

Operate principle

The circuit of HPS-DMX-WTR model aircraft radio mainly includes five parts. They are Regulated Power Supply Circuit, Ratio-Controlled Switching Circuit, SCM-Controlled Circuit, 2.4G Frequency Synthesizer Package Delivery Circuit and Launching Circuit with Amplified Capacity Factor.

Regulated Power Supply Circuit is completed by Low-Dropout Regulator IC XC6203E332PR. Other cell circuits are all working under a united 3.3V voltage.

Ratio-Controlled Switching Circuit is mainly completed by Potentiometer Wch1 and Wch2 and SWITCH kaux. There are different electric potentials transmitted to the three I/O ports of SCM according to the different toggling position of Potentiometer and Switch.

SCM-Controlled Circuit is completed by C8051F310/2/4. It has two major functions. One is to receive the different electric potential sent by Ratio-Controlled Switching Circuit and the other is to send these electric potentials to 2.4G Frequency Synthesizer Package Delivery Circuit and control it to produce different frequent point.

2.4G Frequency Synthesizer Package Delivery Circuit is mainly completed by the Special Purpose Chip NRF24L01+.

The five parts of Launching Circuit with Amplified Capacity Factor are completed by the Special Purpose Chip PA2423L.