1450.4 meeting minutes – 03/04/14

Attendees: Ernie Wahl, Jim O'Reilly, Mitsuo Fujii
Not present: Markus Seuring, Julia DiChiaro, Oleg Erlich, Ajay Khoche, Paul Reuter

Agenda:
- Confirm EntryPoint changes discussed last week are correctly represented in the document.
- Make Device/Tester/TestHead/Partition/TestProgram a forward reference due to otherwise circular dependency between TestProgram block and Device block. One dependency (→) trail: TestProgram → Test → Timing → Device (for signals & signal groups, section 6.11.2.5)
- Lines 5196, 5206 – 5212: ref standardized mapping of PatternExec to a test-type.
- Lines 5248, 5270 – 5324, section 6.11.2.2, ref STIL.1/STIL.4 shared memory, special attention to initialization sequence.
- Annex A Name Spaces
- Annex C Event Sequence
- Annex F Block Sequence
- Section 6.8 Binning: review syntax after rescinding hard bin counters. See near line 3591.
- Seeking help with coding examples: writing coding examples is an excellent way to spot documentation short-comings. More participation equals more scrutiny. A complete production test program would be useful.

Summary:
Line numbers are from STIL.4 syntax document dated Mar. 03, 2014
- Reviewed changes to EntryPoints (change from named to nameless; now contained completely – and only – inside the TestProgram block.
- Reviewed changes related to allowing type definition and instantiation inside the TestProgram block, as well as outside.
- All changes for both of the above are correctly represented in the document.
- Line 1232: Discussed pros and cons of making Device/Tester/TestHead/Partition/TestProgram a forward reference. No resolution was reached as yet – discussion will continue.
  - Pro: making it a forward reference eliminates an otherwise circular dependency, e.g., TestProgram -> Test -> Timing -> Device (contains TestProgram reference) while allowing us to retain a previously agreed to feature, i.e., the use of a reference to a Device by name that makes all device signal and signal-group definitions visible to all Timing, DCLevels, DCSequence, PatternBurst, and PatList blocks.
  - Con: it's a forward reference, i.e., an exception to define-before-use. The proposed alternative is to change the definition for, e.g., the Timing block

```
FROM:
 Timing (TIM_DOMAIN_NAME) {
  (Device DEVICE_NAME; | Chip CHIP_NAME;) // STIL.4: tracks changes made to Device or Chip
  (SignalGroups GROUPS_DOMAIN; )*        // STIL.0: error prone, tracks neither Device nor Chip
    <snip>
 }

TO:
 Timing (TIM_DOMAIN_NAME) {
  (Signals SIGNALS_DOMAIN; )*           // STIL.4: error prone, tracks neither Device nor Chip
  (SignalGroups GROUPS_DOMAIN; )*       // STIL.0: error prone, tracks neither Device nor Chip
    <snip>
 }
```

The advantage of the current syntax (FROM) is that the user only has to edit the Device block or its references in order for all Timing, DCLevels, DCSequence, PatternBurst, and PatList blocks to fall in line regarding signal and signal-group definitions.
The advantage of the alternative syntax (TO) is that we'll not need TestProgram reference to be a forward reference.

- Line 5249, section 6.11.2.8 PatternExec: discussed how to go about defining a standard or recommended way to have an ATPRG convert a PatternExec into a StdFunctional or other kind of test. The goal is to have different tools behave consistently, i.e., produce the same output given the same input.
    - No resolution was reached as yet – discussion will continue.

Action Items:

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/1zVu2M8nTJsrm0nFbBhiuM8-YRt4ErYqdy_uSa3x3_T4/edit?authkey=CLrgwrsG#

Next meeting: 03/11/14.

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