

Host Unit Antenna Information

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1. Antenna Assembly Overview

Note 1) 1a. Includes all cable losses.

1b. Antenna type should be Omni Directional.

IBM ThinkPad G40 Series

Designator	Manufacture	Antenna type	Cable type and length	Gain (dBi) Note 1)
R0222-099 Main antenna	SmartAnt Telecom Co., Ltd. (R.O.C.)	Dual Band Meander (Inverted F) Antenna	coax 570mm	2.4GHz band -0.25 dBi (peak)
				5.8GHz band 3.15 dBi (peak)
R0222-100 Auxiliary antenna			coax 610mm	2.4GHz band 0.87 dBi (peak)
				5.8GHz band 2.11 dBi (peak)

IBM ThinkPad X30 Series

Designator	Manufacture	Antenna type	Cable type and length	Gain (dBi) Note 1)
08K4083 Main antenna	Nissei Electric Co. Ltd. (Japan)	Dual Band Meander (Inverted F) Antenna	coax 394mm	2.4GHz band 0.62 dBi (peak)
				5.8GHz band 0.32 dBi (peak)
08K4084 Auxiliary antenna			coax 534mm	2.4GHz band 1.28 dBi (peak)
				5.8GHz band -0.87 dBi (peak)

IBM ThinkPad X40 Series

Designator	Manufacture	Antenna type	Cable type and length	Gain (dBi) Note 1)
13N5743 Main Antenna	Nissei Electric Co., Ltd. (Japan)	Dual Band Meander (Inverted F) Antenna	coax 488mm	2.4GHz band 0.39 dBi (peak)
				5.8GHz band 1.74 dBi (peak)
13N5742 Auxiliary Antenna			coax 449mm	2.4GHz band 1.67 dBi (peak)
				5.8GHz band 2.04 dBi (peak)

2. Antenna Info of ThinkPad G40 Series

2.1 Host PC Information

The two meander (Inverted F type) antennas are built in the top LCD bezel. 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.



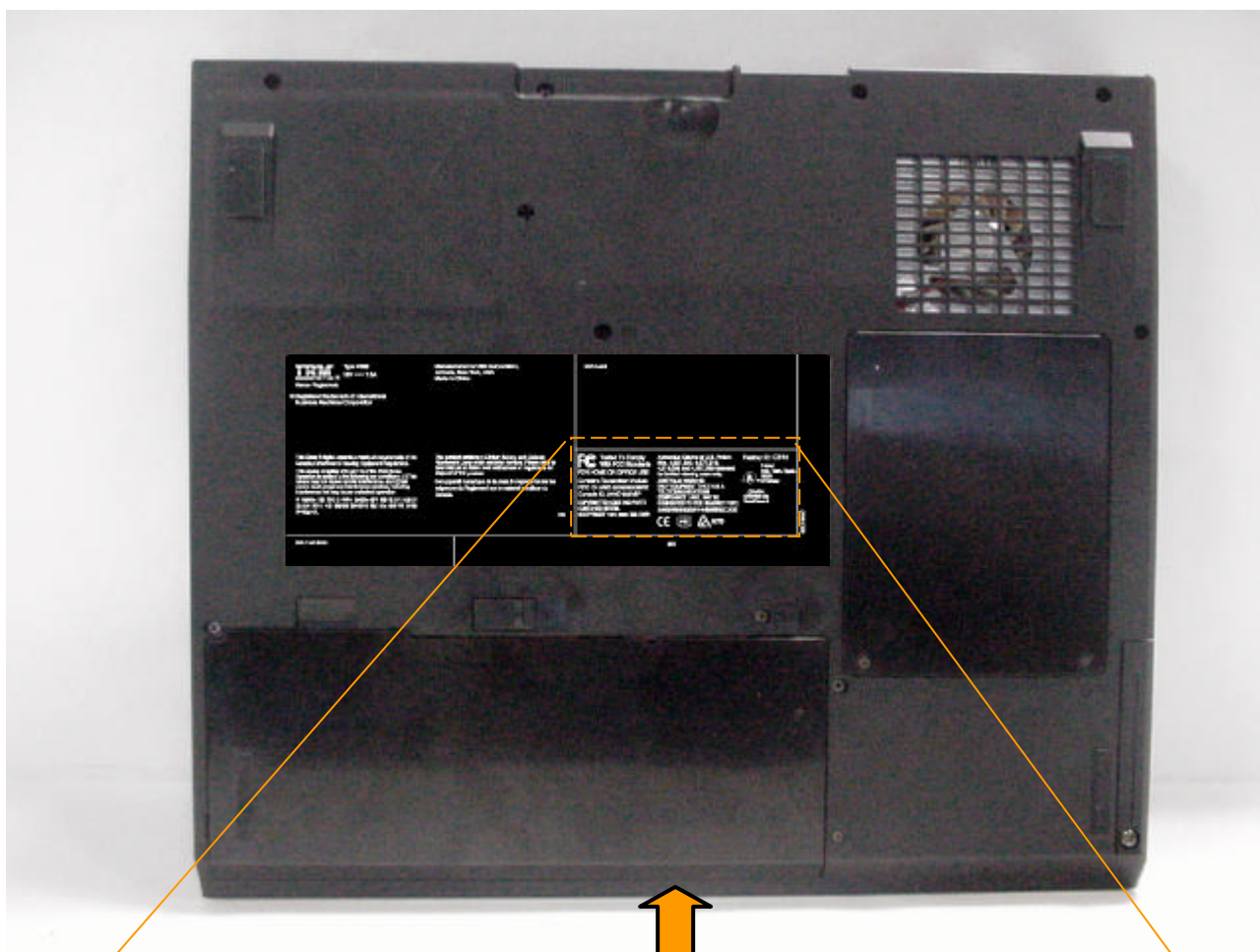
IBM ThinkPad G40 Series, LCD 14 inch Model



