

1450.4 Meeting Minutes - 03/27/08

Attendees: Doug Sprague, Ernie Wahl, Ajay Khoche

Not Attending: Jose Santiago, Jim O'Reilly, Bruce Parnas

- Preamble
 - Record Meeting (*2)
 - To Listen to recording of meeting:
 - Call the (US) dial-in numbers 1-877-421-0003 (toll free) or 1-770-615-1374 (toll)
 - Enter special playback passcode: 747464
 - Once in, enter *3
 - Enter file number for this specific meeting: 70044401
 - Enter 1 to listen to the conference call
 - IEEE Meeting, no discussion of proprietary information
- Reviewed previous open action items (updated list below)
- Doug asked that for future documents that folks send around, that we put a date stamp in the filename so that it can be referred to more specifically in the meeting minutes, and can also be placed on the web easily without stomping over other versions.
- Quick progress updates from sub-teams 5-8
 - Team 5 (Runtime Variables - Doug):
 - Sent initial task list to Jose, more expected over time
 - Will start working task list soon
 - Team 6 (PatternExec Constructs – Jim)
 - Jim not attending
 - Team 7 (TestBase – Jim)
 - Jim not attending, but Jim has updated syntax relative to WG24/WG11, see action item update below.
 - Team 8 (Standard Test Types – Ernie)
 - Currently on hold awaiting issues related to Jim's work on Testbase
- Deferred review of Jim's latest syntax updates to next week
- Reviewed latest Binning documents from Ernie, sent in email to WG on 3/27.
 - Note: red items are the latest changes in this document.
 - Discussed for section 3.1, fig 1
 - Based on discussion between Ernie and Jim, new “Color, Number” attributes have been added to section 3.1.
 - Using notation of constants starting with uppercase and non-constants starting with lowercase.
 - Changed “reprobe” to be “Retest”, more appropriate whether it is wafer or module level testing. Also, should not change so it will be uppercase
 - When counters get reinitialized to be addressed by Doug's work in runtime variables
 - Need to add Unsigned and Char type support, to be covered by Doug's runtime vars work

- Discussed for section 3.1, fig 2
 - New “Continue_on_fail” keyword in BinDefs block and also new “Color” keyword in the Pass/Fail sub-blocks.
- Discussed for section 3.2.2, fig 5
 - Group agreed to change syntax of:
 - `(BINDEFS_NAME.) (Pass|Fail) .AXIS_NAME.axis_property`
 - `(BINDEFS_NAME.) (Pass|Fail) [Integer].axis_property`
 - to no be...
 - `(BINDEFS_NAME.) (Pass|Fail) [Integer|AXIS_NAME].axis_property`
 - So now there is a single consistent way of doing axis property access
- Discussed for section 3.2.3, fig 6
 - Same changes relative to above in fig 5 but for bin property access
 - New syntax:
 - `(BINDEFS_NAME.) (Pass|Fail) [Unsigned|SOFTBIN_NAME].bin_property`
 -
 - Also, make similar change as above for “reprobe” to “retest”
 - Need to more clearly document semantics of “On*” events in main syntax document under the TestProgram block, within the EntryPoints sub-block. Need someone to own this.
- Discussed example on the top of page 12, section 3.2.3
 - This statement, would not work with the current language
 - `Pass.ClockSpeed["3.00GHz"].Index`
 - We cannot associate it with some “bindefs” object as being the current object. See footnote at the bottom of page 11
 - Maybe we need some type of “Using” statement like that provided with C++ to indicate the current active bindefs? Maybe within user defined test types, or a more global Using keyword. Need to flesh this out more
- Discussed section 3.2.4, fig 7, page 12
 - Discussed Bin and BinAndStop statements
 - Lengthy discussion on BinAndStop and whether we may want to break this up into separate Bin & Stop statements combined with using some type of If statement.
 - Separate Bin & Stop statements would be a bit more explicit as to what is happening with the conditions for stopping, as well as would give more flexibility, but requires more statements than a single BinAndStop statement.
 - Discussed the usage of Continue_on_fail flag to with just a Bin statement and certain rules to not require BinAndStop. We need to have some concrete alternatives to choose from.
 - Ernie to put together at least two different alternative syntax definitions with examples for us to discuss in a future meeting
- Next Meeting 04/03/2008

Action Items:

- 02/28: Each sub-team lead to send task list for their team to Jose for inclusion in the project plan.

