**IEEE P802.15**

**Wireless Personal Area Networks**

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| Project | IEEE P802.15 Working Group for Wireless Personal Area Networks (WPANs) |
| Title | **Proposed LB213/D02 Comments Resolution for CIDs 344, 345, 348, 616, 618** |
| Date Submitted | May 2025 |
| Sources | Larry Zakaib (Spark Microsystems)larry.zakaib@sparkmicro.com |
| Re: |   |
| Abstract | Proposed comments resolution for CIDs 344, 345, 348, 616, 618 |
| Purpose | Proposed resolutions to selected comments for Subclauses 10.21 & 10.41 for “P802.15.4ab™/D2.0 Draft Standard for Low-Rate Wireless Networks”.  |
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# CID 187

# CID 344 - Revised

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| **Name** | **Index #** | **Page** | **Sub-clause** | **Line #** | **Comment** | **Proposed Change** | **Disposition Detail** | **Category** |
| VERSO, BILLY | 344 | 38 | 10.21.6.1.2 | 1 | ControllerCapabilityInformation for MLME-ASSOCIATE.request (in Table 10-104) says it is a bitmap as defined in 10.41.4.1, which I think would be clearer if it was actually referring to the bitmap format figure it was meaning. I think it should be a bitmap containing the field in Figure 187. The clause reference on its own does not suffice. | Refer to Figure 187 directly, and add to its description that as well as being a field in the over the air message that is it also the format of the capability information bitmap parameter of the MLME-ASSOCIATE.request | Revised:The bitmap (Figure 187) on its own does not provide the range for each of the controller capabilities. These are defined within 10.41.4.1. Hence in the Valid Range column of Table 10-104, change as shown below in red. Change text as shown in red. |  |

Change Table 10-104 from:

|  |  |  |  |
| --- | --- | --- | --- |
| **Name**  | **Type**  | **Valid range**  | **Description**  |
| ControllerAssociation  | Boolean  | TRUE, FALSE  | Set to TRUE to indicate that the association is from a UWB controlee for UWB (ranging) block association as described in 10.41.3, or set to FALSE otherwise.  |
| ControllerCapabilityInformation  | Bitmap  | As defined in 10.41.4.1.  | The operational capabilities of the device requesting association.  |
| ControleeShortAddress  | Integer  | 0x0000–0xffff  | A short address generated by controlee next higher layer |

To:

|  |  |  |  |
| --- | --- | --- | --- |
| **Name**  | **Type**  | **Valid range**  | **Description**  |
| ControllerAssociation  | Boolean  | TRUE, FALSE  | Set to TRUE to indicate that the association is from a UWB controlee for UWB (ranging) block association as described in 10.41.3, or set to FALSE otherwise.  |
| ControllerCapabilityInformation  | Bitmap  | As defined in Figure 187, Table 55, and within 10.41.4.1. | The operational capabilities of the device requesting association. The format is as specified in 10.41.4.1 figure 187 |
| ControleeShortAddress  | Integer  | 0x0000–0xffff  | A short address generated by controlee next higher layer |

# CID 345 - Revised

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| **Name** | **Index #** | **Page** | **Sub-clause** | **Line #** | **Comment** | **Proposed Change** | **Disposition Detail** | **Category** |
| VERSO, BILLY | 345 | 38 | 10.21.6.1.2 | 1 | I think we need a SessionID parameter to provide the value to place in the Session ID field of the Controller Association Request command frame | Add a SessionID parameter into Table 10-104 | Agreed that Session ID parameter is needed Revised:Add SessionId to the MLME-ASSOCIATE.request semantics as shown below in redAdd a SessionID parameter into Table 10-104 as shown below in red |  |

**Change 10.21.6.1.2 as follows:**

**The semantics of this primitive are as follows:**

**MLME-ASSOCIATE.request**  **(**

**ChannelInfo,**

**CoordAddrMode,**

**CoordPanId,**

**CoordAddress,**

**CapabilityInformation,**

**SecurityParams,**

**ChannelOffset,**

**HoppingSequenceId,**

**DsmeAssociation,**

**Direction,**

**AllocationOrder,**

**HoppingSequenceRequest,**

**ControllerAssociation,**

**ControllerCapabilityInformation,**

**ControleeShortAddress,**

**SessionId**

**)**

Change Table 10-104 to:

**Table 10-104—MLME-ASSOCIATE.request parameters**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name**  | **Type**  | **Valid range**  | **Description**  |
| SessionId | Octet String | As defined in 10.41.4.1. | A 4-octet session identifier that is unique to a session per controller |

# CID 348 - Revised

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| **Name** | **Index #** | **Page** | **Sub-clause** | **Line #** | **Comment** | **Proposed Change** | **Disposition Detail** | **Category** |
| VERSO, BILLY | 348 | 39 | 10.21.6.1.3 | 1 | I think we need a SessionID parameter to provide the value from the Session ID field of the received Controller Association Request command frame | Add a SessionID parameter into Table 10-105 | Note: This paragraph is for the Controller Association Indication command frameAgreed that Session ID parameter is needed Revised:Add SessionId to the MLME-ASSOCIATE.request semantics as shown below in redAdd a SessionID parameter into Table 10-105 as shown below in red |  |

