Date - 07/21/2014

Attendees: CJ Clark, Adam Ley, Bill Tuthill, Bob Gottlieb, Brian Turmelle, Craig Stephan, Dharma Konda, Ismed Hartanto, Jon Colburn, Josh Ferry, Steve Sunter, Tapan J Chakraborty, Teresa McLaurin,

Absent with Excuse : Frans de Jong, **Not Present for ¾ of meeting**:

Missing: Bill Huott, Carol Pyron, Jim Wilson, Kent Ng, Kevin Gorman, Tom Wayers, Heiko Ehrenburg, Dave Armstrong, Roger Sowada, Dwayne Burek, Zahi Abuhanmdeh, Mike Ricchetti, Philippe Lebourg, Saman Adham, Gurgen Harutyunyan, Gobinathan Athimolom, Marc Hutner,

Agenda:

- 1) Patent Slide
- 2) Discuss review of Clause 7 in draft V29
 - a. Review of changes in 7.2
 - b. Review of 7.3, 7.4 and 7.5
 - c. 7.6 and 7.7 are incomplete
- 3) Old business
 - a. Call for old business
- 4) New Business
- 5) Adjourn

Meeting Called to order at 11:00 am EDT

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 Clause 7 in draft v29

Section 7.2

Updated syntax of HSTAP attributes.

Phy_list

Added Encoding, DataRate and Latency

Minmax is min and max of data rate or multiple is a multiple of

sysclk

Bob – what is latency? From RX to TX?

CJ – time it takes to respond from receiving something on receive side and being able to transmit on the transmit side.

Example – XOFF flow control. How much latency is there before receiver can generate XOFF character

Bob – and data would have to be buffered to handle the latency?

CJ – it's the buffering that is introducing the latency

When you string the HTAPS together you would get delays on each one. So this gives the ATE an idea of when data will come back.

Multiple of sysclock uses * to denote multiple.

Examples added for the new fields

Craig – does the latency need a zero after the 1before the E?

CJ – thinks the notation is integer period integer so yes. 1.0E-10

Steve – is that serial data rate?

CJ - ves

CJ – HSTAP attribute. So it is the data rate going to the HSTAP.

Can add some text if that isn't clear. Will add some description.

Steve - Serial HSTAP

CJ – from the perspective of the ATE

Bob – might need more than one latency keyword

7.4

Control Characters

7.5

Compliance Attribute

Attribute lets you describe what port or signals can be used to put the chip into p1149.10 compliance

Grammar is mirror of what is in 1149.1 compliance pin

Pattern list

Could specify the SPI-Enable pin in compliance attribute section

7.6

Scan Channel Association Attribute

Needs to add description and syntax

7.7

Alignment Marker Attribute

Needed for Concurrent serial channels. (Channel Bonding)

Used to retime the slightly out of phase data across multiple receivers.

Allow each of the receivers to align themselves to each other.

Section needs Description and Specification

Section 8 – PDL

Needs to be written

Section 9 – Compliance Verification

Describes how to test for a complainant Interface

Needs to be written

CJ – do we want to change the meeting date to Tuesday?

Adam – would prefer a Tuesday date

Ismed – either day is ok

IEEE 1149.10 High Speed JTAG Working Group Minutes

Call for Old Business
No Old Business

Call for New Business
No new business

Please use reflector to review what is in the Draft.

Please send comments to reflector.

Anything that needs to be updated or you would like discussed

Motion to Adjourn: Bob Seconded: Brian

Meeting adjourned: 11:42 am EDT

Next Meeting:

August 4th, 2014 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.

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

IEEE 1149.10 High Speed JTAG Working Group Minutes
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