

IEEE 802.3 Working Group November 2019 Plenary Week

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Web site: www.ieee802.org/3

Current IEEE 802.3 activities

IEEE 802.3 Task Forces

- IEEE P802.3ca 25 Gb/s and 50 Gb/s EPON
- IEEE P802.3ch Multi-Gig Automotive Ethernet PHY
- IEEE P802.3ck 100 Gb/s, 200 Gb/s, and 400 Gb/s Electrical Interfaces
- IEEE P802.3cm 400 Gb/s over Multimode Fiber
- IEEE P802.3cp Bidirectional 10 Gb/s, 25 Gb/s and 50 Gb/s Optical Access PHYs
- IEEE P802.3cq Power over Ethernet over 2 Pairs (Maintenance #13) Task Force
- IEEE P802.3cr Isolation (Maintenance #14) Task Force
- IEEE P802.3cs Increased-reach Ethernet optical subscriber access (Super-PON)
- IEEE P802.3ct 100 Gb/s and 400 Gb/s over DWDM systems
- IEEE P802.3cu 100 Gb/s and 400 Gb/s over SMF at 100 Gb/s per Wavelength
- IEEE P802.3cv Power over Ethernet (Maintenance #15)

IEEE 802.3 Study Group

- IEEE 802.3 Greater than 10 Gb/s Automotive Ethernet Electrical PHYs
- IEEE 802.3 Multi Gigabit Automotive Optical PHYs
- IEEE 802.3 Improving PTP Timestamping Accuracy on Ethernet Interfaces
- IEEE 802.3 10 Mb/s Single Pair Ethernet Multidrop Enhancements Study Group

IEEE 802.3 Calls for Interest

- IEEE 802.3 Lower cost, short reach optical PHYs using 100 Gb/s wavelengths
- IEEE 802.3 Hybrid (optical/electrical) automotive Ethernet data links

IEEE 802.3 Industry Connection activity

- IEEE 802.3 New Ethernet Applications Ad Hoc

IEEE 802.3 Maintenance

Meeting plan

- Consider new maintenance requests

- Review status of outstanding maintenance requests

- Consider any other maintenance business

Web page

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

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

Description

The scope of this project is to amend IEEE Std 802.3 to add physical layer specifications and management parameters for point-to-multipoint passive optical networks supporting MAC data rates of 25 Gb/s or 50 Gb/s in the downstream direction and 10 Gb/s, 25 Gb/s, or 50 Gb/s in the upstream direction, with distance and split ratios consistent with those defined in IEEE Std 802.3. It also extends the operation of Ethernet Passive Optical Networks (EPON) protocols, such as MultiPoint Control Protocol (MPCP) and Operation Administration and Management (OAM)

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

Status

Last met during the September 2019 interim meeting series

Second Working Group recirculation ballot closed successfully on 2nd October 2019

Exceeded the required 75% for consensus with no comments received

Meeting plan

Prepare for request to proceed to Standards Association ballot

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

Description

Specify additions to and appropriate modifications of IEEE Std 802.3 to add greater than 1 Gb/s Physical Layer (PHY) specifications and management parameters for media and operating conditions for applications in the automotive environment

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

Status

Last met during a October 2019 Task Force teleconference interim

Draft D2.3.1 sent out for 3rd Working Group recirculation ballot

Meeting plan

Consideration of comments received against draft D2.3.1

Prepare for request to proceed to Standards Association ballot

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

Description

This project is to specify additions to and appropriate modifications of IEEE Std 802.3 to add Physical Layer specifications and Management Parameters for 100 Gb/s, 200 Gb/s, and 400 Gb/s electrical interfaces based on 100 Gb/s signaling

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

Status

Last met during the September 2019 interim meeting series

Selecting set of baseline proposals to satisfy project objectives

Meeting plan

Continue to work on selection of a set of baseline proposals

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

Description

Define Physical Layer specifications (PHY) and management parameters for the transfer of Ethernet format frames at 400 Gb/s over fewer than 16 pairs of multimode fiber physical media

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

Status

Last met during the September 2019 interim meeting series

Draft D3.1 sent out for 1st Standards Association recirculation ballot

Meeting plan

Consideration of comments received against draft D3.1

Prepare for request to proceed to RevCom submittal

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

Description

Define physical layer specifications and management parameters for symmetric bidirectional 10 Gb/s, 25 Gb/s, and 50 Gb/s operation over single strand of single mode fiber of at least 10 km

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

Status

Last met during the September 2019 interim meeting series

Baseline proposal selection to satisfy objectives and draft development

Draft D1.0 sent out for Task Force review

Meeting plan

Continue to work on selection of a set of baseline proposals

Consideration of comments received against draft D1.0

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

Description

This project will implement editorial and technical corrections, refinements, and clarifications to Clause 33, Power over Ethernet over 2 pairs, and related portions of the standard. No new features will be added by this project.

