



Artimi Ltd
Betjeman House,
104 Hills Road,
Cambridge,
CB2 1LQ
United Kingdom

Tel: +44 (0) 1223 464 464
Fax: +44 (0) 1223 461 337

Website: www.artimi.com

Artimi Inc.
2105 Landings Drive
Mountain View
CA 94043
USA

Tel: +1 (650) 938 9650
Fax: +1 (650) 887 2252

**Chief, Authorizations Branch
Federal Communications Commission
7435 Oakland Mills Road
Columbia, MD 21046**

October 14, 2008

RE: Request for unlicensed Modular Transmitter Approval.

Reference FCC 07-56A1 47 CFR 15.212

To Whom It May Concern:

Artimi Ltd hereby requests FCC Equipment Authorization as a singular Modular Transmitter of the Artimi RDK Model A180-WUSB-MINI-RDK-F Module, FCC ID: S8S-A-180-PCBA012. Artimi intend to manufacture this device for several ODM manufacturers who will incorporate this module into computer products and accessories. This letter addresses the information required by (a)(1) through to (a)(8) of 47 CFR 15.212.

(a)(1) The Modular transmitter must have its own RF shielding:

This transmitter is designed to be incorporated into computer products with a dedicated motherboard assembly with no end user access. All shielding necessary for normal operation is provided by the multi-layer layout of printed circuit board which is constructed with multiple ground layers. The ODM manufacturers may provide additional shielding around the transmitter module on the assembly area of the dedicated motherboard if RF coupling need to be minimized.

(a)(2) The Modular transmitter must have buffered modulation or data inputs:

The Artimi RDK A180-WUSB-MINI-RDK-F Module uses a PCIe mini connector type to connect to its dedicated mother board for data and the interface is implemented on the module within the A180 integrated circuit as may be seen on sheet two of the schematic diagram included in the filing for FCC equipment Authorization.

(a)(3) The Modular transmitter must have its own power supply regulation:

The Artimi RDK A180-WUSB-MINI-RDK-F Module is powered from 3.3V supply provided by the motherboard. This 3.3V source power domain is then regulated on the module to generate the additional power domains (+1.8V, +1.65V and +1.2V) that are required by the module. The power regulation circuitry may be seen on sheet four of the schematic diagram included in the filing for FCC equipment Authorization.

(a)(4) The Modular transmitter must comply with the antenna and transmission system requirements of §§ 15.203, 15.204(b) and 15.204(c):

The Artimi RDK A180-WUSB-MINI-RDK-F Module is provided with a mini RF connector, not accessible to the end user, for ODM manufacturers to permanently attach an ACON ADM6P-700042 UWB antenna with mating connector.

(a)(5) The Modular transmitter must be tested in a stand-alone configuration:

As described in section 2.5.3 of the test report included in the filing for FCC Equipment Authorization, the Artimi RDK A180-WUSB-MINI-RDK-F Module was powered through a test jig power adaptor and connected to the host PC to activate UWB emissions.

(a)(6) The Modular transmitter must be equipped with either a permanently affixed label or must be capable of electronically displaying FCC identification number :

The FCC identifier will be placed onto the enclosure of the end product that incorporates this transmitter module as "Contains FCC ID: S8S-A-180-PCBA012".

(a)(7) The Modular transmitter must comply with any specific rule or operating requirements applicable to the transmitter:

FCC part 15.519 (a)(1) , Technical requirements for hand held UWB systems, requires that a UWB device shall transmit only when it is sending information to an associated receiver and the UWB intentional radiator shall cease transmission within 10 seconds unless it receives an acknowledgment from the associated receiver that its transmission is being received. It also requires that an acknowledgment of reception must continue to be received by the UWB intentional radiator at least every 10 seconds or the UWB device must cease transmitting. The Artimi RDK A180-WUSB-MINI-RDK-F Module meets this requirement and is implemented in the firmware.

(a)(8) The Modular transmitter must comply with any applicable RF Exposure requirements:

There are no RF immunity requirements for hand-held UWB devices under subpart F of the FCC Rules and Regulations.

Yours sincerely



Richard King
Applications Manager

Tel: +44 (0)1223 464464
Fax: +44 (0)1223 461337
Website: www.artimi.com