IBM ThinkPad G40 Series, LCD 15 inch Model



2.2 Host PC Labeling



Bottom view, Front side

FCC Tested To Comply
With FCC Standards
FOR HOME OR OFFICE USE
Contains Transmitter Module
FCC ID: ANO20040600BTL
Canada IC: 349E-AR5BMB44
COPYRIGHTED CODE AND PARTS
CONTAINED HEREIN.
©COPYRIGHT 1981, 2004 IBM CORP.

Apparatus Claims of U.S. Patent
Nos. 4,631,603, 4,577,216,
4,819,098 and 4,907,093 licenced
for limited viewing uses only.
AUSTRALIA WARNING:
ONLY EQUIPMENT THAT HAS A
TELECOMMUNICATIONS
COMPLIANCE LABEL MAY BE
CONNECTED TO THE HEADSET PORT.

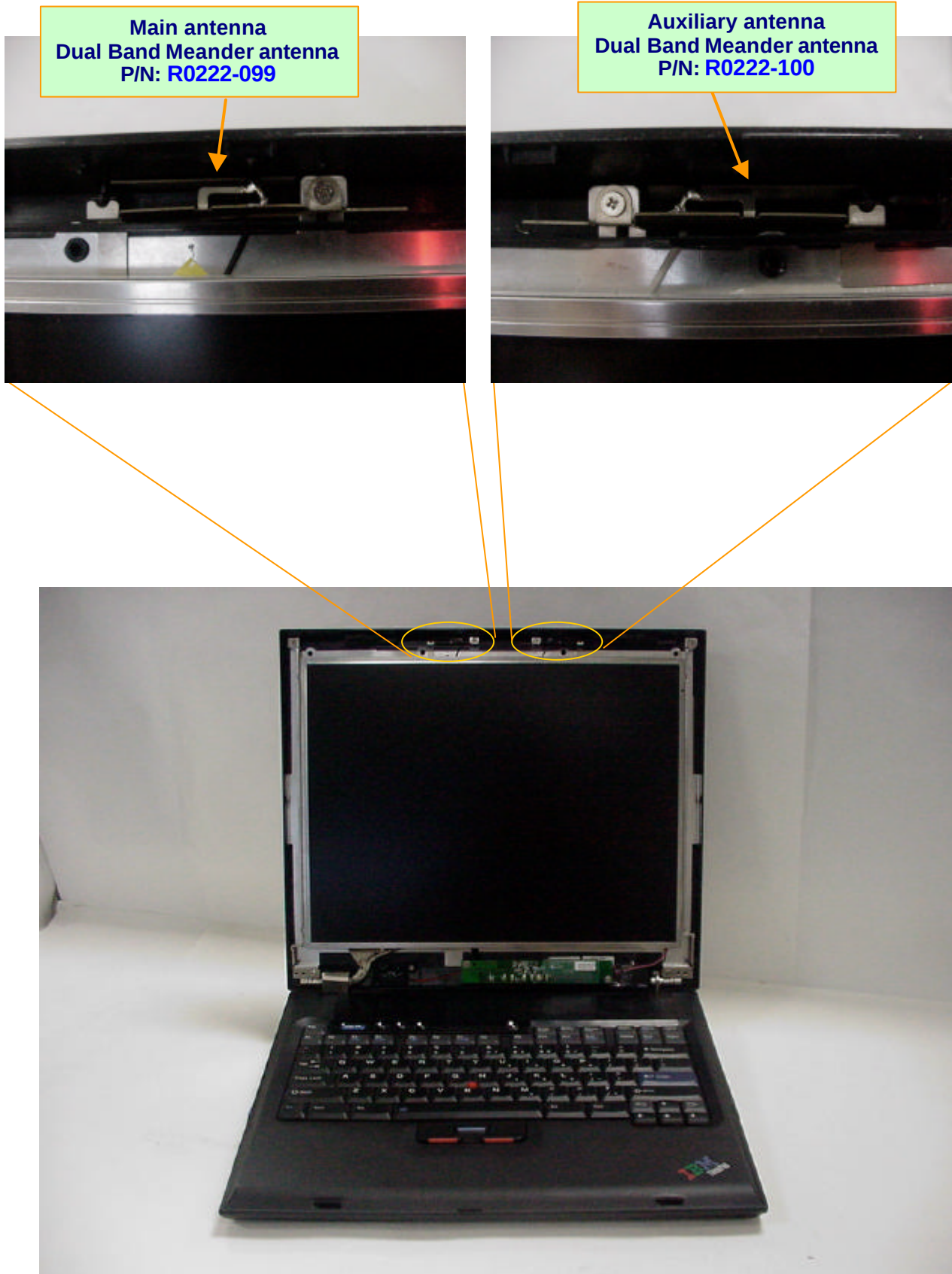


Factory ID: AF10

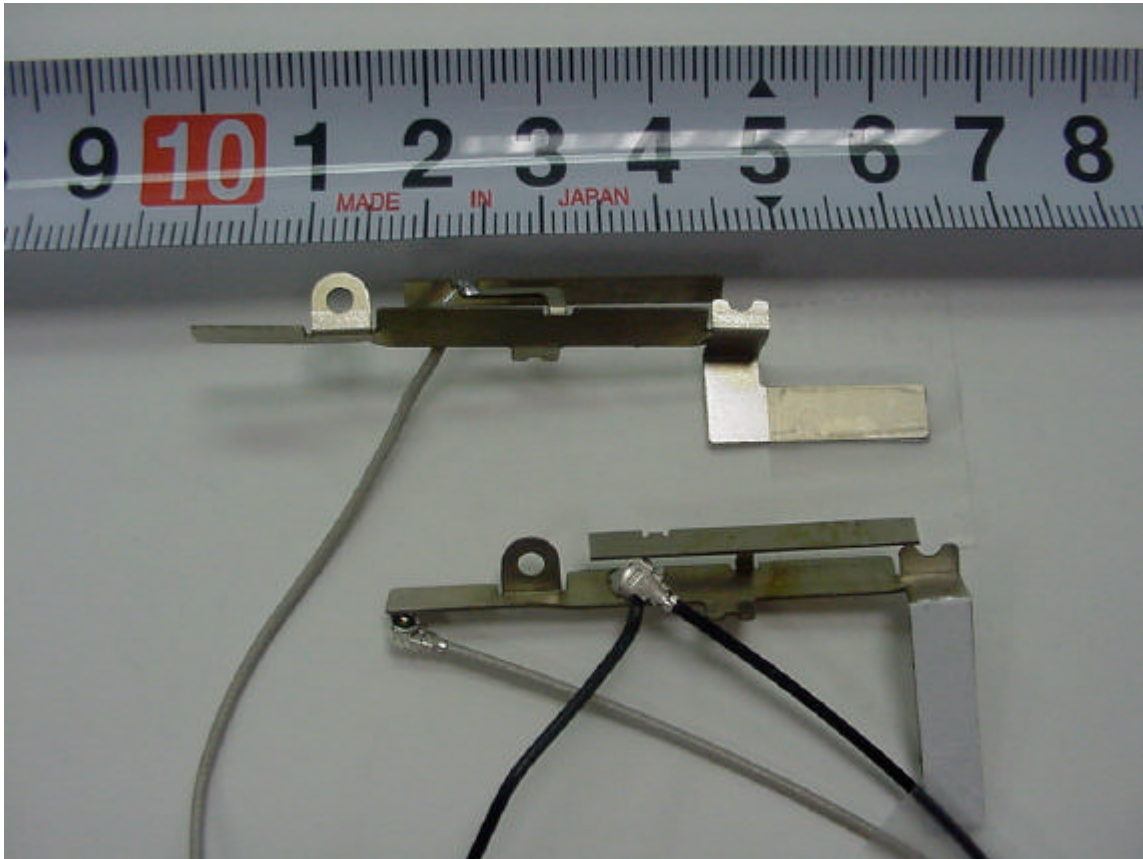


CANADA
ICES/NMB-003
Class/Classe B

2.3 Antenna Locations



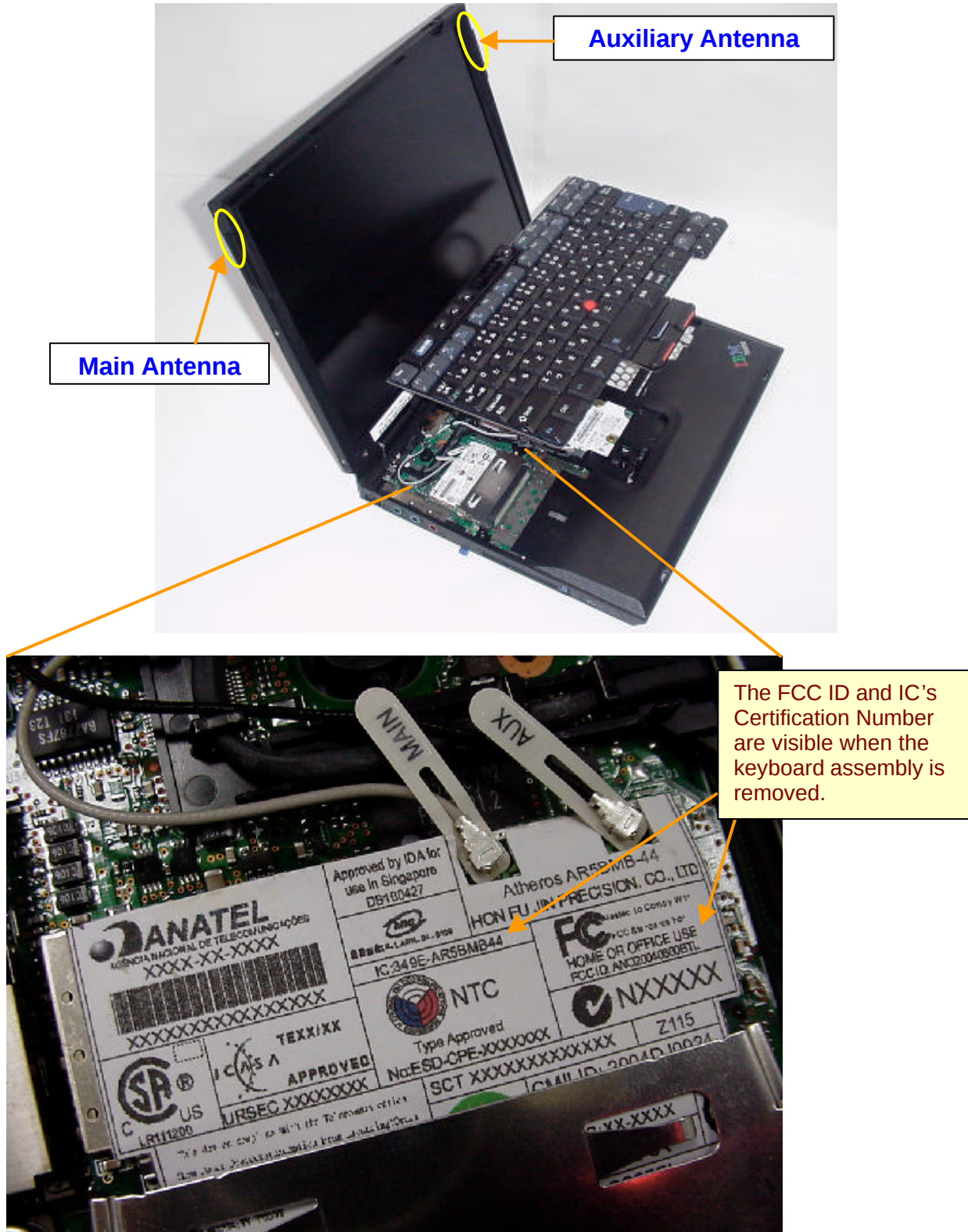
