

Date – 7/20/2015

Attendees: CJ Clark, Adam Ley, Bill Tuthill, Bob Gottlieb, Brian Turmelle, Dharma Konda, Dwayne Burek, Gobinathan Athimolom, Jon Colburn, Josh Ferry, Mike Ricchetti,

Absent with Excuse:

Not present for $\frac{3}{4}$ of meeting:

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, Ismed Hartanto, John Braden, Gurgen Harutyunyan, Steve Sunter, Frans de Jong, Marc Hutner, Craig Stephan, Tapan J Chakraborty,

Agenda:

- 1) Patent Slides
- 2) Review Draft v64
 BSDL grammar
- 3) Adjourn

Meeting Called to order at 11:04 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 Version64

Draft v64 posted on website

BSDL Definitions

Table 7-2 shows what the syntax would look like if you didn't have 1149.1 TAP

1149.10 comes in as an extension when a 1149.1 TAP is present

When it isn't present Table 7-2 will show what basic elements of the grammar to use

Need conformance description for DOT10. Added syntax in 7.1.2 for compliance statement

CJ sent out some examples of BSDL files for when 1149.1 TAP isn't available.

Need to modify HSJTAG_Extension in v64 to have Conformance Description.

IEEE 1149.10 High Speed JTAG Working Group Minutes

Dwayne – if you have the elements but no 1149.1 state machine to drive the elements.

CJ – syntax in BSDL refers to boundary_register.

Dwayne – Thinking we have register definition. And register access could be TAP either DOT1 or DOT10. Maybe along a 1687 description. Different ways to access different registers

CJ – don't have register access in description

Dwayne – register access list doesn't include register?

CJ – yes it does. It maps the instruction to the TDR

Dwayne – form the instruction register

CJ – Register_access implies that you have a instruction register.

CJ – If you don't have a DOT1 TAP then you have a DOT10 interface which is like an 1500 interface.

1149.1 instruction and boundary registers don't exist when you don't have a TAP

Dwayne – would like common syntax for each case. Better reuse

Mike – for Multi Die chips, in 1838 they haven't done much in terms of describing what is going to be there.

Bottom die has 1149.1 interface.

Wrapper register between die is more like 1500

Register is more like test data register than Boundary Register in 1838.

CJ – rules are in terms of port definitions. Semantics in terms of ports.

If you don't have a TAP than Ports are described in TDRs

Dwayne - could have multiple descriptions for the same things.

Would like to use Same BSDL file but able to cut out different pieces for 1149.10 and 1149.1

CJ – that would be when you have both interfaces

Dwayne – if you only have one or the other than it would be the cut subset that you would publish.

Would be like a private vs public sections.

CJ – makes me think that you are using standard BSDL that includes everything

Dwayne – would have 2 descriptions of the same entity. Could be different.

CJ – when you don't have the 1149.1 availability you would using subset of grammar

Dwayne – more common use a BSDL would be to strip out the 1149.10 info and keep 1149.1 more common to have 1149.1 interface.

CJ – if not using 1149.1 you would have DOT10 connected to the fabric and wouldn't have the instruction register.

Mike – if you don't have 1149.1 and you just 1149.10 you still have to do some interconnect test at the board level??

Dwayne – should support a global instruction register that could be used as setup and control

CJ – optional to have instruction register.

Dwayne – would like the same format for ID Register in DOT10 as 1149.1. So that we can make sure we have the right chip.

Mike – if you have a DOT10 only chip would IR still be there?

Dwayne – would like a common register access mechanism

Mike – tat could just be a user defined thing?

Dwayne – it could be. But when you have both would like it to be the same code.

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CJ – in a DOT10 only interface, the legacy DOT1 things don't come along.
We have better descriptions mechanisms.

Continue discussion over reflector.

Editor will continue in this direction. Will leave it open based on feedback.

CJ will send out updated BSDL file examples

Motion to adjourn: Dwayne

Seconded: Brian

Meeting adjourned: 12:00pm EST

Next Meeting:

July 27th, 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.

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

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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