**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 |
| Source | Jaesang Cha (SNUST), Minwoo Lee (SNUST), Vinayagam Mariappan (SNUST), Soonho Jung (SNUST), Kim Chan (SNUST), Ilkyoo Lee (Kongju Nat’ Univ.), Gilsik Lee (The Univ. of Texas at Dallas), Sooyoung Chang CSUS) | Voice: [ ]Fax: [ ]E-mail: [chajs@seoultech.ac.kr]1 |
| 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 address1 : 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 Mode1 : 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 connected1 : 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 Mode1 : 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 connected1 : 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-BLENDING1 : IDE-WATERMARK 2 : SS IDE-BLEND3 : 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 connected1 : 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)