

## Operational Description

The transmitter of the EUT (Wireless LAN Modem MiniPCI Combo Card) is powered by mini-PCI interface. The antenna is Printed and Chip Antenna, and the antenna connector type is UFL. Under normal use condition, the user has to keep at least 20cm separation distance between radiator and the body of the user, because this project is seeking the authorization of limited module approval specific to laptop computer with antenna installed around the LCD panel.

The other instruction, please have a look at the users manual.

### DSSS Information

This device is Direct Sequence Spread Spectrum, the data is mixed by pseudorandom code which is an orthogonal code. The mixed data is digital modulated by BPSK and QPSK technique depends on the data rates.

The CCK coding is applied for increasing the data rate, and also the processing gain will be increased. The bit rates are 1,2,5.5,11Mbps, the symbol rates are 1,1,1.375,1.375Mbps, the chip rates are always 11Mbps.

So, the Chip/symbol is 11,11,8 and 8 respectively. Although is higher bit rate, the processing gain is lower than 10, but the CCK coding used in higher bit rate will provide 2.2dB coding gain.