System operating description:

Connected with adapter, the U4 and U5 of UMPC will produce 3.3V and 1.2V system voltage respectively. Then U 4 and U5 will supply U17 (CPU) with power. X1 (27MHZ) and Y1 (32.768KHZ) start to work. Press SW1 (ON/OFF) once, the W23 pin of U17 will detect the low level signal. The UMPC turns on. And then U17 will supply the En pin of U12 (DC/DC Step Down) with high level signal. U12, U52 and U53 (DC/DC Step Down) will produce 3.3V, 1.2V and 1.8V core voltage respectively. U17 will read boot program from U32 (SPI Flash) and related program from U34. After that U17 will run in U19 and U20 (DDR2). Thus the entire system can run now.

WIFI operating description:

The module of WIFI is AW-GH320 which is provided with 1.8V and 3.0V voltage by U37 and U38 respectively. Then Y2 (40MHZ) works and supply WIFI module with clock signal. U17 works and controls the WIFI module via SPI data bus. Then WIFI module will work in 2.4GH ISM frequency band and can connect the network via Wireless Router.

USB 2.0 controller operating description:

U50 is the USB 2.0 controller, which is supplied with 5.0V voltage by U15 (DC/DC Step Up). X4 (24MHZ) starts to run and provide U50 with clock signal. U50 works and control the U50L via USB data bus. And then USB HOST and SD card slot start to work.

Keyboard operating description:

The application of keyboard is saved in U25. U15 (DC/DC Step Up) supplies U25 with 5.0V voltage. X3（6MHZ）starts to run and provide U 25 with clock signal. The program of U25 is runs in order. Then U17 controls U25 via USB data bus to make keyboard, touch panel and buttons work.

Audio operating description:

U29 is the audio decode whose voltage is 3.3V. U17 controls U29 via I2S data bus to make audio work .