**Change 10.21.6.1.3 as follows:**

**MLME-ASSOCIATE.indication**  **(**

**DeviceAddress,**

**CapabilityInformation,**

**SecurityParams,**

**ChannelOffset,**

**HoppingSequenceId,**

**DsmeAssociation,**

**Direction,**

**AllocationOrder,**

**HoppingSequenceRequest,**

**ControllerAssociation,**

**ControllerCapabilityInformation,**

**SessionId**

**)**

Change Table 10-105 from:

|  |  |  |  |
| --- | --- | --- | --- |
| **Name**  | **Type**  | **Valid range**  | **Description**  |
| ControllerAssociation  | Boolean  | TRUE, FALSE  | Set TRUE to indicate that the association is from a UWB controlee for UWB (ranging) block association as described in 10.41.3, or set to FALSE otherwise.  |
| ControllerCapabilityInformation  | Bitmap  | As defined in 10.41.4.1.  | The operational capabilities of the device requesting association.  |

Change Table 10-105 to:

|  |  |  |  |
| --- | --- | --- | --- |
| **Name**  | **Type**  | **Valid range**  | **Description**  |
| ControllerAssociation  | Boolean  | TRUE, FALSE  | Set TRUE to indicate that the association is from a UWB controlee for UWB (ranging) block association as described in 10.41.3, or set to FALSE otherwise.  |
| ControllerCapabilityInformation  | Bitmap  | As defined in 10.41.4.1.  | The operational capabilities of the device requesting association.  |
| SessionId | Octet String | As defined in 10.41.4.1.  | A session identifier value in the receive association request. |

# CID 616 – Revised

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| **Name** | **Index #** | **Page** | **Sub-clause** | **Line #** | **Comment** | **Proposed Change** | **Disposition Detail** | **Category** |
| VERSO, BILLY | 616 | 183 | 10.41.2 | 4 | There is no "scanning process" defined. I think it is fairly simple to describe, and probablyt not call it scanning process either | replace sentence with: "a controllee wanting to discover controllee devices around itself with which it may assoicate, configures itself for each mandatory channel and mandatory preamble code combination, unless the channel and preamble code are known in advance, and turns on its receiver to listen for AC IE the Association Availability field set." | Note: There is a typo in the proposed change. The 2nd “controllee” should be “controller”.Revised:Accept the proposed resolution with minor error corrections and edits. See revised text proposal below (corrections to proposal highlighted in yellow)See revised proposal below | ASSOC |

**Change from:**

A controlee may repeat the scanning process for each mandatory channel and mandatory preamble code combination unless the channel and preamble code are known in advance.

**To:**

A controlee wanting to discover nearby controller devices with which it may associate configures itself for each mandatory channel and mandatory preamble code combination, unless the channel and preamble code are known in advance, and turns on its receiver to listen for AC IE the Association Availability field set."

# CID 618 – Revised

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| **Name** | **Index #** | **Page** | **Sub-clause** | **Line #** | **Comment** | **Proposed Change** | **Disposition Detail** | **Category** |
| VERSO, BILLY | 618 | 186 | 10.41.4.2 | 14 | This line refers to the addressing mode specified by the MLME-ASSOCIATE.response primitive, however there is no such parameter in that primitive. | Not sure whether we should add a parameter to the primitive for this, or just specify the addressing mode to be extended as is done for the original coordinator association. | A straightforward resolution would be to add the Addressing Mode parameter to the MLME-ASSOCIATE.response primitiveRevised:1. Change the MLME-ASSOCIATE.response semantics to add the addressing mode shown below
2. Add the addressing Mode primitive to Table 10-106 shown below
 | ASSOC |

# Add AddressingMode to the MLME-ASSOCIATE.response semantics

# MLME-ASSOCIATE.response (

# DeviceAddress,

# AssocShortAddress,

# SecurityParams,

# ChannelOffset,

# HoppingSequence,

# DsmeAssociation,

# AllocationOrder,

# BiIndex,

# SuperframeId,

# SlotId,

# ChannelIndex,

# ControllerAssociation,

# ControllerConfiguration,

# ControllerAssociationResult,

# AssociationStatus

# AddressingMode

# )

**Table 10-106—MLME-ASSOCIATE.response parameters**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name**  | **Type**  | **Valid range**  | **Description**  |
| ControllerAssociation  | Boolean  | TRUE, FALSE  | Set to TRUE to indicate that the association is from a UWB controlee for UWB (ranging) block association as described in 10.41.3, or set to FALSE otherwise.  |
| ControllerConfiguration  | Bitmap  | As defined in Figure 189.  | The UWB session configurations determined by the controller as described in 10.41.4.2.  |
| ControllerAssociationResult  | Integer  | As defined in Table 56.  | The association result for the Controller Association Response command defined in 10.41.4.2.  |
| AddressingMode | Enumeration  | SHORT,EXTENDED | The addressing mode of the device address parameter of the association response  |