

IEEE 802.3cg 10SPE TF/802.3 10BPE SG AdHoc meeting

January 17 2018

Prepared by Peter Jones

Proposed Agenda:

1. Agenda/Admin Peter Jones

Presentations posted at:

<http://www.ieee802.org/3/cg/public/adhoc/index.html>

Agenda/Admin Peter Jones:

Meeting began at 7:05am PT.

1. Reviewed the Attendance information related to the ad hoc(s).
2. Displayed pre & post-par slide deck, reviewed patent policy, participation conditions.
<https://development.standards.ieee.org/myproject/Public/mytools/mob/preparslides.pdf> (10BP)
<https://development.standards.ieee.org/myproject/Public/mytools/mob/slideset.ppt> (10SPE)
<https://mentor.ieee.org/802-ec/dcn/17/ec-17-0093-05-OPNP-ieee-802-participation-slide-ppt.ppt>
3. Made potentially essential patents call for 802.3cg – 10SPE
No-one responded.
4. Reminded participants to indicate full names and employer/affiliations correctly for the meeting minutes.
5. Did not ask for approval of Jan 03 minutes
6. Discussed agenda for today. Chair's goal is to get all material presented, address questions of clarification, and mostly push pre-Geneva technical discussions to the reflector.

Presentations/Discussion.

Start and Administrative

- Note new PATCOM slide set published and incorporated for "post-par" work -par (i.e., 802.3cg)

SPE Chair's Comments George Zimmerman

- AdHoc today
 - Lots of work to get through.
 - Questions of clarification only please, and take technical discussion to reflector etc;.
- Geneva interim
 - Timing in Geneva, times for arrival/departure fixed, time will be carefully managed.

Proposed PAR, CSDs and Objectives Changes

Peter Jones **Cisco**
George Zimmerman **CME(*)**

- Slides presented and discussed.
- Number of nodes for multidrop/mixing segment? Question about presentation of channel characteristics for “15 nodes” vs “8 nodes”.
- Inline connectors for multidrop mixing segment. Contributions needed. Attendee encouraged to bring contributions into Geneva.
- Changes/issues/concerns to be discussed on & off the reflector before Geneva.

Follow-up to New Preamble Proposal for 10BASE-T1S

Jay Cordaro, Ahmad Chini, Mehmet Tazebay **Broadcom**

- Impact to BER and complexity?, presenter assert that the impact is minor.
- Digital only implementation? presenter asserts this is reasonable.
- 802.3br support for multi-drop? presenter notes evolution from previously presented proposal.
- BER re preamble only vs entire system? Presenter discusses goals.

A Multidrop Channel Access supporting MII Interface for 10BASE-T1S

Ahmad Chini, Mehmet Tazebay **Broadcom**

- Goal is to enable a physical device with an MII to plug into a new PHY and use multidrop.
- “standard” and “”physical part/product” are not the same thing.
- RS changes are within scope for a PHY.
- Requirement for assigned master to function correctly? Not required, more detail underneath this. PHY uses knowledge of packet length (1-2 packets buffer in PHY) to request time.
- Carrier Sense for flow control? Does this cause issues? PHY buffers at least a full packet.

PSD Mask and Updated EMC

Peirgiorgio Beruto, Gian Marco Bo **Canova Tech**

- Question about 30dbm noise level? Comes from BCI severity class 4 – see slide 11. Needs further discussion.

Optional “Engineered” Power for 10BASE-T1S Multi-drop Ethernet

Dayin Xu, David Brandt Rockwell Automation

- Attendee thanks the presenter for the contribution.
- Guidance for what is needed to be defined in our standard to have a successful standard.

PLCA worst case arbitration latencies Alexander Meier Volkswagen

- What is effect of only segmentation without priority? Presenter states that without considering priority, segmentation does not resolve the issue.
- How much of this is 802.1 vs 802.3? Craig Gunther expresses and offers to work with presenter to develop it further.
- Question about slide 5 numbers for worst case latency calculations, details to be shared using reflector.
- Where should “scheduling” be done, in PHY or MAC? Presenter believes better in the MAC.
- Need to review the proposed system to work out where it maps into the 802 architecture. What should be in 802.1, what in the MAC, and what in the PHY/RS

Meeting closed ~ 9:05am PT

Attendees (from Webex + emails)

Name	Employer	Affiliation	Attended 01/17
Ahmad Chini	Broadcom	Broadcom	y
Alexander Meier	Volkswagen	Volkswagen	y
Amrik Bains	Cisco	Cisco	y
Aniruddha Phatak	Renesas	Renesas	y
Antonio Orzelli	Canova Tech	Canova Tech	y
Brett McClellan	Marvell	Marvell	y
Brian Franchuck	Emerson	Emerson	y
Ching-Yao Su	Realtek	Realtek	y
Claude Gauthier	OmniPHY	OmniPHY	y
Conrad Zerna	Fraunhofer IIS	Fraunhofer IIS	y
Craig Gunther	Harmen	Harmen	y
Dale Borgeson	ED Engineering	Emerson	y
Dave Hess	CordData	CordData	y
David Brandt	Rockwell Automation	Rockwell Automation	y
David Hoglund	Johnson Controls	Johnson Controls	y
David Law	HPE	HPE	y
Dayin Xu	Rockwell Automation	Rockwell Automation	y

Dieter Schicketanz	Consultant, Reutlingen University	Consultant, Reutlingen University	y
Eric DiBiaso	TE	TE	y
Fatma Caliskan	Microchip	Microchip	y
Gary Irwin	CommScope	CommScope	y
George Zimmerman	CME Consulting	ADI, Aquantia, BMW, Cisco, Commscope	y
Gergely Huszak	Kone	Kone	y
Harald Zweck	Infineon	Infineon	y
Hongming An	Microchip	Microchip	y
James Withey	Fluke	Fluke	y
Jay Cordaro	Broadcom	Broadcom	y
Jean Picard	TI	TI	y
Jens Gottron	Siemens	Siemens	y
Jim Bauer	Marvell	Marvell	y
Jim Bird	TI	TI	y
Kirsten Matheus	BMW	BMW	y
Larry Matola	Delphi	Delphi	y
Laura Schweitz	Turck	Turck	y
Ludwig Winkel	Siemens	Siemens	y
Mario Traeber	Intel	Intel	y
Masood Shariff	CommScope	CommScope	y
Matthias Fritsche	HARTING Electronics GmbH	HARTING Electronics GmbH	y
Matthias Jaenecke	Yazaki	Yazaki	y
Mick McCarthy	Analog Devices	Analog Devices	y
Oisín Ó Cuanacháin	Analog Devices	Analog Devices	y
Olaf Krieger	Volkswagen	Volkswagen	y
Peter Jones	Cisco	Cisco	y
Phillip Brownele	TDK	TDK	y
Piergiorgio Beruto	Canova Tech	Canova Tech	y
Steffen Graber	Pepperl+Fuchs	Pepperl+Fuchs	y
Sujan Pandey	NXP	NXP	y
Tim Baggett	Microchip	Microchip	y
Tom Mitcheltree	US Conec	US Conec	y
Valerie Maguire	Siemon	Siemon	y
Victor Berglund	MicroSemi	MicroSemi	y
Attendee count			51