IEEE 802.3 Working Group
November 2022 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 P802.3cx Improved PTP Timestamping Accuracy
- IEEE P802.3cy Greater than 10 Gb/s Electrical Automotive Ethernet
- IEEE P802.3cz Multi-Gigabit Optical Automotive Ethernet
- 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 802.3 Study Groups

- IEEE 802.3 Greater than 50 Gb/s Bidirectional Optical Access PHYs

IEEE 802.3 Ad Hoc

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

IEEE 802.3 Maintenance

Plan

- Consider new maintenance requests
- Review status of outstanding maintenance requests
- Adoption of IEEE 802.3 standards by ISO/IEC SC6 as ISO/IEC/IEEE 8802-3 standards
- 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

Initial Working Group ballot of draft D2.0 and consideration of comments complete

Editorial team preparing draft D2.1 based on comment responses

Plan

This IEEE P802.3cw Task Force is not planning to meet during this plenary session

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

First Standards Association recirculation ballot of draft D3.1 complete

Meeting plan

Consideration of comments received against draft D3.1

Progress approval to proceed to RevCom submittal

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

Second Working Group recirculation ballot of draft D2.21 complete

Consideration of comments complete and further recirculation ballot not required

Meeting Plan

Progress approval to proceed to Standards Association ballot

The IEEE P802.3cy Task Force is not planning to meet during this plenary session

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 using graded-index glass optical fiber for application in the automotive environment.

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

Status

First Standards Association recirculation ballot of draft D3.1 complete

Meeting plan

Consideration of comments received against draft D3.1

Progress approval to proceed to RevCom submittal

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

IEEE P802.3df 200 Gb/s, 400 Gb/s, 800 Gb/s, and 1.6 Tb/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 and 1.6 Tb/s over copper, multi-mode fiber, and single-mode fiber, and use this work to define derivative physical layer specifications and management parameters for the transfer of Ethernet format frames at 200 Gb/s and 400 Gb/s

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

Status

Selecting set of baseline proposals to satisfy project objectives

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 a portion of the current IEEE P802.3df project would leverage existing 100 Gb/s signalling technologies developed for existing standards and projects, while the other portion of the current IEEE P802.3df project would leverage new greater than 100 Gb/s signalling technologies. It was also recognized that the development of a standard based on existing technologies would occur on a faster timeline than a standard based on the development of new signalling technologies. As a result, an IEEE P802.3df PAR modification request, and a new IEEE P802.3dj amendment PAR, are proposed to remove the portion of the project using new greater than 100 Gb/s signalling technologies from the IEEE P802.3df PAR and placed it in the new IEEE P802.3dj PAR.

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

Status (continued)

- IEEE P802.3df Standard for Ethernet Amendment: Media Access Control Parameters for 800 Gb/s and Physical Layers and Management Parameters for 400 Gb/s and 800 Gb/s Operation PAR modification request
  - IEEE P802.3df draft PAR modification request: https://mentor.ieee.org/802-ec/dcn/22/ec-22-0196-01-00EC-draft-ieee-p802-3df-par-modification.pdf
  - IEEE P802.3df draft CSD modifications: https://mentor.ieee.org/802-ec/dcn/22/ec-22-0197-01-00EC-draft-ieee-p802-3df-csd-modification.pdf
  - IEEE P802.3df draft Objectives modifications: https://www.ieee802.org/3/df/public/22_09/dambrosia_3df_02_2209.pdf
- IEEE P802.3dj Standard for Ethernet Amendment: Media Access Control Parameters for 1.6 Tb/s and Physical Layers and Management Parameters for 200 Gb/s, 400 Gb/s, 800 Gb/s, and 1.6 Tb/s Operation
  - IEEE P802.3dj draft PAR: https://mentor.ieee.org/802-ec/dcn/22/ec-22-0198-01-00EC-draft-ieee-p802-3dj-par.pdf
  - IEEE P802.3dj draft CSD: https://mentor.ieee.org/802-ec/dcn/22/ec-22-0199-01-00EC-draft-ieee-p802-3dj-csd.pdf
  - IEEE P802.3dj draft Objectives: https://www.ieee802.org/3/df/public/22_09/dambrosia_3df_05_2209.pdf

Meeting plan

- Continue work towards technically complete draft for working group ballot
  - Continue technical presentations and baseline selection to address PMD objectives for greater than 100 Gb/s signalling
- Progress the necessary IEEE P802.3df and IEEE P802.3dj draft PAR, CSD and objectives approvals

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 802.3 Greater than 50 Gb/s Bidirectional Optical Access PHYs Study Group

Description

Develop a Project Authorization Request (PAR) and Criteria for Standards Development (CSD) responses for greater than 50 Gb/s Bidirectional Optical Access PHYs.

