

Circuit Technical Description

The Equipment Under Test (EUT) is a netbook with Wi-Fi module operating at 2.412-2.462GHz with 11 channels separated by 5MHz channel spacing. The netbook is installed with Windows CE operation system and can carry out the base function of PC.

The basic configuration is:

CPU: 1GHz
RAM: 512MB
Memory: 4GB
MicroSD Card Supported: up to 32GB
Resolution: 480x272
Battery: Rechargeable Li-Polymer
Record: Built-in Microphone
Operating System: Android 4.0, Ice Cream Sandwich
Video Formats: WMV, MKV, MO, AVI, RM/RMVB, MPEG-2/4
Music Formats: MP3, WMA, APE, FLAC, AAC, AC3, WAV

The device is powered by 1X8.4V rechargeable battery or AC 120V/60Hz via an external Adapter.

As to the Wi-Fi module, it mainly consist with two parts which are RF and baseband.

The RF part is using for Wi-Fi 802.11 b/g/n system. The antenna using for the RF is a monopole 0dBi antenna.

The baseband including a MCU which control the motor movement, Cmos sensor for video, IR led, heat sensor and the power management.

There are total two type of the ground which is analogue ground and the digital the ground. The analogue ground is only for the MIC. All other components are using the digital grounding.

There are two type of the voltage supply to the MCU, which the 5V is supplied from the adaptor to the device and the 5V will be regulated by the LDO and given two voltage which are 3.3V and 2V. These two voltages will supply to the MCU.

Type of Modulation: CCK for 802.11b and OFDM for 802.11g.

Antenna Type: Built-in Antenna.

Frequency List: 2412 MHz, 2417 MHz, 2422 MHz, 2427 MHz, 2432 MHz, 2437 MHz, 2442MHz, 2447 MHz, 2452 MHz, 2457 MHz, 2462MHz

Main IC Function: At MAIN PCB

1) U1(InfoTM IMP210) is CPU with varied function such as Control Unit Arithmetic Logic Unit.

2) U4 U5 U7 U8 is DDR2 SDRAM.

3) U36 is NAND flash memory:

4) U10 is HDMI decode IC

5) U3 is audio decode IC

6) U15 is G-Sensor

7) Q12 U43 is recharge IC

8) U14,U4, U22,U17, U15 ,U18, U1, U9, U13is power regulator

9)X2 is oscillator for U1 main frequency.

10)Y2 is oscillator for U1 RTC frequency.

11) U12 is PC camary

12) U5 is touch IC