

Application Document for FCC Part 15, Subpart C (Intentional Radiator) Class II Permissive change

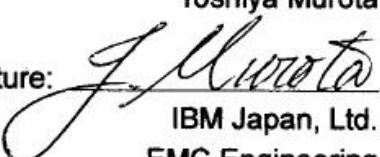
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Product Name: IBM Integrated Bluetooth with 56K Modem

FCC ID: ANO20020100MTN

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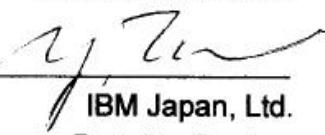
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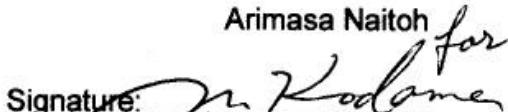
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Outline of Submission

1. Objective

This is a Certification Compliance Report for the **Class II Permissive Change** of the FCC **Part 15, Subpart C (Intentional Radiator)**.

2. Product Description

The applying modular transmitter device is an OEM Bluetooth card supplied by Actiontec Electronics, Inc. The modular device complies with the Bluetooth standard Class II specification. And the modular also has a modem interface. i.e. it is a combo card of Bluetooth with modem function. The certification or DoC process for the modem conformance is performed by Actiontec.

3. Installation of the applying transmitter

There is no hardware modification placed on the applying LMA wireless card itself, but an additional antenna system to be supported as follows.

The granted antenna systems in the previous submission

- IBM ThinkPad R40 Series (The LMA Tx is preinstalled by IBM.)
- IBM ThinkPad X30 Series (The LMA Tx is user installable.)
- IBM ThinkPad T40 Series (ditto)

The new antenna system for this class II submission

- IBM ThinkPad R50 Series (The LMA Tx is user installable.)

An unique electrical connector (so called BIOS Lock) is employed for those host devices to satisfy the FCC rule Part 15.203 or RSS-210 §5.5. This mechanism **allows users to install the applying LMA transmitter into each specified host device except R40 Series.**

The detail explanation of the unique coupling between the LMA transmitter and antenna systems is shown in the separate exhibit "Confidential_BIOS_Lock", however IBM would like to hold it in confidence to maintain the secure "unique operability" with the applying card and IBM antenna systems.

The BIOS Lock function is also effective for the user's maintenance in replacing a broken card with a spare part.

4. Collocation with other transmitters

The applying LMA transmitter is used as a subsidiary device of a dominant WLAN transmitter listed below, and it can transmit simultaneously with one of them on each specified host device listed in the clause 3.

The collocated dominant transmitter with the applying module

- ANO20030400LEG
- ANO20020201CLK

Those transmitters are to be certified separately with the applying module. The RF Safety

evaluation with the collocating transmitters is examined by each application document of those dominant transmitters, so this application does not include it.

5. Submittal documents

● LAM Qualification	omitted (identical with the original filing)
● Product Labeling	omitted (ditto)
● Internal Photos	omitted (ditto)
● External Photos	omitted (ditto)
● Block Diagrams	omitted (ditto)
● Schematic Diagrams	omitted (ditto)
● Parts List	omitted (ditto)
● Circuitry Descriptions of LMA transmitter	omitted (ditto)
● Attestations regarding FH or FH in hybrid mode	omitted (ditto)
● The new antenna system Info.	Yes
● Test Report with the new antenna system	Yes
● Test Setup Photos	Yes
● Electrical antenna connector (BIOS Lock logic)	Yes
● RF Exposure evaluation for the new antenna	Yes
● Users Manual	Yes
● IBM Web site concerning the grant condition	Yes