
**IEEE 802.3ba Copper “Cu” Sub-Task Force
Agenda and General Information
San Francisco, CA – July 2009**

**Cu Sub-Task Force Chair
Chris Di Minico**

**Editor(s) – Ryan Latchman
Arthur Marris**

Cu Sub-Task Force

- **Cu Sub-Task Force Chair and Editor for 40GBASE-CR4 and 100GBASE-CR10, clause 85, 85A**
 - **Chris DiMinico**
- **Editor, 40 Gb/s (XLAUI) and 100 Gb/s (CAUI) interfaces, clause 83A,83B**
 - **Ryan Latchman**
- **Editor, Clauses 69, 73, 74, 84, Annexes 69A, 69B**
 - **Arthur Marris**

Agenda

- **Administrative**
 - **Welcome and Introductions**
 - **Ground Rules**
 - **Appoint recording secretary**
 - **Patent policy and other guidelines**
- **New business**
 - **Comment resolution IEEE Draft P802.3ba/D2.0**
 - **Clauses 85, 85A, 83A,83B and 69,69A,69B,84**
 - **Review presentations addressing comments**
 - **Output documents**
- **Closing**

Ground Rules

- **Based upon IEEE 802.3 Rules**
 - **Foundation based upon Robert's Rules of Order**
 - **Anyone in the room may speak**
 - **Anyone in the room may vote**
- **RESPECT... give it, get it**
- **NO product pitches**
- **NO corporate pitches**
- **NO prices!!!**
- **This includes costs, ASPs, etc. no matter what the currency**
- **NO restrictive notices**

- **Please use the microphone to address the Sub-Task Force**

Participants, Patents, and Duty to Inform

All participants in this meeting have certain obligations under the IEEE-SA Patent Policy. Participants:

- “Shall inform the IEEE (or cause the IEEE to be informed)” of the identity of each “holder of any potential Essential Patent Claims of which they are personally aware” if the claims are owned or controlled by the participant or the entity the participant is from, employed by, or otherwise represents
 - “Personal awareness” means that the participant “is personally aware that the holder may have a potential Essential Patent Claim,” even if the participant is not personally aware of the specific patents or patent claims
- “Should inform the IEEE (or cause the IEEE to be informed)” of the identity of “any other holders of such potential Essential Patent Claims” (that is, third parties that are not affiliated with the participant, with the participant’s employer, or with anyone else that the participant is from or otherwise represents)
- The above does not apply if the patent claim is already the subject of an Accepted Letter of Assurance that applies to the proposed standard(s) under consideration by this group

Quoted text excerpted from IEEE-SA Standards Board Bylaws subclause 6.2

- Early identification of holders of potential Essential Patent Claims is strongly encouraged
- No duty to perform a patent search

Patent Related Links

All participants should be familiar with their obligations under the IEEE-SA Policies & Procedures for standards development.

Patent Policy is stated in these sources:

IEEE-SA Standards Boards Bylaws

<http://standards.ieee.org/guides/bylaws/sect6-7.html#6>

IEEE-SA Standards Board Operations Manual

<http://standards.ieee.org/guides/opman/sect6.html#6.3>

Material about the patent policy is available at

<http://standards.ieee.org/board/pat/pat-material.html>

If you have questions, contact the IEEE-SA Standards Board Patent Committee Administrator at patcom@ieee.org or visit <http://standards.ieee.org/board/pat/index.html>

This slide set is available at <http://standards.ieee.org/board/pat/pat-slideset.ppt>

Call for Potentially Essential Patents

- **If anyone in this meeting is personally aware of the holder of any patent claims that are potentially essential to implementation of the proposed standard(s) under consideration by this group and that are not already the subject of an Accepted Letter of Assurance:**
 - **Either speak up now or**
 - **Provide the chair of this group with the identity of the holder(s) of any and all such claims as soon as possible or**
 - **Cause an LOA to be submitted**

Other Guidelines for IEEE WG Meetings

- All IEEE-SA standards meetings shall be conducted in compliance with all applicable laws, including antitrust and competition laws.
 - Don't discuss the interpretation, validity, or essentiality of patents/patent claims.
 - Don't discuss specific license rates, terms, or conditions.
 - Relative costs, including licensing costs of essential patent claims, of different technical approaches may be discussed in standards development meetings.
 - Technical considerations remain primary focus
 - Don't discuss or engage in the fixing of product prices, allocation of customers, or division of sales markets.
 - Don't discuss the status or substance of ongoing or threatened litigation.
 - Don't be silent if inappropriate topics are discussed ... do formally object.

