IEEE P802.11  
Wireless LANs

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Proposed Specification Skeleton for TGbp D0.1 | | | | |
| Date: 2025-07-17 | | | | |
| Author: | | | | |
| Name | Affiliation | Address | Phone | Email |
| Yinan Qi | OPPO |  |  | v-qiyinan@oppo.com |

Contents

Contents 7

Figures 13

Tables 15

Editorial Notes 17

1. Overview 19
   1. Supplementary information on purpose 19
2. Definitions, acronyms, and abbreviations 19
   1. Definitions specific to IEEE Std 802.11 19
   2. Abbreviations and acronyms 19
3. General description 21
   1. Components of the IEEE Std 802.11 architecture 21

4.3.35 Ambient Power (AMP) AP and non-AP AMP STA 21

1. Layer management (void) 21
2. Frame formats 25
   1. MAC frame formats (void) 25
   2. Action frame format details (void) 25
   3. Format of individual AMP frame types 25
      1. AMP Ack frame format 25
      2. AMP Trigger frame format 25
      3. AMP Wake-Up frame format 25
3. MAC sublayer functional description (void) 29
4. MLME 31
   1. Power management 31
   2. STA authentication and association
5. Security 21
   1. Framework 21
   2. Keys and key distribution 21
6. Ambient Power (AMP) MAC specification 35
   1. Introduction 35
   2. AMP TSF 35
   3. Channel access 35
   4. Triggering procedure 35
   5. Power management for AMP non-AP STA 35
      1. Duty-cycle operation 35
      2. Service period 35
   6. UHF RFID logic interface support 35
   7. WPT 35
      1. Non-AP AMP STA status reporting 35
      2. Energizer control 35
      3. WPT signal coexistence
   8. Power management for AMP-enabled non-AP STA 35
7. Ambient Power (AMP) PHY specification 37
   1. Introduction to the AMP PHY 37
   2. AMP PHY service interface (void) 37
   3. AMP PHY 39
      1. Introduction 39
      2. AMP PPDU formats
         1. DL AMP PPDU formats
         2. UL AMP PPDU formats
      3. Transmitter block diagram 39
         1. AMP DL carrier wave generation
      4. Overview of the PPDU encoding process (void) 39
      5. AMP modulation and coding schemes (AMP-MCSs) 39
      6. Timing related parameters 39
      7. Mathemetical description of signals (void) 39
      8. AMP preamble 39
         1. Introduction
         2. AMP DL preamble
            1. Non-AMP portion of AMP AMP PHY preamble
            2. AMP DL synchronization field
         3. AMP UL preamble
            1. AMP UL synchronization field
      9. Data field 44
         1. Modulation 44
         2. Coding 44
            1. General 44
            2. Manchester coding 44
      10. Transmit specification 46
          1. Transmit spectral mask 46
          2. Transmit center frequency and symbol clock frequency tolerance
          3. Transmit center frequency shift
      11. Receiver specification (void) 46
      12. Transmit procedure (void) 46
      13. Receive procedure (void) 46
   4. AMP PLME (void) 39
   5. Prameters for AMP-MCSs 39

Annex B (void) 49

Annex C (void) 51