

RF Unit description

The RF unit contains 2 RF cards which transmits and receives through 4 antennas. Each RF card supports 2 antennas, through 2 identical RF circuits.

RF Circuit description

For transmit pass, the RF IC converts digital data from WiMax modem to a 2345 MHz modulate analog signal. This analog signal goes into a down converter mixer that change between 1650-1872 MHz and its output, that is 470-698 MHz, gets into preliminary amplifier, final amplifier and then, through Tx / Rx switch and Low Pass Filter to the antenna.

For receive pass, an analog signal at frequency between 470-698 MHz comes from antenna and through LPF and Tx / Rx switch, goes to LNA and then through HPF and LNA to an up converter mixer that change between 1650-1872 MHz and its output is 2345 MHz. This 2345 MHz signal goes into RF IC which converts it to digital signal and transfers it to WiMax modem.