FCC ID: QXK506900
Date: August 16, 2013

CT Project: TCB-p1320010
From: Chris Harvey (Technical Reviewer)

1. Please update the RF Block Diagram to include the frequencies of operation of this device per FCC 2.1033.

CT – Please refer to updated Block Diagram.

2. Please note that the RF Exposure exhibit from Atmel uses an outdated guidance from FCC (60/f rule). Also, since the exhibits for ALD are complete, there is no need to submit the Atmel RF Test Report, Atmel Test Setup Photos, Atmel Confidentiality Request Letter or the Atmel Professional Installation exhibit.

CT – Please disregard Atmel exhibits.

3. Please do not upload the rev 1 RF Exposure exhibit for ALD (only upload rev 2).

CT – Noted.

4. In accordance with FCC Part 15.101, this device is classified as a Class B Digital Device, and not necessarily as a Class B Personal Computer Peripheral. Please note that Class B Digital Devices are subject to Verification approvals, and not subject to Certification. If this device is considered a Computer Peripheral, then it should be tested in accordance with ANSI C63.4 in the minimum computer system configuration.

> *Excerpt from 15.101:*
> *Class B personal computers and peripherals ..... Declaration of Conformity or Certification. CPU boards and internal power supplies used with Class B personal computers. Declaration of Conformity or Certification.*

You have submitted a FCC Part 15 Subpart B Class B test report showing the setup as stand-alone with battery.

CT – Please disregard FCC 15B report, device is not considered DoC.

5. Please also note that the Data Sheet / Manual exhibit uses the FCC logo, which is reserved for FCC DoC approvals. The FCC logo should be removed unless this device is being approved using the FCC DoC approval procedures. Please note that the data sheet and Manual exhibits are identical, and the Manual has been updated.

CT – Please refer to updated Manual without FCC Logo. Device is not DoC.

6. Because this device does not document AC conducted emissions compliance, the devices into which this module is installed that connect to the AC mains should be tested for AC conducted emissions compliance with the module installed (will require Limited Modular Approval). If there is a representative AC Conducted Emissions test provided in the test report then no condition will be applied. (FCC requires AC Conducted Emissions for devices that connect directly or indirectly to the AC mains).

CT – Please refer to page 8 of the 15.247 test report. In the Test Summary Table under AC Conducted Emissions, per the manufacturer it states that " The EUT is battery powered with no connections to the AC mains".

7. It is noted that the original Atmel RF Test report had Peak Conducted Power of 9.2dBm, but this ALD report documents Peak Power of 10.4dBm, which is a difference of 1.2dB. Is this within the manufacturer's tolerance for power? Was the power tolerance taken into consideration for the RF Exposure calculations?

CT – According to the Atmel datasheet for this device the range for output power is -11 to +11 dBm. The measured output power of 10.4 dBm falls within this range. Since this is a new certification why does it matter that there is a 1.2 dB difference between the Atmel certification and ALD certification. The output power of the ALD module is well below the limit of + 30 dBm.
The RF exposure calculations provided in the RF Exposure test report use the measured power (10.4 dBm) of the ALD module.

8. This device is a Module, so should be provided with guidance to the installer for labeling the outside of the host to indicate that 'Contains FCC ID QXK506900'. Please provide the labeling guidance mentioned on the Modular Approval Cover Letter.

CT – Please refer to updated manual.

Response by: Greg Corbin

Submitted by: Jennifer Sanchez

Date: 08/16/2013