

1450.4 meeting minutes – 09/16/14

Attendees: Ernie Wahl, Jim O'Reilly, Ric Dokken, Greg Maston, Carey Garrenton

Not present: Paul Reuter, Scott Franzen, Markus Seuring, Oleg Erlich, Julia DiChiaro, Ajay Khoche, Mitsuo Fujii

Agenda:

- Define semantics of `specvar == None`:
 - Based on previous discussion, implicit in STIL.0: when Timing/DCLevels use variables, one or more Category and Selector is required defining all in-use variables and selecting a field from each.
 - Based on "a" above, `specvar == any_value` in a context that has no Selector is an illegal statement.
 - Proposal: since `specvar.Type == None` poses no problem, apply the relational operator to the field picked by the Selector.
- Section 6.11.3.2 Shared Global Variable Memory, special attention to initialization sequence: review Jim's proposal.
- Data-capture (delayed pending Mentor Graphics input):
 - Review proposal:
 - Consider separating data-capture from manipulation (extract serial or parallel data) from interpretation.
 - Try using existing data-types before creating new ones.
 - See Jim O'Reilly email dated Tue 8/26/2014 12:16 AM
 - Review ramifications of making *captureMemArm* a function returning a Boolean value (section 6.8 and 6.6.4). See line 2268 (17 of example), i.e., define as both *function* and *action*? Would defining a standard test that captures fail memory (and compares signatures?) preclude having to address the previous question?
- Review Annex G Block Sequence
- Review Annex B Name Spaces
- Ric Dokken to provide a complete production test program for Annex G.2
- Seeking help with coding examples: writing coding examples is an excellent way to spot documentation shortcomings. More participation equals more scrutiny. A complete production test program would be useful.
- Review Syntax Document organization and general content in light of emails:
 - Ric Dokken Sat 5/17/2014 4:09 PM
 - Jim O'Reilly Mon 5/19/2014 12:45 PM
 - Ric Dokken Tuesday, May 20, 2014 3:52 PM
 - Jim O'Reilly Tue 5/20/2014 10:57 PM

Summary:

Line numbers if any are with regard to STIL.4 syntax document dated Sept. 15, 2014.

- As has been the case in many recent meetings, an undercurrent of "how much detail and explanation regarding the reasons various constructs were included or excluded" continues, along with discussion about how much should be included which could be considered as "clarifying" or "further elaborating" on potential ambiguities from previous standards. The discussion continues – but per IEEE guidelines, a particular document should not quote from another standard, nor attempt to clarify such ambiguities EXCEPT in the case where they directly impact the standard being developed. For instance, dot2 added detail about expressions including DC resource values, and extending PatternExec to include DC block names (DCLevels, DCSets, etc.). Beyond that, the consensus is that a given standard should NOT attempt to clarify another – such clarification belongs to the WG that developed the standard attempting to be clarified – IF there's a need, and IF they choose to take on that work.
- Added "Table of Tables" (line 377) and "Table of Figures" (line 394). These hot links make diagrams and examples easier to locate.
- CONSENSUS: `specvar == any_value` in a context that has no Selector is an illegal statement, e.g., the FlowVariables block.
- CONSENSUS: apply the relational operator to the field picked by the Selector, i.e., a rule that affects a TestType that takes SpecVariable, or Category, Selector, and Timing parameters but not PatternBurst.
- CONSENSUS: syntax document already says enough about the preceding two items.
- CONSENSUS: keep STIL.4 access to all SpecVariable fields, Meas read-write, Min/Typ/Max read-only.

Action Items:

- Jim to arrange discussion with Mentor Graphics regarding data capture/fail memory analysis capability currently in P1450.4 for MBIST/memory repair flows. This will either be as a part of a regular P1450.4 WG meeting, or a separate conference call. If the latter, Jim to provide summary of discussions to WG.
 - Next week's meeting will cover this topic. Benoit Nadieau-Doste of Mentor Graphics will present the methodology used by Mentor for this, and discuss what their requirements for dot4 (and/or dot5, if it turns out that some of this might better be handled in the test rather than in the flow) to support this capability.
- Ric Dokken to provide a complete production test program for Annex G.2. This program will include all elements (binning, test program, signal map, flows, tests, etc.) to the extent that Ric is able to.

Reference documents (If logged into your google account, can edit. If not, can only view.)

- <http://spreadsheets.google.com/ccc?key=0AoKiPr1I9LY9dF95dkhSTVVqOU5GbWJyWFNhY0JPX0E&hl=en>
- Namespace resolution examples document: <http://docs.google.com/Doc?docid=0AYKiPr1I9LY9ZGY4dmNjNTNfMGZkOGJ2bmZy&hl=en>
- Scratchpad spreadsheet: <https://spreadsheets0.google.com/ccc?key=tQ93VDnAZ-Cl9RFKpPrPDzw&authkey=COzyro8K&hl=en&authkey=COzyro8K#gid=0>
- Scratchpad "Word" doc: https://docs1.google.com/document/d/1zVu2M8nTJsrn0nFbBhiuM8-YRt4ErYqdy_uSa3x3_T4/edit?authkey=CLrgwrsG#

Next meeting: 09/23/14.

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