

P802.3ds

Type of Project: Amendment to IEEE Standard 802.3-2022

Project Request Type: Initiation / Amendment

PAR Request Date:

PAR Approval Date:

PAR Expiration Date:

PAR Status: Draft

Root Project: 802.3-2022

1.1 Project Number: P802.3ds

1.2 Type of Document: Standard

1.3 Life Cycle: Full Use

2.1 Project Title: IEEE Standard for Ethernet Amendment: Physical Layer Specifications and Management Parameters for 200 Gb/s and greater Operation over Multimode Fiber using 200 Gb/s signaling

3.1 Working Group: Ethernet Working Group(C/LAN/MAN/802.3 WG)

3.1.1 Contact Information for Working Group Chair:

Name: David Law

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3.1.2 Contact Information for Working Group Vice Chair:

Name: Adam Healey

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3.2 Society and Committee: IEEE Computer Society/LAN/MAN Standards Committee(C/LAN/MAN)

3.2.1 Contact Information for Standards Committee Chair:

Name: James Gilb

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3.2.2 Contact Information for Standards Committee Vice Chair:

Name: David Halasz

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3.2.3 Contact Information for Standards Representative:

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4.1 Type of Ballot: Individual

4.2 Expected Date of submission of draft to the IEEE SA for Initial Standards Committee Ballot: Nov 2026

4.3 Projected Completion Date for Submittal to RevCom: Aug 2027

5.1 Approximate number of people expected to be actively involved in the development of this project: 50

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 the definition of physical layer specifications and management parameters for the transfer of Ethernet format frames at MAC data rates of 200 Gb/s and greater using 200 Gb/s signaling per lane technology over multimode fiber.

5.3 Is the completion of this standard contingent upon the completion of another standard? No

5.4 Purpose: This document will not include a purpose clause.

5.5 Need for the Project: This project is necessary to provide solutions to meet the growing bandwidth needs for 200 Gb/s signaling per lane short reach optical links for Artificial Intelligence (AI) back-end compute clusters and for front-end/traditional Ethernet networks.

5.6 Stakeholders for the Standard: Stakeholders include users and producers of Ethernet systems and components for high-bandwidth applications, such as networks for compute clusters used in AI data centers, AI servers, AI accelerators, network storage, networking systems, enterprise and cloud-scale data centers, service providers, and high-performance computing.

6.1 Intellectual Property

6.1.1 Is the Standards Committee aware of any copyright permissions needed for this project?

No

6.1.2 Is the Standards Committee 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 Is it the intent to develop this document jointly with another organization? No

8.1 Additional Explanatory Notes: