

**Date – 08/09/2011**

**Attendees:** CJ Clark, Bill Tuthill, Brian Turmelle, Carl Barnhart , Roland Latvala, Carol Pyron, Josh Ferry, Dave Dubberke, John Braden, Adam Cron, John Seibold, Ken Parker, Wim Driessen, Craig Stephan, Ted Eaton, Heiko Ehrenberg, Francisco Russi, Bill Eklow,

**Missing with pre-excuse** Roger Sowada, Adam Ley,

**Missing:** Lee Whetsel, Neil Jacobson, Mike Richetti, Ted Cleggett, Matthias Kamm  
Peter Elias, Dharma Konda,

**Agenda:**

- 1) **11:00** Patent Slides and Rules of Etiquette
  1. Items from the reflector:
    - Adding new rules to subsequent letters preserving rule numbering/lettering where possible
    - REGISTER\_PORT\_ASSOCIATION - Discuss/Motion to accept COMMA form of RPA
  2. Linkage
  3. Float Spec
- 2) Further discussion on mixed R\_F/R\_A
- 3) Homework assignments

**Meeting Called to order at 11:00 am EST**

**Minutes:**

Review of items discussed on reflector

Addition of new rules

Add to the beginning or end of previous standard?

CJ suggested that we add them to the end of the list

KPP – will the IEEE accept the current layout that we have?

Carl – hasn't been proactive and will discuss layout when with IEEE when the time comes

CJ – Template from IEEE in 2010

Carl – doesn't have to do with the numbering of the rules

Carl – Ken's previous point was due to another organization

Carl – go forward with legacy format and will negotiate with IEEE if they have a problem with it.

CJ – focused on adding rules at the end to preserve numbering/lettering. Does this make sense?

KPP – rules might have a logical grouping that might get scrambled due to keeping previous rules the way they were.

Carol- when rules get deleted is there a note made. Is there a differences section

Carl – yes but not completed yet. Not sure we want to list every change anyway

Carl – in the body of the draft there is an attempt to keep the lettering, in the annexes the number has changed.

Carol – has some concern about rules being put in a random order

Carl- have reviewed and no one raised any issues, but we will review sections again and that would be a good time to raise these issues

Heiko- feels that ordering the rules in a logical sense is best

CJ – are you willing to change ordering?

Heiko – in favor in moving if it makes logical sense. On a case by case basis

KPP – Carol made good point about rules that are deleted. By leaving a place holder, parser will have to know what rev of BSDL you are looking at. But if a rule is deleted the parser doesn't need to through an error. But leaving lettered rules in place for rules that are deleted is probably a good thing

Motion made by John Braden:

**Give the editor discretion to renumber and re-letter sections as necessary if it increases clarity**

Heiko seconds motion

Brian – does this include preserving the numbering>

Carl – will try to keep the numbering the same but will reorder if needed

Abs 3

Yes 14

No 0

\*1 ineligible to vote due to attendance

Register port associations

CJ provides some examples of the Register Port Association

KPP – would ask that we consider all the port attributes with respect to commas and semicolons

CJ – does anyone have a huge objection to the format in the example?

Carl, Ken – it is fine.

KPP – simple piece of data

Carl – use of () and commas is more consistent with the other formats in the standard.

The semicolon was not consistent

CJ – We originally discussed using a format that was closer to dot 6 but using a comma is more consistent with the other attributes

Motion made by Carol

**Accept syntax with comma and Symantec checks and grammar of Register\_Port\_Association as is with no prejudice to change in the future**

Brian seconded

Yes 17

No 0

Abs 0

Motion passes

\*1ineligible to vote due to attendance

KPP – Rule e on Symantec checks. Is Port ID restricted to just the list or all list.

Carol – for a given list it can only occur once. Will have multiple fields applied to the same pin

KPP – can a single pin be affected by more fields?

CJ – for a given port association list you can only have it once.

KPP – PORT ID can it be a bit vector port id without a subscript on it meaning

CJ – port id is either a port id for a non subscripted port or subscripted vector

KPP – so if we have 8 members of a bit vector we need to enumerate all of them

CJ – cannot take an 8 bit vector

KPP- why don't we allow a bit vector

CJ – questions arise like is this mapped one to one

Carol – Vih threshold – 3 bits. Bit vector of 8 bits. Is there a decode that applies to those 8 bits or does it apply to all 8 bits.

Adam – this is just an association.

KPP – no mapping

CJ – correct

CJ - Let's look at the proposal. We wouldn't be able to use current Port ID. We should do it offline rather than craft it during the meeting.

Carl and Ken will take to email to show some proposal.

Linkage.

Currently Linkage is the dumping ground for every signal without a boundary scan cell on it.

CJ – who has an objection with the current changes to the draft?

Carol – made linkage section for chip using different options. Example

CJ – had figure used during discussion, is that figure in the draft

Carl – have not touched section since CJ edited the draft.

CJ – will look for figure to add.

Carol shows example

Example uses Power\_Pos, Power\_0, Linkage\_OUT, Linkage\_MECH, Linkage\_BIDIR

KPP- Does linkage\_out imply that it can be tested for open/shorts? Will the fact that you can hurt the coverage

Carol – These are NC, so you shouldn't care.

CJ – Ken is correct, if you specify Linkage\_Out, than the tool can't drive on these pins.

CJ –Linkage\_BIDIR will be treated the same as Linkage\_Out

Carol – wants to note that there are no distinctions between Power\_Pos pins and nothing that shows you what the voltage levels are.

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CJ – voltage level doesn't play as well in ATPG process. Power Pos occurs where there is a Vref and something is tied off to the Vref and ATPG doesn't know that it is a power pin.. This will help the process.

CJ – do we continue, accept the new keywords, with better descriptions? Can we get this behind us

KPP – major issues with 2 things. Where do we put this information and what information do we accept?

Carol – feels that it works reasonable well in the Pin Map

KPP – if we deferred the expansion of the information until after the use statement, legacy software will bomb out gracefully rather than ungracefully if it is further down.

KPP – needs more information about what the different linkages mean

KPP – Power\_Pos doesn't tell me much

CJ- tells you where the rails are.

KPP – key words don't tell you the values of the pins and doesn't help

CJ – discussed at the time and the group didn't want to deal with the voltages. Needed more of a higher level look as to where power and grounds are for the ATPG tools?

Carl- need for clarification on keywords is valid. Some power pins you connect to you don't get a digital 1. Should make sure the definitions are clear and what we want.

CJ – sure, we are open to adding more to the table to help define the words.

CJ – (re the power\_pos) from an ATPG perspective it is not a problem.

CJ – Please send in some feedback on the definitions so we can strengthen them

### HomeWork Status

John has passed his examples in to the working group. CJ is running them through the parser.

Carol – is still working on examples

Heiko is still working on examples.

CJ is still working on port assignments

### Homework assignments.

Heiko and Carol's assignments are outstanding and will be done for next week's meeting

CJ will have examples of port assignments

Bill E – work on more concrete example and definition of the ESSID register

- **Meeting adjourned: 12:00 EST.**

**Next Meeting:** 8/16/2011 11:00 AM EST

2 Motions Made

**Give the editor discretion to renumber and re-letter sections as necessary if it increases clarity**

PASSED

**Accept syntax with comma and Symantec checks and grammar of Register\_Port\_Association as is with no prejudice to change in the future**

PASSED

NOTES:

1149.1 working group website - <http://grouper.ieee.org/groups/1149/1/>

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**JOIN the meeting as GUEST** – will have to ask to present

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