

Host Unit Antenna Information

1. Antenna Specification

Transmission Antenna assembly overview

Note 1):

- 1a. Includes all cable losses.
- 1b. Antenna type should be Omni Directional and have gain of 3.0 dBi or less for IEEE802.11a (5GHz band) and have gain of 2.0 dBi or less for IEEE802.11b/g (2.4GHz band), regarding the IBM internal specification.

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

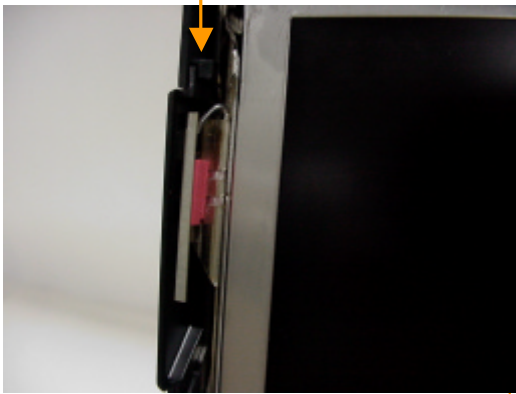
Designator	Manufacture	Antenna type	Cable type and length	Gain (dBi) Note 1)
13N5743 Main Antenna	Nissei Electric Co., Ltd. (Japan)	Dual Band Meander (Inverted F) Antenna	coax 488mm	2.4GHz band 0.39 dBi (peak)
				5.8GHz band 1.74 dBi (peak)
13N5742 Auxiliary Antenna			coax 449mm	2.4GHz band 1.67 dBi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

