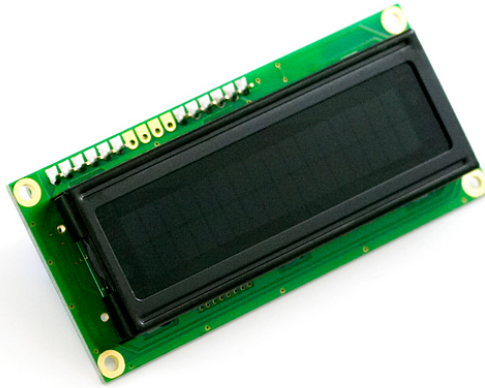


Serial Enabled 16x2 LCD

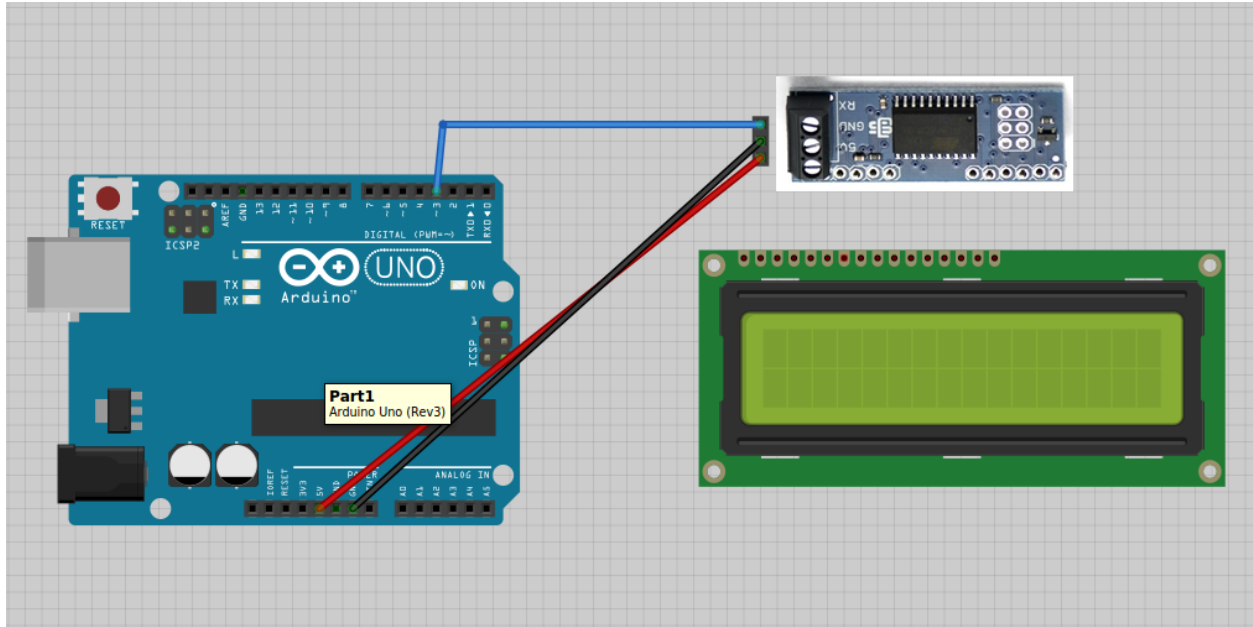


This LCD will allow your project to display all kinds of text and numbers. LCDs can be difficult to use, so this one has an embedded processor to the LCD that does the hard work for you.

more info on the product: https://www.sparkfun.com/datasheets/LCD/SerLCD_V2_5.PDF

Hardware setup:

signal name	signal spec	connects to
RX (receive)	Serial receive (input to the display). 5V TTL level, 9600 baud (default rate, can be changed), 8 bits, 1 stop, no parity.	Arduino pin 2
GND (ground)	Ground for the power supply.	Arduino GND
VDD (power)	Power supply, this should be +5V at up to 60mA if the backlight is fully on.	Arduino 5V



Code:

```
// SparkFun Serial LCD example 1
// Clear the display and say "Hello World!"

// This sketch is for Arduino versions 1.0 and later
// If you're using an Arduino version older than 1.0, use
// the other example code available on the tutorial page.

// Use the softwareserial library to create a new "soft" serial port
// for the display. This prevents display corruption when uploading code.

#include <SoftwareSerial.h>
// Attach the serial display's RX line to digital pin 2
SoftwareSerial mySerial(3,2); // pin 2 = TX, pin 3 = RX (unused)

void setup() {
  //initialize serial communication:
  mySerial.begin(9600);
  delay(250); // Wait for display to boot up
}

void loop()
{
```

```

mySerial.write(254); // move cursor to beginning of first line
mySerial.write(128);

mySerial.write("                "); // clear display
mySerial.write("                ");

mySerial.write(254); // move cursor to beginning of first line
mySerial.write(128);

mySerial.write("Hello World!");
while(1); //wait forever

}

```

>>>TRY WRITE A PROGRAM THAT RANDOMLY WRITES A FORTUNE COOKIE MESSAGE ON THE LCD SCREEN EVERY 10 SECONDS (be creative but remember the total character limit is 16x2!)



>>>optional>>>NOW COMBINE ONE OR BOTH OF THE TWO SENSORS WE TESTED EARLIER AND CREATE:

- [A] a distance measuring device or**
- [B] a mini text adventure! or**
- [C] surprise us all!! ;]**