IEEE SA STANDARDS ASSOCIATION

◆IEEE

P802.3-2022/Cor 2

Type of Project: Corrigendum to IEEE Standard 802.3-2022
Project Request Type: Initiation / Corrigendum
PAR Request Date:
PAR Approval Date:
PAR Expiration Date:
PAR Status: Draft
Root Project: 802.3-2022

1.1 Project Number: P802.3-2022/Cor 2
1.2 Type of Document: Standard
1.3 Life Cycle: Full Use

2.1 Project Title: IEEE Standard for Ethernet - Corrigendum 2Multi-Gigabit Optical Automotive Ethernet Transmitter Distortion Figure Of Merit

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:
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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: Aug 2025
4.3 Projected Completion Date for Submittal to RevCom: Feb 2026

5.1 Approximate number of people expected to be actively involved in the development of this project: 10
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 proposed changes: The scope of the proposed changes is corrections to the Transmitter Distortion Figure of Merit (TDFOM) normalization factors specified in Table 166–16.

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: The normalization factors in Table 166–16 are intended to yield Transmitter Distortion Figure of Merit (TDFOM) equal to 0 dB in Equation (166–16) for an ideal transmitter. However, the current values of the normalization factors in Table 166–16 do not achieve this result and need to be corrected.
5.6 Stakeholders for the Standard: End-users, automotive manufacturers, system integrators, and

providers of systems and components (e.g., cameras, sensors, actuators, artificial intelligence processors, instruments, controllers, network infrastructure, user interfaces, and servers) for automotive applications.

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: Items 5.2.b and 5.5: Equation (166–16) and Table 166–16 are published in the IEEE Std 802.3cz-2023 amendment of IEEE Std 802.3-2022.