

3VOLT POWER
CR2032H LITHIUM COIN CELL

3.0 VOLT

Switched
Vbatt

RESET

1.8 V Voltage Detector
Reset Low when Vbatt < 1.8V

AMBIENT LIGHT SENSOR

Q1
LIGHT SENSOR

5 KEY
KEYPAD

PIC16LF18856 LOW POWER MICROCONTROLLER
ACTIVE MODE - 250KHz CLOCK FROM INTERNAL RC OSC
NORMAL MODE - SLEEP ALL CLOCKS OFF
ACTIVE ON KEY CLOSURE - 250KHz CLOCK
CLOCK SHIFTS TO 8MHz WHEN TRANSMITTING

STATUS ANNUNCIATOR

RED

LED KEYPAD ILLUMINATION

60Hz 8% DUTY CYCLE
2.5 mamp PEAK

X 10
ORANGE

SPI

AX5043 FSK Transmitter
25 MHz Crystal Oscillator

PLL Synthesizer
Antenna Matching
Packetizer

2.1Kb/s Manchester Encoded Data Rate 4.2Kb/s pulse stream
FSK MODULATION +/- 7.5 KHz Deviation
238 uSEC PULSE WIDTH
Data Packet Definition:
903.425MHz 50ms Preamble - 50ms TX OFF - 50ms Data - 50ms TX OFF
902.375MHz 50ms Preamble - 50ms TX OFF - 50ms Data - 50ms TX OFF
903.425MHz 50ms Preamble - 50ms TX OFF - 50ms Data - 50ms TX OFF
600ms Total Packet Length
903.425MHz and 902.375 MHz

ANTENNA

Co:	ENTERPRISE ELECTRONICS		
Title:	WIRELESS KEYPAD BLOCK		
Board:	LRL071BLK.SCH	Revision:	A
Author:	D. Pearson	Size:	A
Date:	6/4/2018	Sheet	1 of 1