

**Date – 03/27/2012**

**Attendees:** (24) CJ Clark, Adam Ley, Bill Eklow, Bill Bruce, Bill Tuthill, Brian Turmelle, Carl Barnhart, Carol Pyron, Craig Stephan, Dave Dubberke, Dharma Konda, Francisco Russi, Hugh Wallace, Jeff Halnon, John Braden, John Seibold, Josh Ferry, Ken Parker, Peter Elias, Rich Cornejo, Roger Sowada, Roland Latvala, Ted Eaton, Wim Driessen,

**Missing with pre-excuse:** Adam Cron

**Missing:** Lee Whetsel, Matthias Kamm, Mike Richetti, Neil Jacobson, Ted Cleggett, Sankaran Menon, Kent NG, Adam Cron, Brian Erickson, Heiko Ehrenberg,

**Agenda:**

- 1) Patent Slides and Rules of Etiquette
- 2) Use LiveMeeting “Raised Hand” to be recognized and take the floor
- 3) Editor’s comments on draft
- 4) Draft Review

**Meeting Called to order at 10:30am EST**

**Minutes:**

Review Patent Slide – Slide Presented to the Group.

Solicited input from anybody who is aware of patents that might read on our standard.

No responses

Review of Working Group Meeting Guidelines

No Objections

Draft Review

Clause 6.2.

Carl cleaned up any inconsistencies that existed in this clause.

CJ – is everyone ok with using the word “Board” or idea of “Board Level” in the example?

Ken – TMP will keep a how system in the safe

CJ – think we have clarified that we need to go outside the chip

Carol – addition of system level was done with descriptive text outside the rules

Carl – yes

Ted – what is the definition of POR?

Carol – same definition that has been in the standard since the beginning.

- Carl – rules for tap controller initialization.  
Carl – Is POR an industry standard term?  
Ted – would like to have a definition of POR  
CJ – “reset at power up” in original standard  
Ken – “Power-up” and “Power-on” used. This could be clarified with a definition in the glossary. If English isn’t your first language it could be confusing.  
CJ- Carl will add a definition to the glossary.  
Francisco – cell is called Power UP. The Pin is POR. Not sure why we are doing it that way. So if we are going to use Power-UP and POR than we should have a definition for both  
Hugh – as a chip designer POR is a functional block used . As long as your definition covers what resets the chip you should be covered.  
We should use Power On instead of Power Up  
Carl – power up is used more than Power On so that is the term that is used on the standard.  
CJ – figure 6-8 is in the standard from earlier versions. And original standard has “Power-UP reset generator”  
Ted – Behavior in 6-8 is not what we want  
Carl – correct that is not a compliant example.  
CJ – we will take the POR as an action item to fix the definition
- Wim – Figure 6-10. If TAP POR is present we don’t need TRST\*?  
CJ- You are allowed to have both. One is a pin and the other is for power up  
Carl – only 1 of the 2 is required.  
Carol – I agree it is also confusing in the picture.  
CJ – this figure was to clear up that you can have both POR and TRST  
Bill B- if the chip has a system POR used only for reset at power up. Can this reset the chip.  
Carl – POR is on chip that can be used to reset both system and test logic.  
External POR pin can not reset both.  
Bill B- this comes up all the time.  
John s- typical to have a power on reset function from the power supply that puts the whole board in a state to keep the chips from frying.  
So why is this illegal  
Carl – an external POR is considered a system reset.  
CJ – should discuss this over the reflector to see if there is another picture to support that we need to show a pin that is not system reset that can reset JTAG  
Bill B – not saying we need it.. Just that we should have something in the rules to say if yes or no.  
Francisco – Figure 6-10 missing clocking mechanism.  
Carl – idea is that it is independent of any clock.  
Carol – this is not test logic reset state.

TMP Controller Operation  
Discussion of Rules

Carol – allowed for user defined instructions to override CLAMHOLD by permission. Do we need to refer to that permission in the Rule

CJ – will take this offline so we don't need to fish through the document to find the needed text

Francisco – if there is an active boundary register segment and persistence is on other boundary scan cells, when I pull reset you are going to collapse the chains and loose the active path?

CJ – no.. That is why Carl added the text to the clause

Ken – The boundary register will not collapse and init data won't collapse?

Carl – init data can. What differences does it make?

Ken – could be bits that are controlling voltage

Carl – data stays the same if it is collapsed

Ken – that was not supposed to be guaranteed

CJ – true. That is not guaranteed. But the standard doesn't allow the architecture that you are describing. Because we use init run.

Ken – it should be clearly written what the register is doing after TLR.

Carl – this rule is about that when persistence is on TLR doesn't make the output of the IO change.

Ted – is there a place in the BSDL that shows if the SegSel does or doesn't get reset.

CJ- yes in the BSDL there is syntax to describe that.

Carl – minor changes to descriptive text

Clause 8.20

Clamp Hold Review

Wim – Should the mode pin be gated with the SegSel pin.

Carl – yes. That is shown in other figures in the SegSel section

Wim – instructions in Table 8-1 should be anded with SegSel as well

Carl – will look into getting that changed. Will clean that up

CJ – can add some simple text to the table to clarify

Bypass escape register

16.1.1

Would like to delete permission g

Discussion

Carol – would like to put this on the reflector

Ken – would only be useful during IC test.

Carl – no capture value turn it into a NO PI

Adam L- is there a rule? If there isn't we need one.

Carl – will add a rule

Francisco – don't see a problem for leaving this.

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CJ – this is only for bypass escape register  
Carl – if you were self-monitoring that is exactly the same as the hold line  
Francisco – there are some people that like to see that line there.  
Carl – would put the rule there to make this a self monitoring cell and what ever value would be scanned out.  
CJ – there is a difference between self-monitoring and no capture.  
Carl – no pi no update is a self-monitoring cell  
CJ – technically it isn't. But we can take that off line.

CJ – this is a permission to capture anything. It would be better to have self monitoring capability

By a show of purple who would like to leave permission g  
1 purple (Francisco R)  
Majority would prefer not to have the permission and add a rule that said the bypass escape register will scan out the value that it is loaded with.  
Carl – Francisco if you have an issue about it send an email.

Carl will send an updated draft from today's feedback and we can vote on whether to accept those changes.

**Meeting adjourned: 12:02pm EST.**

***Summary of Motions Voted on***  
**0 Motions voted on**

**Next Meeting:** 4/2/2012 11:00 AM EST

NOTES:

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

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