802.3 Closing Report

IEEE 802.3bm

40 Gb/s and 100 Gb/s Fiber Optic Task Force

Dan Dove Applied Micro Geneva, CH – 18 July 2013

Overview

- July Plenary Meeting highlights
 - 111 People signed the attendance sheet
 - 24 Presentations from various contributors
 - 2¹/₂ days of meetings
- Baseline Proposals
 - A series of votes on our SMF > 500m objective were taken. No PMD was able to achieve sufficient consensus to be adopted.
- Working Documents
 - An Informal Communication to OIF was approved to address CEI-VSR-28G and CEI-28G-MR <u>http://www.ieee802.org/3/bm/public/jul13/IC_802p3bm_oif_0713-v1p0.pdf</u>
- Motions & Straw Polls
 - 6 Motions and 1 Straw Poll was held

Task Force Motions & Polls

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Housekeeping Motions

AN US AN

Move that IEEE P802.3bm Task Force approve the text in IC_802p3bm_oif_0713-v1p0.pdf, with editorial license granted to the Chair (or his appointed agent) as an informal communication to OIF.

Moved: Michael Ressl Seconded: Tom Palkert

> 50%

Y: 13 N: 0 A: 2

Passes

Move to:

 Adopt proposed responses to remaining "noncontroversial" comments as indicated in slide 13 of anslow_02_0713_optx.pdf

Generate Draft 1.1 for TF recirculation from Draft 1.0 and closed comments

Moved: Pete Anslow Seconded: Peter Stassar

Technical ($\geq 75\%$ required)

Y: 16 N: 0 A: 1

Passes

Motions & Discussion

Straw Poll # 1

Straw Poll: I would support adoption of this PMD to satisfy the "at least 500m SMF" objective for inclusion into Draft 1.1 (alphabetical order)

Chicago Rules (Vote for any number of them)

- CWDM: 39
- DMT: 21
- PAM8: 31
- PSM4: 53

Move to adopt draft Clause 96 based upon P802d3bm-96_DMT_02.pdf for inclusion into P802.3bm D1.1.

Moved: Toshiki Tanaka Seconded: Hideki Isono

Technical (≥ 75% required)

Y: 27 N: 51 A: 31 Fails

Move to adopt draft Clause 96 based upon P802d3bm-96_PAM8_02.pdf for inclusion into P802.3bm D1.1.

Moved: Arash Farhood Seconded: Will Bliss

Technical (≥ 75% required)

Y: 32 N: 48 A: 34 Fails

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Move to adopt draft Clause 96 based upon P802d3bm-96_CWDM_02.pdf for inclusion into P802.3bm D1.1.

Moved: Tek-Ming Shen Seconded: Zeng Li

Technical (≥ 75% required)

Y: 37 N: 55 A: 27 Fails

Move to adopt draft Clause 96 based upon P802d3bm-96_PSM4_02.pdf for inclusion into P802.3bm D1.1.

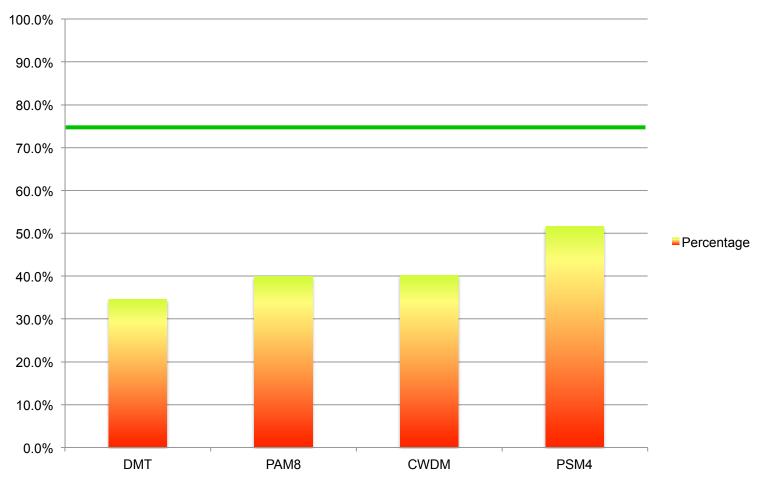
Moved: Tom Palkert Seconded: John Petrilla

Technical (≥ 75% required)

Y: 48 N: 45 A: 26 Fails

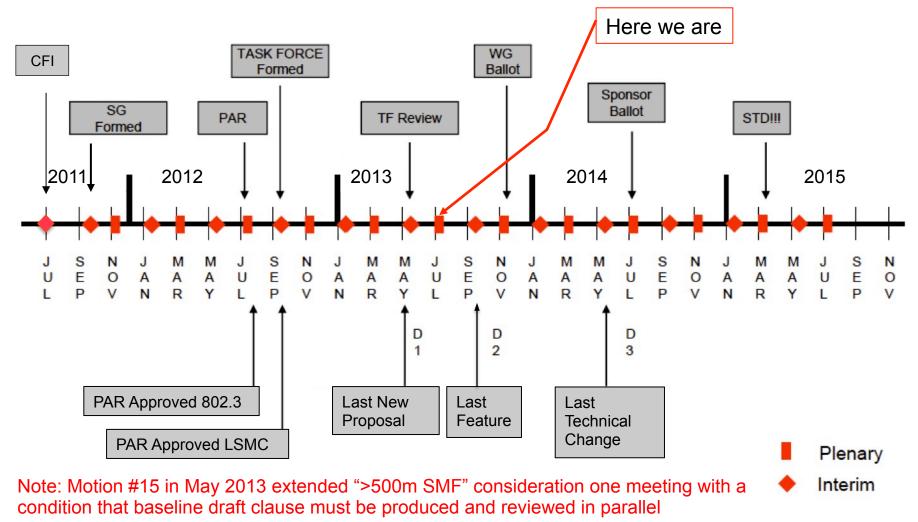
Motion To Adopt - Graphically

Motion to Adopt Baseline



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IEEE P802.3bm Next Generation 40 Gb/s and 100 Gb/s Optical Ethernet Timeline (Adopted 28th, September 2012)



IEEE 802.3 Closing Report of P802.3bm

IEEE P802.3bm Next Generation 40 Gb/s and 100 Gb/s Optical Ethernet Objectives

- ♦ Support full-duplex operation only
- ♦ Preserve the IEEE 802.3 / Ethernet frame format utilizing the IEEE
- ♦ 802.3 MAC
- ♦ Preserve minimum and maximum FrameSize of current IEEE 802.3
- \diamond standard
- ♦ Support a BER better than or equal to 10-12 at the MAC/PLS service
- \diamond interface
- ♦ Provide appropriate support for OTN
- $\diamond~$ Define re-timed 4-lane 100G PMA to PMA electrical interfaces for
- \diamond chip to chip and chip to module applications
- \diamond Define a 40 Gb/s PHY for operation over at least 40 km of SMF
- ♦ Define a 100 Gb/s PHY for operation up to at least 500 m of SMF (1)
- $\diamond~$ Define a 100 Gb/s PHY for operation up to at least 100 m of MMF
- ♦ Define a 100 Gb/s PHY for operation up to at least 20 m of MMF (1)
- Specify optional Energy Efficient Ethernet (EEE) for 40 Gb/s and 100 Gb/s operation over fiber optic cables.
- \diamond (approved by 802.3 July 2011)
- □ (approved by 802.3 November 2012)

(1) Language in the 5C responses clearly articulates that this PHY may not require a new PMD

Future Effort

- Proceed with D1.1 production and recirculation process
- Plan to request Working Group Ballot in November 2013

Thank you