P802.3bt

Submitter Email: david_law@ieee.org
Type of Project: Modify Existing Approved PAR
PAR Request Date: 18-Mar-2016
PAR Approval Date: 12-May-2016
PAR Expiration Date: 31-Dec-2017
Status: Modification to a Previously Approved PAR for an Amendment
Root PAR: P802.3bt **Approved on:** 11-Dec-2013
Root Project: 802.3-2012

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

2.1 Title: Standard for Ethernet Amendment: Physical Layer and Management Parameters for DTE Power via MDI over 4-Pair

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3.1 Working Group: Ethernet Working Group (C/LM/WG802.3)
Contact Information for Working Group Chair
  Name: David Law
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Contact Information for Working Group Vice-Chair
  Name: Adam Healey
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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
Note: Usual minimum time between initial sponsor ballot and submission to Revcom is 6 months.: 10/2017

5.1 Approximate number of people expected to be actively involved in the development of this project: 30
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: The scope of this project is to augment the capabilities of the IEEE Std 802.3 standard with 4-pair power and associated power management information. The project will augment the methodology for the provision of power via balanced cabling to connected Data Terminal Equipment with 802.3 interfaces. Optional augmented power limit will be made available for certain structured

Changes in scope of the project: The scope of this project is to augment the capabilities of the IEEE Std 802.3 standard with 4-pair power and associated power management information. The project will augment the methodology for the provision of power via balanced cabling to connected Data Terminal Equipment with 802.3 interfaces. Optional augmented power limit will be made available for certain

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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: Since the publication of IEEE Std 802.3at-2009, significant market demand has emerged for more efficient power delivery and for applications with power levels greater than those defined in the standard. Example applications include thin clients, multi-radio wireless access points, pan / tilt / zoom cameras, digital signage, building automation, industrial sensors / actuators etc.

5.6 Stakeholders for the Standard: Ethernet component providers (e.g., cabling and integrated circuit), system product providers (e.g., switch and end stations), network providers (e.g., installers, network support) and network implementers (e.g., enterprise, building automation and industrial automation).

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 4.2 and 4.3: Update of dates based on current project plan.

Item 5.2.b: During the development of this project new features are being defined for 4-pair operation. This modification will permit some of these features to be defined for new 2-pair operation as well.