

IEEE 802.3 Working Group March 2021 Plenary Session

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Web site: www.ieee802.org/3

Current IEEE 802.3 activities

IEEE 802.3 Task Forces

- IEEE P802.3ck 100 Gb/s, 200 Gb/s, and 400 Gb/s Electrical Interfaces
- IEEE P802.3cp Bidirectional 10 Gb/s, 25 Gb/s and 50 Gb/s Optical Access PHYs
- 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 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 P802.3cw 400 Gb/s over DWDM systems
- IEEE P802.3cx Improved PTP Timestamping Accuracy
- IEEE P802.3cy Greater than 10 Gb/s Electrical Automotive Ethernet Task Force
- IEEE P802.3cz Multi-Gigabit Optical Automotive Ethernet Task Force
- IEEE P802.3da 10 Mb/s Single Pair Multidrop Segments Enhancement Task Force
- IEEE P802.3db 100 Gb/s, 200 Gb/s, and 400 Gb/s Short Reach Fiber Task Force
- IEEE P802.3 (IEEE 802.3dc) Ethernet revision (Maintenance #16) Task Force

IEEE 802.3 Study Group

- IEEE 802.3 Beyond 400 Gb/s Ethernet Study Group

IEEE 802.3 Ad Hoc

- IEEE 802.3 New Ethernet Applications Ad Hoc
- IEEE 802.3 Power Distribution Coordinating Committee (PDCC) Ad Hoc

IEEE 802.3 Call for Interest

- IEEE 802.3 Enhancements to Single Pair Ethernet call for interest

IEEE 802.3 Maintenance

Plan

Consider new maintenance requests

Review status of outstanding maintenance requests

IEEE P802.3 (IEEE 802.3dc) Ethernet revision (Maintenance #16) project

Adoption of IEEE 802.3 standards by ISO/IEC SC6

Consider any other maintenance business

Plenary session teleconference planned for 14h00 UTC Wednesday 17th March 2021

Web page

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

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

Draft D1.4 sent out for 5th Task Force review

Plan

Progress approval to proceed to Working Group ballot

Plenary session teleconference planned for 15h00 UTC Tuesday 10th March 2021

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

Draft D3.0 sent out for initial Standards Association ballot

Plan

Consideration of comments received against draft D3.0

First plenary session teleconference planned for 12h30 UTC Tuesday 16th March 2021

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

Draft D1.4 sent out for 10th Task Force review

Plan

Progress approval to proceed to Working Group ballot

First plenary session teleconference planned for 19h00 UTC Wednesday 10th March 2021

IEEE P802.3ct 100Gb/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 at reaches greater than 10 km over DWDM systems

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

Status

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

Plan

Consideration of comments received against draft D3.1

Plenary session teleconference planned for 15h00 UTC Tuesday 9th March 2021

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

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

Plan

Consideration of comments received against draft D3.1

First plenary session teleconference planned for 14h00 UTC Monday 15th March 2021

IEEE P802.3cw 400 Gb/s over DWDM Systems Task Force

Description

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

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

Status

Selecting and refining baseline proposals to develop D1.0 to initiate Task Force Review

Plan

Selecting set of baseline proposals to satisfy project objectives

Plenary session teleconference planned for 15h00 UTC Tuesday 9th March 2021

IEEE P802.3cx Improved PTP timestamping accuracy Task Force

Description

Define optional enhancements to Ethernet support for time synchronization protocols to provide improved timestamp accuracy in support of ITU-T Recommendation G.8273.2 'Class C' and 'Class D' system time error performance requirements.

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

Status

Selecting set of baseline proposals to satisfy project objectives

Plan

Selecting set of baseline proposals to satisfy project objectives

First plenary session teleconference planned for 15h00 UTC Wednesday 10th March 2021

IEEE P802.3cy Greater than 10 Gb/s Electrical Automotive Ethernet Task Force

Description

Specify additions to and appropriate modifications of IEEE Std 802.3 to add greater than 10 Gb/s electrical Physical Layer specifications for symmetrical and asymmetrical operation and management parameters for media and operating conditions for applications in the automotive environment.