2.4 Exterior Photos of Antennas



3. Antenna Info of ThinkPad X30 Series

3.1 Host PC Information

The two Meander (Inverted F type) antennas are built in the left and right top sides of LCD as shown in the Photo. 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.



3.2 Host PC Labeling

Applying LMA transmitter is installed under this location. See previous page.

TX FCC ID for an installed Transmitter Card located under customer removable keyboard.

The host device (ThinkPad X30 Series) supports the applying transmitter and a built-in type Bluetooth LMA transmitter which was certified separately (FCC ID: ANO20020100MTN, Feb/26/2003).

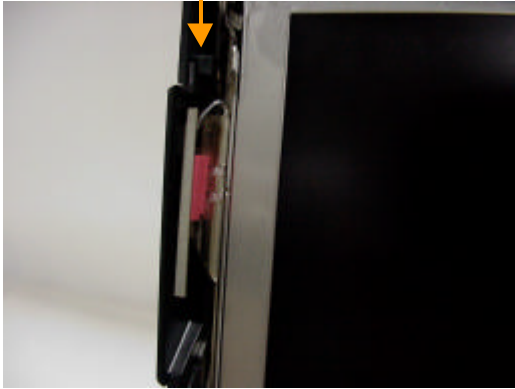
TX FCC ID for an installed CDC transmitter Card located under customer removable keyboard.

