

# 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.

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| Designator                   | Manufacture                         | Antenna type                                    | Cable type and length | Gain (dBi)<br>Note 1)                 |
|------------------------------|-------------------------------------|---|-----------------------|---------------------------------------|
| 08K4083<br>Main antenna      | Nissei Electric Co.<br>Ltd. (Japan) | Dual Band<br>Meander<br>(Inverted F)<br>Antenna | coax 394mm            | 5.2GHz band<br><b>1.42 dBi</b> (peak) |
| 08K4084<br>Auxiliary antenna |                                     |   | coax 534mm            | 5.2GHz band<br><b>0.19 dBi</b> (peak) |

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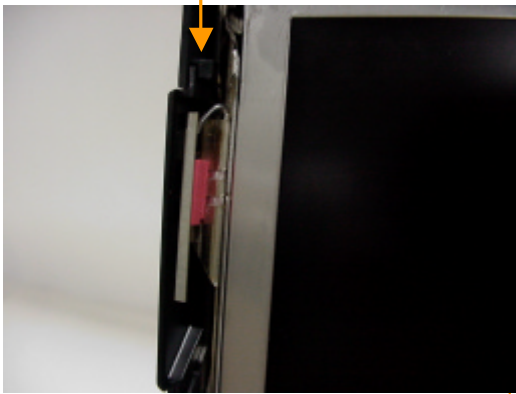
| Designator                   | Manufacture                          | Antenna type                                    | Cable type and length | Gain (dBi)<br>Note 1)                 |
|------------------------------|--------------------------------------|---|-----------------------|---------------------------------------|
| 13N5743<br>Main Antenna      | Nissei Electric Co.,<br>Ltd. (Japan) | Dual Band<br>Meander<br>(Inverted F)<br>Antenna | coax 488mm            | 5.2GHz band<br><b>1.45 dBi</b> (peak) |
| 13N5742<br>Auxiliary Antenna |                                      |   | coax 449mm            | 5.2GHz band<br><b>2.15 dBi</b> (peak) |

## 2. Host PC Information and antenna location

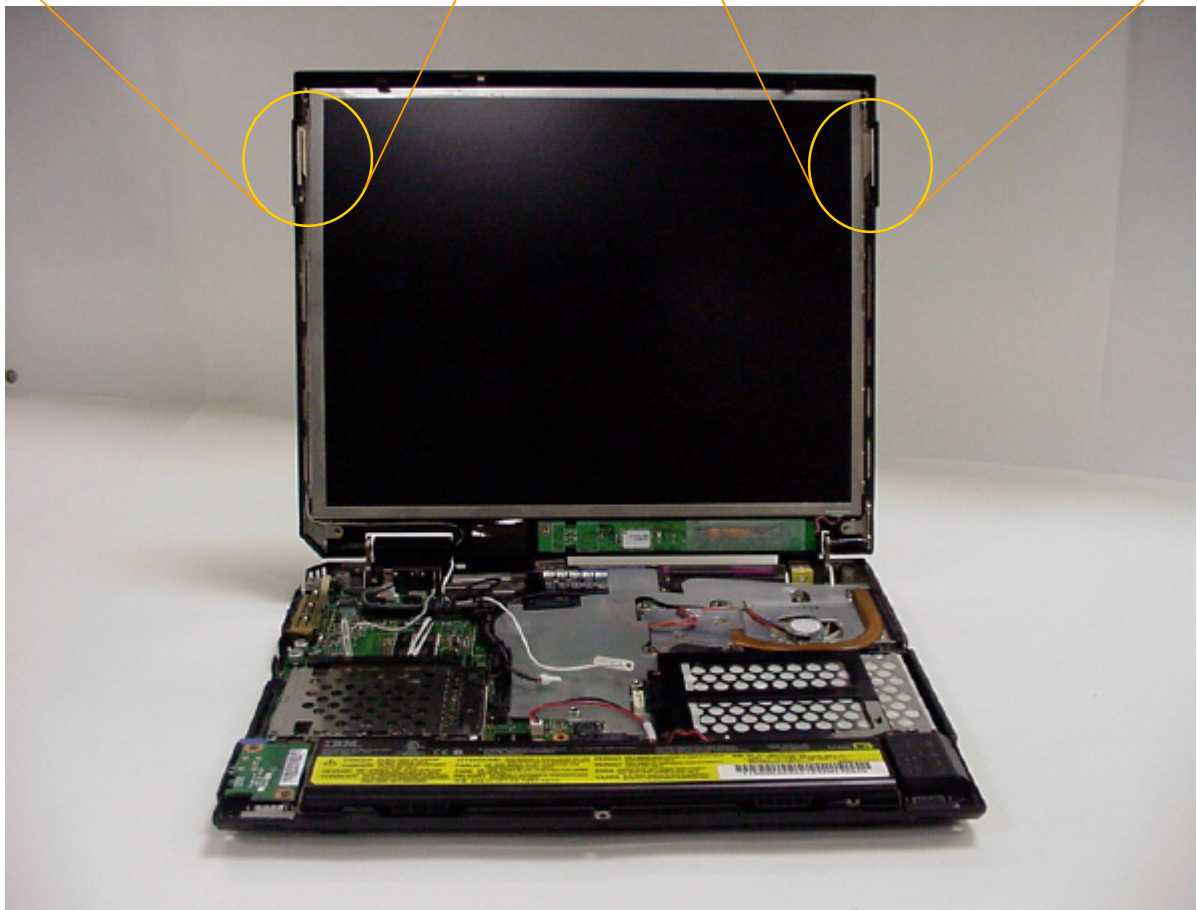
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The two Meander (Inverted F type) antennas are built in the left and right top sides of LCD as shown in the Photo. Those diversity antennas are not used simultaneously. One of the antennas is selected automatically or manually to have a good quality of radio communication. The selected antenna performs transmission or receiving in half duplex alternatively.

