AW-CU544

IEEE 802.11 b/g/n MAC/baseband/radio and Bluetooth 5.2 IoT Module

Certification Guide

Ver. A
## Revision History

<table>
<thead>
<tr>
<th>Document release</th>
<th>Date</th>
<th>Modification</th>
<th>Initials</th>
<th>Approved</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>2022/11/03</td>
<td>Initial Version</td>
<td>Hanna Chiu</td>
<td>Patrick Lin</td>
</tr>
</tbody>
</table>

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1. Certificate list of AW-CU544

AW-CU544-E and AW-CU544-P are following the reference design of Infineon IFX56811 and IFX56810, using Infineon PSoC6 + CYW43439. It has CE, FCC, and IC certificates. Certificate IDs are listed as below.

<table>
<thead>
<tr>
<th>Infineon Model Name</th>
<th>AzureWave Model Name</th>
<th>Antenna</th>
</tr>
</thead>
<tbody>
<tr>
<td>IFX56811</td>
<td>AW-CU544-E</td>
<td>External Antenna</td>
</tr>
<tr>
<td>IFX56810</td>
<td>AW-CU544-P</td>
<td>Printed Antenna</td>
</tr>
</tbody>
</table>

- **FCC ID: WAP-CMM1**
  The final end product must be labeled in a visible area with the following: Contains FCC ID: WAP-CMM1

- **IC: 6100A-CM276NF**
  The final end product must be labeled in a visible area with the following: Contains IC: 7922A-CMM1
2. Antenna Filing Policy

AW-CU544 was certified by using the below antennas. If you have preferred antenna to be used with AW-CU544, antenna filing is necessary.

<table>
<thead>
<tr>
<th>Ant. No.</th>
<th>Brand</th>
<th>Model</th>
<th>Ant. Gain (dBi) including cable loss</th>
<th>Ant. Type</th>
<th>Connector</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>MAG. Layers</td>
<td>MSA-4008-25GC1-A1</td>
<td>2.98</td>
<td>PIFA</td>
<td>I-PEX</td>
</tr>
<tr>
<td>2</td>
<td>AzureWave</td>
<td>AW-CU544</td>
<td>3.12</td>
<td>PCB</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Before applying antenna filing, please notice that below policies

1. Antenna filing could be applied for the countries as below:
   - FCC, CE, and IC

2. The below information must be included in the data sheet of new antenna
   - Antenna Vendor and Part Number
   - Antenna peak gain table
   - Antenna pattern for each band (gains listed on plots must correctly match spec sheet summary table of gains)
   - Antenna photo (including antenna length/width with L type scale) (Figure 1 or Figure 2)
   - Antenna drawing (including length/width)
   - Antenna type
   - Antenna cable length
   - Connector type
   - IPEX Cable drawing if the antenna type is dipole

![Figure 1](image1)

![Figure 2](image2)
3. Reminder about Global Antenna Rules

- Please ensure that new antenna is PIFA or PCB type.
- Please ensure that the peak gain of new antenna is lower than AzureWave limits as above antenna table.
- If new antenna has higher antenna gain value than above, it will trigger FCC permissive change testing or re-test in the other countries.
- If new antenna has different type from current antenna list, re-testing is necessary and charge might have to be taken by requestor.