Date – 12/21/2010

Attendees: CJ Clark, Bill Tuthill, Ken Parker, Adam Ley, Carl Barnhart, Craig Stephan, Heiko Ehrenberg, Wim Driessen, Carol Pyron, Brian Turmelle, Roland Latvala, Ted Eaton, Bill Eklow, Adam Cron,

Missing with pre-excuse

Missing: Dave Dubberke, Mike Richettie, Francisco Russi, Lee Whetsel, Neil Jacobson,

Agenda:

1) Required Patent Disclosure Slides (2:00)

   *Everyone at last meeting agreed that they read and understood obligation*

2) Election formalities-discussion (15:00)

3) Dec 28th meeting? (5:00)

4) Review/Discuss IC_RESET

5) New Business

Meeting Called to order at 11:02 am EST

Minutes:
Reviewed Patent Disclosure Slide

Review election Results
CJ – Chair
Carol – Vice Chair
Carl – Editor
Bill T – Secretary

Officers need to be IEEE/SA members
CJ, Bill, and Carl are members

Carl has some problems writing to PDF
Ted volunteered to help Carl export files to PDF.
Carl will resolve issue writing to PDF
Dec 28th meeting
Carl makes motion to cancel Dec 28th meeting. KPP seconds
None opposed. Motion carries.
Dec 28th Meeting has been canceled.

Ken points out that meeting notices are not scheduled after Jan 1. CJ will need to reissue meeting notice

IC RESET
Permissions
Carl - Remove permission f) based on input from Ted.
Ted – can still be a permission but made a “may” rather than “should”
Carl – g) and h) no comments to be had on these 2

Reset-select register
New clause
Carl – Rule does not require an update flop.
Carl – with Ted’s addition it will require an update flop
CJ – agrees
Carl – basic point of rule is that it is a minimum 1 bit.
Carl – changed rule a)
KPP – suggests reset select register
CJ – doesn’t think “stages” is the right word
Carl – b) is this required any longer? To protect Run Test Idle
Ted – Doesn’t see why it would be required
CJ – each one of the bits is like an “and”
Ted – not sure why TLR won’t reset that. Not sure why it needs to be all 0’s
CJ – might be a mistake. If we can manage the resets better and we are in Clamp Hold
and trying to execute something on chip, wouldn’t want entering TLR to change
anything on the chip.
CJ – CH is optional. Can have IC reset without CH. Seems like we are setting this up to
clear bits in TLR and not sure why we would do that.
Ted – because they have to be cleared by reset. Are we separating the TRST Pin and the
TLR state?
Carl – Rephrased rule b)
Ted – Where is separation of TRST and TLR State
Carl – TRST is a powerup initialization function. Will reset all of the test logic
Once we are operating if you have the clamp persistence controller in the ON
state, a number of resets under TLR don’t occur.
Ted – in the absence of Clamp persistence where is it separated?
Carl – yes.. in that case it is the same.

Ted – thinks we would be better off separating the TRST pin and the TLR state and
define what this would do for both of them.

Carl – lets defer to an email discussion.
CJ – wants to make sure that people can use TRST without Clamp Hold. And make sure it makes sense when to clear

Carl – Rule c) ok
Permission d) Carol wants the ability for decodes here
Ken – this is a function of what the designer wants to do. Shouldn’t disallow it.
Carl – permission e) Do we want this.
Ken – perfectly acceptable.

11:30 – Carl had to leave earlier.

Discussion on Editor
CJ wants to add to draft
Ted – other working groups you would edit the section and pass to Editor.
Ken – sees Carl as the interface to the IEEE. And it’s up to Carl on work to be done.

New Business
Ken – making good progress. Can we summarize that we have 5 new instructions.
These instructions will be a major contribution for this working group.
CJ - yes.
Ken has been working with Carl on improved figures.
CJ – there really shouldn’t be files submitted to the Editor without going to the reflector?
Ken – figure 6.3 thru 6.6
CJ – what would be appropriate would be to share with the working group rather than just handing to Editor.
Ken – in general the working group is the final check off for any change.

Ken shows the group the updated figures.

CJ – what is the IEEE position on the FlipFlop
KPP – The symbol?
CJ – yes they have rules on 2 different ways of showing the logic.
KPP – lay that on Carl. Might want to run it by the IEEE. Symbols in these figures were used in previous standards.

CJ – thinks we should have a figure to show a non gated clock method showing states.
Few members don’t like the gated TCK figure.
KPP – just translated from pervious figure. Didn’t make any logical changes.
If someone wants a change than he will defer to that person
CJ – wouldn’t be a bad idea to add another figure
KPP – that would be a contribution to the standard
CJ – send him the -5 figure and he will modify it for the state.

CJ – No more business.
Meeting for Dec 28<sup>th</sup> is canceled due to the Holidays and lack of sufficient member availability.
Next meeting will be on January 4<sup>th</sup> 2011

KPP – moves to adjourn
Seconded

**Meeting adjourned: 11:45 EST.**

**Next Meeting:** 1/04/2011 11:00 AM EST

**NOTES:**

Action Item by Carl to elaborate on concerns that he has with OOs on power pins and any rules that would need to be added to the standard to address those concerns.

**Current Issues listed and who will champion that issue.**

1. Observe only. – Ken and Carl
2. Directionality linkage. - CJ
3. Power Pins. - Heiko
4. Pairing power pins with functional I/O - CJ
5. Sample / Capture. – Carol (Freescale) & Roland
6. TRST included in PCB level diagram. – Adam L.
7. Slow to Fall/Rise signaling issue – CJ
8. “No Connect” – Ken and Francisco.
9. Device ID – Still needs work
10. Low-Voltage self observe shorts coverage problem – JJ & Intel

**Action Items:**

- CJ will post 1149.1 draft on website with line numbers to make it easier to refer to items in discussion
- Comment #10 CJ will take action to look at possibilities to add to the 1149.1WG website a document which shows which standards are based on 1149.1
- Comment #8 CJ will make changes to draft for observe only
- Comment #7 CJ will get in touch with Doug to get input regarding Comments
- Comment #5 CJ will Add a figure and little text to address TRST use with interconnection of components
- Comment #4 Adam L to add comment about TRST. Update figure 6.8
- Comment #3 Adam L will update language for any proposed change for this section.

**Weekly 1149.1 Meeting coordinates**

1. Please join my meeting.
   [https://www1.gotomeeting.com/join/172495048](https://www1.gotomeeting.com/join/172495048)
2. Other call in numbers
Australia: +61 (0) 8 6365 4094
Canada: +1 416 800 9290
Germany: +49 (0) 898 7806 6462
Netherlands: +31 (0) 208 080 380
Sweden: +46 (0) 852 503 470
United Kingdom: +44 (0) 203 051 4835