

## IEEE P802.3bs 400 Gb/s Ethernet Task Force Informal Communication

Source: IEEE P802.3bs 400 Gb/s Ethernet Task Force<sup>1</sup>

To: Nathan Tracy      Technical Committee Chair, Optical Internetworking Forum  
[ntracy@te.com](mailto:ntracy@te.com)

Paul Nikolich      Chair, IEEE 802 LMSC  
[p.nikolich@ieee.org](mailto:p.nikolich@ieee.org)

David Law      Chair, IEEE 802.3 Ethernet Working Group  
[dlaw@hp.com](mailto:dlaw@hp.com)

CC: Adam Healey      Vice-chair, IEEE 802.3 Ethernet Working Group  
[adam.healey@avagotech.com](mailto:adam.healey@avagotech.com)

Pete Anslow      Secretary, IEEE 802.3 Ethernet Working Group  
[panslow@ciena.com](mailto:panslow@ciena.com)

From: John D'Ambrosia      Chair, IEEE P802.3bs 400 Gb/s Ethernet Task Force  
[John\\_DAmbrosia@dell.com](mailto:John_DAmbrosia@dell.com)

Subject: Informal communication to OIF on progress in IEEE P802.3bs 400 Gb/s Ethernet Task Force

Approval: Agreed to at IEEE P802.3bs 400 Gb/s Ethernet Task Force meeting, Atlanta, GA, 16 January 2015

Dear Mr. Tracy and members of OIF,

Thank you for your liaison letter informing us of the progress on OIF CEI-56G projects and providing us the latest copies of the drafts. As you may know, the P802.3bs Task Force is still in the process of choosing solutions for the CDAUI-8, the optional 8-lane attachment unit interfaces for chip-to-chip and chip-to-module applications.

For your information, the baseline proposals adopted so far in the P802.3bs project include the following:

Baseline adopted in San Diego meeting (July 2014):

- adopt the baseline for the CDMII logical interface as shown in slide 5 of [gustlin\\_3bs\\_03\\_0714.pdf](#)

Baselines adopted in Kanata, Canada meeting (September 2014):

- adopt 16 x 25Gb/s and 8 x 50Gb/s as the basis for the lane rates for any optional C2C and C2M electrical interfaces

---

<sup>1</sup> This document solely represents the views of the IEEE P802.3bs 400 Gb/s Ethernet Task Force, and does not necessarily represent a position of the IEEE, the IEEE Standards Association, IEEE 802 or the IEEE 802.3 Working Group

- adopt the P802.3bm C2C and C2M specifications with current values (except that the BER requirement is TBD) as a baseline draft for the 16 x 25Gb/s electrical interfaces

Baselines adopted in San Antonio, TX meeting (November, 2014):

- adopt the proposal in slides 6 to 16 in [king\\_3bs\\_02a\\_1114.pdf](#) as the baseline proposal for the P802.3bs objective to “provide physical layer specifications which support link distances of at least 100 m of MMF” (400GBASE-SR16)

Baselines adopted in Atlanta, GA meeting (January 2015):

- adopt slides 4 and 8 from [dambrosia\\_02b\\_0115.pdf](#) as baseline architecture
- adopt the EEE baseline proposed in [marris\\_3bs\\_01\\_0115.pdf](#) slide 7
- adopt slide 10 of [trowbridge\\_3bs\\_01a\\_0115.pdf](#) as the baseline for the OTN mapping reference point
- adopt the following equation as the informative insertion loss equation for CDAU-8 chip-to-chip electrical I/O interface:  $IL \leq \{1.083 + 2.543 \text{ SQROOT}(f) + 0.761f\}$   $0.01 \leq f \leq 28.05 \text{ GHz}$  dB
- adopt the following equation as the informative insertion loss equation for CDAUI-8 chip-to-module electrical I/O interface:  $IL \leq \{1.076(0.075 + 0.537 \text{ SQROOT}(f) + 0.566f)\}$   $0.01 \leq f \leq 28.05 \text{ GHz}$  dB

Action items have been identified to be worked prior to the next meeting with a view toward being able to adopt remaining logic (e.g., PCS, FEC), electrical, and optical interface baselines.

Information from our most recent meeting is available at:

[http://ieee802.org/3/bs/public/15\\_01/index.shtml](http://ieee802.org/3/bs/public/15_01/index.shtml)

Sincerely,

John D'Ambrosia  
Chair, IEEE P802.3bs 400 Gb/s Ethernet Task Force  
[John\\_DAmbrosia@dell.com](mailto:John_DAmbrosia@dell.com)