

Nomenclature Selection

Kent Lusted, Intel Corporation

Mark Nowell, Cisco

Supporters

- Mike Li, Intel
- David Ofelt, Juniper
- Brad Booth, Microsoft
- Gary Nicholl, Cisco
- Adee Ran, Intel
- Dave Chalupsky, Intel
- Jon Lewis, Dell
- Steve Swanson, Corning
- Dale Murray, Lightcounting
- Rich Mellitz, Samtec
- Hai-Feng Liu, Intel
- Scott Kipp, Brocade
- Doug Coleman, Corning
- Vital Balasubramanian, Dell
- Steve Carlson, High Speed Design
- David Lewis, Lumentum
- David Malicoat, HPE
- Paul Kolesar, CommScope
- Liav Ben-Artzi, Marvell
- Andy Zambell, Amphenol FCI
- Bharat Tailor, Semtech
- Venu Balasubramonian, Marvell
- Vineet Salunke , Cisco
- Hanan Leizerovich, MultiPhy
- Kiyo Hiramoto, Oclaro
- Kohichi Tamura, Oclaro
- Tom Issenhuth, Microsoft
- Nathan Tracy, TE
- Brian Welch, Luxtera
- Rob Stone, Broadcom
- Joel Goergen, Cisco
- Upen Kareti, Cisco
- Rick Rabinovich, IXIA
- Randy Rannow, APIC Corp
- Eric Baden, Broadcom
- Chris Cole, Finisar
- David Piehler, Dell
- James Fife, eTopus Technology
- Phong Pham, USCONEC
- Derek Cassidy, ICRG and IET
- Scott Sommers, Molex
- Arthur Marris, Cadence
- Qing Xu, Belden
- Raj Hedge, Broadcom
- Jacky Chang, HPE
- Ron Muir, JAE
- Vishal Nimbark, SILABTECH
- Mike Dudek, Qlogic
- Matt Brown, APM

The Case for Nomenclature Term Change

- The use of roman numerals to identify the MAC rates associated with various interfaces worked well when the roman numerals were simple and the number of such identified interfaces were few.
- Since then, the number of interfaces and MAC rates has expanded, and many more are coming as Ethernet becomes ubiquitous
 - 2.5 Gb/s
 - 5 Gb/s
 - 50 Gb/s
 - 200 Gb/s

Discussion on the topic in the P802.3cd in Whistler

Proposal to use Arabic numeral nomenclature discussed in 50 Gb/s, 100Gb/s and 200Gb/s Ethernet Task Force in May 2016 Interim

http://www.ieee802.org/3/cd/public/May16/lusted_3cd_02b_0516.pdf

Motion #5: Move to adopt the nomenclature per lusted_3cd_02b_0516, slides 5 to 13

M: Kent Lusted

S: Dave Ofelt

Technical ($\geq 75\%$),

Y: 65 N: 9 A: 13

Results: passes

Discussion on the topic in P802.3bs

Straw poll from the Whistler meeting

Straw poll #3 in the Whistler meeting showed very strong support for keeping the naming consistent between 200 Gb/s and 400 Gb/s. In other words, if the naming for 200G is changed, the 400G names should be changed also.

Straw Poll #3

A consistent nomenclature (e.g. CCMII / CDMII or 200GMII / 400GMII, CCAUI / CDAUI or 200GAUI / 400GAUI, etc) should be selected for implementation in IEEE P802.3bs.

Yes: 55, No: 1, Abstain: 0

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Candidate non Roman numeral terms

- There was no negative feedback expressed on the proposed nomenclature candidate provided by Pete Anslow per the meeting minutes: <http://www.ieee802.org/3/400GSG/email/msg01150.html>

Candidate non Roman numeral related names

If there is agreement to change the names on page 5 it is proposed to change them to:

200GMII for the **200 Gb/s Media Independent Interface (and Extender)**

200GXS for the **200 Gb/s Extender Sublayer**

200GAUI-n for the **200 Gb/s Attachment Unit Interface**

200GAUI-4 for the **200 Gb/s four-lane Attachment Unit Interface**

200GAUI-8 for the **200 Gb/s eight-lane Attachment Unit Interface**

400GMII for the **400 Gb/s Media Independent Interface (and Extender)**

400GXS for the **400 Gb/s Extender Sublayer**

400GAUI-n for the **400 Gb/s Attachment Unit Interface**

400GAUI-8 for the **400 Gb/s eight-lane Attachment Unit Interface**

400GAUI-16 for the **400 Gb/s sixteen-lane Attachment Unit Interface**

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Motivation for consistent Arabic Numeral usage

1. Clarity of both written and verbal communication

- Outside of IEEE 802.3 WG, these are not everyday terms for everyone
- Even within IEEE 802.3 WG, simple clarity helps when multiple rates are being discussed
- Significant feedback provided over the challenge of communicating with the broad market, end use customer base
- Roman Numerals are not taught universally

2. Future proofing

- Set the precedent for the future rates which may not have “easy” Roman numeral terms
- 25 Gb/s Ethernet faced this challenge already (XXVAUI did not impress)

Summary

- Align the nomenclature in the P802.3bs project to use the same type of numerals for 200 Gb/s and 400 Gb/s
- Propose that the Task Force use the non Roman numeral names given on slide 8 of http://www.ieee802.org/3/bs/public/adhoc/tf/16_0615/anslow_3bs_01_0616_TF.pdf

THANKS!