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

Status

Last met during a September 2019 Task Force interim

Draft D3.1 sent out for 1st Standards Association recirculation ballot

Meeting plan

Consideration of comments received against draft D3.1

Prepare for request to proceed to RevCom submittal

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

Description

Replace references to the IEC 60950 series of standards (including IEC 60950-1 "Information technology equipment - Safety - Part 1: General requirements") with appropriate references to the IEC 62368 "Audio/video, information and communication technology equipment" series and make appropriate changes to the standard corresponding to the new references

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

Status

Last met during the September 2019 interim meeting series

Draft D1.1 sent out for Task Force review

Draft D1.1 also to be submitted for Working Group preview

Meeting plan

Consideration of comments received against draft D1.1

Prepare for request to proceed to Working Group ballot

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

Description

Define physical layer specifications and management parameters for optical subscriber access supporting point-to-multipoint operations using wavelength division multiplexing over an increased-reach (up to at least 50 km) passive optical network (PON)

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

Status

Last met during the September 2019 interim meeting series

Baseline proposal selection to satisfy objectives and draft development

Draft D0.3 sent out for Task Force review

Meeting plan

Continue to work on selection of a set of baseline proposals

Consideration of comments received against draft D0.3

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

Description

Define physical layer specifications and management parameters for the transfer of Ethernet format frames at 100 Gb/s and 400 Gb/s at reaches greater than 10 km over DWDM systems

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

Status

Last met during the September 2019 interim meeting series

Draft D1.0 sent out for Task Force review

Completed PAR modification request and new PAR to split project

Project split rationale:

It has become apparent that the market demands and the state of technology for 100 Gb/s Ethernet and 400 Gb/s Ethernet over DWDM systems are different, and that a faster timeline for the 100Gb/s Ethernet portion of the IEEE P802.3ct project could be achievable. As a result an IEEE P802.3ct PAR modification request, and a new IEEE P802.3cw PAR, are proposed to remove the 400 Gb/s Operation over DWDM Systems portion of the project from the IEEE P802.3ct PAR and place it in the new IEEE P802.3cw PAR.

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

Meeting plan

Consideration of comments received against draft D1.0

Continue work towards technically complete draft for working group ballot

Progress approval of modified objectives, modified CSD and NesCom submittal of PAR modification request for IEEE P802.3ct Standard for Ethernet Amendment: Physical Layers and Management Parameters for 100 Gb/s Operation over DWDM (dense wavelength division multiplexing) systems

Progress approval of objectives, CSD and NesCom submittal of PAR for IEEE P802.3cw Standard for Ethernet Amendment: Physical Layers and Management Parameters for 400 Gb/s Operation over DWDM (dense wavelength division multiplexing) systems

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

Description

Define additions to and appropriate modifications of IEEE Std 802.3 to add PHY specifications and Management Parameters for 100 Gb/s and 400 Gb/s Ethernet optical interfaces for reaches up to 10 km based on 100 Gb/s per wavelength optical signaling.

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

Status

Last met during a September 2019 Task Force interim

Draft D1.0 sent out for Task Force review

Meeting plan

Consideration of comments received against draft D1.0

Continue work towards technically complete draft for working group ballot

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

Description

Editorial and technical corrections, refinements, and clarifications to Clause 145, Power over Ethernet, and related portions of the standard. No new features will be added by this project.

