

Date – 2/23/2015

Attendees: CJ Clark, Adam Ley, Bill Tuthill, Bob Gottlieb, Brian Turmelle, Craig Stephan, Dharma Konda, Dwayne Burek, Frans de Jong, Jon Colburn, Josh Ferry, Gobinathan Athimolom, Marc Hutner, Steve Sunter, Tapan J Chakraborty,

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, Mike Ricchetti, Saman Adham, Teresa McLaurin, Philippe Lebourg, Ismed Hartanto, Gurgun Harutyunyan,

Agenda:

- 1) Patent Slide
- 2) Review Draft 53
- 3) Clarifications needed by Chair

Meeting Called to order at 11:08 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 Draft 53

Updated rules in section 6.1.2 to help wording

Changed some terminology.

ALIGN is now BOND. No parsing difference. Just different Key word

Packet map attribute:

Changed DATA_SIZE to SCAN_DATA_SIZE

Added ALIGNMENT_SIZE – minimum number of bytes used to align control chars and variable length fields of a packet. Needs to be 1 or even integer greater than 0

Modified BSDL to have “Align_string” (integer 1 or even greater than 0)

ALIGNMENT_SIZE is set and not changing

Added clause on Packet Data Alignment at section 9

To show how to do formatting.

Areas need to be aligned. Payload. Control Characters. Fields within a payload.

Steve – should be stated that it is aligned with Alignment_size.

CJ – correct. We are in agreement.

Table 9-1 shows config packet from Table 6-3. To show the information local rather than having to move back into the document to find the information.

Steve – problem with padding out SOP

If you have SOP immediately preceding the command than everything should be aligned after the SOP based on the alignment size.

If you separate SOP and treat it as special you know that you are getting command immediately after SOP

CJ – SOP should always come in on byte zero based on alignment size.

Steve – Xilinx example doesn't guarantee alignment to 4 bytes. But guarantees to byte pairs.

Craig – in designs that we have done we put the data into the fifo and look at the data.

Steve – so the PEDDA has to have a fifo

Craig – correct

CJ – what we are trying to do is to get the data formatted. This at least gets you to where the packet itself is aligned.

CJ – table 9-2 is how you format packet by ATE vendor. Not dictating how to format data inside chip.

Bob – doesn't like ATE vectors not being reusable for different alignment sizes.

Marc – can we mark the cells as “pad” or something so we can easily ignore it?

Steve – SOP is a control character and pads are data characters. If Control Characters are stripped than you could get 3 words of data pads without SOP. Should keep all control characters or all data words.

Bob – would be good to trace a packet through.

IEEE policy

Work Product – shall mean the compilation of or collective work of all participants (e.g. a draft standard; the final approved standard; draft; industry Connections white paper; Industry Connections web site)

7.2. Policy

IEEE owns the copyright in all Work Products

What is the groups take on this? What is Work Product?

Tapan – Work Product is the final approved standard

Fans – feels that the intermediate presentations would be part of it as well.

Steve – doesn't think so.

Steve – if you give a presentation in the terms of a paper that is separate. That is an IEEE paper. If you give an explanatory presentation that is not part of IEEE

If you present some slides IEEE doesn't take ownership of that.

Frans – if you have the standardization of a project than it is also the things that come out of it.

CJ – collective work used here is not meaning that the group worked together. It means in the copyright it would be the multiple works of that body.

Tapan – agrees with Steve. Taking literally that it is the draft standard.

CJ – agrees with Tapan (recluse)

Adam – nothing to add. If that is IEEE policy than it should be submitted to IEEE to interpretation. Generally consider anything that is presented in an IEEE meeting a contribution to the collective work.

CJ discussed the slide that Steve had worked on as an example
Was this a contribution?

Steve – IEEE can't say that they own contribution. It becomes public domain.

Steve – It is a contribution if it is incorporated. If not than it is a position piece.

Steve feels that his slide is a position piece.

Steve – things submitted to working group should not have copyright on them and it should be considered in the public domain after presented

Feels it should be part of public domain if it is presented and submitted to working group.

Send any New Business requests to the reflector

Please use reflector to review what is in the latest version of the draft. Please send any comments on the new material to the reflector. This will let us get a start on the material before the meeting. Please include anything that needs to be updated or anything you would like discussed

Motion to Adjourn: Steve

Seconded: Frans

Meeting adjourned: 12:00pm EST

Next Meeting:

March 2nd, 2015 11:00am

Motion Summary

0 motions 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

IEEE 1149.10 High Speed JTAG Working Group Minutes

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
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