P802.3bs

Submitter Email: david_law@ieee.org
Type of Project: Modify Existing Approved PAR
PAR Request Date: 13-Jan-2016
PAR Approval Date:
PAR Expiration Date:
Status: Unapproved PAR, Modification to a Previously Approved PAR for an Amendment
Root PAR: P802.3bs **Approved on:** 27-Mar-2014

1.1 Project Number: P802.3bs
1.2 Type of Document: Standard
1.3 Life Cycle: Full Use

2.1 Title: Standard for Ethernet Amendment: Media Access Control Parameters, Physical Layers and Management Parameters for 200 Gb/s and 400 Gb/s Operation

Changes in title: Standard for Ethernet Amendment: Media Access Control Parameters, Physical Layers and Management Parameters for 200 Gb/s and 400 Gb/s Operation

3.1 Working Group: Ethernet Working Group (C/LM/WG802.3)
Contact Information for Working Group Chair
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3.2 Sponsoring Society and Committee: IEEE Computer Society/LAN/MAN Standards Committee (C/LM)
Contact Information for Sponsor Chair
  Name: Paul Nikolich
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4.1 Type of Ballot: Individual
4.2 Expected Date of submission of draft to the IEEE-SA for Initial Sponsor Ballot: 03/2017
4.3 Projected Completion Date for Submittal to RevCom: 10/2017

5.1 Approximate number of people expected to be actively involved in the development of this project: 100
5.2.a. Scope of the complete standard: This standard defines Ethernet local area, access and metropolitan area networks. Ethernet is specified at selected speeds of operation; and uses a common media access control (MAC) specification and management information base (MIB). The Carrier Sense Multiple Access with Collision Detection (CSMA/CD) MAC protocol specifies shared medium (half duplex) operation, as well as full duplex operation. Speed specific Media Independent Interfaces (MIIs) provide an architectural and optional implementation interface to selected Physical Layer entities (PHY). The Physical Layer encodes frames for transmission and decodes received frames with the modulation specified for the speed of operation,
transmission medium and supported link length. Other specified capabilities include: control and management protocols, and the provision of power over selected twisted pair PHY types.

5.2.b. Scope of the project: Define Ethernet Media Access Control (MAC) parameters, physical layer specifications, and management parameters for the transfer of Ethernet format frames at 200 Gb/s and 400 Gb/s.

Changes in scope of the project: Define Ethernet Media Access Control (MAC) parameters, physical layer specifications, and management parameters for the transfer of Ethernet format frames at 200 Gb/s and 400 Gb/s.

5.3 Is the completion of this standard dependent upon the completion of another standard: No
5.4 Purpose: This document will not include a purpose clause.
5.5 Need for the Project: The project is necessary to provide solutions for aggregation & high-bandwidth interconnect in these key application areas: cloud-scale data centers, internet exchanges, co-location services, wireless infrastructure, service provider and operator networks, and video distribution infrastructure.

5.6 Stakeholders for the Standard: Stakeholders identified to date include but are not limited to users and producers of systems and components for internet exchanges, co-location providers, service providers and network operators, cloud-scale data centers and multiple system operators (MSOs).

Intellectual Property
6.1.a. Is the Sponsor aware of any copyright permissions needed for this project?: No
6.1.b. Is the Sponsor aware of possible registration activity related to this project?: No

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7.1 Are there other standards or projects with a similar scope?: No
7.2 Joint Development
  Is it the intent to develop this document jointly with another organization?: No

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8.1 Additional Explanatory Notes (Item Number and Explanation): Item #2.1 and Item #5.2b: During the development of IEEE P802.3bs 400 Gb/s Ethernet, it was decided to develop 50 Gb/s optical and electrical signaling. With this signaling available, a family of Ethernet rates, based on multiple instantiations of 50 Gb/s, e.g. 50 Gb/s Ethernet, 100 Gb/s Ethernet, 200 Gb/s Ethernet, and 400 Gb/s Ethernet is emerging. The development of 200 Gb/s Ethernet physical layer specifications equivalent to the existing 400 Gb/s Ethernet specifications is being added to this project. The changes noted in Item #5.2b increase the scope of the project to include definition of MAC parameters, physical layer specifications, and management parameters at 200 Gb/s. Item #2.1 adds 200 Gb/s to the title.
Item #4.2 and #4.3: Update of dates based on current project plan.