SHENZHEN BAICHUAN SECURITY TECHNOLOGY CO., LTD.

The theory of **_WIFI Network Video Recorder_** (Model: **_SRNVR-460H_**):

1. MCU Module (**U8B, HI3520**): Processor running the embedded software, It can deal with all information after it communication with WIFI module. MCU module's crystal oscillator frequency is **24 MHz** and **32.768 kHz**.
2. Transmitter module: Transmit data by modulating on a 2412-2462MHz carrier. Wi-Fi module's crystal oscillator frequency is **40 MHz**. The module used IEEE 802.11 b/g/n. IEEE 802.11b used DSSS technique, IEEE 802.11g/n used OFDM technique. IEEE 802.11b has maximum 11Mbps data rate and maximum target power **9dBm±2dB**, IEEE 802.11g has maximum 54Mbps data rate and maximum target power **8dBm±2dB**, IEEE 802.11n(20M) has maximum 65Mbps data rate and maximum target power **7dBm±2dB**, IEEE 802.11n(40M) has maximum 135Mbps data rate and maximum target power **7dBm±2dB**. RF PA's part number is **U8 (MT7601U_QFN40)**.
3. USB port: This is used to update the firmware via USB disk for main board only or can connect a mouse, it can't connect to PC.
4. HDMI port: This is an output port. It used to display the information on other monitor.
5. VGA port: This is an output port. It used to display the information on other monitor.
6. Earphone Module: This is an output port. It used to play the voice.
7. LAN Module: This is used to connect to the router to transmission data.
8. Shunt Box module: Shunt box can magnify the data from WIFI module, so the data can transfer a greater distance. Shunt Box's crystal oscillator frequency is **12 MHz**.
9. Antenna is used a reversed SMA antenna. The antenna gain is **3.0dBi**.
10. Power supply: A wall-plug-in accessory that provides **+5V** at **2A**.
11. DC/DC converter: Provide the power to the MCU module.
12. Hard Disk: It can write and read the data via MCU module.