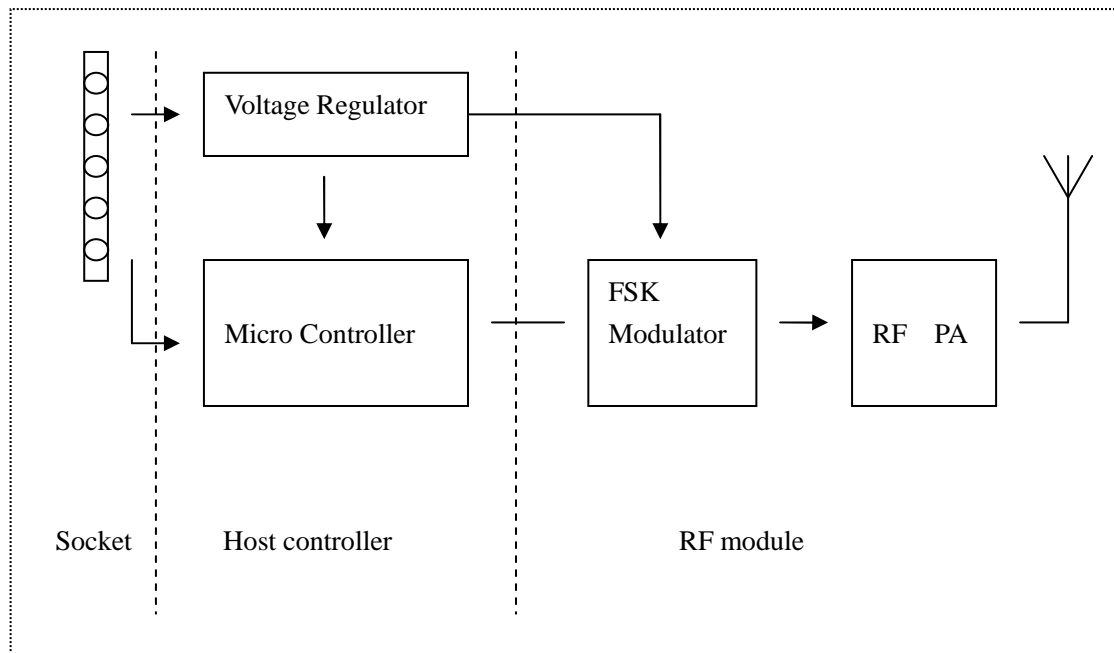# System Description
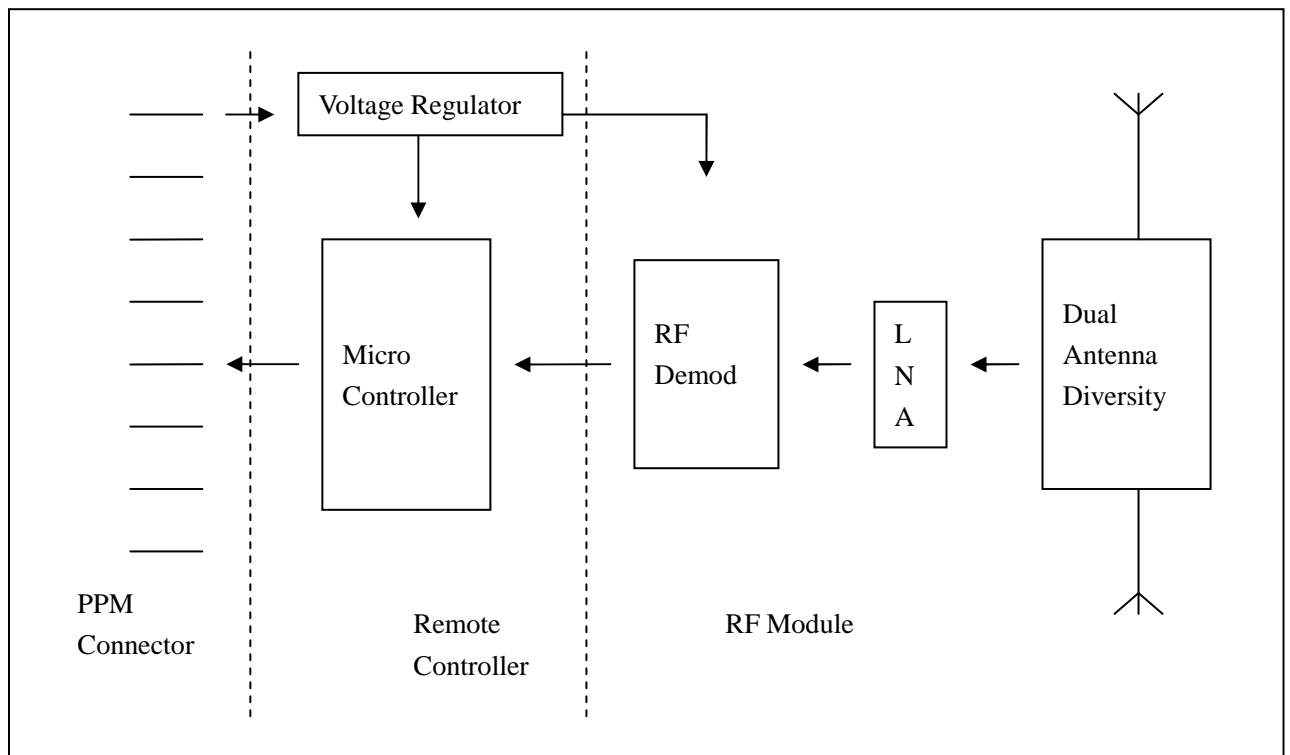
Transimtter Block Diagram:

Working description:

1, PPM signal is received by Micro Controller, and is formatted into digital bits;

2, System power is derived by a DC/DC convertor.

3, Digital bits is modulated by FSK Modulator CC2500 to digital waveforms at 2.4G ISM band;

4, Modulated digital signal is amplified by RF PA, presented at antenna.

5, The signal carrier is hopping 200 times/second.

6, The 2.4G band is divided into 250 channels.

7, Every product uses 50 channels among the 250 points, the 50 channels are selected by equal spacing.

8, The hopping carrier use one of the 50 channels, and the next channel is selected by random numbers.

Receiver Block Diagram:

Working description:
1, RF signal is amplified by LNA.
2, Amplified signal is demodulated by CC2500.
3, Demodulated bits is received by Micro Controller.
4, Micro Controller get PPM signal from the packets.
5, PPM signal is presented at each pin.
6, Demodulator is frequency hopping, using the same machenism as the modulator.