

2025 IEEE Hybrid Bonding Symposium
 Theme: Enabling Hybrid Bonding Commercialization

Day 1 - January 16, 2025 (Thursday)

Time	Duration	End Time	Mode	Speaker Name	Affiliation	Title
8:00	0:30	8:30	Registration / Breakfast & Coffee			
8:30	0:30	9:00	In-person	Dongkai Shangguan	TEA	Introduction and Welcome
Session 1. Hybrid Bonding Processes & Materials (I) [Chair: Hualiang Shi / Guilian Gao]						
9:00	0:30	9:30	In-person	Guilian Gao	Adeia	Hybrid Bonding Process Technology
9:30	0:30	10:00	In-person	Anne Jourdain	IMEC	Deep Pitch Scaling of wafer-to-wafer and die-to-wafer Cu/SiCN hybrid bonding
10:00	0:30	10:30	Coffee Break			
10:30	0:30	11:00	In-person	Viorel Dragoi	EVG	Wafer Bonding for the Next Generation of Applications
11:00	0:30	11:30	In-person	Jonathan Abdilla	BESI	Die to Wafer Hybrid Bonding for Direct Copper Interconnection
11:30	0:30	12:00	In-person	Jinho An	Applied Materials	HBM Multi-Die Stacking Challenges with D2W Hybrid Bonding
12:00	1:00	13:00	Lunch Break			
Session 2. Hybrid Bonding Processes & Materials (II) [Chair: Andrea Chacko / Viorel Dragoi]						
13:00	0:30	13:30	Online	Wei-Lan Chiu	Industrial Technology Research Institute	Low-Temperature and Fine-Pitch Wafer-to-Wafer Hybrid Bonding Using Nanotwinned and Nanocrystalline Copper for Advanced Packaging
13:30	0:30	14:00	In-person	Ilseok Son	TEL	Wafer Bonding Challenges and the Resolution of Paths
14:00	0:30	14:30	In-person	Andrea Chacko	Brewer Science	Temporary Bonding Materials for the Enablement of Hybrid Bonding
14:30	0:30	15:00	Coffee Break			
15:00	0:30	15:30	In-person	Yu Shoji	Toray Industries, Inc	Investigation of Materials and Processes for Polymer-Based Hybrid Bonding
15:30	0:30	16:00	In-person	Takafumi Fukushima	Tohoku University	Materials & Processing for Fine-pitch CtW Hybrid Bonding
16:00	0:30	16:30	Online	Kuan-Neng Chen	National Yang Ming Chiao Tung University	Hybrid Bonding Innovations: Ultra-Low Temperature Cu-Cu Bonding Based Passivation Technology and HRDL Platform Development for RDL Interposer Applications
16:30	0:15	16:45	Coffee Break			
16:45	0:45	17:30	Panel Discussion: Enabling Hybrid Bonding Proliferation [Chair: Dongkai Shangguan] [Panelists: Guilian Gao, Andrea Chacko, Viorel Dragoi, Jonathan Abdilla]			
17:30	Dinner					

Day 2 - January 17 2025 (Friday)

Time	Duration	End Time	Mode	Speaker Name	Affiliation	Title
8:00	0:30	8:30	Registration / Breakfast & Coffee			
8:30	0:30	9:00	In-person	Dongkai Shangguan	TEA	Introduction and Welcome
Session 3. Hybrid Bonding Applications [Chair: Dwayne Shirley / Swetha Barkam]						
9:00	0:30	9:30	In-person	Masaya Nagata	SONY	Advanced 3D Stacking Process with Hybrid Bonding Technology for CMOS Image Sensors
9:30	0:30	10:00	In-person	Raghav Sreenivasan	Applied Materials	Advances in W2W Hybrid and Fusion Bonding to Enable Device Inflections in Logic and Memory
10:00	0:30	10:30	Coffee Break			
10:30	0:30	11:00	Online	Stephane Moreau	CEA-Leti	How did the "hybrid bonding" technology become reliable?
11:00	0:30	11:30	In-person	Brandon Wang	Synopsys	Enabling Advanced Chiplet Based Design
11:30	0:30	12:00	In-person	Charles G. Woychik	NHanced Semiconductors	Onshoring Advanced Packaging in the United States
12:00	1:00	13:00	Lunch Break			
Session 4. Hybrid Bonding Metrology [Chair: Yan Li / Kishio Yokouchi]						
13:00	0:30	13:30	In-person	Monita Pau	Onto Innovation	Process Control for Hybrid Bonding Applications
13:30	0:30	14:00	In-person	Puneet Gupta	UCLA	Yield Modeling for Hybrid Bonding
14:00	0:30	14:30	In-person	Peter Hoffrogge	PVA TePLa	Acoustic Inline Metrology for Hybrid Bonding
14:30	0:30	15:00	Coffee Break			
15:00	0:30	15:30	In-person	Julius Hällstedt	Excillum AB	Metrology for Hybrid Bonds, Microbumps and TSVs in Advanced Packaging – Are X-ray methods up to the task?
15:30	0:30	16:00	In-person	Ryohei Fujita	Nagoya Univ.	Non-Contact Measurement of Thermal Contact Resistance Using Lock in Thermography
16:00	0:30	16:30	In-person	Wenbing Yun	Sigray, Inc.	Advanced 3D Imaging Technologies for 3D IC Packages
16:30	0:30	17:00	In-person	Dongkai shangguan	TEA	Lucky Draw & Closing (on-site; must be present to win)