2. Host PC Information and antenna location

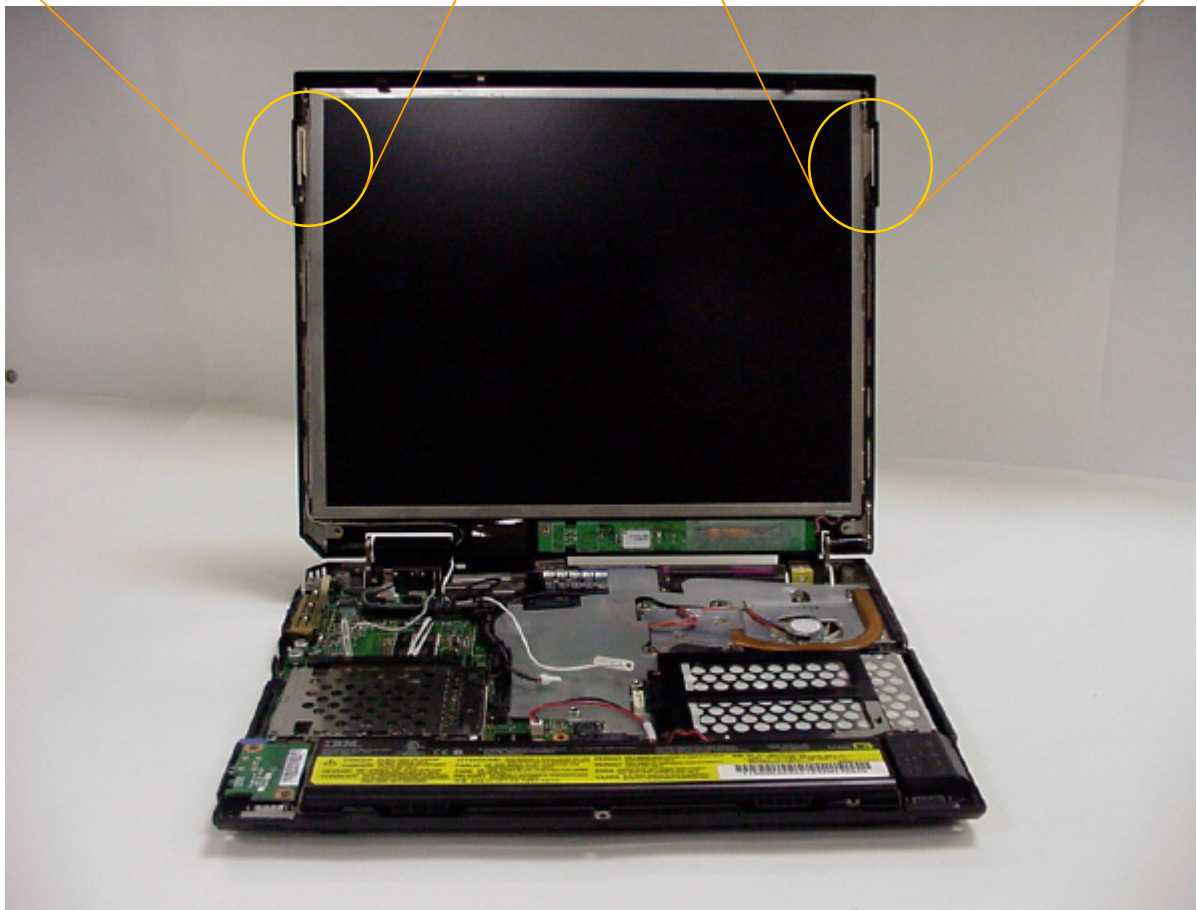
IBM ThinkPad X30 Series

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.

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

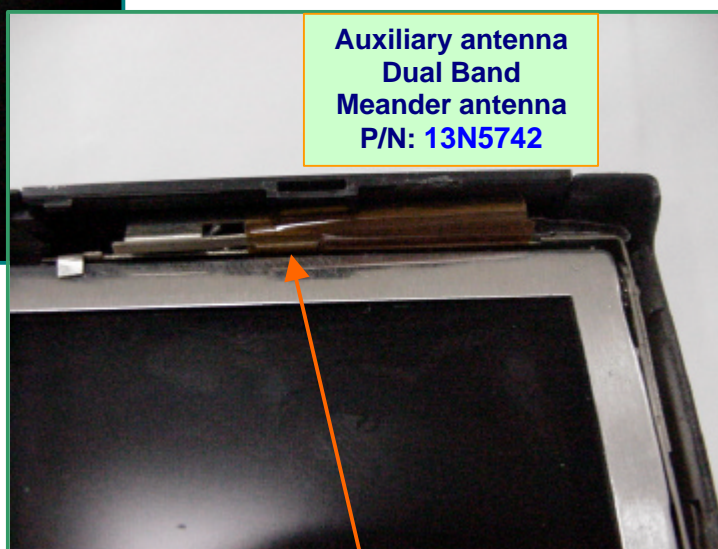
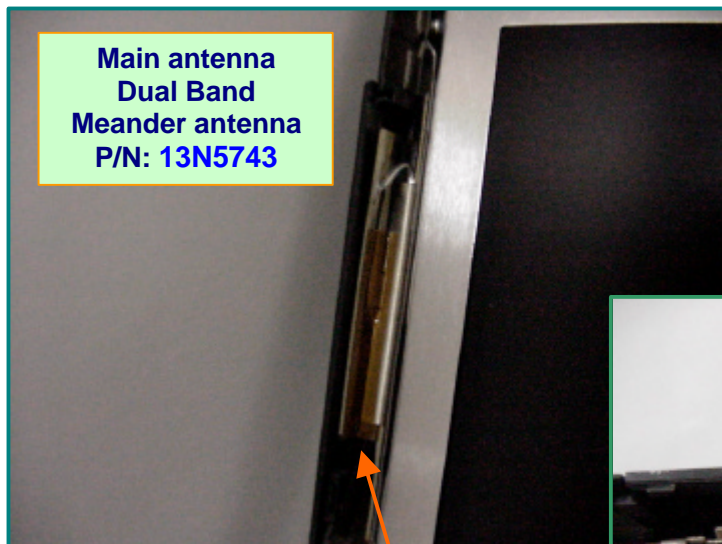


