WSR-1 RF Repeater
                        Principle of operation

The WSR-1 RF repeater between the WR-1/SR-2 alarm receivers and WP-1,
WT-1,WFM-1 and WP-1 alarm transmitters to extend the operating range.

The RF circuit is embedded inside a ChipCon CC1000 RF transceiver chip.
The chip is programmed to work at 915Mhz ISM band and data rate is
approximately 1K baud. DATA is encoded in Manchester format. The logic
functions are controlled by a Holtek HT46R23 micro controller unit
(MCU). The MCU will turn on the receiver part of the RF chip to
constantly monitor the signals between the alarm transmitters and
receivers. Whenever it finds a signal is not acknowledged by the
receiving side, it will turn on the RF transmitter and repeat the
signal to make sure that the receiving side can receive a copy of the
signal. The MCU communicates with the RF chip via IIC bus.