
P802.15.3

Type of Project: Revision to IEEE Standard 802.15.3-2016

Project Request Type: Initiation / Revision

PAR Request Date: 11 Oct 2021

PAR Approval Date: 08 Dec 2021

PAR Expiration Date: 31 Dec 2025

PAR Status: Active

Root Project: 802.15.3-2016

1.1 Project Number: P802.15.3

1.2 Type of Document: Standard

1.3 Life Cycle: Full Use

2.1 Project Title: Standard for Wireless Multi-Media Networks

Change to Title: ~~IEEE Standard for High Data Rate~~ Wireless Multi-Media Networks

3.1 Working Group: Wireless Specialty Networks (WSN) Working Group(C/LM/802.15 WG)

3.1.1 Contact Information for Working Group Chair:

Name: Clinton Powell

Email Address: cpowell@ieee.org

3.1.2 Contact Information for Working Group Vice Chair:

Name: PHILIP E BEECHER

Email Address: phil@beecher.co.uk

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

3.2.1 Contact Information for Standards Committee Chair:

Name: Paul Nikolich

Email Address: p.nikolich@ieee.org

3.2.2 Contact Information for Standards Committee Vice Chair:

Name: James Gilb

Email Address: gilb@ieee.org

3.2.3 Contact Information for Standards Representative:

Name: James Gilb

Email Address: gilb@ieee.org

4.1 Type of Ballot: Individual

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

Jan 2023

4.3 Projected Completion Date for Submittal to RevCom: Oct 2023

5.1 Approximate number of people expected to be actively involved in the development of this project: 80

5.2 Scope of proposed standard: This standard defines PHY and MAC specifications for high data rate wireless connectivity (typically over 200 Mb/s) with fixed, portable, and moving devices. Data rates are high enough to satisfy a set of consumer multimedia industry needs, as well as to support emerging wireless switched point-to-point and high rate close proximity point-to-point applications.

Change to scope of proposed standard: This standard defines PHY and MAC specifications for high data rate wireless connectivity (typically over 200 ~~Mbps~~ Mb/s) with fixed, portable, and moving devices. Data rates are high enough to satisfy a set of consumer multimedia industry needs, as well as to support emerging wireless switched point-to-point and high rate close proximity point-to-point applications.

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

5.4 Purpose: The purpose of this standard is to provide for low complexity, low cost, low power consumption, and high data rate wireless connectivity among devices that support a variety of applications such as a set of consumer multimedia industry needs, wireless switched point-to-point applications in data centers, wireless backhaul/fronthaul intra-device communications, and a wide variety of additional use cases such as rapid large multimedia data downloads and file exchanges between two devices in close proximity, including between mobile devices and stationary devices (kiosks, ticket gates, etc.), and/or wireless data storage devices.

5.5 Need for the Project: It is a requirement of the Standards Association that the Sponsor shall initiate a revision of a standard whenever any of the material in the standard (including all amendments, corrigenda,

etc.) becomes obsolete or incorrect, or if multiple amendments to a base standard exist three years after its approval or most recent reaffirmation. Since the last revision of the standard three amendments have been completed. These are IEEE Std 802.15.3d-2017, IEEE Std 802.15.3e-2017 and IEEE Std 802.15.3f-2017. This revision is needed to roll up the three approved amendments, to make various corrections and to add additional frequency bands in the frequency range 356 to 450 GHz. IEEE Std 802.15.3-2016 includes a reference priority mapping using IEEE Std 802.1D-2004, which is being withdrawn. The reference priority mapping will be replaced in order to use IEEE Std 802.1Q-2018.

Change to Need for the Project: It is a requirement of the Standards Association that the Sponsor shall initiate a revision of a standard whenever any of the material in the standard (including all amendments, corrigenda, etc.) becomes obsolete or incorrect, or if multiple amendments to a base standard exist three years after its approval or most recent reaffirmation. ~~This Since standard the has last been revision reaffirmed of but has the never standard been revised since its completion in 2003. Since that time, two three amendments have been completed and . two more These are in IEEE process Std 802 . 15.3d-2017, Without IEEE a Std revision only one of the two in process 802.15.3e-2017 amendments and can IEEE be Std completed 802.15.3f-2017 . Further, depending This on revision order is of needed completion to of roll the up two the in three process approved amendments, edits to the title, make scope, various or corrections purpose and of to the add base additional standard frequency contained bands in those the amendments frequency may range get 356 lost to or 450 reversed GHz . This IEEE Std revision 802.15.3-2016 is includes needed a to reference roll priority up mapping the using two IEEE completed Std amendments 802.1D-2004 , to which make is various being corrections, withdrawn. to The clean reference up priority the mapping title, will scope, be and replaced purpose, in and order to establish a stable base for the two use in IEEE process Std amendments 802 . It is not adding new functionality 1Q-2018 .~~

5.6 Stakeholders for the Standard: Chip vendors, chip makers, chip designers, technology suppliers, radio frequency (RF) equipment manufacturers, enterprise infrastructure providers, international wireless carriers/service providers, academic researchers, government research laboratories, communication equipment manufacturers, system integrators and consumers.

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: The full name of all standards listed in 5.5 are as follows:

Sponsor Organization: IEEE 802

Standard Number: IEEE 802.15.3

Standard Date: 2016-05-16

Standard Title: Part 15.3: Wireless Medium Access Control (MAC) and Physical Layer (PHY) Specifications for High Rate Wireless Personal Area Networks (WPANs)

Sponsor Organization: IEEE 802

Standard Number: IEEE 802.15.3d

Standard Date: 2017-10-18

Standard Title: Part 15.3: Wireless Medium Access Control (MAC) and Physical Layer (PHY) Specifications for High Rate Wireless Personal Area Networks (WPANs): Amendment 2 for a 100 Gb/s wireless switched point-to-point physical layer

Sponsor Organization: IEEE 802

Standard Number: IEEE 802.15.3e

Standard Date: 2017-06-07

Standard Title: Part 15.3: Wireless Medium Access Control (MAC) and Physical Layer (PHY) Specifications for High Rate Wireless Personal Area Networks (WPANs): Amendment 1: High-Rate Close Proximity Point-to-Point Communications

Sponsor Organization: IEEE 802

Standard Number: IEEE 802.15.3f

Standard Date: 2017-12-06

Standard Title: Part 15.3: Wireless Medium Access Control (MAC) and Physical Layer (PHY) Specifications for High Rate Wireless Personal Area Networks (WPANs): Amendment 3: Extending the Physical Layer (PHY) Specification for Millimeter Wave to Operate from 57.0 GHz to 71 GHz

Sponsor Organization: IEEE 802
Standard Number: IEEE 802.1D
Standard Date: 2004-02-09
Standard Title IEEE Standard for Local and metropolitan area networks--Bridges and Bridged Networks

Sponsor Organization: IEEE 802
Standard Number IEEE 802.1Q
Standard Date: 2018-07-06-18
Standard Title: IEEE Standard for Local and Metropolitan Area Network--Bridges and Bridged Networks