**IEEE P802.15**

**Wireless Personal Area Networks**

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| Project | IEEE P802.15 Working Group for Wireless Personal Area Networks (WPANs) | |
| Title | **D2 Comments Resolution Based MAC PIB Attributes Revision** | |
| Date Submitted | June, 2017 | |
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| Re: | MAC PIB attributes specification revision to Use of over-the-air PHY frame configuration is forbidden for PHY types IV, V and VI | |
| Abstract | Details of Resolutions regarding to the submitted Comments on D2 are suggested for MAC PIB Attributes Specification Revision to use of over-the-air PHY frame configuration is forbidden for PHY types IV, V and VI. The proposed method is designed to operate on the application services like LED ID using Color/QR Code, etc, LBS, Emergency EXIT Signage, LiFi/CamCom, LED-IT and Digital Signage with Advertisement Information etc. | |
| Purpose | D1 Comments Resolutions and Editorial Revision. | |
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**I. PHY TYPE IV MAC PIB Attributes**

# **1. MAC PIB Attributes for Offset-VPWM**

The MAC PIB attributes for Offset-VPWM is presented in the Table 97 - MAC PIB attributes (continued for Offset-VPWM).

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Attribute** | **Identifier** | **Type** | **Range** | **Description** | **Default** |
| macOffsetVPWMDataUsage | 0x81 | Unsigned | 0-255 | This attribute indicates the type of data transmitted using Flash Light Transmitter.  0 : LED ID without IP address  1 : LED ID with IP address  3 : Authentication Data | 0 |

Table 97 - MAC PIB attributes (continued for OffsetVPWM)

**II. PHY TYPE VI MAC PIB Attributes**

# **1. MAC PIB Attributes for VTASC**

The MAC PIB attributes for VATSC is presented in the Table 97 - MAC PIB attributes (continued for VTASC).

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Attribute** | **Identifier** | **Type** | **Range** | **Description** | **Default** |
| macVTASCTxMode | 0x91 | Unsigned | 0-255 | This attribute indicates the VTASC MAC transmission modes.  0 : VTASC Mode  1 : SS VTASC Mode | 0 |
| macVTASCTxCamerEnable | 0x92 | Unsigned | 0-255 | This attribute indicates the Transmitter is Enabled with Camera or not for Interactive Receiver distance specific data transfer control.  0 : Camera not connected  1 : Camera connected | 0 |
| macVTASCRxDistance | 0x93 | Unsigned | 0-255 | This attribute notify the Receiver distance from Transmitter | 0 |
| macVTASCTxDataType | 0x94 | Unsigned | 0-255 | This attribute indicates the type of data to be transmitted.  0 : Normal Data (Media Content, Information Content based on the Application its used)  1 : LED ID Data  2 : Authentication Data | 0 |
| maxVTASCDataLength | 0x95 | Integer | 0-65535 | This attribute specify the length of the data to be transmitted | 1 |

Table 97 - MAC PIB attributes (continued for VTASC)

# **2. MAC PIB Attributes for SS2DC**

The MAC PIB attributes for SS2DC is presented in the Table 97 —MAC PIB attributes (continued for SS2DC.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Attribute** | **Identifier** | **Type** | **Range** | **Description** | **Default** |
| MacSS2DCTxMode | 0xA1 | Unsigned | 0-255 | This attribute indicates the Sequential Scalable 2D Code MAC transmission modes.  0 : SS2DC Mode  1 : SS SS2DC Mode | 0 |
| macSS2DCTxCamerEnable | 0xA2 | Unsigned | 0-255 | This attribute indicates the Transmitter is Enabled with Camera or not for Interactive Receiver distance specific data transfer control.  0 : Camera not connected  1 : Camera connected | 0 |
| macSS2DCRxDistance | 0xA3 | Unsigned | 0-255 | This attribute notify the Receiver distance from Transmitter | 0 |
| macSS2DCTxDataType | 0xA4 | Unsigned | 0-255 | This attribute indicates the type of data to be transmitted.  0 : Normal Data (Media Content, Information Content based on the Application its used)  1 : LED ID Data  2 : Authentication Data | 0 |
| maxSS2DCDataLength | 0xA5 | Integer | 0-65535 | This attribute specify the length of the data to be transmitted | 0 |

Table 97 — MAC PIB attributes (continued for SS2DC)

# **3. MAC PIB Attributes for IDE**

The MAC PIB attributes for IDE is presented in the Table 97 - MAC PIB attributes (continued for IDE).

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Attribute** | **Identifier** | **Type** | **Range** | **Description** | **Default** |
| macIDETxMode | 0xB1 | Unsigned | 0-255 | This attribute indicates the Invisible Data Embedding transmission modes.  0 : IDE-BLENDING  1 : IDE-WATERMARK  2 : SS IDE-BLEND  3 : SS IDE-WATERMARK | 0 |
| macIDETxCamerEnable | 0xB2 | Unsigned | 0-255 | This attribute indicates the Transmitter is Enabled with Camera or not for Interactive Receiver distance specific data transfer control.  0 : Camera not connected  1 : Camera connected | 0 |
| macIDERxDistance | 0xB3 | Unsigned | 0-255 | This attribute notify the Receiver distance from Transmitter | 0 |
| macIDETxDataType | 0xB4 | Unsigned | 0-255 | This attribute indicates the type of data to be transmitted.  0 : Normal Data (Media Content, Information Content based on the Application its used)  1 : LED ID Data  2 : Authentication Data | 0 |
| maxIDEDataLength | 0xB5 | Integer | 0-65535 | This attribute specify the length of the data to be transmitted | 0 |

Table 97 - MAC PIB attributes (continued for Invisible Data Embedding)