

IEEE 802.3 Working Group November 2019 Plenary Week

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Web site: www.ieee802.org/3

IEEE 802.3 Maintenance

Maintenance closing report

http://www.ieee802.org/3/minutes/nov19/1119_maint_close_report.pdf

Activities

Review of outstanding Maintenance Requests

Considered request to IANA for additions to the IANA MAU MIB

– Discussed process forward

Approved liaison letter forwarding drafts to ISO/IEC JTC 1/SC 6 for preview

Next meeting during January 2020 interim meeting series

Full details at: <http://www.ieee802.org/3/interims/>

Web page

<http://www.ieee802.org/3/maint/index.html>

IEEE P802.3ca 25 Gb/s and 50 Gb/s Ethernet Passive Optical Networks Task Force

Task Force closing report

http://www.ieee802.org/3/minutes/nov19/1119_ca_close_report.pdf

Progress

IEEE P802.3ca D2.2 second Working Group recirculation ballot

No comments received

Approval granted to proceed to Standards Association ballot

Next steps

Conduct initial Standards Association ballot on IEEE P802.3ca D3.0

Next meeting during January 2020 interim meeting series

Full details at: <http://www.ieee802.org/3/interims/>

Web page:

<http://www.ieee802.org/3/ca/index.html>

IEEE P802.3ch Multi-Gig Automotive Ethernet PHY Task Force

Task Force closing report

http://www.ieee802.org/3/minutes/nov19/1119_ch_close_report.pdf

Progress

IEEE P802.3ch D2.3.1 third Working Group recirculation ballot

No comments received

Approval granted to proceed to Standards Association ballot

Next steps

Conduct initial Standards Association ballot on IEEE P802.3ch D3.0

Next meeting during January 2020 interim meeting series

Full details at: <http://www.ieee802.org/3/interims/>

Web page:

<http://www.ieee802.org/3/ch/index.html>

IEEE P802.3ck 100 Gb/s, 200 Gb/s, and 400 Gb/s Electrical Interfaces Task Force.

Task Force closing report

http://www.ieee802.org/3/minutes/nov19/1119_ck_close_report.pdf

Progress

Adopted 100G FEC, PCS, PMA baseline

Adopted copper cable assembly, host, and channel

Adopted Chip-to-Module reference receiver architecture

Adopted another part of Chip-to-Module baseline

Aligned CR reference receiver to KR reference receiver

Next steps

Generate D1.0 and initiate Task Force review

Next meeting during January 2020 interim meeting series

Full details at: <http://www.ieee802.org/3/interims/>

Web page:

<http://www.ieee802.org/3/ck/index.html>

IEEE P802.3cm 400 Gb/s over Multimode Fiber Task Force

Task Force closing report

http://www.ieee802.org/3/minutes/nov19/1119_cm_close_report.pdf

Progress

IEEE P802.3cm D3.1 first Standards Association recirculation ballot comment resolution

Completed response to one comment submitted, no recirculation required

Approval granted to submit IEEE P802.3cm to RevCom

Next steps

Progress IEEE-SA Standards Board approval of IEEE P802.3cm

Work of Task Force complete

Assuming IEEE-SA Standards Board approval of IEEE P802.3cm

If not IEEE P802.3cm Task Force will meet again during January 2020 interim meeting series

Full details at: <http://www.ieee802.org/3/interims/>

Web page:

<http://www.ieee802.org/3/cm/index.html>

IEEE P802.3cp Bidirectional 10 Gb/s, 25 Gb/s, and 50 Gb/s Optical Access PHYs Task Force

Task Force closing report

http://www.ieee802.org/3/minutes/nov19/1119_cp_close_report.pdf

Progress

Considered 4 contributions

Performed comment resolution on IEEE P802.3cp D1.0

Developed responses to 51 comments received

Improved wavelength plan for the “long and fast” links

Revised link loss budgets to address many comments

Next steps

Perform Task Force review of IEEE P802.3cp D1.1

Finalize 40km loss budget and wavelength plans for all speeds and budgets

Next meeting during January 2020 interim meeting series

Full details at: <http://www.ieee802.org/3/interims/>

Web page:

<http://www.ieee802.org/3/cp/index.html>

IEEE P802.3cq Power over Ethernet over 2 Pairs (Maintenance #13) Task Force

Task Force closing report

http://www.ieee802.org/3/minutes/nov19/1119_802d3cq_close_report.pdf

Progress

IEEE P802.3cq D3.1 first Standards Association recirculation ballot comment resolution