Bottom view Front Side

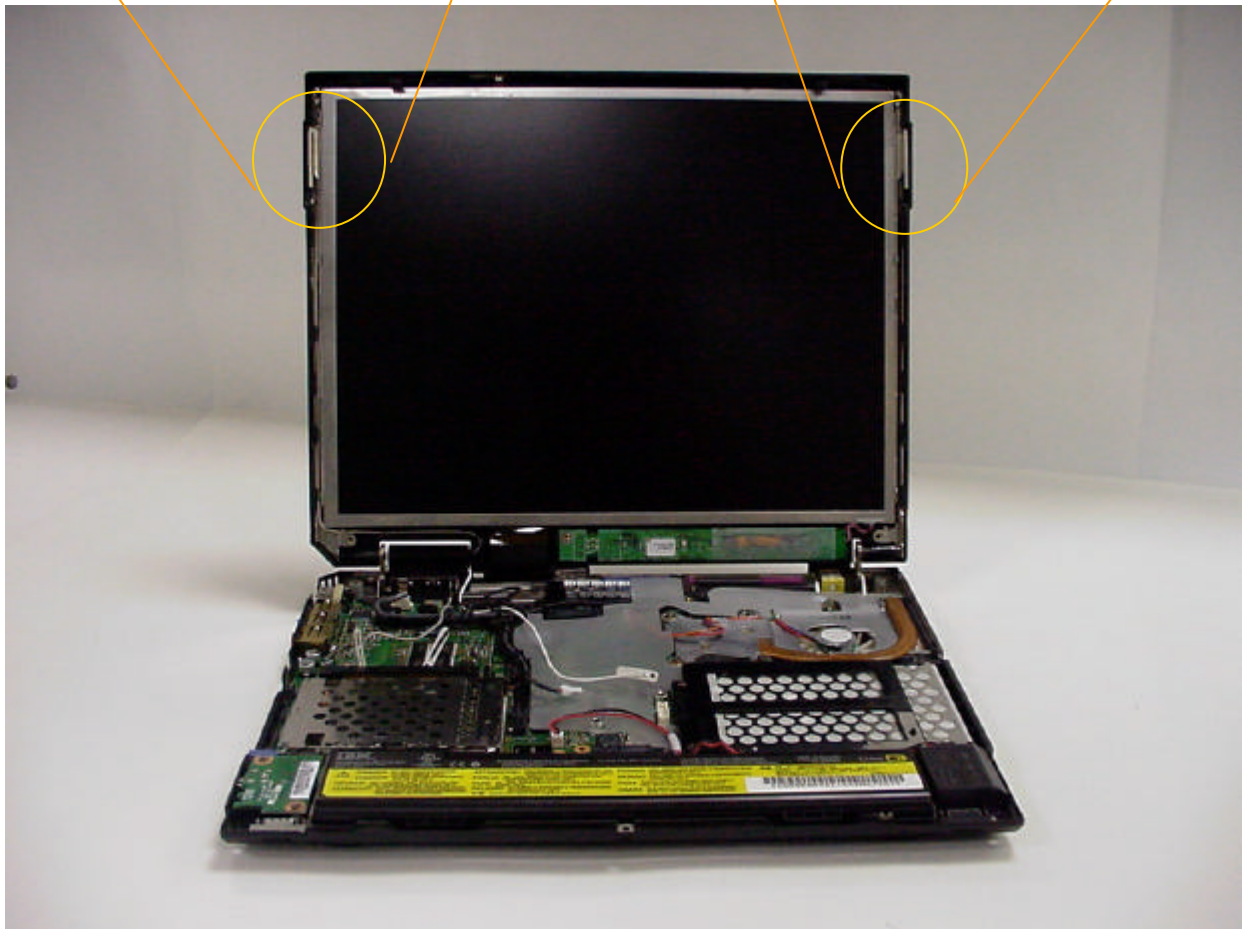
 Type 2672 型号 2672 16V == 3.5A 电压 16V == 电流 3.5A Marca Registrada ®Registered Trademark of International Business Machines Corporation COPYRIGHTED CODE AND PARTS CONTAINED HEREIN. ©COPYRIGHT 1981, 2002 IBM CORP.	This Product contains a Lithium Ion Battery, Lithium Battery and Cathode Fluorescent Lamp which contains mercury. Please refer to User Manual or follow Local Ordinances or Regulations for Disposal of this machine. 警告: 电网电压与电源设置电压必须相符	
Manufactured by IBM Made in Mexico AUSTRALIA WARNING: ONLY EQUIPMENT THAT HAS A TELECOMMUNICATIONS COMPLIANCE LABEL MAY BE CONNECTED TO THE HEADSET PORT. Apparatus Claims of U.S. Patent Nos. 4,631,603; 4,577,216; 4,819,098 and 4,907,093 licensed for limited viewing uses only. CANADA ICES/NMB-003 Class/Classe B 	FC Tested To Comply With FCC Standards FOR HOME OR OFFICE USE	802.3 MAC Address
802.11 MAC Address		

