Date - 07/17/2012

Attendees: CJ Clark, Adam Ley, Adam Cron, Bill Bruce, Bill Eklow, Bill Tuthill, Brian Turmelle, Carl Barnhart, Carol Pyron, Craig Stephan, Dave Dubberke, Dharma Konda, Francisco Russi, Jeff Halnon, Ken Parker, Peter Elias, Rich Cornejo, Roland Latvala, Wim Driessen,

Missing with pre-excuse: Roger Sowada, Heiko Ehrenberg, John Seibold,

Missing: Lee Whetsel, Matthias Kamm, Mike Richetti, Neil Jacobson, Ted Cleggett, Brian Erickson, Scott Wilkinson, Jason Chodora, Sam McMillan Kent NG, Sankaran Menon, Ted Eaton, John Braden, Hugh Wallace, Josh Ferry,

Agenda:

- 1) Patent Slides and Rules of Etiquette
- 2) Use LiveMeeting "Raised Hand" to be recognized and take the floor
- 3) Review input on 7/5 B.8.20 and B.8.21 BNF seems to be out of date already so this may be short.
- 4) Review BNF for R_A support of SELECTMUX (with broadcast).
- 5) Need to get this one on the table. Motion to go to submit draft for balloting when editor is ready. We need a few more reviews and incorporation of feedback given this past weekend. I would think we would be ready to submit the draft for ballot within two weeks. We can make minor tweaks/fixes to text during the balloting process as well which will be incorporated with balloters feedback.

Meeting Called to order at 10:38 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

Review B.8.20 and B.8.21 No responses from the group on feedback for B.8.20 and B.8.21

Bill B – brings up naming structures for iReads and iWrites and needs to be formally addressed.

Feels the requirements are not currently clear

Needs to be clear to the PDL provider what the minimum requirements are for the tools to accept the PDL

CJ – requests Bill B to send an email with some write up of more thoughts. Doesn't want to avoid the agenda and will put this on a later agenda.

Requests to continue the dialog on the reflector.

#4 Review of BNF for selectMux with broadcast

CJ reviews changes made over the week to figure and example of last proposal

Carl – would like to get rid of :

CJ – colon is there because of email about arrays

Carl – thought it would cause problems without tools

Carl – selectvalues and broadcastvalues are opposite of each other. And that is

confusing. There is many to many in broadcastvalues and one to many in selectvalues.

CJ- and that is why they are the opposite

Carl – yes. But we could use the format of broadcastvalues in selectvalues.

CJ – this is a personal preference but are there any deficiencies?

Carl – other than confusing, no. it is the same information content either way. Would prefer to have consistency between the two. If there is a reason to have different than would be open to that.

Ken – why do we have gating logic?

CJ – this is for broadcast. So we can have more than one thing gated.

Carl – you have to code a register constraint for an illegal situation that shouldn't exist CJ – needs to have broadcast to select different WSP to broadcast with.

Ken – another alternative would be to have a linkage between gating logic and the 4 input mux at the bottom.

Carol – either one is correct. Could have a drawing indicating that logic goes through Boolean logic that goes to select lines.

CJ – only happens if you ability to route signals back to where mux selection is being done. Not always possible.

CJ – could design something wrong so you couldn't scan one of the registers.

Ken – if you put the wrong bit in the chain could be clocking register 1 when I am examining the output of register3. Tool could essentially break the chain. Never had a scenario like that in the past.

Carl – not allowed in the boundary register or any standard register.

Ken – this is only for proprietary registers? And allow someone to describe what they are doing today? And people live like that today?

CJ – we are still on supporting 1500. Nothing to do with other registers.

CJ – chain doesn't get broken because you are talking to all of them. But if someone implements a no broadcast or the decoder is incorrect, than you will have a chain where you are looking at TDO and TDO will not be valid.

Just trying to describe things that people are trying to implement.

Bill B- what is the obligation of PDL with this.

CJ – nothing changes in PDL with regards to this.

Bill B- iApply would not know about this

CJ – correct. iApply wouldn't know about this internal scan chain.

Sees PDL as just text and doesn't know anything about the database.

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Bill B- point is if there is no impact on PDL than why are we documenting it.

If you are going to describe this like a netlist than it should have some impact on PDL. PDL should do something with this.

CJ – PDL has no knowledge. Just a text file. And the text points to the flops. The reason we are doing this is not for PDL but for the database. To keep the registers up to date in the tool.

Bill B – where do we capture . In the description that goes with iApply. Software is required update database on iApply.

Carl will update the iApply rules to include BroadCast.

Carl – implication has to do with how you maintain the database. Which is part of the PDL system. Doesn't change the PDL code.

CJ – only update the database with iWrite if you want to as a tool vendor. If you are ignorant of the broadcast , you will still get all the same information .

Only matters if you are keeping a live database if you want to display the information about the flops that are present.

CJ – PDL and BSDL are documentation. Wouldn't make rules for tools.

CJ – tried to capture that the writer of PDL if you did an iWrite that the value was sticky for iApply. Might have gone over board for tool vendor.

Wim – BRD field is it under control by PDL

CJ – nothing preventing. Just documentation. The tool would have to figure out if it is supposed to be broadcasting or single operation.

Wim – if you do an iWrite for BRD_field and iWrite for WSP3, what do you do for a conflict.

CJ – tool can identify that this can't be done

Wim – BRD_field is that under control of the PDL operator or PDL executer.

CJ – both. as a tool vendor you can do it either way. Whatever makes sense for you and your customer.

Wim – seems confusing for the tool. Not sure what the intention of the PDL writer is. CJ – maybe need to see some example PDL.

Wim – afraid that the write of PDL will not understand what the tool is going to do.

CJ – not want to write rules for tools

Carl – if you put none into BRD_field it implys you are scanning a single structure . that is not the case . No way for gating logic to scan a single WSO.

CJ – agreed, as drawn there isn't enough wires to show none as an option.

Carl - Drawing should be updated to show correctly selecting "none"

CJ – Picture is confusing, but in another standard this is being done

Carl – just saying that the drawing needs more information.

Ken – how would you ever set the BRD_Field after the default setting for SI-> SO

Carl – reset that the SOC_field can be set by default.

Ken – will go offline to convince that you can get value intoSOC_field.

CJ – none doesn't mean broken, just not broadcast. Would take 2 scans to change BRD_Field.

Ken – should be clear in BSDL what the default path should be and how to load more bits.

Carol - broadcast field and selectfield can be same set of bits?

CJ – yes.

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Meeting adjourned: 12:10 pm EST.

Summary of Motions Voted on 0 Motions voted on

Next Meeting: 7/24/2012 10:30 AM EST

NOTES:

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

To Join the meeting <u>https://www.livemeeting.com/cc/intellitech/join?id=2CQ2PQ&role=attend&pw=n%26d%5DNqX%284</u>

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

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