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

Status

Selecting set of baseline proposals to satisfy project objectives

Meeting plan

Continue to work on selection of a set of baseline proposals

Plenary session teleconference planned for 15h00 UTC Tuesday 9th March 2021

IEEE P802.3cz Multi-Gigabit Optical Automotive Ethernet Task Force

Description

Specify additions to and appropriate modifications of IEEE Std 802.3 to add Physical Layer specifications and management parameters for multi-gigabit optical Ethernet for application in the automotive environment.

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

Status

Selecting set of baseline proposals to satisfy project objectives

Meeting plan

Continue to work on selection of a set of baseline proposals

First plenary session teleconference planned for 13h00 UTC Tuesday 9th March 2021

IEEE P802.3da 10 Mb/s Single Pair Multidrop Segments Enhancement Task Force

Description

Specify additions and modifications of the Physical Layer (including reconciliation sublayers), management parameters, Ethernet support for time synchronization protocols, and optional power delivery supporting multiple powered devices on the 10 Mb/s mixing segment.

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

Status

Selecting set of baseline proposals to satisfy project objectives

Meeting plan

Continue to work on selection of a set of baseline proposals

First plenary session teleconference planned for 15h00 UTC Wednesday 10th March 2021

Second plenary session teleconference planned for 15h00 UTC Wednesday 17th March 2021

IEEE P802.3db 100 Gb/s, 200 Gb/s, and 400 Gb/s Short Reach Fiber Task Force

Description

Specify additions to and appropriate modifications of IEEE Std 802.3 and adds Physical Layer specifications and management parameters for 100 Gb/s, 200 Gb/s, and 400 Gb/s Ethernet optical interfaces for server attachment and other intra-data center applications using 100 Gb/s signaling over optical fiber

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

Status

Selecting set of baseline proposals to satisfy project objectives

Meeting plan

Continue to work on selection of a set of baseline proposals

Plenary session teleconference planned for 14h00 UTC Tuesday 16th March 2021

IEEE 802.3 Beyond 400 Gb/s Ethernet Study Group

Description

Develop a Project Authorization Request (PAR) and Criteria for Standards Development (CSD) responses:

- (1) Beyond 400 Gb/s Ethernet
- (2) Physical Layer specifications for existing Ethernet rates based on Physical Layer specifications for beyond 400 Gb/s Ethernet.

Web site: <https://ieee802.org/3/B400G/index.html>

Status

First meeting held on Thursday 14th January 2021

Meeting plan

Progress towards developing PAR, CSD responses and objectives

Enhancements to Single Pair Ethernet call for interest

With the conclusion of IEEE Std 802.3cg-2019, the Ethernet Standard has renewed interest in Ethernet at lower speeds. Renewed interest has broadened the application areas. This has already spawned a project for enhancements to the 10 Mbps shared-media (aka multidrop) operation on mixing segments in IEEE P802.3da; however, the point-to-point PHYs are outside the written scope of the IEEE P802.3da PAR. This call for interest is to consider enhancements related to the use of the point-to-point operation in single pair ethernet, including for example, use of 10BASE-T1L with MACMERGE. The proposed study group would explore any needed enhancements to use the new PHYs in Time-Sensitive Networking (TSN) and industrial networking environments.

The call for interest will take place during the IEEE 802.3 Opening Plenary on Monday 8th March. A call for interest consensus building meeting has been scheduled to occur at 15h00 UTC on Tuesday 9th March 2021. The vote to determine if a Study Group will be formed will take place at the IEEE 802.3 Closing Plenary on Thursday 18th March.