3.3 Antenna Locations

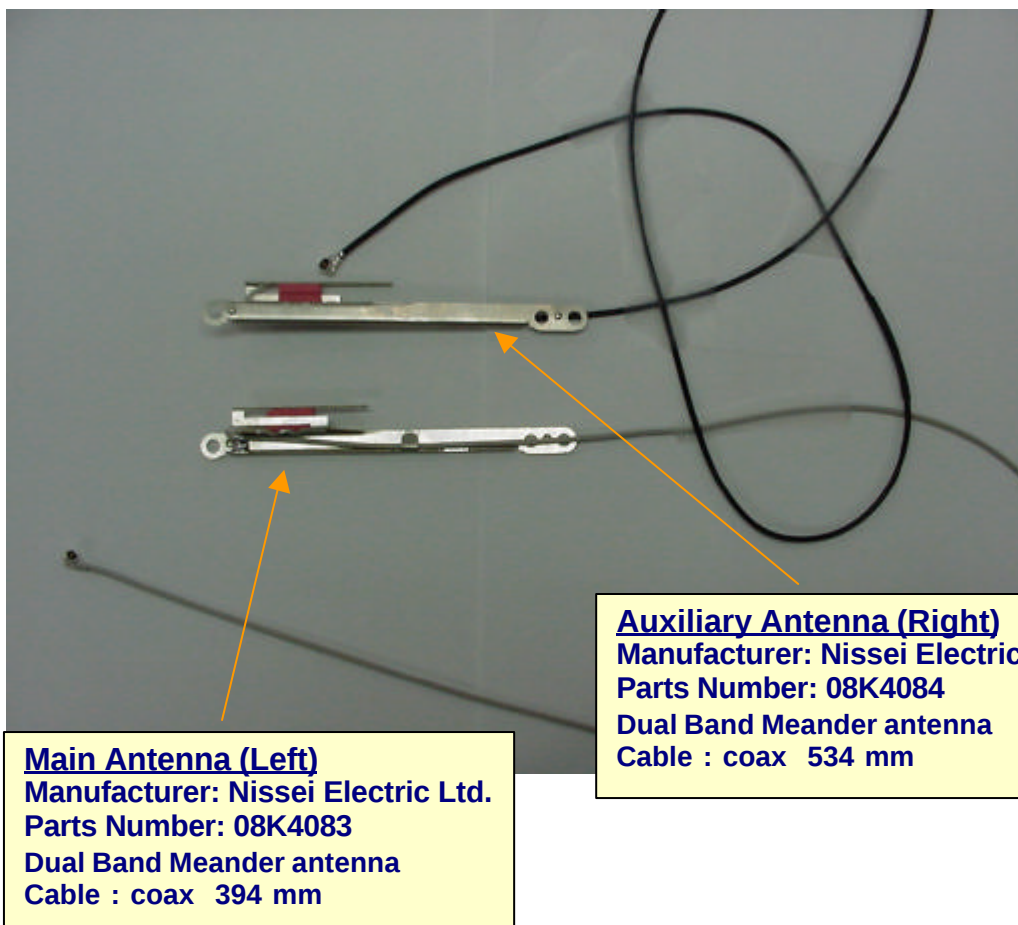
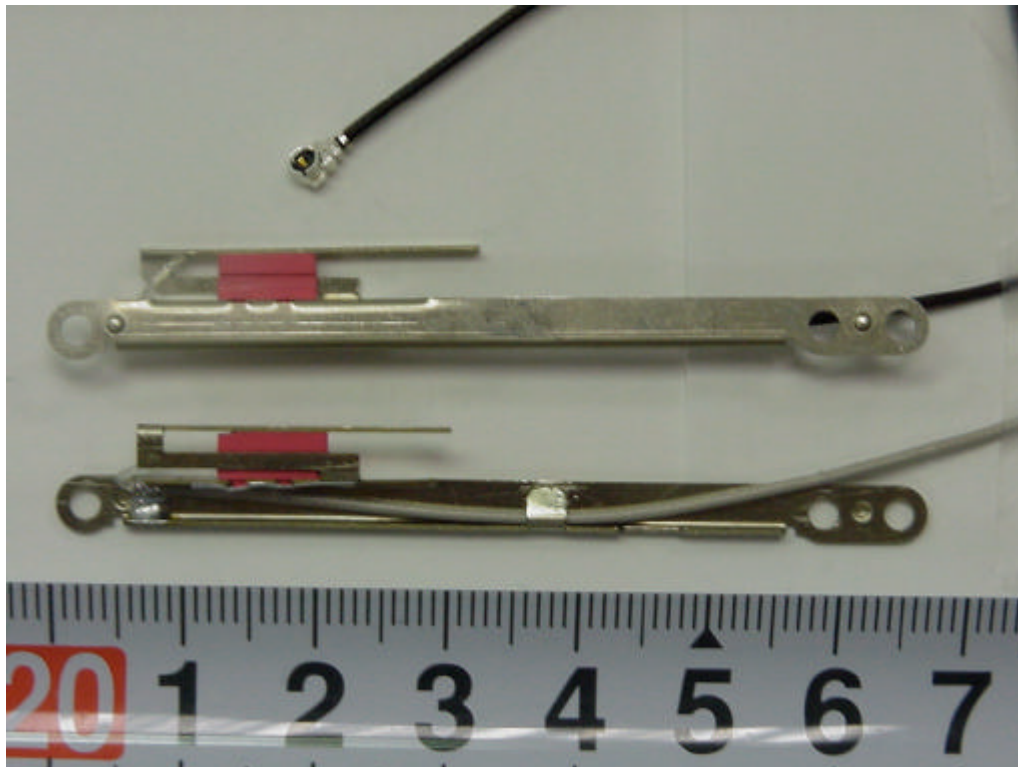
Main antenna
Dual Band Meander antenna
P/N: 08K4083



