IEEE 802.3 Working Group
March 2021 Plenary Week

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Web site: www.ieee802.org/3

IEEE 802.3 Maintenance

Progress

Maintenance requests

Reviewed new maintenance requests

Reviewed status of outstanding maintenance requests

Remaining request will be reviewed at next meeting

ISO/IEC JTC1 SC6

Progressed IEEE Std 802.3cr-2021 and IEEE Std 802.3cu-2021 adoption by ISO/IEC JTC1/SC6

IEEE 802.3 revision project

Reviewed IEEE P802.3 (IEEE 802.3dc) revision project plans

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

Progress

Generated IEEE P802.3ck draft D2.0

No changes from pre-submitted IEEE P802.3ck draft D1.5

Approval granted to progress to Working Group ballot

Next steps

Conduct initial Working Group ballot of IEEE P802.3ck draft D2.0

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

Progress

IEEE P802.3cp D3.0 initial Standards Association ballot comment resolution

Developed responses for 43 comments received

Conditional approval granted to proceed to RevCom submittal

No comments supporting the remaining disapprove vote

Disapprove voter has indicated satisfaction with the responses to comments

Next steps

Conduct IEEE P802.3cp D3.1 first Standards Association recirculation 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

Progress

Generated IEEE P802.3cs draft D2.0 for initial Working Group ballot

- No changes from pre-submitted IEEE P802.3cs draft

Approval granted to progress to Working Group ballot

Next steps

Conduct initial Working Group ballot of IEEE P802.3cs draft D2.0

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

Progress

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

Conditional approval granted to proceed to RevCom submittal

9 unsatisfied TR comments from 1 commenter

IEEE P802.3ct D3.2 second Standards Association ballot initiated

Next steps

Complete IEEE P802.3ct D3.2 second Standards Association recirculation 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

Progress

IEEE P802.3cv D2.1 first Standards Association ballot recirculation ballot complete

100% approval with two comments received, both rejected

Approval granted to proceed to RevCom submittal

Next steps

Progress RevCom submittal

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

Progress

Prepared liaison letter to OIF regarding current status

Next steps

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

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

Progress

Review of informal comments received against IEEE P802.3cx D0.4

Agreement on the basic outline and content of the informative annex

Prepared liaison to ITU-T Q13/15 regarding current status

Next steps

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

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

Progress

Continued work on baselines for link segment/channel model

Next steps

Continue baseline selection to satisfy the project objectives

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

Progress

IEEE P802.3cz D1.0 first Task Force review comment resolution

Completed responses on some of the 352 comments received

Considered PMD baseline for addition to draft

Next steps

Complete IEEE P802.3cz D1.0 comment resolution

IEEE P802.3cz D1.1 second Task Force review to follow comment resolution

Continue work towards a technically complete draft

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

Progress

Heard baseline proposals

Mixing segment channel specs

Dynamic Physical Layer Collision Avoidance (DPLCA) node assignment

Next steps

Continue baseline selection to satisfy the project objectives

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

Progress

Baseline proposals selected and Draft 0.1 generated by editors

Several TBDs and editor's notes

Next steps

Work to resolve TBDs

Cycles of informal review to prepare for Task Force Review

IEEE 802.3 Beyond 400 Gb/s Study Group

Description

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

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

Progress

Technical presentations heard as input to selecting objectives

Next steps

Consideration of potential objectives

Enhancements to Single Pair Ethernet call for interest

Enhancements to Single Pair Ethernet call for interest closing report

> https://ieee802.org/3/minutes/mar21/0321_SPEenhance_closing_report.pdf

Study Group formation approved

> IEEE 802.3 Enhancements to point to point Single Pair Ethernet Study Group

>> The scope of the Study Group is to develop Project Authorization Requests (PAR) and Criteria for Standards Development (CSD) responses for Enhancements to point to point Single Pair Ethernet to:

>> 1. Support Time Sensitive Networking (TSN), and

>> 2. Support increasing traffic and speed needs with long reach point to point higher speed single pair PHYs

First Study Group meeting to be announced

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

IEEE 802.3 Task Force vice-chairs

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

IEEE P802.3ct 100 Gb/s over DWDM systems: Tom Issenhuth <tissenhuth@outlook.com>

IEEE P802.3cw 400 Gb/s over DWDM systems: Tom Issenhuth <tissenhuth@outlook.com>

IEEE 802.3 Study Group chairs

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

IEEE 802.3 IEEE 802.3 Enhancements to point to point Single Pair Ethernet Study Group (acting) George Zimmerman <george@cmephyconsulting.com>

Upcoming meetings

Please see http://www.ieee802.org/3/calendar.html