

Application Document for FCC Part 15, Subpart E (UNII Devices)

Document Number: FCC 19-0219-0

Product Name: ThinkPad T40 Series
(Machine type: 2373, 2374, 2375, 2376)

FCC ID: ANO20020302R1L

January 14, 2003

EMC Staff Engineer

Signature:

Toshiya Murota

IBM Japan, Ltd.

EMC Engineering
LAB-S59

1623-14, Shimotsuruma,
Yamato-shi Kanagawa-ken 242-8502, Japan
Phone: +81-46-215-6574
Fax: +81-46-273-7420
E-Mail: murota@jp.ibm.com

EMC Engineering Manager / NVLAP signatory

Signature:

Akihisa Sakurai

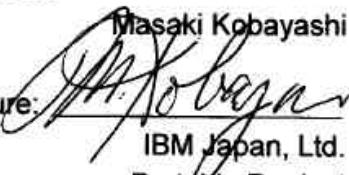

IBM Japan, Ltd.

EMC Engineering
LAB-S59

1623-14, Shimotsuruma,
Yamato-shi Kanagawa-ken 242-8502, Japan
Phone: +81-46-215-2613
Fax: +81-46-273-7420
E-Mail: akihisa@jp.ibm.com

Portable Product Director

Signature:

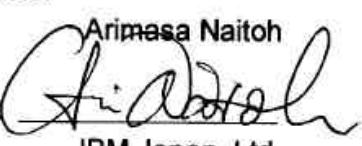
Masaki Kobayashi


IBM Japan, Ltd.
Portable Product
LAB-R16

1623-14, Shimotsuruma,
Yamato-shi Kanagawa-ken 242-8502, Japan
Phone: +81-46-215-3889

Portable Systems Director

Signature:

Arimasa Naitoh


IBM Japan, Ltd.
Portable Systems
LAB-R11

1623-14, Shimotsuruma,
Yamato-shi Kanagawa-ken 242-8502, Japan
Phone: +81-46-215-6110

Outline of Submission

1. Objective

This is a Certification Compliance Report for FCC Part 15 subpart E, U-NII device.

- The applying equipment : ThinkPad T40 Series
- FCC ID : **ANO20020302R1L**

The device is **composite equipment** with the same FCC ID of Part 15 subpart C, DTS device.

2. Installation of the applying transmitter

The built-in wireless LAN module is **preinstalled by IBM**. According the FCC Part 15.407(d), a **tamperproof structure** is employed so that the applying wireless module is not able to be removed nor plugged in by users.

Since users can not access to the card, IBM or a responsible party will replace a broken card with a spare part. Refer to “Circuitry Description” document, and page **6** of User’s Manual.

3. Product Description

The applying equipment is a standard size laptop computer integrating IEEE 802.11a & b combo Wireless LAN function inside. The wireless module consists of an OEM card (Philips Components, **Model No: PH11107-X**, 802.11 Combo Mini-PCI WLAN Card) and built-in antennas (Inverted F-figure Dual bands antennas × 1, Dual-band Coupled Floating Element Antenna× 1). The specifications of the applying wireless LAN card and the built-in antennas are as follows.

Specification of Wireless-LAN feature

IBM product name of wireless Card	IBM Dual-Band 11a/b Wi-Fi® Wireless Mini PCI Adapter
Carrier Frequencies	5180MHz ~ 5320MHz
Antenna gain	Maximum peak 1.42 dBi (in the above band)
Conducted transmission power	Maximum 17 dBm
Antenna type	Main antenna: P/N: 62P4024 Dual-band Inverted F-figure type antenna Auxiliary antenna: P/N: 62P4203 Dual-band Coupled Floating Element Antenna
Antenna cable type And length	Main antenna: coax 740 mm Auxiliary antenna: coax 860 mm

4. Mounting structure of Wireless LAN card and Antenna

The inverted F-figure type antenna is built in the top of the LCD, and the coupled floating element antenna is built in the right side of the LCD. Those diversity antennas are not used simultaneously. One of the antennas is selected automatically or manually to have a good quality of radio communication. The selected antenna performs transmission or receiving in half duplex alternatively.

