

## **MIXED-SIGNAL/RF SUBCOMMITTEE MINUTES AMS/RF PROCESS CHECKLIST WORKING GROUP**

**Date:** March 13, 2007

**Location:** Conference Call

**Time:** 10:00AM

### **Attendees:**

- Thomas Moerth – Austriamicrosystems
- David Cheskis – Jazz
- Philippe Jansen – IMEC
- Yousuf Palla – SLICEX
- Henri Liu – Jump Connections
- Chelsea Boone – FSA
- Ken Brock

### **Summary:**

- This first meeting had a good mix of members representing the fables, foundry, and EDA perspectives on the Process Checklist to keep it informative and relevant for the target audience and beneficial to those who produce them.

### **Discussion Items:**

- Confirmed Version 0.3 for additions in process types, process attributes, and process maturity.
- Process maturity – Dave developed nomenclature and definitions for development pre-production and production designations to be included in the user's guide to the process checklist. The first draft is currently listed in the checklist 0.4
- Turn Around Time – After much discussion we agreed that hard numbers in the process checklist would not be appropriate because they change dynamically with fab loading, latency, shuttle demand and customer type. We agreed to include a section in the User's Guide that would address the inter-relations in the number of layers, process options and cycle times (standard, hot-lot, MPW).
- Device Attributes – We decided to include passive device attributes for resistors (material, figure of merit, unit, value) for capacitors, inductors, varactors and diodes as was done for active devices on page 3. The version 0.4 checklist reflects a first pass at per device type figures of merit (FOM). More work to be done to set standard measurement conditions in User's Guide.
- For list version maintenance purposes, we decided to not link the process checklist version to the versions of the PDK and SPICE model checklists.
- We did not get to discuss at length the mixed-signal additions –digital library section that includes number of core, I/O, memory (RAM, ROM, etc.) and interface circuits, # tracks, ring oscillator performance, and gate density (gates/mm<sup>2</sup>).

### **Next Meeting for AMS/RF Process Checklist Working Group:**

- April 17, 2007 at 10:00AM on teleconference