

Modular Approval Request FCC (per DA 00-1407)

FCC ID: E90TL001ZEAL-C02

<i>Items to be covered</i>	<i>Answer from applicant</i>
1. The modular transmitter must have its own RF shielding.	The module contains a shield place on top of the RF circuit made out of nickel. (refer to external photo)
2. The modular transmitter must have buffered modulation/data inputs (if such inputs are provided) to ensure that the module will comply with Part 15 requirements under conditions of excessive data rates or over-modulation.	Data to the modulation circuit is buffered on the module via logic or microprocessor inputs in the BC4 components location baseband on the Block diagram.
3. The modular transmitter must have its own power supply regulation.	The module contains its own power supply regulation and the RF reference oscillator is contained within the module. Power supply regulation is provided via BC4 components location VREG on the block diagram.
4. The modular transmitter must comply with the antenna requirements of Section 15.203 and 15.204(c). The antenna must either be permanently attached or employ a "unique" antenna coupler (at all connections between the module and the antenna, including the cable)..	The antenna is an onboard antenna as shown in the internal picture.
5. The modular transmitter must be tested in a stand-alone configuration, i.e., the module must not be inside another device during testing. This is intended to demonstrate that the module is capable of complying with Part 15 emission limits regardless of the device into which it is eventually installed.	Module was tested in a stand-alone configuration as shown in the test set up picture contained in the test report.
6. The modular transmitter must be labeled with its own FCC ID number, and, if the FCC ID is not visible when the module is installed inside another device, then the outside of the device into which the module is installed must also display a label referring to the enclosed module. This exterior label can use wording such as the following: "Contains Transmitter Module FCC ID: XYZMODEL1" or "Contains FCC ID: XYZMODEL1." Any similar wording that expresses the same meaning may be used. The Grantee may either provide such a label, an example of which must be included in the application for equipment authorization, or, must provide adequate instructions along with the module which explain this requirement. In the latter case, a copy of these instructions must be included in the application for equipment authorization.	The module transmitter does not have label with its own FCC ID since it is too small. Instead user's manual has its ID. Installation instruction document has instruction of exterior label for system integrator product.
7. The modular transmitter must comply with any specific rule or operating requirements applicable to the transmitter and the manufacturer must provide adequate instructions along with the module to explain any such requirements. A copy of these instructions must be included in the application for equipment authorization. For example, there are very strict operational and timing requirements that must be met before a transmitter is authorized for operation under Section 15.231. For instance, data transmission is prohibited, except for operation under Section 15.231(e), in which case there are separate field strength level and timing requirements. Compliance with these requirements must be assured.	Installation instruction provides conditions on using the modular transmitter. Refer to installation instruction.
8. The modular transmitter must comply with any applicable RF exposure requirements. For example, FCC Rules in Sections 2.1091, 2.1093 and specific Sections of Part 15, including 15.319(i), 15.407(f), 15.253(f) and 15.255(g), require that Unlicensed PCS, UNII and millimeter wave devices perform routine environmental evaluation for RF Exposure to demonstrate compliance. In addition, spread spectrum transmitters operating under Section 15.247 are required to address RF Exposure compliance in accordance with Section 15.247(b)(4). Modular transmitters approved under other Sections of Part 15, when necessary, may also need to address certain RF Exposure concerns,	The modular transmitter meets the requirements for a portable device that may be used at distance less than 2.5cm from the human body since its output power is lower the limit of 60/fGHzmW <25mW for a 2.4GHz device>. The module



typically by providing specific installation and operating instructions for users, installers and other interested parties to ensure compliance.

meets the requirements for a mobile device that may be used at distance of more than 20cm from the human body. Refer to the MPE calculation.

Note: If compliance with one or more of the numbered requirements, listed above, cannot be demonstrated, it may be possible to obtain a "Limited Modular Approval" (LMA).

Name and surname of applicant (or authorized representative): Yasushi Noguchi

Date: 2/23/2012

Signature: 