Operation Description

M4 is a audio speaker, the audio source from 3 source :

One is streaming iOS/Android/MAC/PC device Audio over WiFi 2.4GHz frequency.

Two is streaming audio over Bluetooth 2.4G frequency.

Three is get the audio from AUX input.

Product Concept –

Get the audio source from WiFi/Bluetooth/Aux, go to the audio AMP and speaker.

Product Diagram –

With Power supply 18V to charge the battery, use DC/DC convert to 3.3V and 5V for other power supply.

NTP8230 get the audio signal from AUX input or Bluetooth or WIFI module input. By ADC PCM1863 which is working in 12.288MHZ, And driver the speaker for the sound.

The WIFI module of GS450H working in 25MHz crystal,, get the audio file form internet ,output I2S single to the ADC PCM1863, then output the audio single

The Bluetooth module of CPU CSR8645 working in 26MHz crystal, get the audio from Bluetooth source and output the analog audio to ADC PCM1863.

All the control by MCU N79E814AT28 which is working in 22.1184 MHz