

**Date – 04/11/2016**

**Attendees:** CJ Clark, Bill Tuthill, Brian Turmelle, Craig Stephan, Dharma Konda, Heiko Ehrenburg, Gobinathan Athimolom, Gurgen Harutyunyan, Ismed Hartanto, Jon Colburn, Josh Ferry, Marc Hutner, Mike Ricchetti, Tapan J Chakraborty,

**Absent with Excuse:** Bob Gottlieb,

**Missing:** Bill Huott, Carol Pyron, Jim Wilson, Kent Ng, Kevin Gorman, Tom Wayers, Dave Armstrong, Roger Sowada, Zahi Abuhanmdeh, Teresa McLaurin, Philippe Lebourg, John Braden, Saman Adham, Frans de Jong, JF Cote, Dwayne Burek, Steve Sunter, Adam Ley,

**Agenda:**

- 1) Patent Slides
- 2) Ballot invite stats (3 more people since last week), closing tomorrow
- 3) Need TTSC approval to go to ballot
  - a. Wait or get approval in special meeting
- 4) Need permission to add a MAX\_FRAMES\_1149\_10 keyword to HSTAP. On half-duplex interfaces there is a maximum number of packet frames that the interface can receive (due to internal buffer sizes)

**Meeting Called to order at 11:05 am EDT**

**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 responses noted.

Ballot invite stat

Group is ok with ballot list.

No one wanted to extend the ballot to a longer period.

Need TTSC approval to go to ballot

Next meeting May 11<sup>th</sup>

Do we wait the month for the meeting to occur to get approval OR

Do we petition to get a special meeting?

If we go 2 weeks sooner, it would be two weeks sooner and also there would not be any other TTSC topics to get in the way of deciding on approval during TTSC meeting.

Group seems to be in favor of petitioning for the earlier meeting.

IEEE 1149.10 High Speed JTAG Working Group Minutes

Add a MAX\_FRAMES\_1149\_10 Keyword to HSTAP?

Indicates maximum number of packet frames that you can send at one time before you have to turn the bus around and look for data to come back.

No objections to adding Key word.

Motion – Mike motions to go to ballot with draft V90 - draft v89 with the added support for the MAX\_FRAMES\_1149\_10 keyword for half-duplex support.

Seconded – Brian

Yes – 10

Bill T.	Gobinatihan A.	Jon C.	Tapan C.
Brian T.	Gurgen H.	Josh F.	
Dharma K.	Heiko E.	Mike R.	

No – 0

Abstain – 0

Motion passes

New Business – No new Business

**Motion to Adjourn – Bill**

**Seconded – Brian**

**Meeting adjourned: 11:58am EDT**

**Next Meeting:**

April 18th, 2016 11:00am

*Motion Summary*

*1 motion made*

*Motion by Mike to go to Ballot with draft v90*

*10Yes / 0 No / 0 Abstain*

*Motion passes*

*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.*~~

## IEEE 1149.10 High Speed JTAG Working Group Minutes

***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>

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