Auxiliary antenna
Dual Band Meander antenna
P/N: 08K4084



3.4 Exterior Photos of Antennas



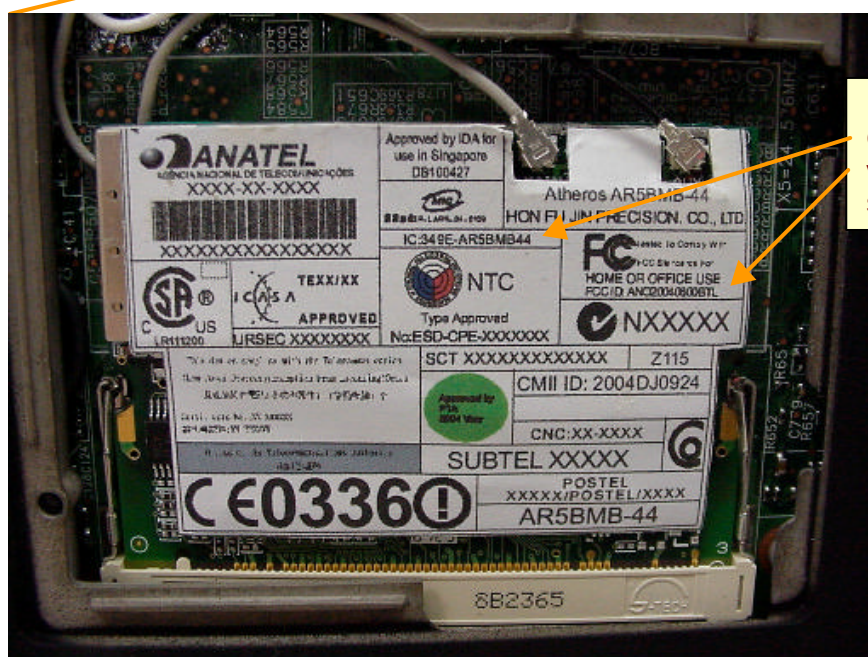
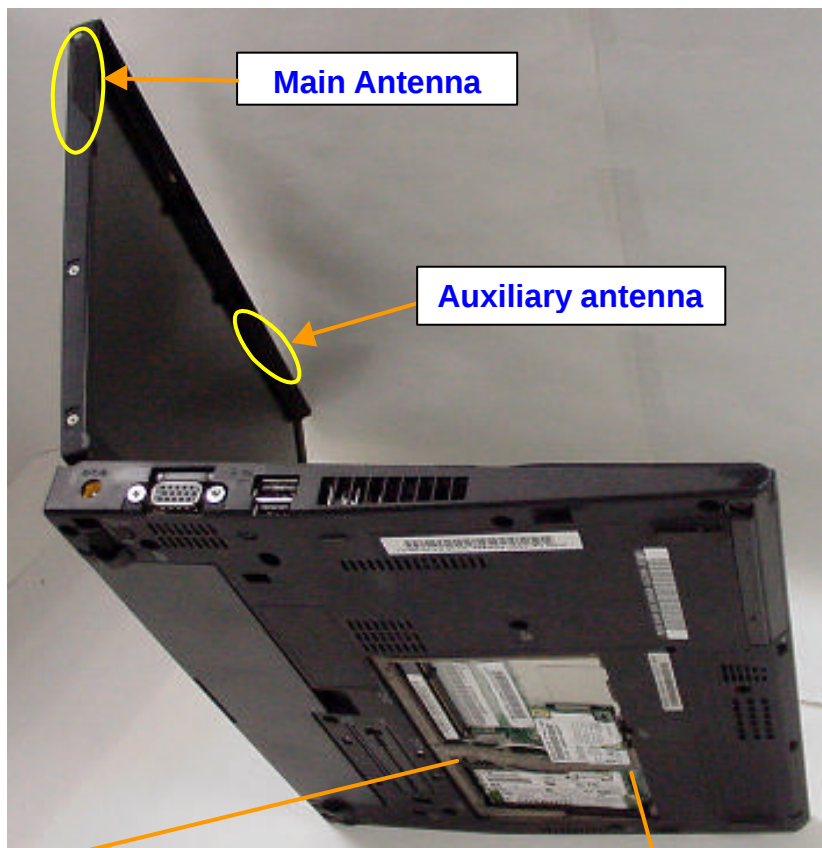
Main Antenna (Left)
 Manufacturer: Nissei Electric Ltd.
 Parts Number: 08K4083
 Dual Band Meander antenna
 Cable : coax 394 mm

Auxiliary Antenna (Right)
 Manufacturer: Nissei Electric Ltd.
 Parts Number: 08K4084
 Dual Band Meander antenna
 Cable : coax 534 mm

