

System operating description:

Connected with adapter of DC 12V. U14,U15 and U16 of will produce 5V,3.3V and 1.25V system voltage respectively. Then U15 and U16 will supply U1 (CPU) with power. X7 (27MHZ) start to work..The 7Pin of U11 gave a low level signal to Reset to system ,after 0.5s gave a high level signal.Then U1 read boot program from U4 (Nor Flash) to U2 and U3.After that U1 will run in U2 and U3 (SDRAM). Thus the entire system can run now.

WIFI operating description:

The module of WIFI is connected to J7, which is provided with system 3.3V voltage. U1 works and controls the WIFI module via USB1.1 data bus. Then WIFI module will work in 2.4GH ISM frequency band and can connect the network via Wireless Router.

SD card controller operating description:

U8 is the SD Card controller, which is supplied with 5.0V controled by SD Card. When SD Card plug in, then 5.0V power On, and X3 (12MHZ) starts to run and provide U8 with clock signal. U8 works and controled by the U1 via USB data bus. And then USB HOST and SD card slot start to work..

Audio operating description:

U5 is the audio encode and decode whose voltage is 3.3V and 1.8V. U1 controls U5 via I2C data bus to make audio work..The Audio data in/out between U1 via IIS data bus.

Ethernet operating description:

U6 is the ethernet controller, which is supplied with system 3.3V. When power on, X2 (25MHZ) starts to run and provide U6 with clock signal. U1 controls U6 via MII data bus.U7 translate U6 signal to Ethernet slot (J4), and then Ethernet start to work .

Motor controller operating description:

U1 control the Motor, U9 translator U1 signal to Motor signal. U1 can control the Motor to turn up/down/left/right.

Video input operating description:

Video signal came from CMOS Sensor Module. CMOS Sensor Module powered by system 3.3V .U1 controls Module via I2C data bus and video data come form ITU656 data bus.