

MS/RF PCM/PROCESS CHECKLIST SUB-WORKING GROUP MINUTES

Date: February 18, 2009

Location: Teleconference

Time: 10:00am (PST)

Participants:

Chelsea Boone – GSA
Larry Mehringer – STMicroelectronics
Bill Merkel – Keithley Instruments
Aniruddha Joshi – Skyworks Solutions, Inc.
David Schwan – RF Micro Devices (RFMD)
Li Ling – Intel

Meeting Purpose:

- To gather feedback on how the Sub-Working Group should go about developing a checklist that will help in communicating basic process parameters and criteria for mixed-signal and RF processes.

Actions Completed/Items Discussed:

- Should we add/remove sections to/from the AMS/RF Process Checklist to create PCM Checklist?
- How will we incorporate test conditions?
- What are the expectations? Proposals?

End Result/Conclusions:

- The PCM Checklist will show (1) how to measure each device attribute and (2) how each device attribute is defined. There will be a place for people to put in numbers and how measurements are made. It will be like the MS/RF SPICE Model Checklist (Sub-Working Group is to look at Model Checklist before next meeting). Companies could have a Non-NDA or NDA-based checklist.
- The Checklist will help fabless and IDM companies navigate information. We will help standardize information. We will take each device parameter and wrap a definition around each measurement method. However, agreement on each definition will be difficult.
- Our audience will consist of: product/design engineers, yield people, people who craft PCMs for foundries, test engineers, process engineers.
- Foundries won't release more than they have to, which might be the result of the different scale of investment on the fabless side vs. the foundry side.
- Coverage Issue: How much info do you need to understand systematic and random variation?
- For the next meeting we need to get more pure-play foundries involved. David and Chelsea will work on this.
- Each participant in today's meeting will send Chelsea what goals they want the Checklist to accomplish and to meet those goals.

Example:

Ideas for Goals:

Define the process control monitor (PCM) parameters listed in the Process Checklist and in common use for foundry process specification to IC designers.

Tasks:

Create a list of parameters

Research commonly used methods/techniques for each parameter.

Agree and document a method for each parameter.

(Should we consider a partnership with a "standards" organization (like JEDEC) to work with?)

- Next Meeting: March 18th, 10:00am PST