1450.4 meeting minutes – 09/02/10

Attendees: Jim O'Reilly, Ernie Wahl, Markus Seuring, Oleg Erlich, Ajay Khoche

Not present: Bruce Parnas, Paul Reuter

Agenda:

- IEEE Meeting Preamble (No discussion of proprietary information).
  - Review draft ballot document (P1450.4_D00_2010_09_01.pdf) as provided by Ernie in his email of Sept. 1, 2010 (subject: 9/2/2010 Teleconference). Also see summary of discussion between Ernie and Bruce from Aug. 24, 2010 (attached). Please review these two documents, and be prepared to vote yes or no on the various issues.
  - Discussion summary:
    - Long (~ 2 hour) discussion regarding various aspects of SignalGroups. Continued with email exchanges following the meeting.
    - Issues that the proposed solutions are intended to handle (among others).
      - Fewer pins at package than at wafer
      - Testing unused pins at package (i.e., making sure that pins that are not supposed to be bonded out are in fact open).
    - Signal Groups namespace lookup resolution (first to last)
      - PatternList (within PatternBurst).
      - PatternBurst
      - Test or Flow block
      - Test Program block
      - Unnamed SignalGroup block.
    - Allow empty SignalGroup definition within SignalGroup block. Example:

```
SignalGroups {
    dummy_group_1;          // Same as dummy_group_1 = None;
    dummy_group_2 = None;   // Use keyword None to specify empty SignalGroup
}
```

    - When trying to resolve a signal group name reference, the context list is traversed in the order shown above (PatternList to unnamed). If, at any context, a definition IS found in a SignalGroups block at that context level, the search stops (even if the signal group is empty). On the other hand, if a definition is NOT found in that context, go to the next higher level, and check there. In this way, if the unnamed context contains a signal group definition that is not empty, one can override that with an empty definition by the same name at a lower-level (higher priority) context.
    - Precisely what it means to have timing, waveforms, and levels assigned to an empty SignalGroup may depend on tester hardware design but the intent should be clear: if there are vector columns associated with signals that are missing timing or level specifications, they should be masked at runtime, i.e., not contribute to pattern pass or fail.
    - **UNDER CONSIDERATION:** Extend signal type definition (Signals block) to include type NonFunctional and Unused (in addition to In, Out, InOut, Supply, and Pseudo). A NonFunctional or Unused pin does not require any timing, vector, or DC Levels information, nor any vector data. Further, if such a definition is used with a pattern file which has a column for a NonFunctional or Unused pin, that data is ignored, and does not contribute to the pattern pass/fail result. The difference between a NonFunctional pin and an unused pin is this: a NonFunctional pin can be connected to stimulus or measurement resources such as analog waveform generation or capture instruments or PMUs; an Unused pin cannot be connected to such resources.
- Open issues - are there other open issues that should be considered? A review of the open issues list can guide us here.

    - Issues list: http://spreadsheets.google.com/ccc?key=0AoKiPr1I9LY9dF95dkhSTVVqOU5GbWJyWFNhY0JPX0E&hl=en
    - Namespace resolution examples document: http://docs.google.com/Doc?docid=0AYKiPr1I9LY9ZGY4dmNjNTNfMGZkOGJ2bmZy&hl=en
    - If logged into your google account, can edit. If not, can only view.
- Next Meeting 09/16/10.

For reference STIL .4 information can be found at the IEEE STIL website: http://grouper.ieee.org/groups/1450/ (select the P1450.4 link from the table) or use the direct link http://grouper.ieee.org/groups/1450/dot4/index.html