

Operational Description

This device is a 300N Draft 802.11n Wireless PCI Adapter, which operates in the 2.4GHz frequency spectrum with throughput of up to 300Mbps which OFDM technique will be applied. If the signal to noise ratio is too poor which could not support 300Mbps, the 11Mbps data rate with DSSS technique will be applied.

1. There are three antennas provided to this EUT, please refer to the following table:

| Antenna 1(With bracket) | | | | |
|-------------------------------------|--------------|-------------------|----------------------------------|------------------|
| Model No. | Antenna Type | Antenna Connector | Net Gain(dBi) | Note |
| C664-540089-A | Dipole | SMA Plug Reverse | 1.3dB (include Cable loss 2.6dB) | Omni-directional |
| Antenna 2(With bracket) | | | | |
| Model No. | Antenna Type | Antenna Connector | Net Gain(dBi) | Note |
| C037-510810-A | Dipole | SMA Plug Reverse | 1.7dB (include Cable loss) | Omni-directional |
| Antenna 3(Without bracket) | | | | |
| Model No. | Antenna Type | Antenna Connector | Net Gain(dBi) | Note |
| C037-510695-A | Dipole | SMA Plug Reverse | 1.94dB | Omni-directional |

From the above antennas, the worst cases were found in antenna 3.

- The EUT incorporates a MIMO function with 802.11b, 802.11g, draft 802.11n. Physically, the card provides two completed transmit and three completed receivers.
- The EUT is 2 * 3 spatial MIMO (2Tx & 3Rx) without beam forming function. The antenna configurations are two transmitter antennas and three receiver antennas, as there are 3 on board antennas. Spatial multiplexing modes for simultaneous transmission using 2 antennas, and for simultaneous receiver using 3 antennas.
- When the EUT operating in draft 802.11n, the software operation, which is defined by manufacturer, MCS (Modulation and Coding Schemes) from 0 to 15.

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5. The EUT complies with draft 802.11n standards and backwards compatible with 802.11b, 802.11g products.
6. The EUT operates in the 2.4GHz frequency spectrum with data rate up to 300Mbps.