

Operational Principle

1. CPU, CX5183 have an 8-bit microprocessor with low-power and high-speed CMOS technology. Operation frequency is 4MHz. It needs an external 4MHz crystal for reference frequency; this crystal is also used for RF module. This chip is responsible to control RF-Baseband Transceiver (SIGNA6210).
2. EEPROM, 24C02, 2048 bits of serial electrically erasable and programmable read only memory (EEPROM) organized as 256 words of 8 bits each. The device is optimized for use in many industrial and commercial applications where low-power operation are essential.
3. 2.4 GHz ISM Band Transceiver/Framer, SIGNA6210 which is a low-cost, fully integrated CMOS radio frequency (RF) transceiver block, combined with a 64-byte buffered framer block. It contains transmit, receive, VCO and PLL functions, including an on-chip channel filter and resonator, with an external 12MHz crystal as reference frequency.
4. OPTICAL Sensor, with DSP integration chip that serves as a non-mechanical motion estimation engine for implementing a computer wireless mouse.
5. Voltage detector, LX61M1102M2, detected voltage (1.1V) of battery, Prompt the user to change the battery
6. ANTENNA, The antenna is typically fed from the end of the monopole section by a plated through-hole via which is in turn connected to the RF output on the 2402-2480MHz band.