Completed response to one comment submitted

Conditional approval granted to submit IEEE P802.3cq to RevCom

Next steps

Conduct IEEE P802.3cq D3.2 second Standards Association recirculation ballot

Progress IEEE-SA Standards Board approval of IEEE P802.3cq

Next meeting is an December 2019 contingent interim teleconference

Full details at: <http://www.ieee802.org/3/interims/>

Web page:

<http://www.ieee802.org/3/cq/index.html>

IEEE P802.3cr Isolation (Maintenance #14) Task Force

Task Force closing report

http://www.ieee802.org/3/minutes/nov19/1119_cr_close_report.pdf

Progress

Performed comment resolution on IEEE P802.3cr D1.1

Developed responses to 15 comments received

Approval granted to proceed to Working Group ballot

Next steps

Conduct IEEE P802.3cr D2.0 initial Working Group ballot

Next meeting during January 2020 interim meeting series

Full details at: <http://www.ieee802.org/3/interims/>

Web page:

<http://www.ieee802.org/3/cr/index.html>

IEEE P802.3cs Increased-reach Ethernet optical subscriber access (Super-PON) Task Force

Task Force closing report

http://www.ieee802.org/3/minutes/nov19/1119_cs_close_report.pdf

Progress

Considered 3 contributions

Considerations for Link Loss

Super-PON Link Budget Analysis - Revised Fiber Loss

Super-PON PCS Options

Next steps

Continue baseline selection to satisfy the project objectives

Next meeting during January 2020 interim meeting series

Full details at: <http://www.ieee802.org/3/interims/>

Web page:

<http://www.ieee802.org/3/cs/index.html>

IEEE P802.3ct 100 Gb/s and 400 Gb/s over DWDM systems Task Force

Task Force closing report

http://www.ieee802.org/3/minutes/nov19/1119_3ct_close_report.pdf

Progress

Performed comment resolution on IEEE P802.3ct D1.0 (100 Gb/s Ethernet objective only)

Developed responses to 59 comments received

Heard 4 technical presentations related to 400 Gb/s Ethernet objective

400GBASE-ZR error vector magnitude (EVM) pass/fail criteria, 75 GHz / 100 GHz grid spacing

Progressed IEEE P802.3ct PAR split

IEEE P802.3ct PAR modification request, new scope of 100 Gb/s Operation over DWDM only

IEEE P802.3cw new PAR, scope of 400 Gb/s Operation over DWDM

Next steps

Conduct second Task Force review of IEEE P802.3ct D1.1

Progress approval of IEEE P802.3ct PAR modification request and IEEE P802.3cw PAR

Next face to face meeting during January 2020 interim meeting series

Full details at: <http://www.ieee802.org/3/interims/>

IEEE P802.3ct teleconference interims

Full details: http://www.ieee802.org/3/ct/public/tf_interim/index.html

Web page:

<http://www.ieee802.org/3/ct/index.html>

IEEE P802.3cu 100 Gb/s and 400 Gb/s over SMF at 100 Gb/s per Wavelength Task Force

Task Force closing report

http://www.ieee802.org/3/minutes/nov19/1119_cu_close_report.pdf

Progress

Performed comment resolution on IEEE P802.3cu D1.0

Developed responses to 22 comments received

7 technical contributions were made

6 Motions and 1 Straw Poll taken

Nomenclature modified for 6 km 400Gb/s PHY to be 400GBASE-LR4-6

Next steps

Perform Task Force review of IEEE P802.3cu D1.1

Request to proceed to Working Group ballot at January 2020 IEEE 802.3 interim meeting

Next meeting during January 2020 interim meeting series

Full details at: <http://www.ieee802.org/3/interims/>

Web page:

<http://www.ieee802.org/3/cu/index.html>

IEEE P802.3cv Power over Ethernet (Maintenance #15) Task Force

Task Force closing report

http://www.ieee802.org/3/minutes/nov19/1119_802d3cv_close_report.pdf

Progress

Performed comment resolution on IEEE P802.3cv D1.0

Developed responses to 15 comments received

Next steps

Perform Task Force review of IEEE P802.3cv D1.1

Continue to progress towards a technically complete draft

Next meeting during January 2020 interim meeting series

Full details at: <http://www.ieee802.org/3/interims/>

Web page:

<http://www.ieee802.org/3/cu/index.html>

IEEE 802.3 Greater than 10 Gb/s Automotive Ethernet Electrical PHYs Study Group

Study Group closing report

http://www.ieee802.org/3/minutes/nov19/1119_B10GAUTO_close_report.pdf

Progress

Continued development of PAR, CSD and Project Objectives

Presentation subjects

Additional technical feasibility of cable/connectors for > 10 Gb/s

PHY approaches for 25 Gb/s and multi-lane for > 25 Gb/s (added objectives for 50 and 100 Gb/s)

Leveraging automotive EEE technique from P802.ch “Slow Wake” with enhancements for use cases with highly asymmetric traffic for additional power reduction

Next steps

Continue development of PAR, CSD and Project Objectives

Next meeting during January 2020 interim meeting series

Full details at: <http://www.ieee802.org/3/interims/>

Web page:

<http://ieee802.org/3/B10GAUTO/index.html>

IEEE 802.3 Multi Gigabit Automotive Optical PHYs Study Group

Study Group closing report

http://www.ieee802.org/3/minutes/nov19/1119_OMEGA_close_report.pdf

Progress

Continued development of PAR, CSD and Project Objectives

Presentation subjects

Possible components that would support various rates of operation

Link budget, EEE to address asymmetric traffic loads and reliability analysis

Next steps

Continue development of PAR, CSD and Project Objectives

Next meeting during January 2020 interim meeting series

Full details at: <http://www.ieee802.org/3/interims/>

Web page:

<http://ieee802.org/3/OMEGA/index.html>

IEEE 802.3 Improving PTP Timestamping Accuracy Study Group

Study Group closing report

http://www.ieee802.org/3/minutes/nov19/1119_ITSA_close_report.pdf

Progress

IEEE P802.3cx PAR and CSD approved by IEEE 802 Executive Committee

IEEE P802.3cx PAR on January 2020 NesComagenda

Study Group extended and re-chartered until next plenary

Study Group will meet during January 2020 interim meeting series

IEEE-SA Standards Board will not consider approval of PAR until after January interim

Next steps

Continue consensus building

Next meeting during January 2020 interim meeting series

Full details at: <http://www.ieee802.org/3/interims/>

Web page:

<http://ieee802.org/3/ITSA/index.html>

IEEE 802.3 10 Mb/s Single Pair Ethernet Multidrop Enhancements Study Group

Study Group closing report

http://ieee802.org/3/minutes/nov19/1119_802d3_SPMD_close_report.pdf

Progress

Continued development of PAR, CSD and Project Objectives

Presentation subjects

Multidrop considerations, bundled Single Pair Ethernet thermal considerations

Multidrop mixing segment considerations, use cases

Next steps

Continue development of PAR, CSD and Project Objectives

Next meeting during January 2020 interim meeting series

Full details at: <http://www.ieee802.org/3/interims/>

Web page:

<http://ieee802.org/3/SPMD/index.html>

IEEE 802.3 Lower cost, short reach, optical PHYs using 100 Gb/s wavelengths call for interest

IEEE 802.3 Lower cost, short reach, optical PHYs using 100 Gb/s wavelengths call for interest closing report

http://ieee802.org/3/minutes/nov19/1119_100GSR_close_report.pdf

Study Group formation approved

IEEE 802.3 100 Gb/s wavelength Short Reach PHYs Study Group

The scope of the Study Group is to consider development of a Project Authorization Request (PAR) and Criteria for Standards Development (CSD) responses for Lower cost, short reach, optical PHY using 100 Gb/s wavelengths

First Study Group meeting during the January 2020 interim meeting series

Full details at: <http://www.ieee802.org/3/interims/>

IEEE 802.3 Hybrid (optical / electrical) automotive Ethernet data links call for interest

IEEE 802.3 Hybrid (optical / electrical) automotive Ethernet data links call for interest closing report

<http://ieee802.org/3/minutes/nov19/Hybrid%20Autmotive%20closing%20report%201119.pdf>

Consensus building meeting straw poll

Should OMEGA study group scope be broader to be able to discuss hybrid links?

Y: 30 N: 13 A: 25

Number of individuals in the room: 68

No motion was made with respect to this call for interest

IEEE 802.3 New Ethernet Applications (NEA) Ad Hoc

Closing report

http://ieee802.org/3/minutes/nov19/1119_NEA_close_report.pdf

Activities

Ethernet Bandwidth Assessment, Part II

Introduction of draft D1.0

Beyond 400 Gb/s Ethernet

Industry Consensus Beyond 400 GbE?

