IEEE 802.3 Working Group
July 2017 Plenary Week

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Web site: www.ieee802.org/3

Current IEEE 802.3 activities

- IEEE 802.3 Task Forces
  - IEEE P802.3bs 200 Gb/s and 400 Gb/s Ethernet
  - IEEE P802.3bt DTE Power via MDI over 4-Pair
  - IEEE P802.3ca 25 Gb/s, 50 Gb/s, and 100 Gb/s Ethernet Passive Optical Networks
  - IEEE P802.3cb 2.5 Gb/s and 5 Gb/s Backplane
  - IEEE P802.3cc 25 Gb/s Ethernet over Single-Mode Fiber
  - IEEE P802.3cd 50 Gb/s, 100 Gb/s, and 200 Gb/s Ethernet
  - IEEE P802.3.2 (IEEE 802.3cf) YANG data models
  - IEEE P802.3cg 10 Mb/s Single Twisted Pair Ethernet
  - IEEE P802.3ch Multi-Gig Automotive Ethernet PHY
  - IEEE P802.3 (IEEE 802.3cj) Maintenance #12 (revision)
- IEEE 802.3 Industry Connection activity
  - IEEE 802.3 New Ethernet Applications Ad Hoc
- IEEE 802.3 Call for Interest
  - IEEE 802.3 Beyond 10km Optical PHYs call for interest

IEEE 802.3 Maintenance

- Meeting plan
  - Consider new maintenance requests
  - Reviewing status of outstanding maintenance requests
  - IEEE P802.3 (IEEE 802.3cj) Maintenance #12 (Revision)
    - Prepare request to proceed to Working Group ballot
  - ISO/IEC JTC1 SC6 adoptions under PSDO agreement
    - Submission of IEEE 802.3 drafts for review
    - Submission of IEEE 802.3 standards for adoption
    - Response to comments on adoption of IEEE 802.3 standards
  - Consider any other maintenance business
- Web page
  - http://www.ieee802.org/3/maint/index.html

IEEE P802.3bs 200 Gb/s and 400 Gb/s Ethernet Task Force

Description

Define Ethernet Media Access Control (MAC) parameters, physical layer specifications, and management parameters for the transfer of Ethernet format frames at 200 Gb/s over single-mode fiber and 400 Gb/s over optical physical media

Web site: http://www.ieee802.org/3/bs/index.html

Status

Last met during the May 2017 interim meeting series

Draft D3.2 sent out for 2nd Sponsor recirculation ballot

Meeting plan

Consideration of comments received against draft D3.2

Prepare for request to proceed to RevCom submittal

IEEE P802.3bt DTE Power via MDI over 4-Pair Task Force

Description

Augment the capabilities of the IEEE Std 802.3 standard with 4-pair power and associated power management information, optional augmented power limit will be made available for certain structured cabling systems, improvements introduced for 4-pair systems, excluding raising the power limit, are optionally enabled for 2-pair systems

Web site: http://www.ieee802.org/3/bt/index.html

Status

Last met during the May 2017 interim meeting series

Draft D2.5 sent out for 5th Working Group recirculation ballot

Completed PAR extension request

Meeting plan

Consideration of comments received against draft D2.5

Prepare for request to proceed to Sponsor ballot

Seek approval for PAR extension request submission to NesCom

IEEE P802.3ca 25 Gb/s, 50 Gb/s, and 100 Gb/s Passive Optical Networks Task Force

Description

Amend IEEE Std 802.3 to add physical layer specifications and management parameters for symmetric and/or asymmetric operation at 25 Gb/s, 50 Gb/s, and 100 Gb/s MAC data rates on point-to-multipoint passive optical networks with distance and split ratios consistent with those defined in IEEE Std 802.3-2015

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

Status

Last met during the May 2017 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 P802.3cb 2.5 Gb/s and 5 Gb/s Operation over Backplane Task Force

Description

Amend IEEE Std 802.3 to add 2.5 Gb/s and 5 Gb/s Physical Layer (PHY) specifications and management parameters for operation over channels such as backplanes and twinaxial copper cables consistent with current storage interconnect applications within a single rack.

