

# Minutes of Compact Model Council Meeting

March 14, 2005 Face-to-Face Meeting in Seattle

## Companies and Universities in Attendance:

Analog Devices, Texas Instruments, AMD, Agilent, Atmel, NEC Electronics, Hiroshima University, Toshiba, Agere Systems, RF Micro Devices, Broadcom, STARC, UC-San Diego/TU-Dresden, ST Microelectronics, Intel, IBM, Sandia National Labs, Nassda, Intersil, Renesas Technology, Philips, Freescale, Pennsylvania State University, Mentor, UC-Berkeley, TU-Crete, Infineon, Cadence, Silvaco

### 1. Introduction and Welcome (Joe Watts)

Joe Watts reminded members that a decision narrowing next generation MOSFET model standard candidates from four to two will be made via electronic ballot following the meeting via email. Model developer presentations will be made available on the CMC website.

### 2. Presentations on Phase-II results were as follows:

|       |  |
|-------|--|
| HiSIM | Mitiko Miura-Mattausch (Hiroshima University)<br>Ivan Pesic (Silvaco)  |
| BSIM5 | Chenming Hu (UC-Berkeley)<br>Daniel Wan (UMC)<br>Warren Wong (Synopsys)<br>Mohan Dunga (UC-Berkeley)<br>Xin Zhang (TI)<br>Yutao Ma (Cadence) |
| PSP   | Ronald van Langevelde (Philips)  |
| EKV   | Matthias Bucher (TU-Crete)   |

### 3. General Discussion of Presentations

A request was made to see how robust the models are beyond the fitting range of  $W$ ,  $L$ , and bias in the standard reference data. CMC members agreed this is intended for Phase- III of the selection process.

Action Item:

Developers who have not already done so, are asked to generate log-log plots of y-parameters (real and imaginary) v. frequency of the W/L=32/2 NMOS and PMOS at  $|V_d|=0.6V$  and include this with their Phase-II results. Developers are asked provide a list of model parameters and what they mean. Developers are asked to contact Keith Green when they are ready to transfer their package of Phase-II results. These are due to Keith by Monday, March 21.

Action Item:

Keith will post those Phase-II results provided by Monday, March 21 before Wednesday, March 23, and send an email announcement.

Action Item:

Members are asked to direct any concerns about the contents of the Phase-II postings to Joe Watts who will relay these to developers.

#### 4. Next Generation Process

Action Item:

Joe Watts will initiate a GEIA electronic balloting process for down-selecting model candidates from four to two. The ballot will close 30 days after Phase-II web postings are completed.

It was agreed to postpone presentation of Phase-III results to the 3Q05 meeting. This three month change in date compensates for the slip in schedule incurred last year and allows members sufficient time to complete Phase-III evaluations.

Meeting Adjourned.

This meeting was conducted in accordance with the EIA Legal Guides and EIA Manual of Organization and Procedure.