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

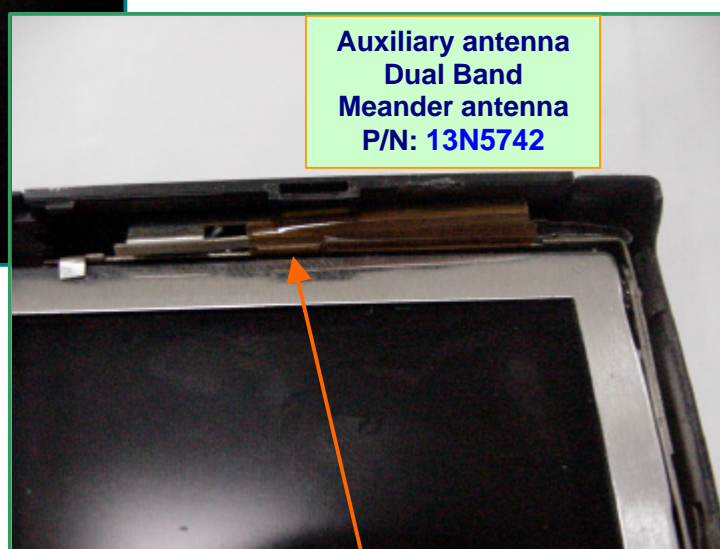
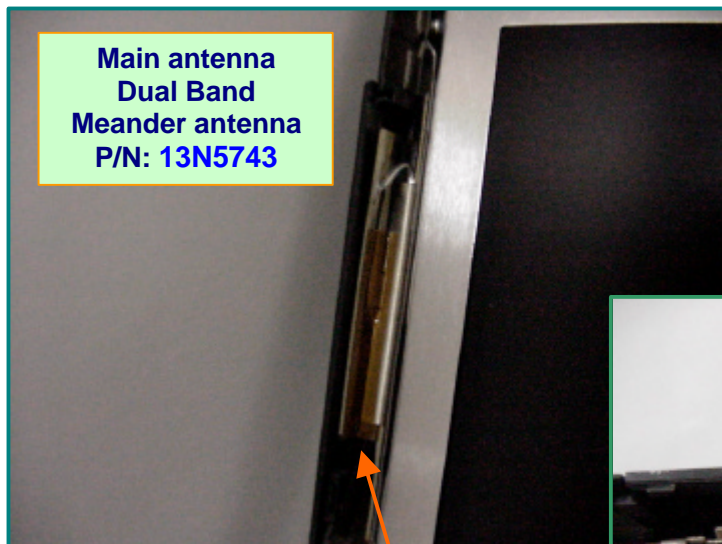


