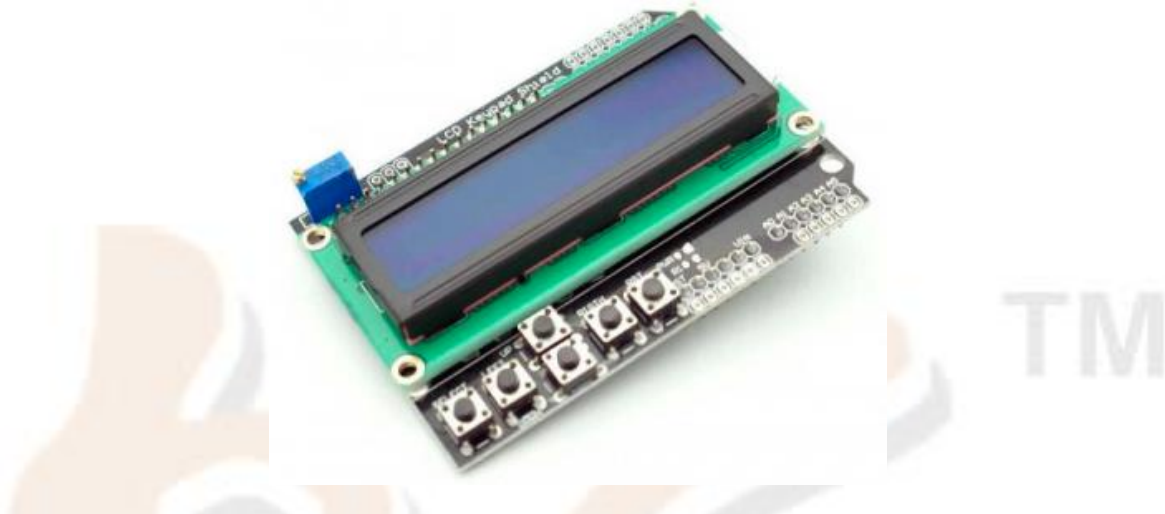


1602 LCD Keypad Shield Compatible with Arduino



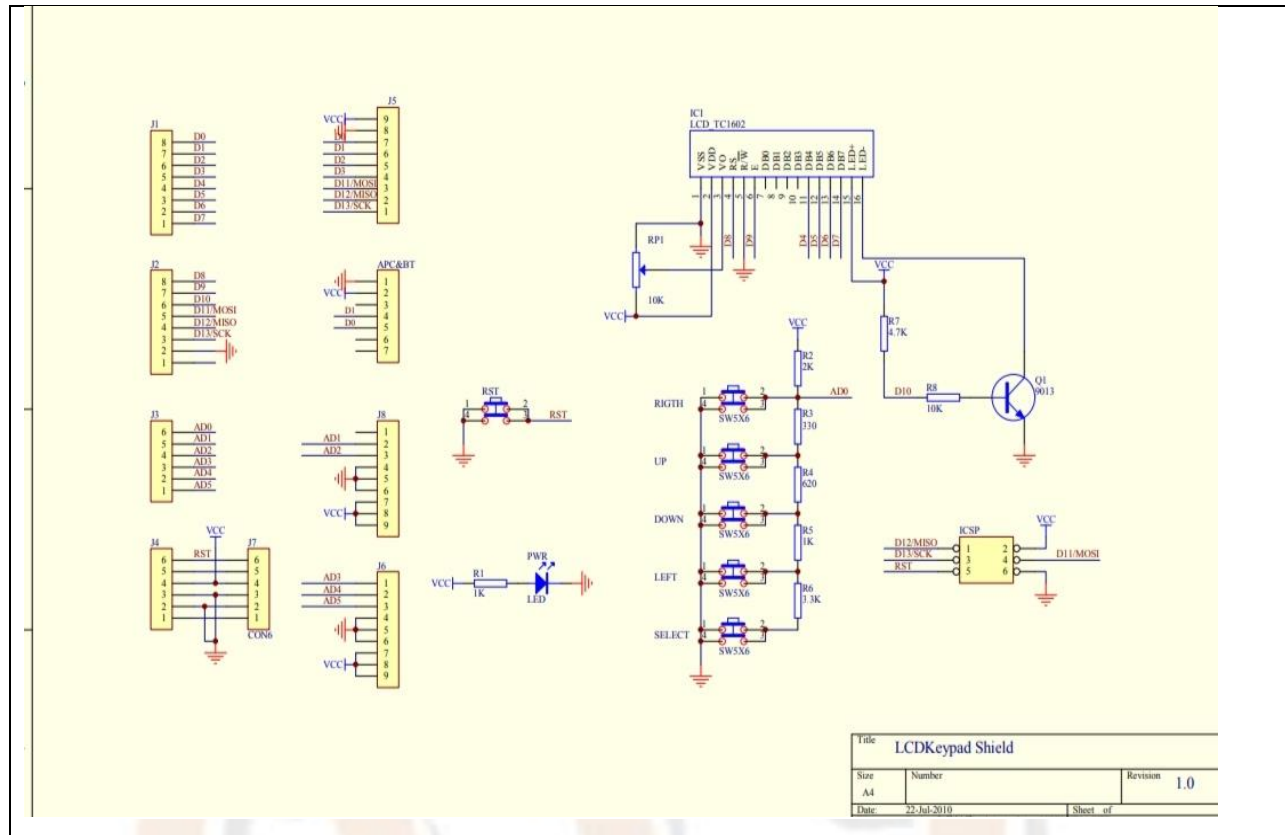
This is a very popular LCD Keypad shield for Arduino or Freeduino board. It includes a 2x16 LCD display and 6 momentary push buttons. Pins 4, 5, 6, 7, 8, 9 and 10 are used to interface with the LCD. Analog Pin 0 is used to read the push buttons. The LCD shield supports contrast adjustment and backlight on/off functions. It also expands analog pins for easy analog sensor reading and display.