4. Antenna Info of ThinkPad X40 Series

4.1 Host PC Information

The main and auxiliary meander (Inverted F) antennas are built in the left and right top sides of LCD as shown in the Photo. Those diversity antennas are not used for transmission 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.



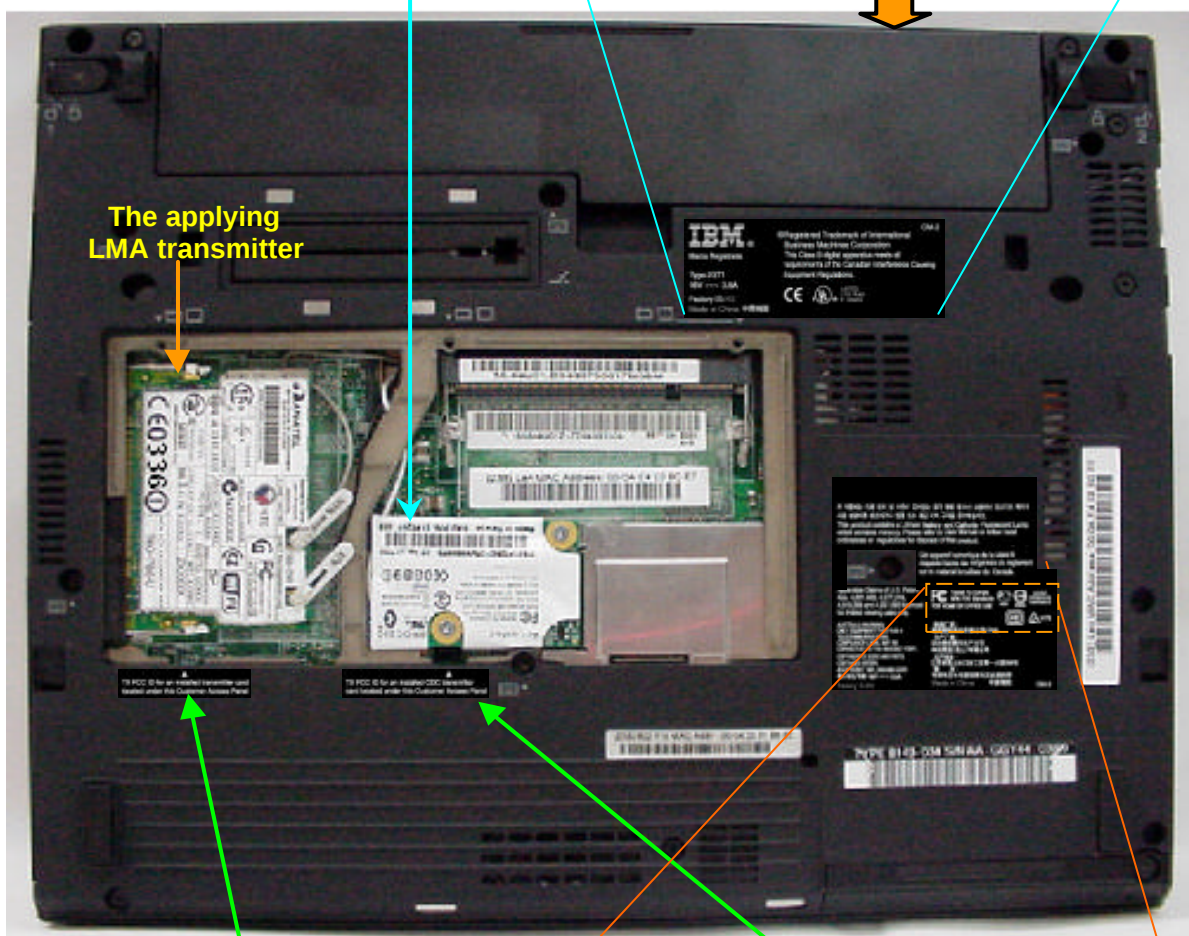
FCC ID and IC's Certification Number are visible when the card slot cover is removed.