Web site: <http://ieee802.org/3/cv/index.html>

Status

IEEE P802.3cv PAR approved by IEEE-SA Standards Board

Approval date 5th September 2019

First meeting during a September 2019 Task Force interim

Draft D1.0 sent out for Task Force review

Meeting plan

Consideration of comments received against draft D1.0

Continue work towards technically complete draft for working group ballot

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

Description

Develop a Project Authorization Request (PAR) and Criteria for Standards Development (CSD) responses for greater than 10 Gb/s Automotive Ethernet Electrical PHYs

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

Status

Met during the September 2019 interim meeting series

Continued development of draft objectives, CSD and PAR for proposed project

Meeting plan

Continue developing draft objectives, CSD and PAR

IEEE 802.3 Multi Gigabit Automotive Optical PHYs Study Group

Description

Develop a Project Authorization Request (PAR) and Criteria for Standards Development (CSD) responses for Multi Gigabit Automotive Optical PHYs

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

Status

First meeting during a September 2019 Study Group interim

Initial development of draft objectives, CSD and PAR

Meeting plan

Continue developing draft objectives, CSD and PAR

Additional information

The hybrid (optical/electrical) automotive Ethernet data links call for interest is seeking to extend the scope of this Study Group to include (optical/electrical) automotive Ethernet links

IEEE 802.3 Improving PTP Timestamping Accuracy Study Group

Description

Develop a Project Authorization Request (PAR) and Criteria for Standards Development (CSD) responses for high accuracy time transport for IEEE 802.3 Ethernet

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

Status

First meeting during the September 2019 interim meeting series

Completed draft objectives, CSD and PAR for proposed project

Meeting plan

Progress approval of objectives, CSD and NesCom submittal of PAR for IEEE P802.3cx Standard for Ethernet Amendment: Media Access Control (MAC) service interface and management parameters to support improved Precision Time Protocol (PTP) timestamping accuracy

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

Description

Develop a Project Authorization Request (PAR) and Criteria for Standards Development (CSD) responses for 10 Mb/s Single Pair Ethernet Multidrop Enhancements.

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

Status

First meeting during a September 2019 Study Group interim

Initial development of draft objectives, CSD and PAR

Meeting plan

Continue developing draft objectives, CSD and PAR

IEEE 802.3 New Ethernet Applications (NEA) Ad Hoc

Description

The goal of this activity is to assess requirements for new Ethernet-based applications, identify gaps not currently addressed by IEEE 802.3 standards, and facilitate building industry consensus towards proposals to initiate new standards development efforts

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

Status

Last met during the September 2019 interim meeting series

Meeting plan

There are two sessions planned for the November plenary

[1] Bandwidth Assessment – Introduction / Review of draft D1.0

[2] Discussion – Industry Consensus Assessment for Beyond 400 Gb/s Ethernet

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

Matching the module I/O rate to the ASIC I/O rate reduces component count and complexity, leading to lower cost & power optical interfaces. SerDes rates on both switch ASICs and server network interface cards are expected to move to 100 Gb/s per lane in the next few years, driving current work in the IEEE P802.3ck and P802.3cu Task Forces. However, the highest speed, shortest reach PMDs over multimode fiber under development in Ethernet are built on 50 Gb/s optical lanes.

As the electrical power & interconnect bandwidth of servers & accelerators are increasing, high-radix switches are also able to connect more servers, creating a trend towards fewer servers-per-rack and thus longer server attachment connections at 100 Gb/s and higher. At the same time the achievable passive copper cable reach with 100 Gb/s lanes is expected by some experts to be shorter than the reach with 50 Gb/s lanes. In order to develop the lowest cost and complexity optical modules for next-generation server attachment, as well as shorter switch-to-switch connections, with emerging SerDes rates, we request a Call-for-Interest to assess support for a Study Group to develop the PAR and CSD for lower cost, short reach optical PHYs using 100 Gb/s wavelengths.

This request for agenda time for this CFI has been received from Mabud Choudhury <mchoudhury@ofsoptics.com>

IEEE 802.3 Hybrid (optical/electrical) automotive Ethernet data links Call for Interest

Discussions and presentations to the Multi-Gigabit Automotive Optical PHY Study Group have highlighted that the majority of automotive Ethernet links will have asymmetric peak and aggregate data rates in the two link directions. For example, a link to a camera primarily carry the image data in one direction, with the reverse direction primarily carrying the much lower data rate camera control data. There is significant interest from Study Group participants in using multi-gigabit optical fiber to carry traffic in one link direction but use a significantly lower speed electrical path in the opposite link direction, optionally allowing power to be provided over the electrical balanced conductors. This Call for Interest is to consider expanding the scope of the Multi-Gigabit Automotive Optical PHYs Study Group to also allow a PAR and CSD to include adding specifications for hybrid (optical/electrical) automotive Ethernet data links.”

