

Operation funtions

Characteristics :

1. M7 is a mini notebook based on Intel Menlow of X86 structure, CPU with intel Atom Z series. It has characteristics of ultra Mobile (Portable), supporting handwriting, Wifi and Bluetooth functions. the machine uses DC12/3A power supply, WiFi frequency range is from 2.412-2.462GHz and Antenna Gain is 3dBi, Bluetooth frequency range is 2.402-2.480Ghz and Antenna Gain is 5.5dBi
2. Functions
 - 1>CPU is the brain of whole computer system. System Controller Hub of M5A is US15W. it integrates with southbridge and northbridge chipset, working as the bones for the machine. SCH is short for System Controller Hub, which is the part directly dealing with CPU, is the basic platform of CPU Power realization. Let 's start with Clock chip 9UMS9633, it can be considered as the heart of Motherboard, it supplies the basic punctual time signal to all functional Chips, guarantee all parts working in order.
 - 2>SCH is the chip connecting CPU and RAM. Its main job is calculating and transferring some high speed and big size pictures and memory data, e.g. data transfer between RAM and CPU. LVDS signal is sent through SCH. LVDS receiver converts LVDS signal to RGB signal.
 - 3>Many Functional Modules are connected to SCH, e.g. USB ports, HDD, EC, Audio, Micro SD, BT/Wifi chipset, Mini PCIE con etc, all are controlled by SCH. SCH specification can have eight USB connections. USB connections in use are one USB camera, two USB ports, one Mini PCIE. of bluetooth function in BT/Wifi chipset uses usb signal, also. Sound card chip is connecting SCH via AC_LINK bus. Soundcard chip controls Headphone and Speaker. The following is the most important functional Module – EC. EC (embedded controller) connects SCH via LPC bus. EC controls the output and the allocation of the whole power system power voltage, e.g. system power on signal, CPU heat ventilation functioning and battery's charging process etc. It also controls low speed connecting parts in the System, e.g. keyboard, touchpad or other user interfaces. System Bios is connected to EC chip via SPI bus. The control firmware of EC is stored with BIOS program code in the Flash ROM of Bios chip.
3. M7 case has electronic conductive paint on the surface inside. It controls electromagnetic radiation well. Also, we connect earthing signal of the motherboard to electronic conductive case through electronic conductive foam. in doing so, it realizes good earthing function and eliminate electromagnetic radiation, and also enhance anti-inference ability.
 - PIFA antenna for Wi-Fi and Bluetooth, the Antenna Gain is 3dBi for Wi-Fi and 5.5dBi for Bluetooth
 - Frequency range: 2412-2462MHz for Wi-Fi, and 2402-2480MHz for Bluetooth
 - Modulation type: IEEE 802.11b: DSSS(CCK,DQPSK, DBPSK)
IEEE 802.11g : OFDM(64QAM, 16AQM, QPSK, BPSK)
Bluetooth: FHSS
 - Input: DC 12V, 3A