Project: IEEE P802.15 Working Group for Wireless Specialty Networks (WSN)

Submission Title: Interim Call Slides Nov2024-Jan2025

Date Submitted: 25 November 2024

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Contact:

Voice: [deprecated],

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Re: Task Group 4ab: 802.15.4 UWB Next Generation

Abstract: Meeting Slides for the interim Webex November 2024 through January 2025

Purpose: Continue project progress and continue the illusion of organization

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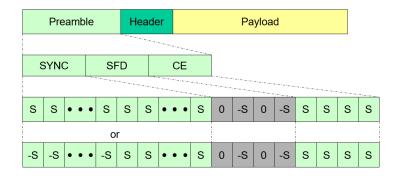


Task Group 15.4ab Next Generation UWB Amendment

Meeting Slides for the Interim meeting
November 26th, 2024
through
January 7th 2025

Meeting Preamble

Stuff you need to know before we get to the meeting content



Task Group Rules

- Discussion: Everyone present is welcome
- Straw polls: Everyone present may vote
- Formal motions: WG voters
- To make, second and vote
- Patent policy for PAR activities applies
- All the usual rules of conduct

Please identify yourself on first contact with name and affiliation

IEEE-SA Patent, Copyright, and Participation Policies

See: https://grouper.ieee.org/groups/802/sapolicies.shtml

IEEE-SA Patent Slides for Standards Development Meetings (.pdf)

https://development.standards.ieee.org/myproject/Public/mytools/mob/slideset.pdf

IEEE-SA Standards Board Patent Committee (PatCom) home page

https://standards.ieee.org/content/ieee-standards/en/about/sasb/patcom/index.html

IEEE-SA Participation Policy meeting slide set - individual method (.pdf)

https://standards.ieee.org/content/dam/ieee-standards/standards/web/documents/other/Participant-Behavior-Individual-Method.pdf

Working Group Copyright Materials

https://standards.ieee.org/ipr/copyright-materials.html

https://standards.ieee.org/content/dam/ieee-standards/standards/web/documents/other/ieee-sa-copyright-policy-2019.pdf

Participants have a duty to inform the IEEE

- Participants <u>shall</u> inform the IEEE (or cause the IEEE to be informed) of the identity of each holder of any potential Essential Patent Claims of which they are personally aware if the claims are owned or controlled by the participant or the entity the participant is from, employed by, or otherwise represents
- Participants <u>should</u> inform the IEEE (or cause the IEEE to be informed)
 of the identity of any other holders of potential Essential Patent Claims

Early identification of holders of potential Essential Patent Claims is encouraged

Ways to inform IEEE

- Cause an LOA to be submitted to the IEEE SA (patcom@ieee.org); or
- Provide the chair of this group with the identity of the holder(s) of any and all such claims as soon as possible; or
- Speak up now and respond to this Call for Potentially Essential Patents

If anyone in this meeting is personally aware of the holder of any patent claims that are potentially essential to implementation of the proposed standard(s) under consideration by this group and that are not already the subject of an Accepted Letter of Assurance, please respond at this time by providing relevant information to the WG Chair

IEEE 802 Ground Rules

Respect ... give it, get it

NO product pitches

NO corporate pitches

NO prices

NO restrictive notices – (no confidentially notices in email)

Presentations must be openly available

Agenda



https://mentor.ieee.org/802.15/dcn/24/15-24-0668-00-04ab-tgab-agenda-november-2024-through-january-2025.xlsx

5.2.b Scope of the project (As approved):

 This amendment enhances the Ultra Wideband (UWB) physical layers (PHYs) medium access control (MAC), and associated ranging techniques while retaining backward compatibility with enhanced ranging capable devices (ERDEVs).

