



# 2001 Annual EDS AdCom Report

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**Werner Weber**

Infineon Technologies, Corporate Research

Chair, Electron Devices Society Technical Committee on VLSI  
Technology and Circuits



## Topics...

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**PURPOSE OF COMMITTEE**

**MEMBERSHIP**

**2001 ACCOMPLISHMENTS**

- IEDM Emerging Technology Session & Panel Discussion
- Initiation of compact modeling workshop
- Proposal for special issues in TED

**PLANS FOR 2002**



# VLSI TECHNOLOGY AND CIRCUITS COMMITTEE

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## **PURPOSE**

To serve EDS members through enhanced technical exchanges

- Initiate topical workshops of current interest (attached to existing conferences or start new ones)
- Special issues for major publications (e.g. T-ED)
- Panel session topics for major conferences
- Special sessions for major conferences



# VLSI TECHNOLOGY AND CIRCUITS COMMITTEE

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## **CHAIR**

- Werner Weber, Infineon Technologies, Munich, Germany  
(stepping down)
- James A. Hutchby, Semiconductor Research Institute, Research  
Triangle Park, NC (begin in 2002)

## **MEMBERS**

- Ilesanmi Adesida, University of Illinois, Urbana, Illinois, USA
- Savvas G. Chamberlain, DALSA Inc., Waterloo, Canada  
(stepping down)
- Ken-ichi Goto, Fujitsu Labs Ltd., Atsugi, Japan



# VLSI TECHNOLOGY AND CIRCUITS COMMITTEE (cont'd)

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## MEMBERS

- Atsushi Hori, Matsushita Electric Industrial Co., Ltd., Kyoto, Japan (stepping down)
- Tsu-Jae King, University of California at Berkeley, Berkeley, CA, USA (stepping down)
- Mark E. Law, University of Florida, Gainesville, FL, USA
- Kwyro Lee, KAIST University, Taejon, Korea
- Lalita Manchanda, Agere Systems, Murray Hill, NJ, USA
- Willy M. Sansen, ESAT-MICAS, KU Leuven, Leuven, Belgium
- S.C. Sun, ProMos Technologies, Hsinchu, Taiwan



# VLSI TECHNOLOGY AND CIRCUITS COMMITTEE (cont'd)

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## **MEMBERS**

- Akira Toriumi, The University of Tokyo, Tokyo, Japan
- Jeffrey J. Welser, IBM Technology Group, #3203, Somers, NY, USA
- Pierre H. Woerlee, Philips Research Laboratory, Eindhoven, The Netherlands (stepping down)
- Xing Zhou, Nanyang Technological University, Singapore



## 2001 ACCOMPLISHMENTS

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Broadening regional distribution of committee members

- 6 US, 3 Japan, 3 SEA, 3 Europe

EDS Website (Xing Zhou):

- <http://www.ieee.org/organizations/society/eds/groups.html>
- Website was transferred to IEEE to allow for better continuity

Workshop on Compact Modeling

- organized at the 2002 International Conference on Modeling and Simulation of Microsystems (Xing Zhou)

IEDM Emerging Technology Session & Evening Panel

- Topic of Emerging Technology session at IEDM 2001 is "interconnects", organized by Jeff Welser
- Evening Panel discussion on same topic organized by Jim Hutchby



## 2001 ACCOMPLISHMENTS (cont.)

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### IEEE Trans. Electron Devices Special Issue

- Ongoing discussion on special issue on “Interconnect Systems”, (Atsushi Hori, Eric Mair)

### List of proposals for special issues for IEEE TED

- InP HBTs in high-bitrate communications (40 - 100Gbps).
- Devices for High Speed Communications
- Next Generation Memory Devices and Integration:
- RF technologies, passive devices and RF modeling and simulation
- Organic Electronics
- Yield, Statistics, Fluctuations ---
- Precise Electrical Measurement Techniques
- Reexamination of Si/SiO<sub>2</sub> Interface





## LOOKING AHEAD ...

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Introduce new committee chair at committee meeting on Dec 5, 2001 - Jim Hutchby will take over by the end of the year.

Add new committee members

Decide on future of activities at the IEDM Emerging Technology Session

Look for other activities that can sustain the committee's function year-after-year, e.g.

- suggest EDS members for awards
- suggest EDS members for Fellows

Look for opportunities for workshops if suitable topics arise



# Annual Meeting of the VLSI TECHNOLOGY AND CIRCUITS COMMITTEE

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## **AGENDA**

- Introduction of new chairman
- Annual report (W.W.)
- Decide on 3 years vs. 4 years membership
- Ideas for future activities