

35th Working Group Bipolar (2023)

Member matters

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AKB 2023

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2	AKB location and date for 2023	8
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AKB 2023

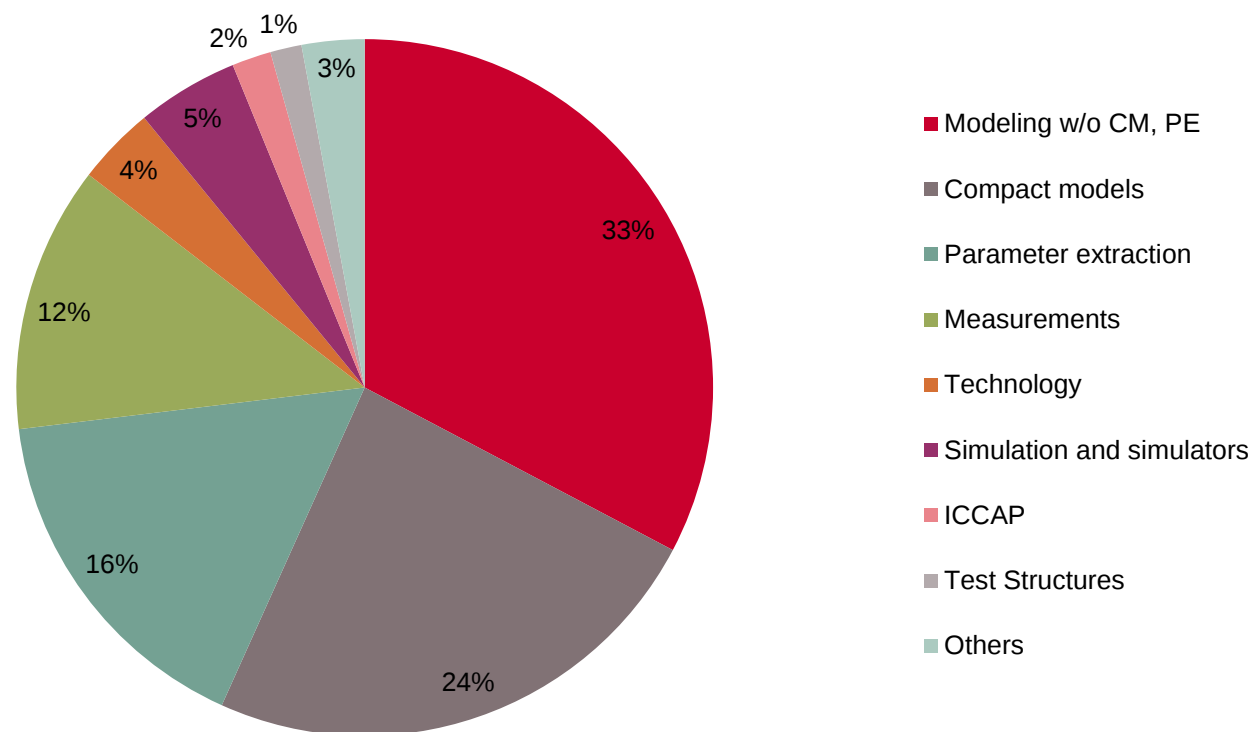
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Our topics

- › **Measurements:** techniques, de-embedding, hardware, driver
- › **Modeling:** compact models, parameter extraction methods and strategy (general or model specific), scaling, thermal, noise, breakdown, parasitics, ESD, MQA, statistics, stress, aging)
- › **Software for measurement and extraction:** ICCAP and other software, programs, transforms
- › **Simulation and simulators:** performance, model implementation problems, bugs
- › **Test structures:** design, evaluation
- › **Technology:** tendencies, new developments
- › **Others:** daily problems of the modeling work

Some statistics about the past

- › Total unique presentations: **248** (years 1997-2023)
 - Presentations in the last years and today: 2019 (12), 2021 (9), 2022 (7), 2023 (9)
- › Modeling topics (w/o CM, PE) include:
 - MOS and bipolar modeling
 - passives
 - Statistics & QA
 - Parasitics
 - Thermal
 - Breakdown
 - Scaling
 - Strategy, Noise
 - Stress & Aging
 - ESD
 - Machine learning applied to modeling



Our members

	Company			Company	
1	AdMOS		8	NXP Hamburg / Eindhoven	
2	ams OSRAM		9	Rohde & Schwarz	
3	Analog Devices		10	SemiMod	
4	Bosch		11	ST	
5	IHP		12	TUD	
6	IMS		13	XFAB	
7	Infineon		14	III/V lab	

















