

DS6800W Airplay Dock Instruction

DS6800W is a USB/MP3-IN with Airplay dock product.

The main work principle can be divided into 4 parts: the control part, the power part, the audio part, and the Airplay part.

The control part takes charge of the control of the product which uses LM38800 as its MCU. The MCU takes charge of some parts including Keys, LED, power management, Software upgrade, bus mastering and so on. The audio source coming from iPod, iPhone, iPad via USB socket is ARM decoded by the D/A (PCM1808). The ARM system also controls the Airplay part (DM870) by Apple certificate CP2.0B IC.

The main power of the system uses a 20V power supply by DC/DC adapter, power control IC (TPS54286) and IC (AMS1117) is transformed to several types as 20V, 5V, 3.3V, 1.2V, 1.8V etc.

All of the audio signals produced by the audio processor IC (CS48520), then these audio signals flow to the control IC (STA339BW), finally connecting with the tweeter and woofer speakers.

The Airplay part uses BridgeCo CR870-2I, main IC is DM870.

Main specification as below:

Operation Frequency: 2.4GHz (2412-2472MHz)

Modulation: 802.11b: DSSS (CCK/QPSK/BPSK)

802.11g: OFDM (BPSK/QPSK/16QAM/64QAM)

Antenna Type: RG-178 Coaxial Cable