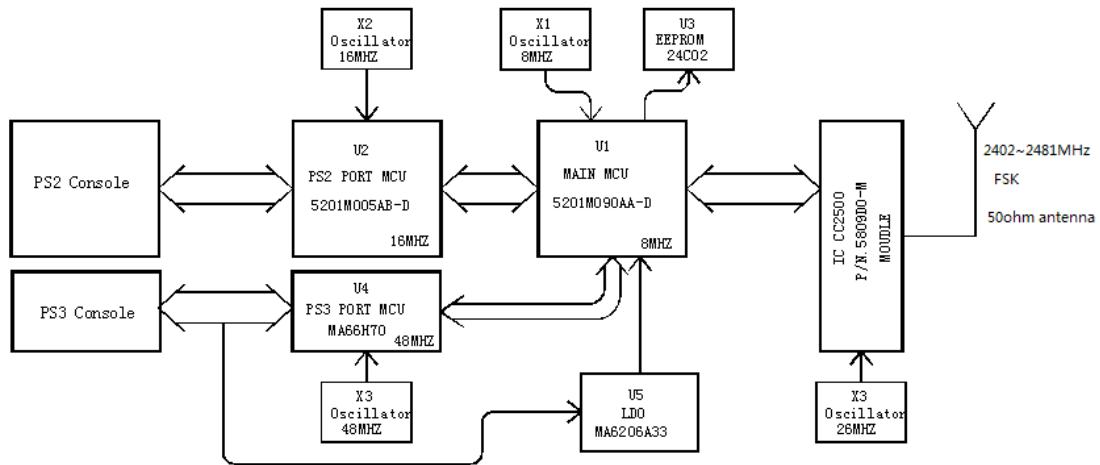


Functional Description

1. When connected to a PS2 console, the console will provide a 3.5V voltage to U1, U2 and the RF module. U2 will verify if the connected device is a PS2 console. If it is, U2 will begin communicate with U1.
2. U1 will search all the channels via the RF module and send out a connect command.
3. If a slave device responses, U1 will verify if it is connectable.
4. If it is connectable, U1 will send out a connectable command out via the RF module. The connect indicator will be lit on. U1 will generate a random code stored in U3.
5. U1 sends a request signal via the RF module to get the axis value and button value.
6. The slave device will send the axis value and button value to the U1 via the RF module.
7. U1 receives the data of RF module and verifies it. If it is correct, the data will be sent to U2. U2 will translate the data to commands in PS protocol and send to PS2 console.
8. If the receiver is connected to a PS3 console, the console will provide a 5V voltage to U4, U5. The 5V voltage will be regulated to 3.3V and then provided to U1 and RF module. U4 will verify if the connected device is a PS3 console. If it is, U4 will begin communicate with U1.
9. U1 will search all the channels via the RF module and send out a connect command.
10. If a slave device responses, U1 will verify if it is connectable.
11. If it is connectable, U1 will send out a connectable command out via the RF module. The connect indicator will be lit on. U1 will generate a random code stored in U3.
12. U1 sends a request signal via the RF module to get the axis value and button value.
13. The slave device will send the axis value and button value to the U1 via the RF module.
14. U1 receives the data of RF module and verifies it. If it is correct, the data will be sent to U4. U4 will translate the data to commands in USB2.0 protocol and send to PS3 console.

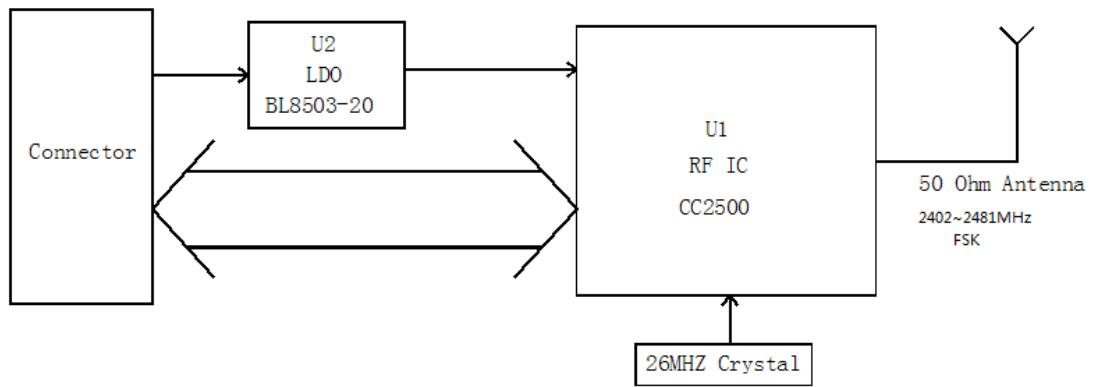
Typical Product Characteristics:

Items	Description
Type of Modulation	FSK
Number of Channels	80
Frequency Band	2402 MHz ~ 2481 MHz
Antenna Type	PCB Antenna
Testing Duty Cycle	100%
Test Power Source	PS2 DC 3V5,USB 5V.
Temperature Range(Operating)	0 ~ 50



Description:

- 1) X3 Oscillator 48MHZ: provides a 48MHz frequency for U4 MA66H70.
- 2) U4 PS3 PORT MCU MA66H70: is a PS3 interface IC whose function is to transfer data for U1 and the PS3 console. The communication way between U4 and U1 is SPI; U4 and PS3 is USB2.0.
- 3) U5 LDO MA6206A33: regulates the 5V voltage to 3.3V to provide to U1 Main MCU.
- 4) X2 Oscillator 16MHZ: provides a 16MHz frequency for U2.
- 5) U2 PS2 PORT MCU 5201M005AB-D: is a PS2 interface IC whose function is to transfer data for U1 and PS2 console. The communication way between U2 and U1 is parallel port; U2 and PS2 is PS3.0/2.0 protocol.
- 6) X1 Oscillator 8MHZ: provides an 8MHz frequency for MCU U1.
- 7) U3 24C02: is a EEPROM to store the random code.
- 8) U1 Main MCU 5201M090AA-D: is the main MCU to process the data of RF module and the periphery circuits.
- 9) RF Module: sends the data of MCU U1 out and receives the signal from guitar and sends it to U1 to process. The communication way between RF module and MCU U1 is SPI.
- 10) 26MHZ Crystal: provides a 26MHz frequency for the RF module's IC.



Description:

- 1) Connector: The communicating circuit between the RF IC and MCU which transfers the data between the two ICs and also provides a 3.6V voltage to the RF module.
- 2) U2 LDO BL8503: converts 3.6V to 2V for the RF IC's power supply.
- 3) U1 RF IC CC2500: modulates the data from MCU and send the signal out by the 50ohm matched antenna. The modulation is FSK. It uses 80 channels for communication and the frequency is 2402~2481MHz with 1MHz interval for each channel. Antenna type: PCB.
- 4) 26MHZ Crystal: provides a 26MHz working frequency for the RF IC.