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 P802.3ck 100 Gb/s, 200 Gb/s, and 400 Gb/s Electrical Interfaces: Elizabeth Kochuparambil <edonnay@cisco.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 P802.3cs Increased-reach Ethernet optical subscriber access: (Super-PON): Claudio DeSanti <cds@ieee.org>

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

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

IEEE P802.3cx Improving PTP Timestamping Accuracy on Ethernet Interfaces: Steve Gorshe <steve.gorshe@microchip.com>

IEEE P802.3cy Greater than 10 Gb/s Electrical Automotive Ethernet Task Force: Steve Carlson <scarlson@ieee.org>

IEEE P802.3cz Multi-Gigabit Optical Automotive Ethernet Task Force: Bob Grow <bob.grow@ieee.org>

IEEE P802.3da 10 Mb/s Single Pair Multidrop Segments Enhancement Task Force: Chad Jones <cmjones@cisco.com>

IEEE P802.3db 100 Gb/s, 200 Gb/s, and 400 Gb/s Short Reach Fiber Task Force: Robert Lingle <rlingle@ofsoptics.com>

IEEE P802.3 (IEEE 802.3dc) Ethernet revision (Maintenance #16) Task Force Adam Healey <adam.healey@broadcom.com>

IEEE 802.3 Task Force vice-chair

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 chair

IEEE 802.3 Beyond 400 Gb/s Ethernet Study Group John D'Ambrosia <jdambrosia@ieee.org>

Upcoming meetings

Please see <http://www.ieee802.org/3/calendar.html> for latest calendar of meetings

IEEE 802.3 Call and Meeting Calendar

NOTE: Calendar set to detected computer time zone: Europe/London

Today ← → March 2021 ▼
Print Week Month Agenda

Sun	Mon	Tue	Wed	Thu	Fri	Sat
28	1 Mar 15:00 IEEE 802.3 B400G SG - March 15:00 IEEE P802.3cy ad hoc	2 15:00 IEEE 802.3 NEA teleconference 17:00 IEEE PARs from other WGs ad hoc	3 15:00 P802.3ck - Jan/Feb Comment Reso 18:00 PDCC Weekly Ad Hoc	4 15:00 IEEE P802.3ct / .3cw Joint TF Elect 17:00 IEEE P802.3dB TF Interim Teleconf	5	6
7	8 IEEE 802.3 March 2021 virtual plenary week 1 - Teleconference 14:00 IEEE 802.3 March 2021 Opening pl	9 13:00 IEEE P802.3cz ad hoc teleconferen 15:00 IEEE P802.3ct / .3cw	10 Wednesday, 10 March IEEE 802.3 March 2021 virtual plenary 13:00 IEEE P802.3cz ad hoc teleconferen 15:00 P802.3ck - Jan/Feb Comment Reso 15:00 P802.3cx March meeting 15:00 P802.3da 10Mbps SPMD interim 18:00 PDCC Weekly Ad Hoc	11 14:00 IEEE 802.3 March 2021 Mid-Sessio	12	13
14	15 IEEE 802.3 March 2021 virtual plenary week 2 - Teleconference 14:00 IEEE 802.3 B400G SG - March 14:00 IEEE P802.3cv interim meeting 14:00 P802.3cy ad hoc teleconference mt	16 12:00 IEEE P802.3cz Interim TF teleconfe 12:30 802.3cp March interim meeting 14:00 IEEE P802.3cy plenary meeting 14:00 IEEE P802.3dB TF Interim	17 12:00 IEEE P802.3cz Interim TF teleconfe 12:30 802.3cp March interim meeting 14:00 P802.3da 10Mbps SPMD interim fo 17:00 PDCC Weekly Ad Hoc	18 14:00 IEEE 802.3 March 2021 Closing Ple	19	20
21	22 14:00 IEEE 802.3 B400G SG - March	23	24 14:00 P802.3da 10Mbps SPMD interim 17:00 PDCC Weekly Ad Hoc	25 14:00 IEEE P802.3ct / .3cw Joint TF Elect	26	27
28	29 15:00 IEEE 802.3 B400G SG - March	30	31 18:00 PDCC Weekly Ad Hoc	1 Apr 17:00 IEEE P802.3dB TF Ad Hoc	2	3

Events shown in time zone: United Kingdom Time + Google Calendar

To subscribe to this calendar in your personal logged-in Google account calendar, use the "+ Google Calendar" button in the lower right corner of the calendar view above.
To subscribe to this calendar using other calendar applications use this [iCalendar subscription link URL](#).
As an example, for Outlook follow these [instructions](#) using the above iCalendar subscription link URL as the address of the internet calendar to add to Outlook.

