IEEE 802.3 Working Group November 2023 Plenary Session

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Web site: www.ieee802.org/3

Current IEEE 802.3 activities

IEEE 802.3 Task Forces

IEEE P802.3cw 400 Gb/s over DWDM systems

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

IEEE P802.3df 200 Gb/s, 400 Gb/s, 800 Gb/s, and 1.6 Tb/s Ethernet

IEEE P802.3dg 100 Mb/s Long-Reach Single Pair Ethernet

IEEE P802.3dh Multi-Gigabit Automotive Ethernet over Plastic Optical Fiber

IEEE P802.3dj 200 Gb/s, 400 Gb/s, 800 Gb/s, and 1.6 Tb/s Ethernet

IEEE P802.3dk Greater than 50 Gb/s Bidirectional Optical Access PHYs

IEEE P802.3.1 (IEEE 802.3.1b) SMIv2 Data Models (Revision)

IEEE P802.3.2 (IEEE 802.3.2a) YANG Data Model (Revision)

IEEE 802.3 Study Group

IEEE 802.3 Ethernet for Automotive Imaging Sensors Study Group

IEEE 802.3 Ad Hoc

IEEE 802.3 New Ethernet Applications

IEEE 802.3 Power Distribution Coordinating Committee (PDCC)

IEEE 802.3 Maintenance

Description

Maintenance of the IEEE 802.3 standards are performed by the IEEE 802.3 Maintenance Task Force.

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 P802.3cw 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

Sixth Working Group recirculation ballot of draft D2.6 initiated on 8 November 2023

Meeting Plan

Meet jointly with IEEE P802.3df and IEEE P802.3dj Task Forces during plenary session Progress conditional approval to proceed to Standards Association ballot

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

Consideration of proposed updates to project objectives

IEEE P802.3df 400 Gb/s and 800 Gb/s Ethernet Task Force

Description

Define Ethernet MAC parameters, physical layer specifications, and management parameters for the transfer of Ethernet format frames at 800 Gb/s over copper, multi-mode fiber, and single-mode fiber physical medium dependent (PMD) sublayers based on 100 Gb/s per lane signaling technology. Using these new definitions for 800 Gb/s, define physical layer specifications and management parameters for the transfer of Ethernet format frames at 400 Gb/s.

Web site: http://ieee802.org/3/df/index.html

Status

First Standards Association recirculation ballot of draft D3.1 closed 28 October 2023

Meeting plan

Meet jointly with IEEE P802.3cw and IEEE P802.3dj Task Forces during plenary session

First Standards Association recirculation ballot comment resolution

Progress conditional approval to proceed to RevCom submittal

IEEE P802.3dg 100 Mb/s Long-Reach Single Pair Ethernet Task Force

Description

Specify additions to and appropriate modifications of IEEE Std 802.3 to add 100 Mb/s Physical Layer specifications and management parameters for operation, and associated optional provision of power, using a single balanced pair of conductors

Web site: https://ieee802.org/3/dg/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

IEEE P802.3dh Multi-Gigabit Automotive Ethernet over Plastic Optical Fiber 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 using graded-index plastic optical fiber for application in the automotive environment.

Web site: https://ieee802.org/3/dh/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

IEEE P802.3dj 200 Gb/s, 400 Gb/s, 800 Gb/s, and 1.6 Tb/s Ethernet Task Force

Description

Define Ethernet MAC parameters for 1.6 Tb/s. Define physical layer specifications, and management parameters for the transfer of Ethernet format frames at 800 Gb/s and 1.6 Tb/s over copper and single-mode fiber physical medium dependent (PMD) sublayers based on 200 Gb/s or greater per lane signaling technologies. Using these new definitions for 800 Gb/s and 1.6 Tb/s, define physical layer specifications and management parameters for the transfer of Ethernet format frames at 200 Gb/s and 400 Gb/s, when applicable.

Web site: https://ieee802.org/3/dj/index.html

Status

Selecting set of baseline proposals to satisfy project objectives

Meeting plan

Meet jointly with IEEE P802.3cw and IEEE P802.3df Task Forces during plenary session Continue to work on selection of a set of baseline proposals

IEEE P802.3dk Greater than 50 Gb/s Bidirectional Optical Access PHYs Task Force

Description

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

Web site: https://ieee802.org/3/dk/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

IEEE P802.3.1 (IEEE 802.3.1b) SMIv2 Data Models (Revision)

Description

This revision is to address accumulated maintenance changes as well as appropriate updates to the IEEE Std 802.3.1 Structure of Management Information version 2 (SMIv2) MIB modules to support IEEE Std 802.3 amendments published since IEEE Std 802.3.1 was last revised in 2013.

