Copper “Cu” Sub-Task Force Closing Report
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
  – Chris DiMinico

• Editor, 40 Gb/s (XLAUI) and 100 Gb/s (CAUI) interfaces, Annex 83A, 83B
  – Ryan Latchman

• Editor, Clauses 69, 74, 84, Annexes 69A, 69B
  – Arthur Marris
Comment resolution - Tuesday and Wednesday

- Clause 85, 40GBASE-CR4 and 100GBASE-CR10
- Backplane Clauses 69, 73, 74, 84, Annexes 69A, 69B
- Annex 83A, 83B 40 Gb/s (XLAUI) and 100 Gb/s (CAUI) interfaces

- Resolved all ER/T/TR
- Editorial responses posted

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<th>Clause/Annexes</th>
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5 late comments considered
Clause 00 comment#96 related to clause 85

- Summary comment#96 …change the reach objective for CR4/10 to 7m (from 10m) to allow for more loss be assigned to the PCB……

- Use gustlin_04_0709 as reach objective guidance and subsequent input for insertion loss allocation.
  - Change the reach objective for CR4/10 to 7m (from 10m) to allow for more loss to be assigned to the PCB, keeping constant the channel loss budget (26.3dB). Change clause 85A.4 from 4.74dB total loss for tx/rx host boards to 5dB

- Comment resolution: The link loss budget accommodates at least 7m reach and an IL of 6.5 dB between TP0-TP2 with TP0-TP5 channel loss budget 24.44 dB
Resolved key items to 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
Resolved key items Annexes 69, 69A, 69B, 84

- 69B - frequency range of specified parameters
- 69 - architecture diagrams
Resolved key items Annexes 83A,83B

- 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