## **Operational Description**

The RT3050F SoC combines Ralink's 802.11n compliant 1T1R MAC/BBP/RF, a high performance 320MHz MIPS24KEc CPU core, and a base clock frequency of the 40MHz, 1-port integrated 10/100 Ethernet switch/PHY, a USB OTG and a Gigabit Ethernet MAC. With the RT3050 ,The RT3050 employs Ralink's 2nd generation 11n technologies for longer range and better throughput. The embedded high performance CPU can process advanced applications effortlessly, such as routing, security and VoIP. In addition, the RT3050 has rich hardware interfaces (SPI/PCM/I2S/I2C/UART/GDMA) to enable many possible applications.

Mofi Router provides Internet connection method: Wired (xDSL / cable modem) connection. The product connect the ethernet cable from the router's USB port (combines a USB port and a RJ45 LAN port, the USB port is only charging function) to the LAN port of the modem as a Wi-Fi wireless router, and to connect all end user with Wi-Fi adapter.

## **Technical Specifications:**

- 150Mbps PHY data rate
- TX power: 13.5dBm
- RX sensitivity: -76dBm @ 54Mbps
- 20MHz/40MHz channel bandwidth
- Hardware NAT, OoS, TCP/UDP/IP checksum
- Reverse Data Grant (RDG) support
- Tx frequency range: 2412-2462MHz for 802.11b/g/n(HT20), 2422-2452MHz for 802.11n(HT40)
- Modulation: CCK, BPSK, QPSK, DQPSK
- Security: WEP/TKIP/AES/WPS/WPA/WPA2
- Work voltage: DC 3.7V by battery with external USB power supply.