Date – 08/21/2012
Attendees: CJ Clark, Adam Ley, Bill Bruce, Bill Eklow,Bill Tuthill ,Brian Turmelle, Carl Barnhart, Carol Pyron, Craig Stephan, Dave Dubberke, Dharma Konda, Heiko Ehrenberg, Hugh Wallace, Jeff Halnon, John Braden, Josh Ferry, Ken Parker , Peter Elias, Rich Cornejo,Roland Latvala, Wim Driessen,

Missing with pre-excuse: Roger Sowada,

Missing: Lee Whetsel, Matthias Kamm , Mike Richetti, Neil Jacobson, Ted Cleggett, Brian Erickson, Scott Wilkinson, Jason Chodora ,
Kent NG, Sam McMillan, Sankaran Menon, Ted Eaton,
Adam Cron , Francisco Russi, John Seibold,

Agenda:

1) Patent Slides and Rules of Etiquette
2) Use LiveMeeting "Raised Hand" to be recognized and take the floor
3) Editor's report on pre-ballot draft – Editor's highlight reel
4) C.5.1 examples

> 15046 a) The **iPDLLevel** command shall appear as the first command in each PDL file.

Meeting Called to order at 10:34 am 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 Response
Review of Working Group Meeting Guidelines
    No Objections

Carl Reviews largest changes to the draft
Most of the changes in the last few days were descriptive not normative.
Initialization area
    Tables that show example flows to initialize
New Annex D
    2 examples which were using BSDL and PDL
    Extended 1500 examples
    Register Assembly has some 1500 examples.
        Segment select
        Extended example with broadcast scan
New text in introductory area for Annex C PDL

Carl published a diff from beginning of June until now (8/14). To allow people to see what the changes are that have been made in the last couple draft updates.

Bill B – sees 4 versions. 0819
Carl – one without suffix is diff from last publication (7/24)

DELAYPO
CJ – let's look at DelayPO and understand why the delay is necessary. The draft should show a diagram of what a DelayPO controls.
Carol – if there is any pipeline after it we shouldn't indicate it?
CJ – pipelining to control mux from the scan cell.
Carl – DelayPO is not restricted to that use
CJ – tools can't be made to wait an arbitrary amount of clocks.
        We should have specification of how many TCKs are there.
        Reason for delay is for mux. The update signal has to continue to the segment that you are switching off.
        On segselect we define ½ tck
Carl – DelayPO is a structural description key word.
        Had suggested that we change to "output will be delayed after update state changes no more than 4 tcks". This delay would get buried in state machine.
        The change to the current wording was made due to objections to "one and only one tck"
Carol – was thinking of DelayPO was a generic key word
Carl – it is generic, but it is required on select cells
Carol – can say that it when it is one a segselect it can be 1
        Are the mux and flow instantiation are going to be close and you won't need to pipeline from the flop to the mux?
CJ – if you did you can still make timing
        Just need an edge. We are delaying by a ½tck, if you delay by a full tck behind the scene it wouldn't be noticeable
        The control of the switch shouldn't have an ambiguous description.
        Whatever the number is, it is not making sense.
Carl – we had specified a limit of 1 before.
Wim – 2 seems to be a maximum
Carl – 2 is fine.
Carol – 2 is fine.
Carl will make changes to the draft to reflect having only a maximum of 2TCKs for DelayPO

C.5.1 Examples
Ken – in Figure C.6 is the grey defining a board? What does that represent?
CJ – yes.. it can be anything.
Ken – as opposed to a die and stack
CJ – for the examples it doesn't matter.
Ken – just thought it would be useful for any written description later in the text.

CJ – we can call it a UUT.
Carl will update the drawing

CJ has added examples to section C.5
CJ – the 5.6 diagram needs to have 2 separate instances of the series block. Needs an I1 and I2
Carl – I1 is an instance of an IP and not the TDR
CJ – we are not showing the verilog complete chunks
CJ and Carl will clean up figure to make it less confusing

SysClock Requirements
CJ - do we really want this attribute?
Carol – this is not a requirement by the logic.
CJ – what is the purpose of register association sysclock.?
        Suggesting that having 1000 blocks on a TDR. Having to call out this requirement is busy work. Would be ok to provide. But not to be required to provide it.
CJ – would change this as only a requirement for predefined instruction. Any user defined instructions should be a permission.
Do we want this for every IP block?
Carol – thinks a lot of instructions don't require a sysclock associated with them. Hoping it is not a required field.
CJ – not as the standard is written
Carol – that should change then.

PDL example.
CJ added PDL example to section C5.1.4

iSource before iPDLLevel
Bill B – would make it more like "include" that is in software
Hugh – reason this was done in iJTAG was that if you don't have capability of level1 you wouldn't have to parse the whole file. If an iSource starts sourcing Level1 this would be an error. This is why the PDLLevel0 came first in the file.
CJ – having it first or second doesn't change if the tools have to parse the file
        Tool would still have to go into file and look for level0 or level1
Hugh – disagrees that it is the same. Feels it is different.
Carl – toggling back and forth between pld0 and pdl1 has been there for months
Hugh – disagrees.
Bill B – where ever you use iSource is that the same as cutting and pasting the code into there
CJ – yes.. it is the same as TCL source
Bill B – does the iSource file need to be a complete piece of PDL?
CJ – yes. it needs to be defined.
Bill B – than it is is different than TCL source. TCL source will let you put in a snippet of code.
CJ – yes.. you are right. That is why we have iSource.

CJ moved the iSource to the first line of the PDL example and the PDLLEVEL 0 to the second line.
CJ – asks Carl to modify example that they iSource is allowed to come first.
Carl – is it permitted or required?
Bill B – the way you would write it is whatever is sourced is legel code so it can go anywhere.
Carl – so it is legal prior to any PDLLevel command in the file.
CJ – no. when you are sourcing an isourcing you are sourcing a complete pdl group
Carl – so all iSource commands needs to come at the beginning of the file .

Meeting adjourned: 12:06 pm EST.
Summary of Motions Voted on
0 Motions voted on
Next Meeting: 8/28/2012 10:30 AM EST

NOTES:

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

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Meeting time: Tuesdays 10:30 AM (EST)   (Recurring)

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