

Application Examiner Telecommunication Certification Body RFI Global Services Ltd. Pavilion A Ashwood Park Basingstoke Hampshire RG23 8BG United Kingdom

## **Re: Modular Approval application**

10<sup>th</sup> March 2009

To whom it may concern,

FCC ID: USE654943

Applicant: Paxton Access Ltd

Model Number: 654-943-US

This application is submitted in accordance with FCC Public Notice, DA 00-1407, for Part 15 Unlicensed Modular Transmitter Approval. This Low Power transceiver module complies with the requirements specified in DA 00-1407 as described below:

- 1) **Inherent RF Shielding** The Net2 nano circuit board has inherent RF shielding to minimize emissions for compliance to FCC Part 15, Subpart C requirements. This inherent shielding is due to the radio transceiver being a self contained chip with external crystal. The addition of the extra board sited 1.6 cm above the active PCB, also acts as a protective shield to the circuitry.
- Buffered modulation/data inputs The data/modulation rates are defined by the IEEE802.15.4 standard, which has been developed to comply with FCC Part 15 rules. The Chipcon CC2430 transceiver chip controls the data/modulation rates in accordance with this standard.
- 3) **Power Supply Regulation** The Net2 nano has on board regulators and filtering circuitry to generate the various voltages required. The +12VDC from the power input terminal is used as the source to generate the +12V, 5V and 3.3V onboard voltages.
- 4) Antenna Requirements per Section 15.203 and 204(c) The Net2 nano has an antenna that complies with Section 15.203 and 204(c). The module has an integral PCB antenna that is inaccessible to the user.
- 5) **Tested in Stand-Alone Configuration** The Net2 nano was tested as a standalone device and was compliant with FCC Part 15, Subpart C, requirements as detailed in the Test Report contained in this application. The module is intended to

be powered from a +12 VDC source provided by undefined power supply or host terminal.

- 6) FCC ID Label Exhibit 1 contains the labelling requirements of the module and the user manual, Exhibit 8, contains instructions for carrying the FCC ID to the exterior of the final product.
- 7) **Comply with Specific Rules and Operation Requirements** The module was compliant with FCC Part 15, Subpart C, specifically Section 15.247 for operation in the band of 2400-2483.5 MHz. The test results are detailed in the Test Report.
- 8) **RF Exposure Requirement Compliance** The Net2 nano complies with the Maximum Permissible Exposure (MPE) levels of ANSI/IEEE C95.1-1992 and 47 CFR 1.1310, Table 1 for an uncontrolled environment. Compliance is demonstrated with the MPE calculation contained in this application.

Sincerely,

B.D. glass

Quality Manager Paxton Access Ltd