenichi Ohura	Astom	Lifetime prediction simulation system for the next generation power semiconductor module using silver sintering die attach
2:50 PM (Tokyo)	1:50 AM (US EST)	7:50 AM (Berlin)	S3.I3.E	Invited 3	Yvan Avenas	Grenoble University	TAPIR (compact and modular Power modules with Integrated cooling) technology: goals and challenges
3:15 PM	2:15 AM	8:15 AM		Coffee Break			
<b>Day 1</b>			<b>S4: Additive Manufacturing</b>				
				Chair	Patrick McCluskey	University of Maryland	
				Chair	Douglas Hopkins	North Carolina State	
3:30 PM (Tokyo)	2:30 AM (US EST)	8:30 AM (Berlin)	S4.K.J	Session Keynote	Masahiro Tsukamoto	Osaka University	Development of high power blue diode laser systems for laser metal deposition and selective laser melting in additive manufacturing
4:00 PM	3:00 AM	9:00 AM	S4.I1.E	Invited 1	Dirk Busse	Budatec	Novel sintering process technology to achieve highest yield and quality
4:25 PM	3:25 AM	9:25 AM	S4.I2.E	Invited 2	Olivier Mathieu	Rogers	A low inductive power system in package with multilayer ceramic substrate and integrated active cooling
4:50 PM	3:50 AM	9:50 AM	S4.I3.E	Invited 3	Dragan Dinulovic, Leon Haase, Martin Haug, Juergen Wolf	Würth Elektronik eiSos GmbH	Power Microtransformer on Silicon Embedded into PCB
5:15 PM	4:15 AM	10:15 AM	S1.P3.E	Symposium Plenary Speaker 3	Hans-Juergen Albrecht	Dresden University	Materials and Technologies for Power Electronic Module

## Detailed Day-by-day Presentation Schedule of 3D PEIM 2021 Day 2

Day 2		S5: Plenary II					
June 22nd Tuesday	June 21th Monday	June 22nd Tuesday		Chair	Katsuaki Suganuma	Osaka University	
9:00 AM (Tokyo)	8:00 PM (US EST)	2:00 AM (Berlin)	S5.P1.J	Symposium Plenary Speaker 1	Toshiharu Makino	AIST	Diamond devices based on unique material properties
9:40 AM	8:40 PM	2:40 AM	S5.P2.J	Symposium Plenary Speaker 2	Tomonobu Mihara	Mitsubishi Electric	Applications with SiC Power Devices for Railcar
10:20 AM	9:20 PM	3:20 AM		Coffee Break			
Day 2		S6: Manufacturing Technologies					
				Chair	John Bultitude	Kemet	
10:35 AM (Tokyo)	9:35 PM (US EST)	3:35 AM (Berlin)	S6.I1.U	Invited 3	Kurt Schroder	NovaCentrix	Advanced Photonic Curing: High-Speed Printing and soldering with light
11:00 AM	10:00 PM	4:00 AM	S6.I2.J	Invited 1	Akiko Kumada, Masahiro Sato, & Shin Nakamura	Tokyo University	Cavity Propagation under Pulse Voltages in Silicone Gel for Encapsulation of Power Modules
11:25 AM	10:25 PM	4:25 AM	S6.I3.J	Invited 2	Thomas Lei	Nio Electric Car	Lost-foam technology for power electronics packaging
11:50 AM	10:50 PM	4:50 AM	S6.K.J	Session Keynote	Hiroshi Yamaguchi	AIST	Development of High Performance SiC Power Module
12:20 PM	11:20 PM	5:20 AM		Lunch Break			
Day 2		S7: Materials					
				Chair	Jason Rouse		
1:30 PM	12:30 PM	6:30 AM	S7.I1.J	Invited 1	Hiroake Miyake	Tokyo City University	Space Charge Accumulation Properties in Various Insulating Materials for Power Electronics under DC High Electric Field at High Temperature
1:55 PM	12:55 PM	6:55 AM	S7.I2.J	Invited 2	Keitaro Tanno	Tokin	Compatibility Assessment of Soft magnetic Metal-flake Composite Material for PCB embedding
2:20 PM	June 22nd 1:20 AM	7:20 AM	S7.I3.J	Invited 3	Kenji Nishiguchi	RISHO Kogyo Co.,Ltd.; NC State; and TechDream, Inc., USA	Characterization and Testing of Organic Substrates to Replace DBC in 1200V Modules
2:45 PM (Tokyo)	1:45 AM (US EST)	7:45 AM (Berlin)	S7.K.E	Session Keynote	Michael Joerger	Heraeus	Superior reliability of power electronic packages with Die Top Systems (DTS®). Why a wire based technology solution outperforms clip based interconnections
3:15 PM	2:15 AM	8:15 AM		Coffee Break			
Day 2		S8: Heterogeneous Integration					
				Chair	Cyril Buttay	Laboratoire Ampère, Lyon, France	
3:30 PM (Tokyo)	2:30 AM (US EST);	8:30 AM (Berlin)	S8.K.E	Session keynote	Rainer Frauwallner	AT&S	The Technology Race in Power Electronics Packaging: A Rolling Start?
4:00 PM	3:00 AM	9:00 AM	S8.I1.E	Invited 1	Thomas Löher	Fraunhofer IZM Berlin	3D Power Electronics by Embedding of Components into the Build-up of Printed Circuit Boards: 2 Case Studies
4:25 PM	3:25 AM	9:25 AM	S8.I2.E	Invited 2	Jean-Marc Yannou	ASE	Flexible Integration of High Power Modules By Means Of IC Embedded Sub Modules
4:50 AM	3:50 AM	9:50 AM	S8.I3.E	Invited 3	Mickaël Petit	SATIE	Resumption of contacts by metallic foam Electrical, thermal and reliability performance
5:15 PM	4:15 AM	10:15 AM	S5.P3.E	Symposium Plenary Speaker 3	Josef Lutz, Christian Baumler, Jörg Franke	TU Chemnitz	Reliability aspects of 3D integrated power device

