

## CMC Teleconference: January 6, 2005

### Attendees:

Freescale, TI, Philips, IBM, Hiroshima University, Renesas, Synopsys, UC-Berkeley, Intel, ADI, Silvaco

### 1. 1Q05 Meeting Location:

The 1Q05 meeting will be in Seattle to better accommodate Asia- and Europe-based CMC members. The meetings will be held on March 14 and 15.

### 2. IBM Data for Next Generation Standard MOSFET Model Candidate Evaluations:

It was agreed to keep both PMOS gate capacitance data sets (cmc2.cgate\_p and cmc.tox.pfet) for model evaluation. These are both already posted on the CMC website.

#### Action Item:

Joe Watts (IBM) will send new README files documenting LCR meter configurations for all C-V data sets. Keith Green (TI) will post these on the CMC website.

#### Action Item:

Joe will verify low-terminal LCR connection on the overlap capacitance measurement and report back to CMC members.

#### Action Item:

Joe will add Ldrawn values to data files cmc.Lscale\_tox.lvtmfet and cmc\_Lscale\_tox.lvtpfet and resend to Keith for posting on the CMC website.

It was pointed out that there is a "dip" or "hump" in the cmc2.jct.lvtpfet data. Joe reported that this is real. Therefore, it was agreed to keep the data set. It was also agreed this may affect s-parameter data model fits, so model presenters are asked to simply point out how this shows up in overlays.

It was reported that Isub in some I-V data sets have very low values. Joe remarked these were taken with long integration, so no improvement to data quality is possible.

#### Action Item:

Mitiko Miura-Mattausch (Hiroshima University) will send Joe bias conditions for additional DC I-V data in accumulation for Igidl extractions. Joe will send Keith the data for posting on the CMC website.

Action Item:

Joe will have the junction leakage data re-measured with zero source/drain-to-gate voltage, and with the bulk voltage swept, to eliminate the gate-overlap leakage current. Joe will also have the 125C leakage data for the large area diode (cmc2.diode.nfet) re-measured to address data quality concerns.

All updated I-V and C-V data sets will be posted by Friday 1/14.

Action Item:

Members and developers are asked to send Joe and Colin McAndrew (Freescale) feedback on what C-V model plots they think should be shown at the March model reviews that are not covered in the current deliverable document posted on the CMC website.

It was agreed to review the s-parameter data in a similar manner as the C-V and I-V data were.

Action Item:

Members and developers are asked to send Colin s-parameter data feedback by Friday 1/14. Colin will send out a summary on 1/17. There will be a teleconference, if necessary, to discuss issues with this data on 1/19.

3. Other:

Jane Xi (UC-Berkeley) will send Keith an R2R circuit netlist to post on the website.

Meeting adjourned.

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