Web site: https://ieee802.org/3/1/b/index.html

Status

Task Force review of draft D0.5 closed 6 November 2023

Meeting plan

Draft D0.5 Task Force review comment resolution

Progress approval to proceed to Working Group ballot

IEEE P802.3.2 (IEEE 802.3.2a) YANG Data Model (Revision)

Description

This revision is to addresses accumulated maintenance changes as well as appropriate updates to the IEEE Std 802.3.2 YANG modules to support IEEE Std 802.3 amendments published since IEEE Std 802.3.2 was first published.

Web site: https://ieee802.org/3/2/a/index.html

Status

Task Force review of draft D0.5 closed 6 November 2023

Meeting plan

Draft D0.5 Task Force review comment resolution

Progress approval to proceed to Working Group ballot

IEEE 802.3 Ethernet for Automotive Imaging Sensors Study Group

Description

Develop a Project Authorization Request (PAR) and Criteria for Standards Development (CSD) responses for an electrical physical layer specification and related functionality of a client optimized for automotive end-node cameras

Web site: https://ieee802.org/3/ISAAC/index.html

Status

Developing PAR, CSD responses and objectives

Meeting plan

Progress towards completing PAR, CSD responses and objectives

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

No meetings held since July 2023 plenary session

Meeting plan

One meeting to discuss Ethernet fabrics for artificial intelligence (AI)/machine learning (ML)

IEEE 802.3 Power Distribution Coordinating Committee (PDCC) Ad Hoc

Description

Review output and build consensus on draft input for liaisons regarding power delivery over cabling cited in IEEE 802.3 standards and projects, e.g.:

Build consensus on responses to public input proposals received as part of the next edition of NFPA70; and consider any other NFPA related items of interest, such as proposed Tentative Interim Amendments (TIA)

Build consensus on draft input to IEC TC64/PT716, and proposed direction of the IEEE 802.3 Category C liaison expert

Build consensus on draft input to IEC TC108/PT63315, and proposed direction of the IEEE 802.3 Category C liaison expert

Web site: https://ieee802.org/3/ad_hoc/PDCC/index.html

Meeting plan

Progress request for a Category C liaison with IEC TC 64/MT 2 current carrying capacity of conductors and related overcurrent protection

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>
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- IEEE P802.3da 10 Mb/s Single Pair Multidrop Segments Enhancement: Chad Jones <cmjones@cisco.com>
- IEEE P802.3df 400 Gb/s and 800 Gb/s Ethernet: John D'Ambrosia <jdambrosia@ieee.org>
- IEEE P802.3dg 100 Mb/s Long-Reach Single Pair Ethernet: George Zimmerman <george@cmephyconsulting.com>
- IEEE P802.3dh Multi-Gigabit Automotive Ethernet over Plastic Optical Fiber: Yuji Watanabe <yuji.watanabe@agc.com>
- IEEE P802.3dj 200 Gb/s, 400 Gb/s, 800 Gb/s, and 1.6 Tb/s Ethernet: John D'Ambrosia <jdambrosia@ieee.org>
- IEEE P802.3dk Greater than 50 Gb/s Bidirectional Optical Access PHYs: Yuanqiu Luo <yuanqiu.luo@futurewei.com>
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- IEEE P802.3.2 (IEEE 802.3.2a) YANG Data Model (Revision) Marek Hajduczenia <mxhajduczenia@gmail.com>

IEEE 802.3 Study Group chair

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- IEEE P802.3cw 400 Gb/s over DWDM systems: Tom Issenhuth <tissenhuth@outlook.com>
- IEEE P802.3df 400 Gb/s and 800 Gb/s Ethernet: Mark Nowell <mnowell@cisco.com>
- IEEE P802.3dj 200 Gb/s, 400 Gb/s, 800 Gb/s, and 1.6 Tb/s Ethernet: Mark Nowell <mnowell@cisco.com>

Upcoming meetings

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