Web site: http://www.ieee802.org/3/cb/index.html

Status

Last met during the May 2017 interim meeting series

Draft D3.0 sent out for Initial sponsor ballot

Meeting plan

Consideration of comments received against draft D3.0

IEEE P802.3cc 25 Gb/s Ethernet over Single-Mode Fiber Task Force

Description

Provide an amendment to the IEEE 802.3 Ethernet standard to add point-to-point single-mode fiber Physical Medium Dependent (PMD) options for serial 25 Gb/s operation at reaches greater than 100 m

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

Status

Last met during the May 2017 interim meeting series

Draft D3.1 sent out for 1st Sponsor recirculation ballot

Meeting plan

Consideration of comments received against draft D3.1

Prepare for request to proceed to RevCom submittal

IEEE P802.3cd 50 Gb/s, 100 Gb/s, and 200 Gb/s Ethernet Task Force

Description

Define Ethernet Media Access Control (MAC) parameters, Physical Layer specifications, and management parameters for the transfer of Ethernet format frames at 50 Gb/s over copper and optical media. Define additional Physical Layer specifications and management parameters at 100 Gb/s over copper and optical media. Define additional Physical Layer specifications and management parameters at 200 Gb/s over copper and multimode fiber physical media

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

Status

Last met during the May 2017 interim meeting series

Draft D2.0 sent out for Initial Working Group ballot

Meeting plan

Consideration of comments received against draft D2.0

IEEE P802.3.2 (IEEE 802.3cf) YANG Data Model Definitions Task Force

Description

- Define YANG data models for IEEE Std 802.3 Ethernet
- Web site: http://ieee802.org/3/cf/index.html

Status

- Last met during the May 2017 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 P802.3cg 10 Mb/s Single Twisted Pair Ethernet Task Force

Description

Define additions to and appropriate modifications of IEEE Std 802.3 to add 10 Mb/s Physical Layer (PHY) specifications and management parameters for operation, and associated optional provision of power, on single balanced twisted-pair copper cabling

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

Status

Last met during the May 2017 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 P802.3ch 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

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

Approval date 18th May 2017

First meeting during a May 2017 Task Force interim

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 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 May 2017 interim meeting series

Meeting plan

Three session on Tuesday evening

- Next-Generation multimode Fibre (MMF) PMD
- 100Gb/s Electrical Signaling Over Copper
- Use cases for single pair Ethernet

IEEE 802.3 Beyond 10km Optical PHYs Call for Interest

Over the past four years, the IEEE 802.3 Ethernet WG has initiated several projects that were chartered with developing new Ethernet rates, including 50GbE, 200GbE, and 400GbE. The optical focus of these efforts has been solutions that address reaches 10 km or less. There is an emerging need to provide Ethernet solutions at these data rates to support the bandwidth growth of applications that extend beyond 10km. This Call for Interest is to request the formation of a study group to explore the development of new single mode fiber PHYs that address reaches greater than 10km for 50GbE, 200GbE, and 400GbE.

This request for agenda time for this CFI has been received from John D'Ambrosia <jdambrosia@ieee.org>

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IEEE P802.3cc 25 Gb/s Ethernet over Single-Mode Fiber: David Lewis <David.Lewis@lumentum.com>
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IEEE 802.3.2 (IEEE 802.3cf) YANG Data Model: Yan Zhuang <zhuangyan.zhuang@huawei.com>
IEEE P802.3cg 10 Mb/s Single Twisted Pair Ethernet: George Zimmerman <george@cmephyconsulting.com>
IEEE P802.3ch Multi-Gig Automotive Ethernet PHY: Steve Carlson <scarlson@ieee.org>

Preliminary IEEE 802.3 Meeting Plan

	Sun	Mon	Tue	Wed	Thu
AM		IEEE 802.3 Opening Plenary	IEEE P802.3bs IEEE P802.3ca IEEE P802.3cb IEEE P802.3cd IEEE P802.3cg	IEEE P802.3bt IEEE P802.3ca IEEE P802.3cd IEEE P802.3cg IEEE P802.3ch	IEEE P802.3bt IEEE P802.3ca IEEE P802.3cd IEEE P802.3ch
PM		IEEE P802.3bs IEEE P802.3cb IEEE P802.3cc IEEE P802.3cg IEEE P802.3.2	IEEE P802.3ca IEEE P802.3cb IEEE P802.3cd IEEE P802.3cg IEEE P802.3ch	Maintenance IEEE P802.3bt IEEE P802.3ca IEEE P802.3cd IEEE P802.3ch	IEEE 802.3 Closing Plenary
			IEEE 802.3 beyond 10km Optical PHYs call for interest IEEE 802.3 NEA		

IEEE 802.3 NEA: New Ethernet Applications ad hoc: Next-Generation multimode Fibre (MMF) PMD; 100Gb/s Electrical Signaling Over Copper; Use cases for single pair Ethernet