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

IEEE Std 802.3-2018 amendments

<p>IEEE Std 802.3cb-2018 Amendment 1: Physical Layer Specifications and Management Parameters for 2.5 Gb/s and 5 Gb/s Operation over Backplane 27-Sep-18/04-Jan-19*</p>	<p>IEEE Std 802.3cg-2019 Amendment 5: Physical Layers Specifications and Management Parameters for 10 Mb/s Operation and Associated Power Delivery over a Single Balanced Pair of Conductors 7-Nov-19/5-Feb-20*</p>	<p>IEEE Std 802.3ca-2020 Amendment 9: Physical Layer Specifications and Management Parameters for 25 Gb/s and 50 Gb/s Passive Optical Networks 4-Jun-20/30-Jun-20*</p>
<p>IEEE Std 802.3bt-2018 Amendment 2: Physical Layer and Management Parameters for Power over Ethernet over 4 pairs 27-Sep-18/31-Jan-18*</p>	<p>IEEE Std 802.3cq-2020 Amendment 6: Maintenance #13: Power over Ethernet over 2 pairs 30-Jan-20/13-Mar-20*</p>	<p>IEEE Std 802.3cr-2021 Amendment 10: Maintenance #14: Isolation 9-Feb-21/TBD*</p>
<p>IEEE Std 802.3cd-2018 Amendment 3: 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 5-Dec-18/15-Feb-19*</p>	<p>IEEE Std 802.3cm-2020 Amendment 7: Physical Layer and Management Parameters for 400 Gb/s over Multimode Fiber 30-Jan-20/30-Mar-20*</p>	<p>IEEE Strd 802.3cu-2021 Amendment 11: Physical Layers and Management Parameters for 100 Gb/s and 400 Gb/s Operation over Single-Mode Fiber at 100 Gb/s per Wavelength 9-Feb-21/TBD*</p>
<p>IEEE Std 802.3cn-2019 Amendment 4: Physical Layers and Management Parameters for 50Gb/s, 200Gb/s, and 400Gb/s Operation over Single-Mode Fiber 7-Nov-18/20-Dec-19*</p>	<p>IEEE Std 802.3ch-2020 Amendment 8: Physical Layer Specifications and Management Parameters for 2.5 Gb/s, 5 Gb/s, and 10 Gb/s Automotive Electrical Ethernet 4-Jun-20/30-Jun-20*</p>	

State of the standard

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

IEEE 802.3
Enhancements to
Single Pair Ethernet
call for interest

Study Group

IEEE 802.3 Beyond
400 Gb/s Ethernet
Study Group

Task Force

IEEE P802.3db
100 Gb/s, 200 Gb/s,
and 400 Gb/s Short
Reach Fiber
[Baseline selection](#)

IEEE P802.3cx
Improved PTP
Timestamping
Accuracy
[Baseline selection](#)

IEEE P802.3cs
Increased-reach
Ethernet optical
subscriber access
(Super-PON)
[D1.4 Task
Force Review](#)

IEEE P802.3cp
Bidirectional 10 Gb/s,
25 Gb/s, and
50 Gb/s Optical
Access PHYs
[D3.0 Standards
Association ballot](#)

IEEE P802.3da
10 Mb/s Single Pair
Multidrop Segments
Enhancement
[Baseline selection](#)

IEEE P802.3cw
400 Gb/s over
DWDM systems
[Baseline selection](#)

IEEE P802.3ck
100 Gb/s, 200 Gb/s,
and 400 Gb/s
Electrical Interfaces
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IEEE P802.3ct
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IEEE P802.3cz
Multi-Gigabit Optical
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IEEE P802.3cy
Greater than 10 Gb/s
Electrical Automotive
Ethernet
[Baseline selection](#)

IEEE P802.3cv
Maintenance #15:
Power over Ethernet
Task Force
[D3.1 Standards
Association ballot](#)

Progress to standard 