This request for agenda time for this CFI has been received from Carlos Pardo <carlospardo@kdpof.com>

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>

Preliminary IEEE 802.3 Meeting Plan

Always check [on-line schedule](#) for latest updates

	Sunday	Monday	Tuesday	Wednesday	Thursday
AM		IEEE P802.3cg IEEE P802.3cr	IEEE P802.3ca/cp/cs IEEE P802.3ch/B10A IEEE P802.3ck IEEE P802.3cu SPMD	IEEE P802.3ca/cp/cs IEEE P802.3ch/B10A IEEE P802.3ck IEEE P802.3cn/ct IEEE P802.3cq/cv/18 ISTA OMEGA	IEEE P802.3ca/cp/cs IEEE P802.3cn/ct
PM		IEEE P802.3ca/cp/cs IEEE P802.3ch/B10A IEEE P802.3ck IEEE P802.3cu	PAR review ad hoc IEEE P802.3ca/cp/cs IEEE P802.3ch/B10A IEEE P802.3ck IEEE P802.3cu OMEGA SPMD	Maintenance IEEE P802.3ca/cp/cs IEEE P802.3ch/B10A IEEE P802.3ck IEEE P802.3cm IEEE P802.3cn/ct IEEE P802.3cq/cv/18 OMEGA	IEEE 802.3 Closing Plenary

NEA:
Ethernet Bandwidth
Assessment
Beyond 400 Gb/s
Ethernet

CFI 1

CFI 2

- B10A:** IEEE 802.3 Greater than 10 Gb/s Automotive Ethernet Electrical PHYs Study Group
- OMEGA:** IEEE 802.3 Multi Gigabit Automotive Optical PHYs Study Group
- ISTA:** IEEE 802.3 Improving PTP Timestamping Accuracy Study Group
- SPMD:** IEEE 802.3 10SPE Multidrop Enhancements Study Group
- 18:** IEEE SCC18 ad hoc
- NEA:** IEEE 802.3 Industry Connections New Ethernet Applications
- CFI 1:** Lower cost, short reach optical PHYs using 100 Gb/s wavelengths
- CFI 2:** Hybrid (optical/electrical) automotive Ethernet data links

State of the standard

IEEE Std 802.3-2018 Revision

IEEE Std 802.3-2018 Standard for Ethernet 8 Books (Sections) 14-Jun-18/31-Aug-18*

Section 1	Section 2	Section 3	Section 4	Section 5	Section 6	Section 7	Section 8
Clause 1 to 20 Annex A to H, 4A	Clause 21 to 33 Annex 22A to 33E	Clause 34 to 43 Annex 36A to 43C	Clause 44 to 55 Annex 44A to 55B	Clause 56 to 77 Annex 57A to 76A	Clause 78 to 95 Annex 83A to 93C	Clause 96 to 115 Annex 97A to 115A	Clause 116 to 126 Annex 119A to 120E
CSMA/CD Overview MAC PLS/AUI 10BASE5 MAU 10BASE2 MAU 10BROAD36 MAU 10BASE-T MAU 10BASE-F MAUs 10 Mb/s Repeater 10 Mb/s Topology 10BASE-Te 1BASE5 DTE & MAU Mgmt Repeater Mgmt	100 Mb/s Overview MII 100BASE-T2 100BASE-T4 100BASE-TX 100BASE-FX 100Mb/s Repeater 100Mb/s Topology MAC Control Auto-Negotiation (AN) Management DTE Power	1000 Mb/s Overview GMII 1000BASE-X AN 1000BASE-SX 1000BASE-LX 1000BASE-CX 1000BASE-T 1000 Mb/s Repeater 1000 Mb/s Topology	10 Gb/s Overview MDC/MDIO XGMII XAUI XSBI 10GBASE-SR 10GBASE-LR 10GBASE-ER 10GBASE-SW 10GBASE-LW 10GBASE-EW 10GBASE-LX4 10GBASE-CX4 10GBASE-T	Subscriber Access Networks (SA) Overview OAM MPMC 100BASE-LX10 100BASE-BX10 1000BASE-LX10 1000BASE-BX10 1000BASE-PX10 1000BASE-PX20 10GBASE-PR 10/1GBASE-PRX 10PASS-TS 2BASE-TL SA Topology 10GBASE-LRM Backplane Overview 1000BASE-KX 10GBASE-KX4 10GBASE-KR Backplane AN BASE-R FEC	EEE LLDP TLVs Time Sync RS-FEC 40/100G Overview 40GBASE-KR4 40GBASE-CR4 40GBASE-SR4 40GBASE-FR 40GBASE-LR4 40GBASE-ER4 100GBASE-CR10 100GBASE-SR10 100GBASE-KR4 100GBASE-KP4 100GBASE-CR4 100GBASE-SR4 100GBASE-LR4 100GBASE-ER4	100BASE-T1 1000BASE-T1 Single-Pair AN MAC Merge 10GPASS-XR EPoC PHY Link MPMC for EPoC PoDL 25Gb/s Overview 25GBASE-CR/CR-S 25GBASE-KR/KR-S 25GBASE-SR 25GBASE-LR 25GBASE-ER 25GBASE-T 40GBASE-T 1000BASE-RHA/B/C	200 Gb/s and 400 Gb/s Overview 200GBASE-DR4 200GBASE-FR4 200GBASE-LR4 400GBASE-SR16 400GBASE-DR4 400GBASE-FR8 400GBASE-LR8 2.5 Gb/s and 5 Gb/s Overview 2.5GBASE-T 5GBASE-T

