Electronics Manufacturing & Packaging Symposium

06-Oct Professional Development Courses

09:00		**registration**	
10:00	PDC 1	ESA	Working with ESA: advancing EEE sovereignty, standards and innovation
11:00		**break**	
11:30	PDC 2	placeholder	Advanced packaging
13:00		**lunch**	
14:00	PDC 3	Spacechips, Rajan Bedi	Flexible PCB Design and Manufacturing for Space Applications
15:00		**break**	
15:20	PDC 4	Spacechips, Rajan Bedi	Right-First-Time Design for Fabrication and Assembly Considerations When Manufacturing Space-Grade PCBs
16:20		**break**	
16:40	PDC 5	ESA	Space mission classification and the materials & processes control board
17:40		**end**	

7, 8 Oct Poster presentations during afternoon breaks

46	Sapienza University Of Rome, Simone Bandini	Morphological and Compositional Evolution of InPb/Au Solder Joints under Thermal Ageing in Atmospheric and Vacuum Environments

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08:00		**registration**		
08:45		welcome	ESA, Stephane Mespoulet	Welcome
09:00			Global Electronics Association, Peter Tranitz	The path towards Advanced Electronic Packaging
09:20	1	additive manufactured electronics	HTV Conservation GmbH, Thorsten Leist	Quality assurance of additively manufactured electronics
09:45	2		Politecnico di Milano, Andrea Mistrini	Laser Additive Manufacturing of High-Performance Thermal Management Systems for Aerospace High-Power Electronics
10:10	3		Holst Centre - Tno, Darragh Walsh	Novel Additive Manufacturing Platform for Freeform 3D Microelectronics and Packaging
10:35	4		Jadavpur University, o.b.o. Soham Ghosh	Design of Scalp-Implantable and Non-Invasive Antenna System for Intracranial Pressure Monitoring
11:00		**break**		
11:30	5	PCB 1	Alter Technology, Dimas Morilla Mairen	Critical Role of Tg and CTE Characterization in PCB Design Using Thermomechanical Analysis (TMA)
11:55	6		Hytek, Poul Juul	Physical characterization of PCB materials
12:20	7		Istituto Italiano Della Saldatura, Luca Moliterni	Study of Base Laminates Used for High Reliability Printed Circuits Boards
12:45	8		LPKF Laser & Electronics, Patrick Stockbrügger	Potential of laser depaneling for harsh environments in terms of quality and reliability
13:10		**lunch**		
14:10	9	lead-free assembly	Nanospace, Philippe Hersberger	Lead-free assembly technologies for telecom satellite equipment (ESA ARTES)
14:35	10		Technical University of Darmstadt, Guillaume Meyer	Lead-Free Transition for the European Space Sector - the Tin Whiskers Challenge
15:00	11		Spur Electron, Cathy Chandler	Lead-free assembly technologies for telecom satellite equipment
15:25	12		Teledyne E2v, Eric Perriaud	Board Level Reliability Testing of BGA Packages Equipped with Lead-Free Interconnection Solutions and Dedicated to Space Applications
15:50		**break**		Poster presentations
16:20	13	modelling	Hooke Electronics, Jean-Baptiste Libot	Physics-of-Failure Based Reliability Modeling of Lead-Free Electronic Assemblies Under Thermal Cycling
16:45	14		Imec, Klara Volckaert	Experimental Data-Driven Prediction of Input Parameters for Finite Element Simulations for Electronic Assemblies
17:10	15		Airbus DS, Oscar Vazquez	PCB Procurement for New Space using IPC standards
17:35		**end**		
18:00		welcome reception at Space EXPO		
20:00		**end**		