See *IEEE-SA Standards Board Operations Manual*, clause 5.3.10 and "Promoting Competition and Innovation: What You Need to Know about the IEEE Standards Association's Antitrust and Competition Policy" for more details.

Agenda Tuesday and Wednesday

- **Schedule (Start: Tuesday morning 10:00 AM, End: consistent with completion on Wednesday close of business; Start Wednesday: End: TBD)**
 1. **Clause 85, 40GBASE-CR4 and 100GBASE-CR10**
 2. **Backplane Clauses 69, 74, 84, Annexes 69A, 69B**
 3. **Annex 83A, 83B 40 Gb/s (XLAUI) and 100 Gb/s (CAUI) interfaces**
- **Priority**
 - **Review T/TRs for each clause**
- **Comment status**

Clause/Annexes	Editor	TR	T	ER	E	Total
85	Chris DiMinico	56	42	10	11	119
69, 74, 84, 69A, 69B	Aurthur Marris	4	1	0	6	11
83A,83B	Ryan Latchman	24	4	10	4	42
		84	47	20	21	172

Key items clause 85

Insertion loss allocation between PCB trace loss, connector, and cable

- Possible impact to cable reach objective; use comment#96 proposed remedy (comment#96 is not closed); 7 m guidance in gustlin_04_0709.pdf

IL cable assembly fit

- Difference in backplane versus cable assembly IL- polynomial fit proposed

Cable assembly specifications

- IL and FEXT

TP2 and TP3 specification refinements

Return loss

- Consideration for RL budget related to ILD and power penalty IL allocation

Key items Annexes 83A, 83B

- **Jitter bandwidth**
- **Resolving any differences between PPI and nAUI (connector loss, S parameter etc.)**
- **Lane speed descriptions and designations**
- **Inclusion of shall statements and PICS entries**
- **Rise and fall times**
- **Consideration for PPI specifications**
- **Use of MCB and HCB**

Key items Annexes 69,69A,69B,84

- 69B-** frequency range of specified parameters
- 69 -** architecture diagrams

Presentations in support of comments

[Comment#s 165, 170, 188, 189, 200, 202, 213:
Additional Concerns on CR4/CR10 Specifications](#)
9-Jul-09
260K

Ali Ghiasi
Vivek Telang
Magesh Valliappan

Broadcom

[Comment #182 - XLAUI / CAUI Experimental
Results](#)
9-July-09
533K

Ali Ghiasi

Broadcom

[Comment #138, 139 - Insertion Loss budget for
40/100GBASE-CR4/CR10](#)
9-July-09
260K

Adam Healey

LSI

[Comment #127, 137, 141 - Noise Considerations
for 40/100GBASE-CR4/CR10](#)
9-July-09
189K

Adam Healey

LSI

[Comment #125, 132, 135, 140, 142 - Transmitter
Requirements for 40/100GBASE-CR4/CR10](#)
9-July-09
xxK

Adam Healey

LSI

[Accompanying Text for healey_01_0709.pdf](#)
9-July-09
126K

Presentations in support of comments

[Comment#96: 802.3ba CR4/10, SR4/SR10 loss budgets](#)

8-Jul-09
260K

Marco Mazzini
Mark Gustlin
Lin Shen
Gary Nicholl
Pirooz
Tooyserkani
John
D'Ambrosia

Cisco
Cisco
Cisco
Cisco
Cisco
Force10
Networks

Comment #338 - 341 - Supporting
Material
9-July-09
xxK

Tom Palkert
Xilinx / Luxtera

[40GBASE-CR4 and 100GBASE-CR10 cable assembly measurement models](#)

12-July-09
164K

Chris DiMinico
MC
Communications

[40GBASE-CR4 and 100GBASE-CR10 802.3ba Draft 2.1 cable assembly specifications](#)

12-July-09
38K