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Contact: Shuang Yu, Senior Manager, Solutions Marketing
+1 732-981-3424, shuang.yu@ieee.org

**IEEE 802.3™-2012 “STANDARD FOR ETHERNET” EXPANDS
TO ADDRESS NEW MARKETS, BANDWIDTH SPEEDS AND MEDIA TYPES**

Latest Revision to Globally Pervasive IEEE 802.3 Standard Defines Wired Ethernet Connectivity

PISCATAWAY, N.J., USA, 30 August 2012 – IEEE, the world's largest professional association advancing technology for humanity, today announced the publication of IEEE 802.3™-2012 “Standard for Ethernet.” IEEE 802.3 defines wired connectivity for Ethernet local area, access and metropolitan area networks around the world.

“IEEE 802.3 technologies and the varied Ethernet networks that they enable are found everywhere, and the standard’s application horizon continues to expand,” said David Law, chair of the IEEE 802.3 Ethernet Working Group and distinguished engineer with HP Networking. “When Ethernet networking was conceived in the 1970s and the IEEE 802.3 standard was first published in 1985, its founders could not possibly have foreseen the global transformation that their ideas and efforts would ultimately set into motion. The standard has helped spawn whole new business models, industries and ways of life. And that cycle of innovation continues today.”

IEEE 802.3 defines the physical (PHY) and media access control (MAC) layers of Ethernet transmission across wired connections of multiple media. The standard’s global deployment is pervasive, and the span of stakeholders in its ongoing development is sweeping, including network component and system manufacturers (optical transceivers, cabling, integrated circuit, powering devices, switches and network interface cards, for example) and network, software and bandwidth providers, as well as LAN and Internet users worldwide.

Furthermore, IEEE 802.3’s relevance continues to grow multi-dimensionally in order to address additional media types, bandwidth speeds and protocols. The new IEEE 802.3 revision approved by the IEEE Standards Association (IEEE-SA) incorporates various technical updates and enhancements and consolidates a host of amendments to the base standard that were approved since IEEE 802.3’s last full revision, in 2008. Amendments addressing 10 Gbit/s

Ethernet Passive Optical Networks (EPONs), energy efficiency, extension to 40 Gbit/s and 100 Gbit/s speeds while maintaining compatibility with previously installed IEEE 802.3 interfaces, enhanced support for loss-sensitive applications and time synchronization are among those that have been incorporated into IEEE 802.3-2012.

“For decades now, Ethernet has provided the flexible connectivity foundation on which application innovation and the bandwidth explosion have been based,” said Brad Smith, senior vice president and chief analyst at LightCounting.com, a transceiver market research firm. “The reason it has proven to be such an enduring foundational technology over years is because of the IEEE 802.3 community’s vigilance to keep the standard current with its users’ real-world needs. The various working sub-groups work very hard at incorporating the needs of the hardware and software community. At the IEEE meetings, members can be seen working well into the night on projects, standards and specifications.”

Added Wael William Diab, vice-chair of the IEEE 802.3 working group, chair of the revision task force and senior technical director at Broadcom: “IEEE 802.3 is constantly being refined to address new challenges and applications. We see the standard being expanded horizontally to address the specific needs of new markets such as energy efficiency, in-car networking, data-center networking and content delivery. At the same time, IEEE 802.3’s relevance is being expanded vertically in terms of bandwidth speeds and connection media. Work, in fact, is already underway on a variety of fronts that will have dramatic impact on the next generations of the world’s ubiquitous wired connectivity protocol of choice.”

IEEE 802.3 is available for purchase at the [IEEE Standards Store](#). For more information about the IEEE 802.3 working group, please visit <http://standards.ieee.org/develop/wg/WG802.3.html>.

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About the IEEE Standards Association

The IEEE Standards Association, a globally recognized standards-setting body within IEEE, develops consensus standards through an open process that engages industry and brings

together a broad stakeholder community. IEEE standards set specifications and best practices based on current scientific and technological knowledge. The IEEE-SA has a portfolio of over 900 active standards and more than 500 standards under development. For more information visit <http://standards.ieee.org/>.

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