

Short-range Wireless Range
Ultrasonic

~~GPIO~~

MSP 432 CUSI-SPI Mode

MOSI → data output

SOMI → input

CLK → output

SS → output

MSP430 SPI mode

MOSI → data input

SOMI → output

CLK → input

SS → input

4-pin mode

~~CLSTEM = 1~~
~~1~~

13-pin mode gets rid of SS, not SOMI)

If multiple slaves desired (Yes) software needs to use general purpose I/O to generate STC signals individually

UCAxCTLW0 → Control Word 0

→ UCAxCTL1 → Control 1

→ UCAxCTL0 → Control 0

UCAxBRW → Bit rate control word

BR0 → BR control 0

BR1 → BR control 1

UCAxSTATUS → Status

UCAxRXBUF → Receive Buffer → not needed, Master won't receive

UCAxTXBUF → Transmit Buffer

UCAxIE → Interrupt Enable

UCAxIFG → Interrupt Flag

UCAxIV → Interrupt Vector

P2.0 → RED LED

P2.1 → GREEN LED

P2.2 → BLUE LED

P1.0 → LED1

HC-05 Bluetooth Module

Input: DC 5V

- VCC → +5V

- GND → Ground

- TXD → ^{send signal} serial sending pin - connect to RXD

- RXD → serial signal receiving pin - connect to TXD

STATUS - KEY → Mode Switch

↳ low gain for comm mode

- EN → SS