The wifi router is powered by DC 12V 1A.The 12V power step down to 5V 2A

for USB .The 12V power step down to 3.3V 3A for core voltage via two power

chips. U1 is a MCU, when the button (connected to pin13) is press or rolling

ball switch (connected to pin14) is contact. The MCU will generate an enable

signal to turn on the RF chip and a serial ID code and apply to the RF chip

for FSK modulation, Crystal oscillator is 20MHz. L623 ,L624 are the loading of the RF

output. The L7, C85 & L8 are form as antenna matching network. The modulated RF

signal will applied to the antenna via this network.The transmitter goes with a test pad.

It connected to the pin A1,B2 of U1 and ground.When this pad is connected. The

transmitter will be turn on continuely (for test only).Transmitter Frequency is 2.4GHz.

The router includes an 802.11n MAC and base band, a 2.4 GHz radio and FEM, a 580

MHz MIPS® 24K™ CPU core, a 5-port 10/100 switch and two RGMII.The embedded

high performance CPU can process advanced applications effortlessly, such as

routing, security and VoIP. The router also includes a selection of interfaces to support

a variety of applications, such as a USB port for accessing external storage.