Web site: https://ieee802.org/3/GT50GBIDI/index.html

Status

The Study Group completed development of the draft IEEE P802.3dk Standard for Ethernet Amendment: Greater than 50 Gb/s Bidirectional Optical Access PHYs, as well as supporting CSD and objectives

Draft PAR: https://mentor.ieee.org/802-ec/dcn/22/ec-22-0200-00-00EC-draft-ieee-p802-3dk-par.pdf

Draft CSD: https://mentor.ieee.org/802-ec/dcn/22/ec-22-0201-00-00EC-draft-ieee-p802-3dk-csd.pdf

Draft objectives: https://ieee802.org/3/GT50GBIDI/public/2210/Draft_GT50Gbidi_OBJv3.pdf

Meeting plan

Progress the necessary IEEE P802.3dk draft PAR, CSD and objectives approval

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

Two-year extension approved on 12 October 2022

Meeting plan

The IEEE 802.3 NEA Ad Hoc is not planning to meet during this plenary session

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

Review of ITU-T K.147 draft recommendation

Delegation to future ISO/IEC JTC1 SC25/WG3 meetings

Direction of IEEE 802.3 delegation to future ISO/IEC JTC1 SC25/WG3 meetings

IEEE 802.3 Officers, Subgroup Chairs and Vice-Chairs

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IEEE P802.3da 10 Mb/s Single Pair Multidrop Segments Enhancement: Chad Jones <cmjones@cisco.com>
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IEEE P802.3de Time Synchronization for Point-to-Point Single Pair Ethernet: George Zimmerman <george@cmephyconsulting.com>
IEEE P802.3df 200 Gb/s, 400 Gb/s, 800 Gb/s, and 1.6 Tb/s Ethernet: John D'Ambrosia <jdambrosia@ieee.org>
IEEE P802.3dg 100 Mb/s Long-Reach Single Pair Ethernet: George Zimmerman <george@cmephyconsulting.com>
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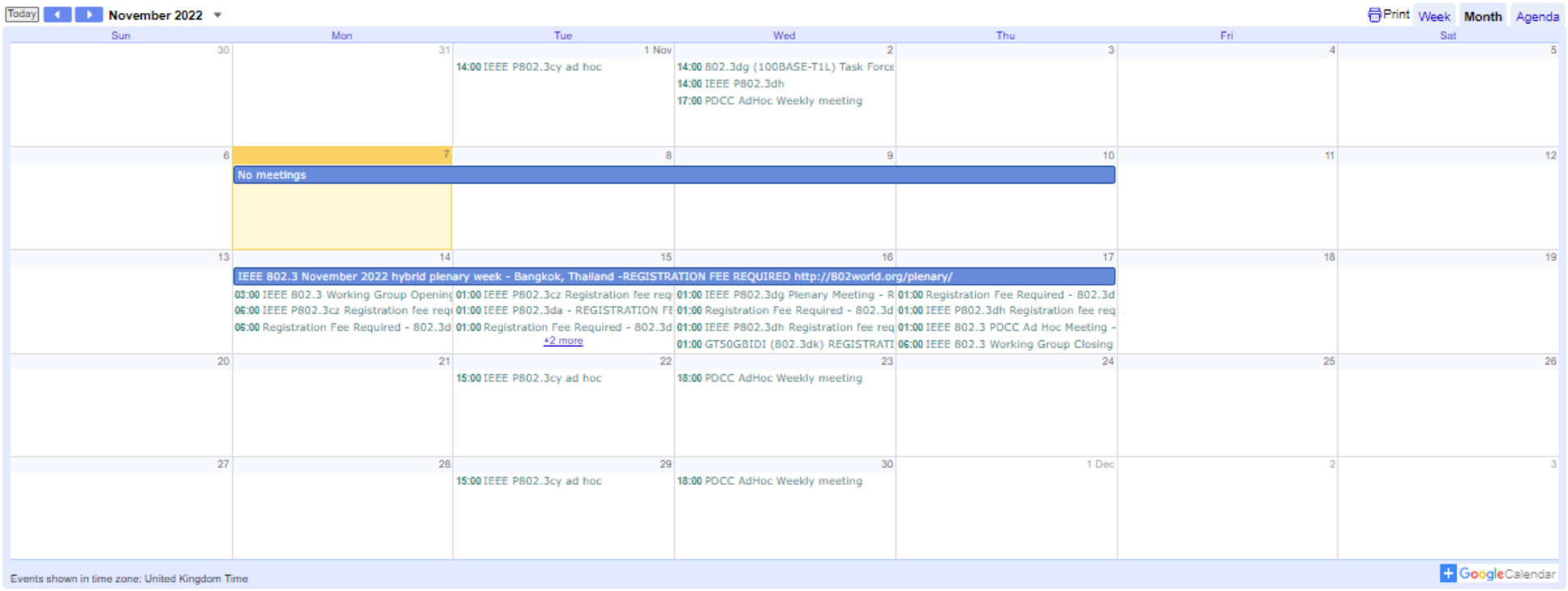
Upcoming meetings

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

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



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