4.2 Host PC Labeling

The host device (ThinkPad X40 Series) supports the applying transmitter and a built-in type Bluetooth LMA transmitter which was certified separately (FCC ID: ANO20020100MTN, Dec/17/2003).



Bottom view, Back side



TX FCC ID for an installed transmitter card located under this Customer Access Panel

TX FCC ID for an installed CDC transmitter card located under this Customer Access Panel



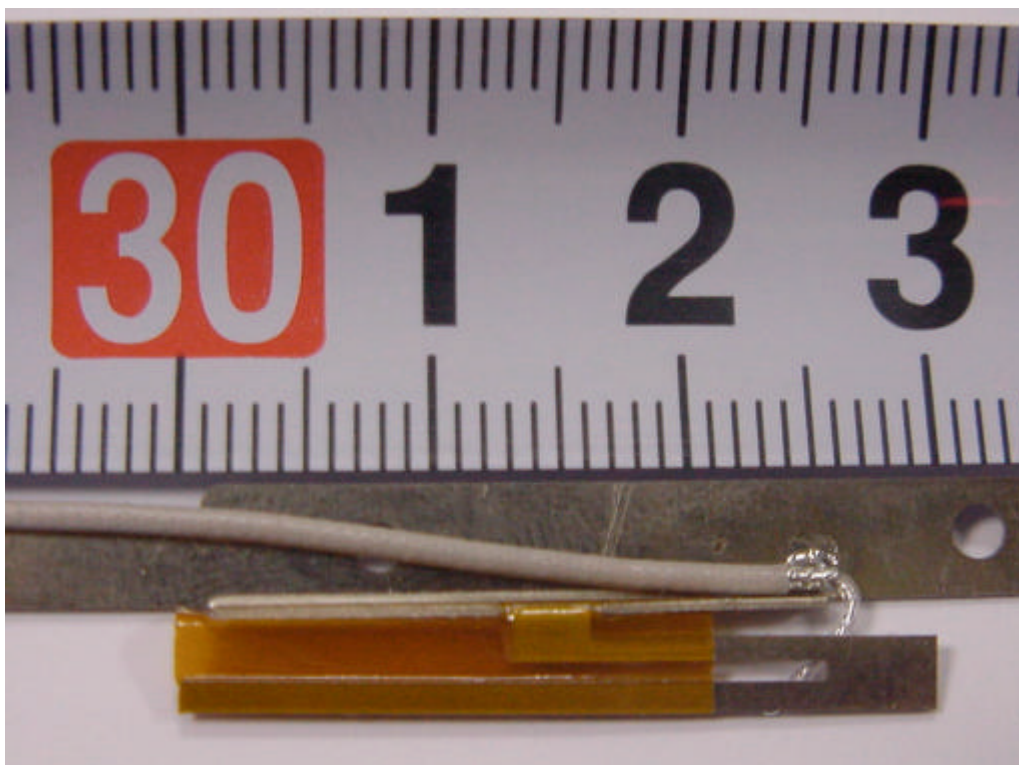
4.3 Antenna Locations



4.4 Exterior Photos of Antennas

Main Antenna

Manufacturer: Nissei Electric Co., Ltd.
Parts Number: 13N5743
Type: Dual Band Meander
Cable: Coax, 488 mm



Auxiliary Antenna

Manufacturer: Nissei Electric Co., Ltd.
Parts Number: 13N5742
Type: Dual Band Meander
Cable: Coax, 449 mm