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09:00	16	assembly	Thales Alenia Space, Paula Marin Banque	Low loss PCB solutions - focus on nickel-free finishes
09:25	17		LILOTREE, Kunal Shah	Novel Surface Finish for High frequency PCB Technologies- How to Achieve Optimum Signal Integrity & Reliability.
09:50	18		Thales Alenia Space Italia, Andres Matias Dabas	Qualification of high-speed press-fit connectors for space applications
10:15	19		Thales Alenia Space, Hugo Garcia	Evaluation of Pressfit Technology for High-Reliability Space Applications
10:40	20		OHB System, Alexander Hannes	Microcoil Springs – an alternative to CCGA tin columns
11:05		break		
11:35	21	EEE packaging 1	Ncab Group, Jan Pedersen	The PCB Journey from Multilayer to Ultra HDI
12:00	22		Alter Technology, Mari Carmen López	High Temperature Lead Free Solder for Internal Soldering of EEE Parts: Manufacturing and Testing
12:25	23		Alter Technology, Luis Alejandro Arriaga Arellano	Space Radiation shielding in microelectronics through the development of advanced composite Materials (SRPROTEC Project)
12:50	24		Ghent University / Imec, Geert Van Steenberge	Wafer-Scale Packaging of Photonic Switches and Transceivers
13:15		lunch		
14:15	25	PCB 2	ACB, Joachim Verhegge	High-speed HDI technology for space applications: a road to qualification
14:40	26		Oki Circuit Technology, Ogura Toshihiko	Development of HDI PCBs using low-loss materials
15:05	27		Cistelaier, Luca Pagnani	Approaching New Challenges: How We Got to Space"
15:30	28		Ilfa Gmbh, Nikita Jacobs	Copper-Based Sinter Paste Integration for Advanced PCB Packaging and Multiboard Architectures
15:55		break		Poster presentations
16:25	29	PCB & modelling	Elemca, Jeremie Dhennin	EBSD Evaluation of the Impact of Reflow Temperature on Microvia Microstructure
16:50	30		Imec, Maarten Cauwe	Microvia manufacturing capability assessment: a perspective on three levels of stacked microvias
17:15	31		Imec, Chinmay Nawghane	Optimizing Multilevel Microvia Structures for Thermo-Mechanical Reliability in High-Speed HDI PCBs
17:40	32		Elastic-Simulations Gmbh, Harald Ziegelwanger	Modelling the reliability of through-hole-technology assemblies
18:05		end		
20:00		Dinner Noordwijk Zeemeeuw.com		
23:30		end		

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09:00	33	assembly & modelling	Istituto Italiano Della Saldatura, Stefano Barbiere	The Surface Insulation Resistance (SIR) test according to ECSS-Q-ST-70-61 and IPC-TM-650 2.6.3.7 for flux residues study
09:25	34		PBT Works, Vladimir Sítko	Cleaning of electronic assembly: development and qualification using the Glass Test board
09:50	35		Elemca, Jeremie Dhennin	Finite Element Modeling of SAC305 Solder Joint Reliability under Thermomechanical Cycling for Space Applications
10:15	36		Thales Alenia Space Belgium, Vincent Voet	Thermomechanical fatigue lifetime prediction of solder joints in electronic component assemblies
10:40		break		
11:10	37	EEE packaging 2	AEMtec, Robin Jerratsch	Status on GSTP “Definition and validation of an European source of FC Bump services for 28nm and lower technology nodes”
11:35	38		Tno Defence, Safety And Security, Tindara Verduci	Advanced packaging technologies for next generation integrated RF systems
12:00	39		Thales Alenia Space Italia, Andres Matias Dabas	Advanced Digital Processor System-in-Package (SiP) for space applications
12:25	40		Thales Alenia Space Italia, Mirko Rocci	Advanced uHDI and Embedded-Power SiP Technology for Space Applications
12:50	41		Fraunhofer Izm, Tekfouy Lim	Advanced system integration technologies for Space applications
13:15		lunch		
14:15	42	assembly testing	ESA, Jordi Oller Sánchez	CT Scan as a Non-Destructive Alternative to Microsectioning for Electronic Assembly Verification
14:40	43		Jtag Technologies, Peter van den Eijnden	TapSpacer: remote access to embedded JTAG boundary-scan logic
15:05	44		Airbus Defence And Space, Asensio Zapata	Asymmetric test cycling as a new approach for validation of electronic assemblies in harsh environment
15:30	45		DSI Aerospace, Jan Frederik Wagenfeld	PCB Design Challenges in Next-Generation Space Mass Memory Units
15:55		closing	ESA, GEA	
16:05		end		