State of the standard

Current amendments and other IEEE 802.3 standards

IEEE Std 802.3-2018 amendments

IEEE Std 802.3cb-2018
Physical Layer Specifications and
Management Parameters for 2.5 Gb/s
and 5 Gb/s Operation over Backplane
27-Sep-18/04-Jan-19*

IEEE Std 802.3bt-2018
Physical Layer and
Management Parameters for Power
over Ethernet over 4 pairs
27-Sep-18/31-Jan-18*

IEEE Std 802.3cd-2018
Media Access Control Parameters for
50 Gb/s and Physical Layers and
Management Parameters for 50 Gb/s,
100 Gb/s, and 200 Gb/s Operation
Approved 5-Dec-18/15-Feb-19*

Other IEEE 802.3 standards

IEEE Std 802.3.1-2013
IEEE Standard for
Management Information Base
(MIB) Definitions for Ethernet
14-Jun-13/02-Aug-13*

IEEE Std 802.3.2-2019
IEEE Standard for Ethernet YANG
Data Model Definitions
21-Mar-19/21-Jun-19*

State of the standard

IEEE 802.3 current status overview

Call for interest

Lower cost, short reach optical PHYs using 100 Gb/s wavelengths CFI

Hybrid (optical/electrical) automotive Ethernet data links CFI

Study Group

IEEE 802.3 Greater than 10 Gb/s Automotive Ethernet Electrical PHYs
 Developing PAR, CSD and objectives

IEEE 802.3 Multi Gigabit Automotive Optical PHY
 Developing PAR, CSD and objectives

IEEE 802.3 Improving PTP Timestamping Accuracy
 Developing PAR, CSD and objectives

IEEE 802.3 10SPE Multidrop Enhancements
 Developing PAR, CSD and objectives

IEEE P802.3ck 100 Gb/s, 200 Gb/s, and 400 Gb/s Electrical Interfaces
 Baseline selection

IEEE P802.3cs Increased-reach Ethernet optical subscriber access (Super-PON)
 D0.3 Task Force Review

IEEE P802.3cv Maintenance #15: Power over Ethernet Task Force
 D1.0 Task Force Review

IEEE P802.3ct 100 Gb/s and 400 Gb/s over DWDM systems Task Force
 D1.0 Task Force Review

Task Force

IEEE P802.3cp Bidirectional 10 Gb/s, 25 Gb/s, and 50 Gb/s Optical Access PHYs
 D1.0 Task Force Review

IEEE P802.3cu 100 Gb/s and 400 Gb/s over SMF at 100 Gb/s per Wavelength
 D1.0 Task Force Review

IEEE P802.3cr Isolation (Maintenance #14)
 D1.1 Task Force Review

IEEE P802.3ca 25 and 50 Gb/s Passive Optical Networks
 D2.2 Working Group ballot

IEEE P802.3ch Multi-Gig Automotive Ethernet
 D2.3.1 Working Group ballot

IEEE P802.3cm 400 Gb/s over Multimode Fiber
 D3.1 Standards Association ballot

IEEE P802.3cq Power over Ethernet over 2 Pairs (Maintenance #13)
 D3.1 Standards Association

IEEE P802.3cn 50 Gb/s, 200 Gb/s, and 400 Gb/s over greater than 10 km of SMF
 D3.4 on 6th Nov 2019 RevCom agenda

IEEE P802.3cg 10 Mb/s Single Pair Ethernet
 D3.1 on 6th Nov 2019 RevCom agenda

Progress to standard