The LCD Keypad shield is developed for Arduino compatible boards, to provide a user-friendly interface that allows users to go through the menu, make selections etc. It consists of a 1602 white character blue backlight LCD. The keypad consists of 5 keys — select, up, right, down and left. To save the digital IO pins, the keypad interface uses only one ADC channel. The key value is read through a 5 stage voltage divider.

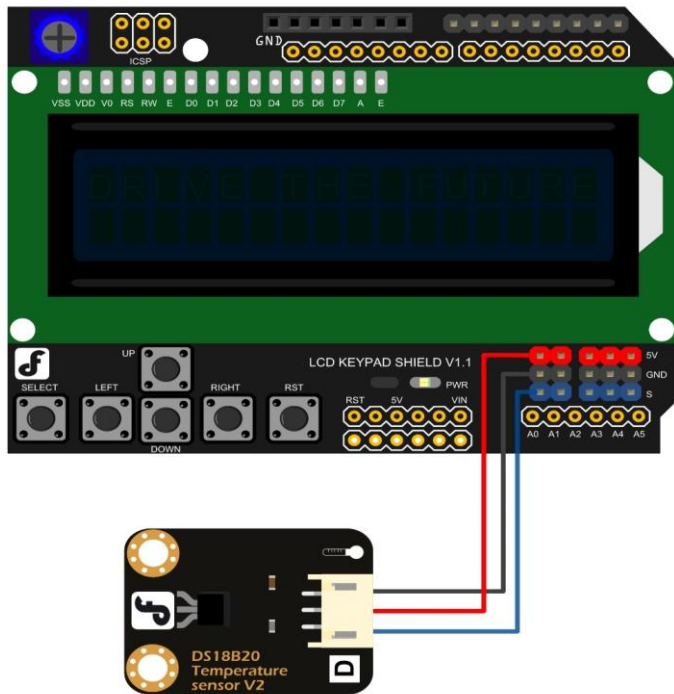
SPECIFICATIONS:

- Operating Voltage: 5V
- 5 Push buttons to supply a custom menu control panel
- RST button for resetting arduino program
- Integrate a potentiometer for adjusting the backlight
- APC&BT pin header for connecting wireless devices, directly compatible with:
 - APC220 Radio Communication Module
 - DFRobot Bluetooth V3
- Expanded available I/O pins
- Expanded Analog Pinout with standard DFRobot configuration for fast sensor extension
- Dimension: 80 x 58 mm (3.15x 2.28 in)

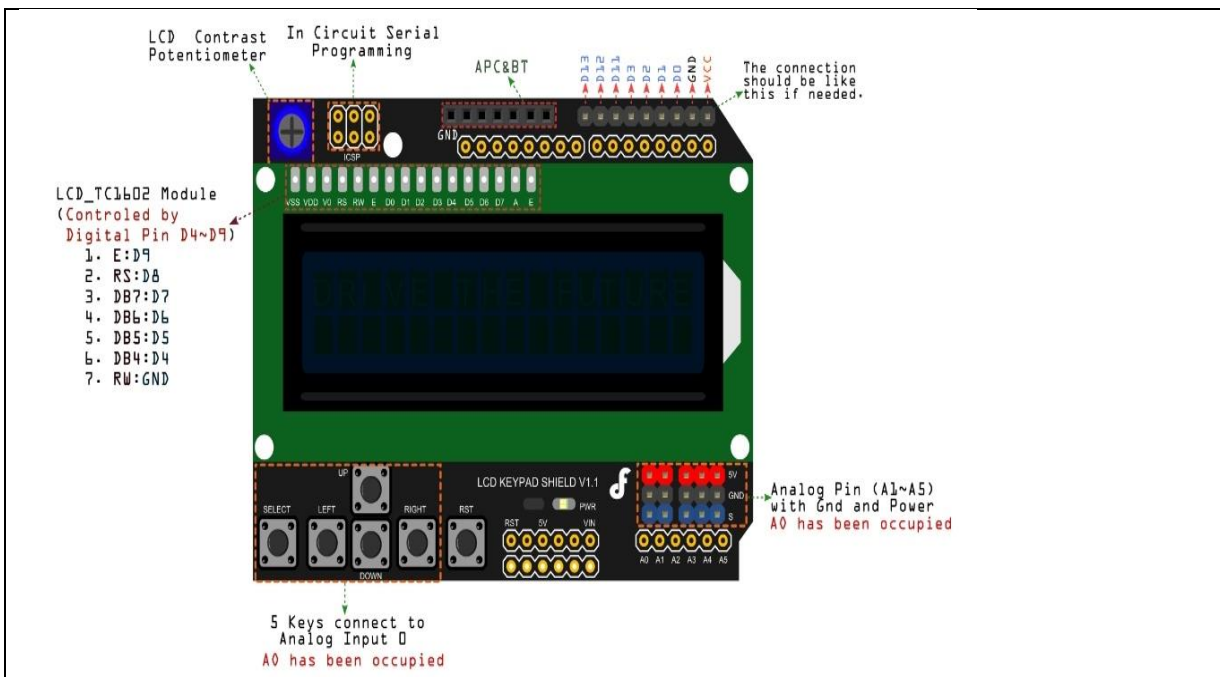
SCHEMATIC DIAGRAM:



- Plug the LCD Keypad to the UNO(or other controllers)
- Temperature sensor: S(blue) -- A1()
- Note: A0 has been occupied.
- VCC(red) -- VCC
- GND(black) -- GND



PIN FUNCTION:



| Pin | Function | Instruction |
|------------------|---------------------------|--|
| Digital 4 (D4) | D4-D7 are used as DB4-DB7 | Four high order Bidirectional tristate data bus pins. Used for data transfer and receive between the MCU and the LCD |
| Digital 5 (D5) | | |
| Digital 6 (D6) | | |
| Digital 7 (D7) | | |
| Digital 8 (D8) | RS | Choose the data or signal display |
| Digital 9 (D9) | Enable | Start data read/write |
| Digital 10 (D10) | LCD backlight control | For adjust brightness |
| Analog 0 (A0) | Button select | Select up, down, left and right |