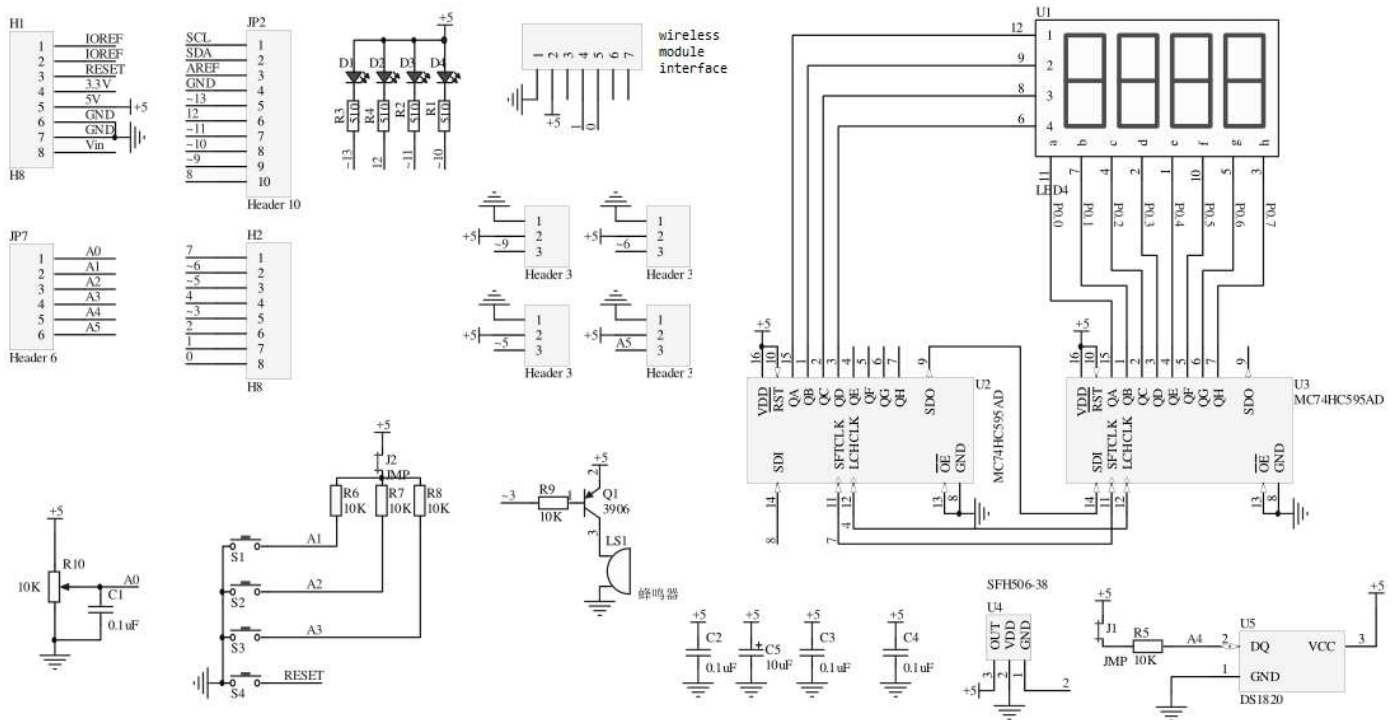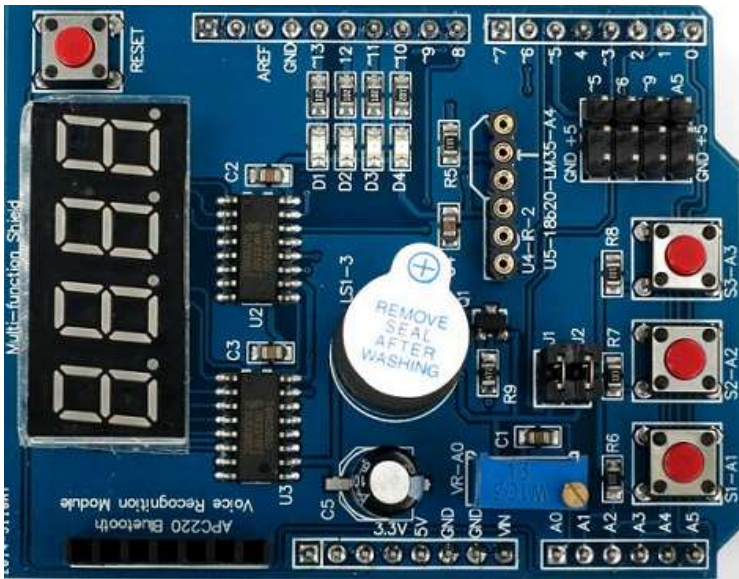# arduino_multifunction_shield

This library supports the Arduino Multi Function Shield - *a good device to get started learning sensoring & B4R.*
Based on this open source project: http://www.cohesivecomputing.co.uk/hackatronics/arduino-multi-function-shield/ (Library version 1.2 has been wrapped)

Multi Function Shield Features (Pin)[Board Info]

- 4 digit 7-segment LED display module (3641BH) driven by two serial 74HC595's (Pin Latch 4, Clock 7, Data 8)
- 4 Red LEDs (Pin 10,11,12,13) [D1-13, D2-12, D3-11,D4-10]
- 10K potentiometer (Pin A0) [Vr-A0]
- 3 x push buttons (Pin A1, A2, A3) [S1-A1, S2-A2, S3-A3]
- Piezo buzzer (Pin 3 digital ON/OFF) [LS1-3]
- DS18B20 temperature sensor interface (not included) (Pin A4) [U5-18b20-LM35-A4]
- Infrared receiver interface (Pin 2) [U4-IR-2] Compatible to a 1838B Infrared IR receiver
- Bluetooth interface (GND, +5v, 0 = tx, 1 = rx) [APC220]
- Free pins pwm (5, 6, 9, A5) with GND, +5V
- Serial interface header for connection to serial modules (Bluetooth, wireless interface, voice module, a voice recognition module)

Functionality & Samples

- The library has functions to support the LED Display, LEDs, Buzzer, Buttons, Temperature Sensor LM35.
- B4R example programs developed showing usage for the LED Display, LEDs, Buzzer, Buttons, LM35 (Temperature), DS18b20 (Temperature), PotMeter, PulseIn, Sonar HC-SR04. The examples are well documented and cover most functions from the

library.

Library Dependencies
rMultiFuncShield depends upon the library TimerOne .

TODO

- Test: I2C (requires SoftI2C Library), InfraRed, Bluetooth APC220, Voice Recognition, MPU6050 motion sensor

ChangeLog
20160212 v0.9 - (Post #3) Library documentation updated, Samples reworked.
20160208 v0.8 - (Post #1) Initial version

Attached Files:

rMultiFuncShield.zip		b4rhowtomultifuncshield.zip	
File size:	104 KB	File size:	22.3 KB
Views:	641		