- Ernie has sent %complete list
- Doug has sent initial task list for Runtime Variables to Jose
- 02/28: Jose to merge current documents into new MS Word master document.
 - Still in progress
- 02/28: Jose to migrate reviewed issues into a new issues list, update based on previous discussion
 - Still in progress
- 03/06: Ernie to move Standard Test Types documentation toward becoming an Annex in dot4 which would be a Proposal for Test Types
 - No master document yet to put this in as an Annex
- 03/06: Jim to update syntax related to WG24/WG11 to indicate that Inherit TestBase is allowed and recommended, but not required. Also, remove the UseDefaults keyword as an option on Line 265 & 284 of D18.
 - Jim to review 3/6 minutes and update
 - Done and ready for review
- 03/06: Doug to address syntax of FuncExec (WG24b) and ensure consistency with STIL statement rules, as part of and integrating with other 1450 standards.
 - On Doug's task list, will send to Jose
- 03/06: Doug to address WG25 as part of Runtime Variables
 - On Doug's task list, sent to Jose
- 03/06: Doug to address new WG30 issue (Define before Use for Variables and BinDefs) as part of integration with other specs.
 - On Doug's task list, sent to Jose
- 03/06: Jose to add new WG30 issue to current issues list.
- 03/06: Jose to add a "Look Ahead" work item to the project plan timeline to ensure extensibility for phase 2 capabilities.
 - Jose attacking from both ends with project plan, will add this item at the end of the timeline for dot4.
- 03/06: Jim to send latest updated syntax and issues/resolutions docs to Jose for updates to master documentation.
 - Jim needs to make changes mentioned above, then will send update
- 03/20: Doug to address array specification/indexing syntax as part of the Variables block issues to be resolved. Needs to account for the proper way to identify multiple tokens and how they are separated within the array bracket notation.
 - Added to Doug's Runtime Variables task list
- 03/20: Jim to post previous binning work document to the dot4 website under quicklinks in docs for working group meetings. Shows other attributes which may be required for binmaps.
 - Ernie has the latest updates
- 03/27: Doug to address adding new types: Unsigned, Char
- 03/27: Ernie to put together alternative BinAndStop syntax/examples for discussion in subsequent meeting

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>

----- Latest Prioritized High Level Dot4 Todolist -----

NOTE: First person in list is sub-team lead

Phase 1 (Must Have for ballot!!)

- 1 Process (Jose, Doug, Jim)
- 2 Documentation (Jose, Doug, Jim)
- 3 Integration with Other 1450 Specs (Doug, Jim, Bruce)
- 4 Binning (Ernie, Doug)
- 5 Runtime Variables (Doug, Ernie)
- 6 PatternExec constructs (Jim, Ajay)
 - Don't force to a 1-1 relationship with test methods
- 7 TestBase (Jim, Jose, Bruce)
- 8 Standard Predefined Test Types (Ernie, Ajay)
 - Production Test Methods only for now
 - Need a basic functional test at a minimum
 - Tag to mark this as a functional test

Phase 2 (Can work around, but may pull some stuff into phase 1 if we have time)

9 MultiSite (??)

Issues...

- Have similar concept we have in
- How many different sites? Also, iteration and access to them
- Synchronization between sites for shared resources
 - parallel vs serial
- Allow for different flows per site?
- Need to Suspend, Disable, Enable sites
- Need to specify what program runs on what sites (assumes different dies being tested)
- Does this even belong in Test Flow??

10 Datalogging Interface? (Ajay)

11 Bypass (in PreActions) syntax and semantics (Jim)

- Package only, Wafer only issues

12 Interfacing to Shmoo Plotting (??)

- May want to do this as a high level construct that you associate with an instance of a test

13 Input/Output Interface? (Ernie??)

14 Writing/Reading to/from screen, files (??)