**Auxiliary antenna**  
**Dual Band Meander antenna**  
**P/N: 08K4084**



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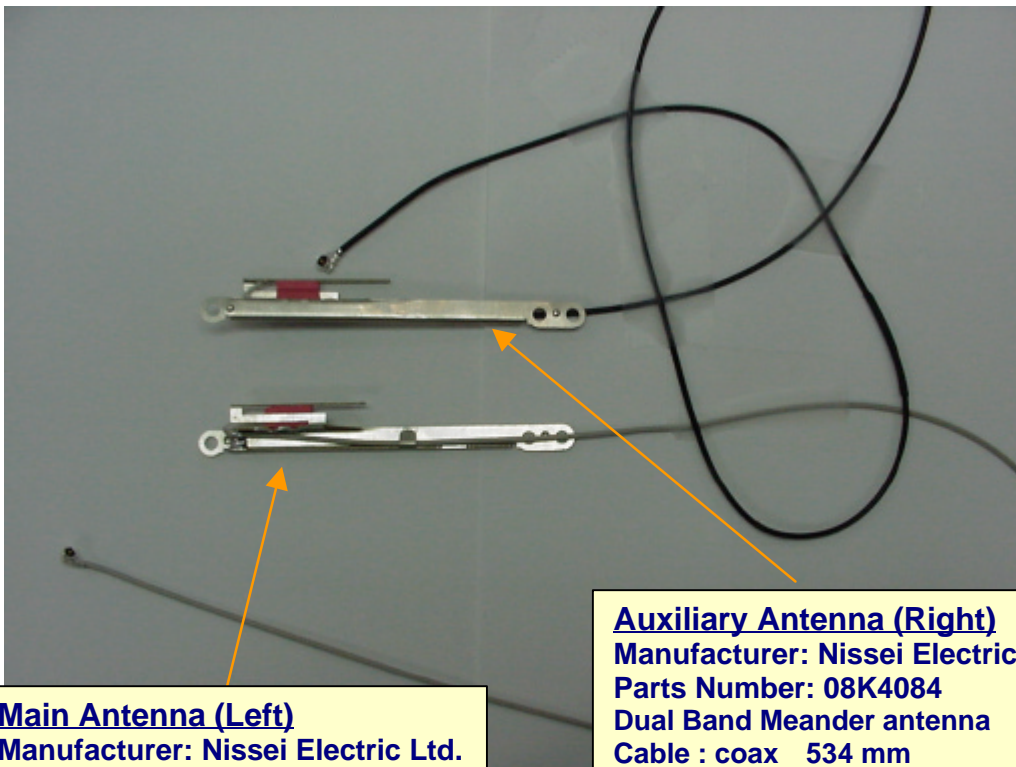
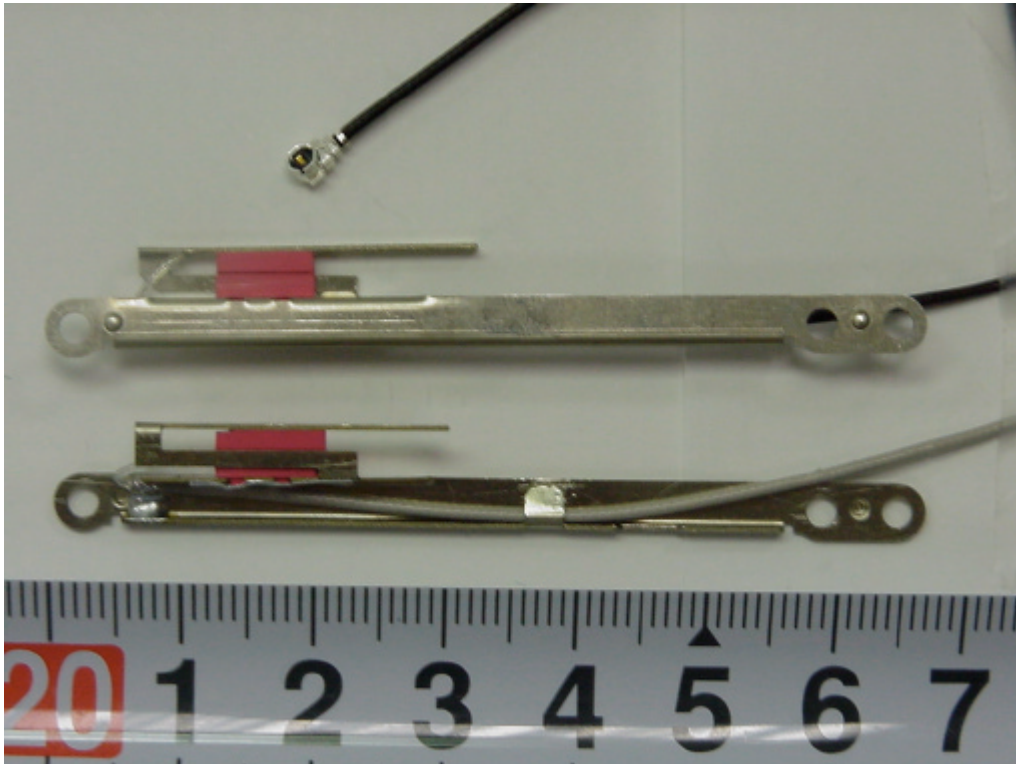
The main and auxiliary meander (Inverted F) antennas are built in the left and right top sides of LCD as shown in the Photo. Those diversity antennas are not used for transmission simultaneously. One of the antennas is selected automatically or manually to have a good quality of radio communication. The selected antenna performs transmission or receiving in half duplex alternatively.





### 3. Exterior Photos of Antennas

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**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**

