

Date – 10/12/2015

Attendees: CJ Clark, Adam Ley, Bill Tuthill, Bob Gottlieb, Brian Turmelle, Craig Stephan, Dharma Konda, Dwayne Burek, Gobinathan Athimolom, Ismed Hartanto, Josh Ferry, Mike Ricchetti, Tapan J Chakraborty,

Absent with Excuse: Jon Colburn,

Missing: Bill Huott, Carol Pyron, Jim Wilson, Kent Ng, Kevin Gorman, Tom Wayers, Heiko Ehrenburg, Dave Armstrong, Roger Sowada, Zahi Abuhanmdeh, Saman Adham, Teresa McLaurin, Philippe Lebourg, Steve Sunter, Gurgen Harutyunyan, Frans de Jong, John Braden, Marc Hutner,

Agenda:

- 1) Patent Slides
- 2) Review of changes to Josh's PDL commands
 - a. I did not finish the editorial work there, mostly done.
 - b. Is there a motion to incorporate these commands into the draft subject to further refinement?
- 3) BSDL change for TX_CLOCK, REF_CLOCK, RX_CLOCK
 - a. Discussed this last week, I did not yet make a change.
- 4) New business
- 5) Adjourn

Meeting Called to order at 11:10 am EST

Minutes:

Review Patent Slide – Slides Presented to the Group.

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

No other responses noted.

Review of changes to PLD commands

CJ changed iConfig command to make it less tool centric. Tool rules don't make sense in context in what you are determining if it is compliant or not.

Josh ok with changes to iconfig description

-nofail described as CONFIGR response packet is not expected or ignored

Bob – what is the scenario that we wouldn't get a CONFIGR

CJ – not sure.. Josh is trying to plan for it.

Josh – SPI bus might not be required

CJ – was thinking more about First Silicon bring up. Wouldn't want to be stopped because response had an error in it.

IEEE 1149.10 High Speed JTAG Working Group Minutes

Bob – would be true for all packets? Wondering if there is anything special for this or would do it for all packets

Josh – seen device that is kind of compliant. Didn't want to throw out whole thing because response failure.

Josh – add “shall not be “to no fail description.

iTarget – updated to write in terms of specification and removed tool discussion
Removed rule a). Josh was ok with it.

iReset10 – parameters should be optional. Should only supply parameter that you want to assert. Could do all 3 if you wanted to but should be able to indicate which ting you want to do.

Josh – didn't know if we should have the ability in PDL to force it to assert. That is why all 3 parameters were put in so they would all be asserted.

CJ – might want a forced low and return. Could have a special type for this.

Bob – This is for system reset?

CJ – there are many bits in the type field that can be used.

Josh – happy with how the hardware is described. If things are working as it should, than it should work ok. Just a way to manually de-assert it.

CJ – not compatible with what you are thinking.

Bob – internally we have the ability with the bit 1 if we want to hold the tap in reset? Bit 0 is the TMS pulsing through thru the state machine. Not sure there is a capability we need to hold bit 0 if we can force the state with bit 1.

CJ – different opinion on how severe the errors will be. Josh is concerned that the reset is held low all the time.

Bob – is bit 1 and bit 0 supposed to be orthogonal.

Josh – iReset in DOT1 is a system reset.

CJ – these are just test resets.

Bob – iReset10 is the TMS taking it to reset.

CJ – PDL for DOT1 already, TMSRESET

Bob – Bit 1 is doing the same thing but using the optional TRST pin.

No concept of the optional pin with DOT10

CJ – in Dot1 there is a number of new mechanism that only get reset via the TRST pin or power cycle. Inside the chip the TRST pin does more than reset the tap. It clears the persistent state-machine.

Bob – and taking the tap state-machine doesn't do that?

CJ – correct.

Bob – system reset is a higher level reset?

CJ – right.

Josh – don't have a dot1 tap. Should we have the capability to do an IC_RESET

CJ – packet would need to do that.

Would need some more flexibility to the iRESET10 command.

The tool would know how to make the packet based on type field.

Josh – PDL command would need additional types?

CJ – yes.

Bob – what would the hardware be expected to do if we see the clear

IEEE 1149.10 High Speed JTAG Working Group Minutes

Josh – if it is already asserted it would be ignored.

CJ – simply de-asserts the signal. REST10* goes high.

Bob – differentiated it from system reset and differentiated it from TRST.

CJ – Enabling DOT10 rerouting RESET*.

CJ – will try to recraft the command and add the capability to add a specific value into the type field. Would give your more flexibility.

Call for New Business

No New Business

Motion to Adjourn – Josh

Seconded - Bob

Meeting adjourned: 12:00pm EST

Next Meeting:

October 19th, 2015 11:00am

Motion Summary

0 motion made

Action Items

~~*Bill Tuthill—10-21-2013—Add minutes and Attendance spreadsheet to the website.*~~

~~*CJ—11-11-2013—Reach out to ATE industry and Probe Industry to get update on future of ATE equipment to see which data speeds and protocols they are heading towards.*~~

~~*Philippe—Look into alternative method to create control information (pause, start, terminate, etc.) rather than using K characters in packet.*~~

~~*Bob—create a case study to show use of Attributes*~~

~~*Frans—will start some block diagrams of a simple use case to help illustrate the current architecture*~~

~~*Dwayne—present to the group his ideas for a simplified scheme—Direct Interface.*~~

~~*Adam—invite someone from IEEE to speak on IEEE benefits of standardization at WG meeting*~~

Call for Essential Patent notes

Adam Ley 12/1/2014

PN, TTL, AN

7348796, METHOD AND SYSTEM FOR NETWORK-ON-CHIP AND OTHER INTEGRATED CIRCUIT ARCHITECTURES, DAFCA INC.

IEEE 1149.10 High Speed JTAG Working Group Minutes

Steve Sunter 11/17/2014

1. US 7610532 "Serializer/de-serializer bus controller interface" Avago, granted 2009
2. US 7739567 "Utilizing serializer-deserializer transmit and receive pads for parallel scan test data" Avago, granted 2010
3. US 8543876 "Method and apparatus for serial scan test data delivery" Altera, granted 2014

NOTES:

1149.10 working group website - <http://grouper.ieee.org/groups/1149/10/>

Here is the WebEx conference link.

<https://meetings.webex.com/collabs/meetings/join?uuid=MAG12PB7HN5W24AM2EOKIOM9KS-KERT>

You can use VOIP on your computer or dial-in using the phone number below.

Audio Connection

+1-415-655-0001

Access code: 194 196 960