Auxiliary antenna
Dual Band Meander antenna
P/N: 08K4084



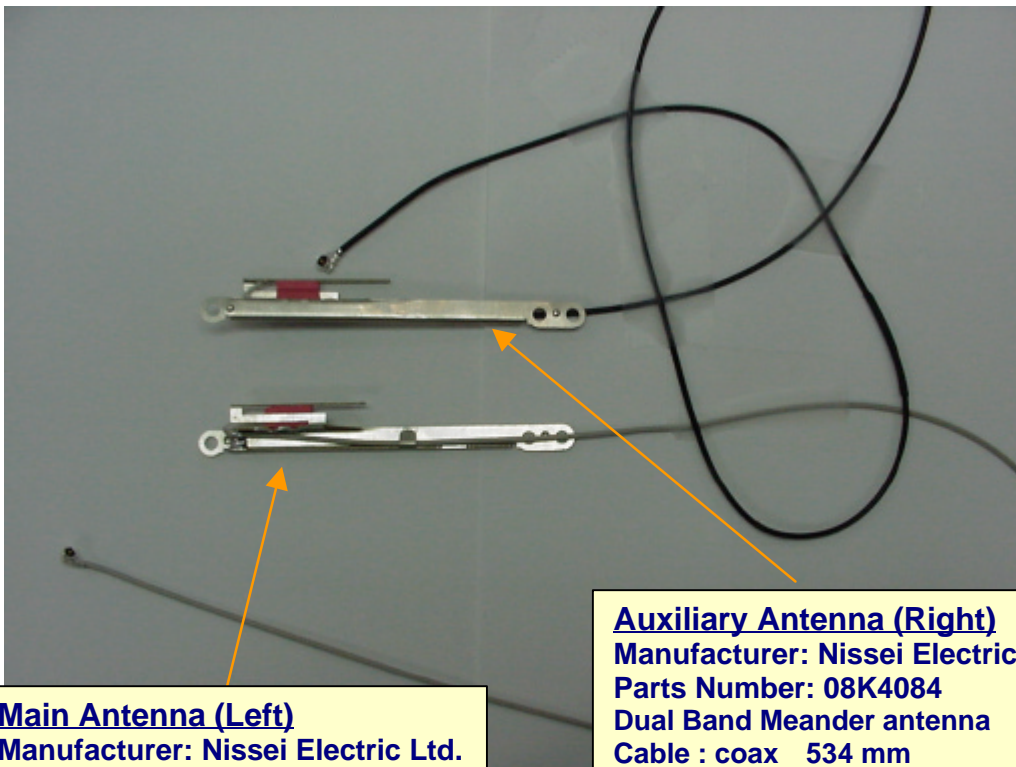
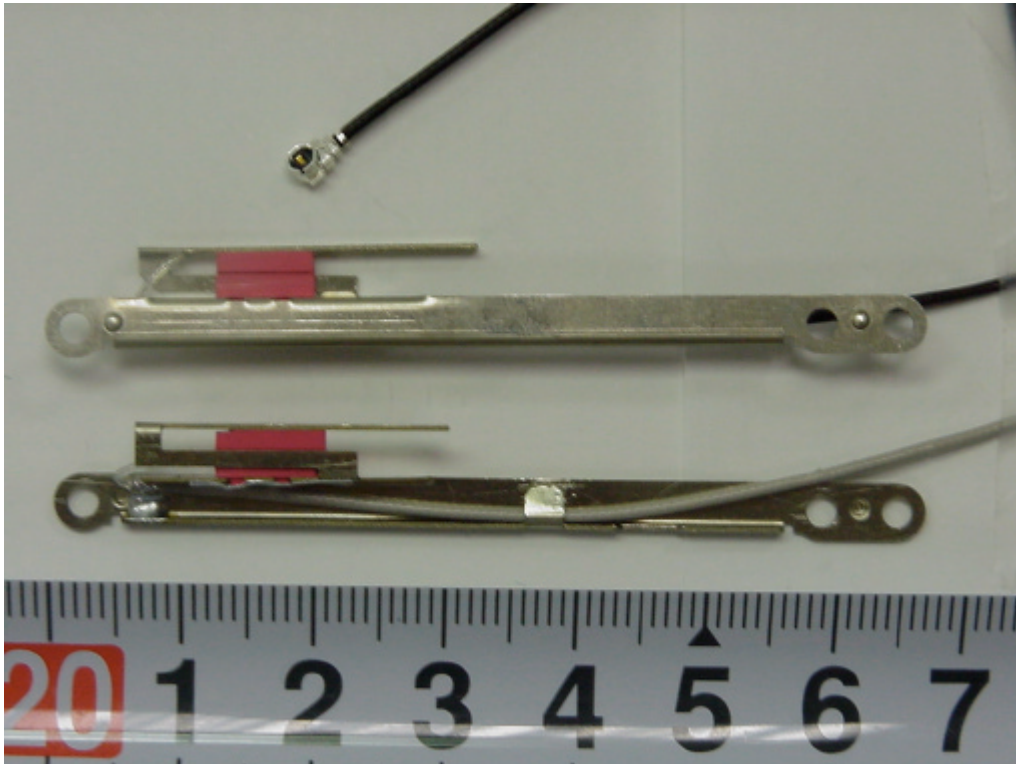
IBM ThinkPad X40 Series

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.



3. Exterior Photos of Antennas

IBM ThinkPad X30 Series



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

IBM ThinkPad X40 Series, main antenna

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



IBM ThinkPad X40 Series, auxiliary antenna

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

