

P802.3by

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Type of Project: Amendment to IEEE Standard 802.3-2012

PAR Request Date: 16-Sep-2014

PAR Approval Date: 10-Dec-2014

PAR Expiration Date: 31-Dec-2018

Status: PAR for an Amendment to an existing IEEE Standard

1.1 Project Number: P802.3by

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 25 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)

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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: 01/2016

4.3 Projected Completion Date for Submittal to RevCom: 08/2016

5.1 Approximate number of people expected to be actively involved in the development of this project: 80

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: This amendment defines Ethernet Media Access Control (MAC) parameters, physical layer specifications, and management parameters for the transfer of Ethernet format frames at 25 Gb/s for server to switch interconnections.

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: There is a need for greater than 10 Gb/s Ethernet connectivity for server to switch connections. The availability of 25 Gb/s signaling technologies enables interconnect solutions for server to switch applications to be developed which are lower cost than existing 40 Gb/s Ethernet solutions.

5.6 Stakeholders for the Standard: Users and producers of systems and components for data centers.

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

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

8.1 Additional Explanatory Notes (Item Number and Explanation):