Members list and proposals - I

- › Update of memberships
 - › FHWS and Intel: removed from membership based on discussion in 34th AKB.
 - › SemiMod: new member as decided in 34th ABK
 - › SisConsult: has asked for removal of membership due to retirement
- › Request from Michael Schroter to change from company-based membership to person-based membership.
 - Pros:
 - No new voting required when previous long-time member have changed the company
 - Cons:
 - New company of previous members might violate AKB rules (e.g., EDA vendors)
 - Large burden to include new persons (e.g., from Ph.D. students from academia, or new colleagues from companies) into the AKB, new voting required.
 - Even harder to get a sufficient number of people on-site for voting.
 - Voting!
 - Remember: Currently each **company** has one vote!
 - **Decision after discussion: Stay with company based membership**

Members list and proposals - II

- › Recording of the talk
 - Pros:
 - to engage and strengthen this community of experts
 - Concerns:
 - data privacy of the individual members
 - technical difficulty about the sharing platform
 - **Decision after discussion: No recording**

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AKB past locations

- › AKB10, 1997: ALCATEL, Stuttgart
- › AKB11, 1998: TEMIC, Heilbronn
- › AKB12, 1999: Philips, Hamburg
- › AKB13, 2000: Infineon, Munich
- › AKB14, 2001: IHP, Frankfurt (Oder)
- › AKB15, 2002: Motorola, Berlin
- › AKB16, 2003: AMS, Unterpremstätten
- › AKB17, 2004: Atmel, Heilbronn
- › AKB18, 2005: Bosch, Reutlingen
- › AKB19, 2006: XFAB, Erfurt
- › AKB20, 2007: Infineon, Munich
- › AKB21, 2008: Hamburg, NXP
- › AKB22, 2009: FH Würzburg

- › AKB23, 2010: Crolles, ST
- › AKB24, 2011: Infineon, Munich
- › AKB25, 2012: Infineon, Munich
- › AKB26, 2013: IHP, Frankfurt (Oder)
- › AKB27, 2014: Crolles, ST
- › AKB28, 2015: AMS, Unterpremstätten
- › AKB29, 2016: Infineon, Munich
- › AKB30, 2017: XFAB, Erfurt
- › AKB31, 2018: AdMOS, Frickenhausen
- › AKB32, 2019: Crolles, ST
- › AKB33, 2021: Virtual ...
- › AKB34, 2022: R&S
- › AKB35, 2023: XFAB, Corbeil-Essonnes

AKB past local organizers

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2021	2022	2023	Sum
AKB No.	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	
IMS																									0
TUD																									0
SemiMod																									0
Analog Dev																									0
Bosch							1																		1
AdMOS																				1					1
R&S																						1			1
NXP	1									1															2
IHP			1												1										2
AMS					1												1								2
XFAB								1											1					1	3
ST												1				1					1				3
Infineon		1							1				1	1				1				1			6

AKB 2024 local organizer:

Next AKB date and location

› The 36th AKB will take place:

– **where: ams-OSRAM AG**

– **when: Nov. 21-22, 2024**

› Other conferences in Oct/Nov/Dec:

2024 IEEE BiCMOS and Compound Semiconductor Integrated Circuits and Technology Symposium (BCICTS) Oct 13, 2024 - Oct 16, 2024
Fort Lauderdale, FL USA
Abstract Submission Date: May 10, 2024

2024 IEEE 55th Semiconductor Interface Specialists Conference (SISC) Dec 14, 2024 - Dec 18, 2024
San Diego, CA USA
Abstract Submission Date: Sep 1, 2024

2024 IEEE International Electron Devices Meeting (IEDM) Dec 14, 2024 - Dec 18, 2024
San Francisco, CA USA
Abstract Submission Date: Jul 26, 2024

More on IEEE Electron Devices Society Calendar: <https://eds.ieee.org/conferences/conferences-calendar>

12-15 NOV 2024		SEMICON Europa 2024 Die SEMICON Europa ist die größte europäische Elektronikplattform, die Branchenführer aus der gesamten Design- und Fertigungskette zusammenbringt. Sie findet jährlich im Wechsel zur productronica und electronica statt und wird von SEMI Europe organisiert. Trade Fair Center Messe München	 
12-15 NOV 2024		electronica 2024 Weltleitmesse und Konferenz der Elektronik Trade Fair Center Messe München	 

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Questions, proposals?



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