

Date – 1/5/2015

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

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, Gurgen Harutyunyan, Tapan J Chakraborty, Tapan J Chakraborty,

Agenda:

- 1) Patent Slide
 - a. Letters sent to potential essential patents, three from Steve and one from Adam L.
- 2) Review of v49. A couple of tweaks here and there. Will work on adding some detail on DATA_SIZE.
- 3) Adjourn

Meeting Called to order at 11:11 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 other responses noted.

CJ had sent out LOA's regarding the potential essential patents that have been brought up here.

Draft 49 review

4.1.2 Specifications

Minor tweaks for clarification

5.1.2. Specifications

Minor tweaks for clarification rule h)

6.2.3 Minor tweaks for clarification

6.4.2 Rules

More clarification in the bit used in the type field of reset packet.

TRST 10* is a toggle function in order to map PDL

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Started work on definition of Data_SIZE

Data_size is important for the tool to know how to group the bits in the channel selected. Based on PEDDA design.

To describe how the tool would like the data packetized based on the number of channels.

Steve – sees the data_size as defining the number of bits in a sub group

We have already defined “group”. This is smaller than group. So wanting to call it a “sub-group”

This definition might cause problems elsewhere, may be able to provide a presentation next week.

Steve –Having data_size like this eliminates the need to have a bitwise crossbar . Don’t have a bit wise round robin.

Bob – data_size will change depending on the given implementation. Not a static

Steve- would be static because it is in the BSDL. Static for a specific design

CJ – can have multiple PEDDAs with multiple packet maps

Steve – this configuration would be fixed for a specific PEDDA

Bob – not sure that makes sense.

CJ –feels both points of view are valid.

CJ – can have a data_size that is tied to a scan group

Bob – if we want to access a configuration chain to program something and then access 16 scan chains, those would be 2 different groups. Would have a Data_size 1 and interleave 1 and then you would want a Data_size16 and interleave by 1 for other chain. This would be too much overhead for configuration chain.

CJ – nothing preventing you from having PEDDA name be the same and calling out different scan_groups with different data_size. Not clear in the spec. Need to add some clarification for it.

Steve showed an example for Data_size that he made to illustrate the issues he wants to bring up.

Bob – channel_select word has to match the number of chains in your group.

CJ – for each mode of operation of the circuit you have you need to have a data_size,interleave, and scan_group. Need to describe the configuration

CJ – need the packetizer to know how to group the data.

Steve will need to resume presentation next week to discuss some further issues he sees with the current wording for data_size

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

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Motion to Adjourn: Jon
Seconded: Frans
Meeting adjourned: 12:06pm EST

Next Meeting:
Jan 12th, 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

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>

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Audio Connection

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