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**Information technology —
Telecommunications and information
exchange between systems — Local
and metropolitan area networks —
Specific requirements —**

**Part 3:
Standard for Ethernet**

**AMENDMENT 3: Physical layers and
management parameters for 25 Gb/s and
40 Gb/s operation, types 25GBASE-T and
40GBASE-T**

*Technologies de l'information — Télécommunications et échange
d'information entre systèmes — Réseaux locaux et métropolitains —
Prescriptions spécifiques —*

Partie 3: Norme pour Ethernet

*AMENDEMENT 3: Couches physiques et paramètres de gestion pour
l'exploitation des interfaces à 25 Go/s et 40 Go/s, types 25GBASE-T et
40GBASE-T*



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IEEE Std 802.3bq™-2016

(Amendment to

IEEE Std 802.3™-2015

as amended by

IEEE Std 802.3bw™-2015, and

IEEE Std 802.3by™-2016)

IEEE Standard for Ethernet

Amendment 3: Physical Layer and Management Parameters for 25 Gb/s and 40 Gb/s Operation, Types 25GBASE-T and 40GBASE-T

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Abstract: This amendment to IEEE Std 802.3-2015 specifies new Physical Coding Sublayer (PCS) interfaces and new Physical Medium Attachment (PMA) sublayer interfaces for 25 Gb/s Ethernet and 40 Gb/s Ethernet. 25GBASE-T and 40GBASE-T specify LAN interconnects for up to 30 m of balanced twisted-pair structured cabling, for 25 Gb/s and 40 Gb/s, respectively.

Keywords: 25GBASE-T, 25 Gigabit Ethernet, 25GMII, 40GBASE-T, 40 Gigabit Ethernet, Auto-Negotiation, Ethernet, IEEE 802[®], IEEE 802.3[™], IEEE 802.3bq[™], Physical Coding Sublayer (PCS), Physical Medium Attachment (PMA) sublayer, structured cabling, XLGMII

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