working principle description

FCC ID: 2AG7C-SNAP8TA

1.DSP

　　Core chip：UA1 T31 is MCU chip，DDR memory integrated in MCU chip，ARM926@440MHz, DDR/512Mb. UA2 flash is responsible for system files and data storage, XA1 24MHz crystal oscillator provides the clock frequency to MCU.

2.VIDEO

　　1.0M CMOS image sensor collect original video signal，through 10Bit data bus into DSP of MCU, then coding compression and output to the network part，meanwhile can be storage photo and video from outside SD card.

3.Micro SD Card

　　MUC (UA1) has SDIO data communication bus, it can make SD card data reading & writing operations come true. SD interface as Micro SD bomb card slot.

4.IR

　　11PCS 2.6mm/F1.6 IR LED light can make infrared better. Independent IR LED Board.

5．WIFI Module.

Antenna: The antenna type used in this product is FPC antenna with reverse polarity SMA connector. Antenna gain 3.51dBi.

Modulation type: 11b: DSSS (CCK, QPSK, BPSK),11/5.5/3/2/1 Mbps (Dynamic),

11g: OFDM (64QAM, 16QAM, QPSK, BPSK)54/48/36/24/18/12/9/6 Mbps (Dynamic),

11n(HT20): OFDM (64QAM, 16QAM, QPSK, BPSK): 150, 135, 117 ,104, 78, 65, 58.5, 52, 39, 26, 19.5, 13, 6.5Mbps (Dynamic)

Crystals: X1 40MHz and X2 32.768kHz crystal oscillators provide the clock frequency to WIFI Module.

Frequency Range: 2.412-2.462GHz

Input Voltage: DC 5V/1A from power supply

5. Manufacturing Tolerance

2.4GWLAN			
IEEE 802.11b (Peak)			
Channel	Channel 01	Channel 06	Channel 11
Target (dBm)	20.0	20.0	20.0
Tolerance ±(dB)	1.0	1.0	1.0
IEEE 802.11g (Peak)			
Channel	Channel 01	Channel 06	Channel 11
Target (dBm)	20.0	21.0	21.0
Tolerance ±(dB)	1.0	1.0	1.0
IEEE 802.11n HT20 (Peak)			
Channel	Channel 01	Channel 06	Channel 11
Target (dBm)	21.0	21.0	21.0
Tolerance ±(dB)	1.0	1.0	1.0