## Detailed Day-by-day Presentation Schedule of 3D PEIM 2021 Day 3

Day 3:		S9: Quality & Reliability					
June 23rd Wednesday	June 22nd Tuesday	June 23rd Wednesday		Chair	Steven Martell	Nordson Sonoscan	
9:00 AM (Tokyo)	8:00 PM (US EST)	2:00 AM (Berlin)	S9.I1.J	Invited 1	Yu Qiang	Yokohama National University	Thermal Performance and Reliability Study on Major Designs and Packaging Process of Automobile Power Module
9:25 AM	8:25 PM	2:25 AM	S9.I2.U	Invited 2	Steven Martell	Nordson Sonoscan	Quality Assurance of 3D Power Device Structures with Non-Destructive Imaging Techniques
9:50 AM	8:50 PM	2:50 AM	S9.I3.E	Invited 3	Aaron Hutzer	Bond Plus	Quality and reliability assurance of vacuum conduction soldering processes with big data approaches
Day 3		S10: Partners Session					
				Chair	Minora Ueshima	Daicel	
10:15 AM	9:15 PM	3:15 AM	S10.S1.J (P)	Exhibit Partner 1			
10:25 AM	9:25 PM	3:25 AM	S10.S2.J (P)	Exhibit Partner 2			
10:35 AM	9:35 PM	3:35 AM	S10.S3.J (P)	Exhibit Partner 3			
10:45 AM	9:45 PM	3:45 AM	S10.S4.J (P)	Exhibit Partner 4			
10:55 AM	9:55 PM	3:55 AM	S10.S5.J (G)	Exhibit Partner 5			
11:00 AM	10:00 PM	4:00 AM	S10.S6.J (G)	Exhibit Partner 6			
11:05 AM	10:05 PM	4:05 AM	S10.S7.J (G)	Exhibit Partner 7			
11:10 AM	10:10 PM	4:10 AM	S10.S8.J (G)	Exhibit Partner 8			
Day 3		Lab Tour					
				Chair	Tsuyoshi Funaki	Osaka University	
11:15 AM (Tokyo)	Until	12:00 PM (Tokyo)		Helper 1	Chentoung Chen	Osaka University	
				Helper 2	Zheng Zhang	Osaka University	