200 Gb/s per Lambda Optical: Why, When, and How?

Next steps

Review of draft D1.0 of Ethernet Bandwidth Assessment, Part II

Teleconferences on topics raised related to beyond 400 Gb/s Ethernet

Next meeting during January 2020 interim meeting series

Full details at: <http://www.ieee802.org/3/interims/>

Web page:

http://ieee802.org/3/ad_hoc/ngrates/index.html

IEEE 802.3 Officers, Subgroup Chairs and Vice-Chairs

IEEE 802.3 Chair: David Law <dlaw@hpe.com>

IEEE 802.3 Vice Chair: Adam Healey <adam.healey@broadcom.com>

IEEE 802.3 Secretary: Jon Lewis <jon.lewis@dell.com>

IEEE 802.3 Executive Secretary: Steve Carlson <scarlson@ieee.org>

IEEE 802.3 Treasurer: Valerie Maguire <valerie_maguire@siemon.com>

IEEE 802.3 Task Force chairs

IEEE P802.3ca 25 Gb/s and 50 Gb/s EPON: Curtis Knittle <c.knittle@cablelabs.com>

IEEE P802.3ch Multi-Gig Automotive Ethernet PHY: Steve Carlson <scarlson@ieee.org>

IEEE P802.3ck 100 Gb/s, 200 Gb/s, and 400 Gb/s Electrical Interfaces: Elizabeth Kochuparambil <edonnay@cisco.com>

IEEE P802.3cm 400 Gb/s over Multimode Fiber: Robert Lingle <rlingle@ofsoptics.com>

IEEE P802.3cp Bidirectional 10 Gb/s, 25 Gb/s and 50 Gb/s Optical Access PHYs: Frank Effenberger <frank.effenberger@huawei.com>

IEEE P802.3cq Power over Ethernet over 2 Pairs (Maintenance #13) Task Force: Chad Jones <cmjones@cisco.com>

IEEE P802.3cr Isolation (Maintenance #14) Task Force: Jon Lewis <jon.lewis@dell.com>

IEEE P802.3cs Increased-reach Ethernet optical subscriber access (Super-PON): Claudio DeSanti <cdssdc@google.com>

IEEE P802.3ct 100 Gb/s and 400 Gb/s over DWDM systems: John D'Ambrosia <jdambrosia@ieee.org>

IEEE P802.3cu 100 Gb/s and 400 Gb/s over SMF at 100 Gb/s per Wavelength: Mark Nowell <mnowell@cisco.com>

IEEE P802.3cv Power over Ethernet (Maintenance #15) Task Force: Chad Jones <cmjones@cisco.com>

IEEE 802.3 Task Force vice-chairs

IEEE P802.3ca 25 Gb/s and 50 Gb/s EPON: Glen Kramer <glen.kramer@broadcom.com>

IEEE P802.3ck 100 Gb/s, 200 Gb/s, and 400 Gb/s Electrical Interfaces: Kent Lusted <kent.c.lusted@intel.com>

IEEE 802.3 Study Group chairs

IEEE 802.3 Greater than 10 Gb/s Automotive Ethernet Electrical PHYs: Steve Carlson <scarlson@ieee.org>

IEEE 802.3 Multi Gigabit Automotive PHYs Optical Study Group: Bob Grow <bob.grow@ieee.org>

IEEE 802.3 Improving PTP Timestamping Accuracy on Ethernet Interfaces Study Group: Steve Gorshe <steve.gorshe@microchip.com>

IEEE 802.3 10 Mb/s Single Pair Ethernet Multidrop Enhancements Study Group: Chad Jones <cmjones@cisco.com>

IEEE 802.3 100 Gb/s wavelength Short Reach PHYs Study Group (acting): Robert Lingle <rlingle@ofsoptics.com>

Working Group information

IEEE 802.3 Web site (presentations, minutes, reflector subscription, etc.)

<http://www.ieee802.org/3>

Interim TF and SG meeting details posted on web site

<http://www.ieee802.org/3/interims/index.html>

Announced so far, please check above URL for up to date information

IEEE P802.3cq contingent teleconference interim

12th December 2019

IEEE 802.3 Interim meeting series

20th through 24th January 2020, Geneva, Switzerland

IEEE 802 plenary meeting series

16th through 19th March 2020, Atlanta, GA, USA