

## IEEE 1149.10 High Speed JTAG Working Group Minutes

### **Date – 01/11/2016**

**Attendees:** CJ Clark, Bill Tuthill, Bob Gottlieb, Brian Turmelle, Craig Stephan, Dharma Konda, Heiko Ehrenburg, Gobinathan Athimolom, Gurgen Harutyunyan, JF Cote, Jon Colburn, Mike Ricchetti, Steve Sunter,

**Absent with Excuse:** Josh Ferry, Marc Hutner, Tapan J Chakraborty,

**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, Dwayne Burek, Saman Adham, Adam Ley, Ismed Hartanto , Frans de Jong,

### **Agenda:**

- 1) Patent Slides
- 2) Review of draft v81
  - a) Still need to complete Annex
- 3) New Business
- 4) Adjourn

### **Meeting Called to order at 11:05 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 responses noted.

Review of draft v81

Went over changes made by Craig.

Asked for comments on draft 81.

No one spoke up

No motion made for accepting version 80.

Possible vote to accept v81 next week.

Call for New Business.

Clarification questions from JF

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Clocking questions based on emails from Steve on reflector

Discussed clocking for scan channel associations.

Packet formatting tool can determine IDLE packets from this information.  
Schedule to MEC.

By March need to get towards Ballot at that point

Like to finish the last clause before going to MEC.

Get approval in September to meet the 2016 deadline

Will need to shortly decided if we need PAR extension or go to ballot

Motion to Adjourn – JF

Seconded – Craig

**Meeting adjourned: 11:55 am EST**

**Next Meeting:**

January 18<sup>th</sup> 2016 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

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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