

April 2,2010

Minutes of today's IEEE 1149.1 - Initialize Sub-Group Meeting

Attendees:

Carl Barnhart
CJ Clark
Dave Dubberke
Ted Eaton
Heiko Ehrenberg
bill Eklow
Roland Latvala
Adam Ley
Ken Parker
Carol Pyron
Bill Tuthill
Sivakumor V

Minutes:

We started a new review of the tentative rules, initiated by the email discussions of Rule 2g. There was a lot of discussion and it was reasonably intense but not unreasonable. :-)>

- Rules 2f and 2g were identified as probably needing change.
- It was clear after a few minutes that the original consensus on persistence (if it ever really existed) no longer exists: Carol defended the rule which provides only for retention of the INIT_DATA register, but not the results of INIT-RUN. Carl argued that if the results of INIT-RUN were not persistent, then there was no rationale for persistence at all. Ted argued that because of all the things that can go wrong, he would not rely on persistence even if were mandated. Ken continued to argue that the cost of multiple INIT-SETUP/INIT-RUN executions was a problem. There were other opinions as well.
- Ken summarized his proposals on a test-ready mode for CJ and others.
- The consensus on persistence dissolved and persistence, per se, will be dropped. What remains is a requirement that once the invasive INIT-RUN finishes, the INIT-RUN results must persist as long as the chip is kept in an invasive instruction. Loading a non-invasive instruction is equivalent to Test-Logic-Reset, and either invalidate the INIT-RUN results.
- The discussion turned to the meaning of INIT_SETUP being non-invasive and INIT_RUN being invasive. It was recognized that all non-invasive instructions required before EXTEST must be run first, then INIT-RUN will initiate the test. In addition, the INIT-RUN instruction, as an invasive instruction, must take control of the I/O. The proposal is that it be allowed either a HIGHZ or CLAMP behavior, like the RUNBIST and INTEST instructions, and that this be documented in the BSDL.

Current Status:

Rules - informally done, but being refined
BSDL Constructs - informally agreed upon, some details still open
PDL - informally agreed upon as default side file format

Work still to be done:

- Formalize Rules
- Formalize BSDL constructs
- Formalize PDL constructs
- Write descriptive text
- Incorporate into 1149.1 Std

Actions:

1. Ken agreed to rework his proposal based on this understanding of the invasive/non-invasive boundary.

Next meeting date:

Same time next Friday April 9nd.