Areas of enhancement include:

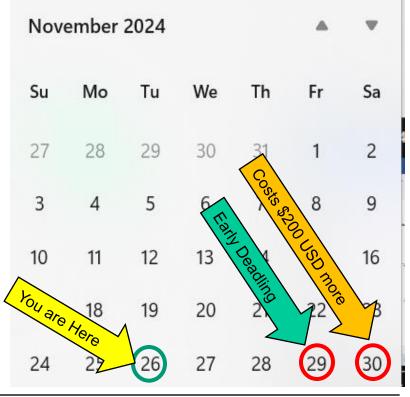
- additional coding, additional coding, preamble and modulation schemes to support improved link budget and/or reduced air-time relative to IEEE Std 802.15.4 UWB;
- additional channels and operating frequencies;
- interference mitigation techniques to support greater device density and higher traffic use cases relative to the IEEE Std 802.15.4 UWB;
- improvements to accuracy, precision and reliability and interoperability for high-integrity ranging; schemes to reduce complexity and power consumption;
- definitions for tightly coupled hybrid operation with narrowband signaling to assist UWB;
- enhanced native discovery and connection setup mechanisms;
- sensing capabilities to support presence detection and environment mapping;
- and mechanisms supporting low-power low-latency streaming as well as high data-rate streaming allowing at least 50 Mb/s of throughput.

Support for peer-to-peer, peer-to-multi-peer, and station-to-infrastructure protocols are in scope, as are infrastructure synchronization mechanisms. This amendment includes safeguards so that the high throughput data use cases do not cause significant disruption to low duty-cycle ranging use cases.

https://development.standards.ieee.org/myproject-web/app#viewpar/9081

Reminder: Registration for January Wireless Interim

- January 12th through 17th 2025
- Early Registration US\$600 by November 29, 2024 (Anywhere on Earth)
- https://touchpoint.eventsair.com/2025jan-ieee-802-wireless-interimsession/registration
- Only a few days left to get the early registration deadline!



Near Term Working Milestones



	Current Schedule
First letter ballot	June 2024
Initial LB comment resolution	Start: July 2024
First recirculation	Jan 2025
Recirculation comment resolution	Feb/March 2025
Second recirculation	March 2025
Recirculation comment resolution	March/April 2025
First SA-Ballot	May 2025
SA-Ballot comment resolution	Start July 2025

CRG

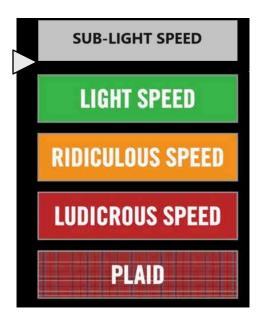
Name	Affiliation
Ben Rolfe (Chair)	BCA
Billy Verso	Qorvo
Clint Chaplin	Samsung
Riku Pirhonen	NXP
Mickael Maman	ST Microelectronics
Rojan Chitrakar	Huawei
Alex Krebs	Apple
Pooria Pakrooh	Qualcomm
Carlos Aldana	Meta
Li-Hsiang Sun	MediaTek

Quorum: 50% of CRG present

Editor's Corner



Comment resolution



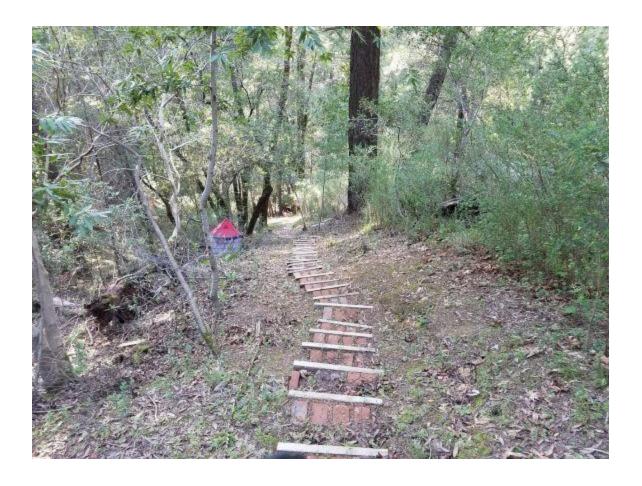
Consolidated Comments

15-24-0371

https://mentor.ieee.org/802.15/dcn/24/15-24-0371-27-04ab-consolidated-comments-draft-1-0.xlsm

Any Other Business

Next Steps



Recess



November 2024 – January 2025

Task Group 15.4ab Next Generation UWB Amendment

Resume from Recess

November 2024 – January 2025

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Any Other Business

Adjourned

