I2C Serial Interface for
LCD CHARACTER DISPLAY MODULE
Technical Manual Rev 1r0
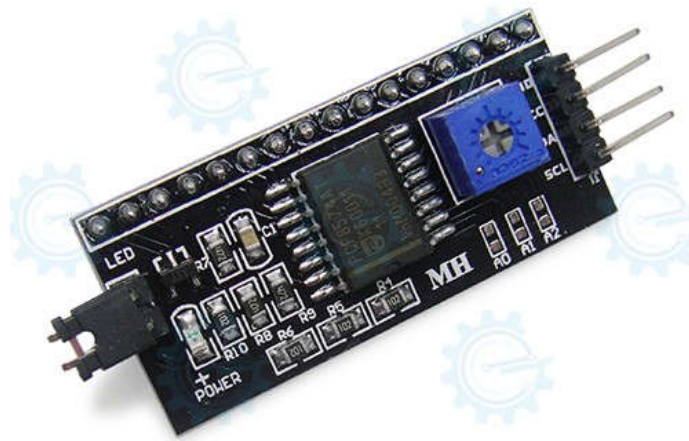
I2C Serial interface board Module for LCD Display is an Arduino compatible module for your project to lessen the wire connectionsa and to use normal LCD shield after connected with certain quantity of sensors or SD card. With this you will be able to realize data display via only 2 wires.

Features:

- *I2C Serial Interface (2-Wires)*
- *Arduino Compatible*
- *for 16-pins LCD displays(2x16/4x20)*
- *Low power comsumptions*
- *With Contrast adjustment on board*

General Specifications:

Input Supply: 5VDC
Interface: I2C Serial Interface
PCB Dimensions: 42mm x 19mm
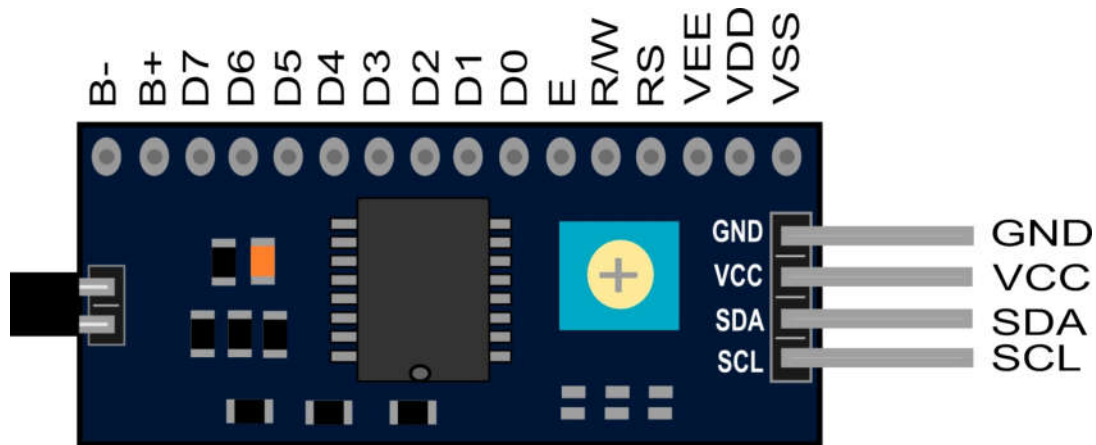
Figure 1. Major parts presentation of I2C Serial Interface for LCD Display

Table 1: Connection

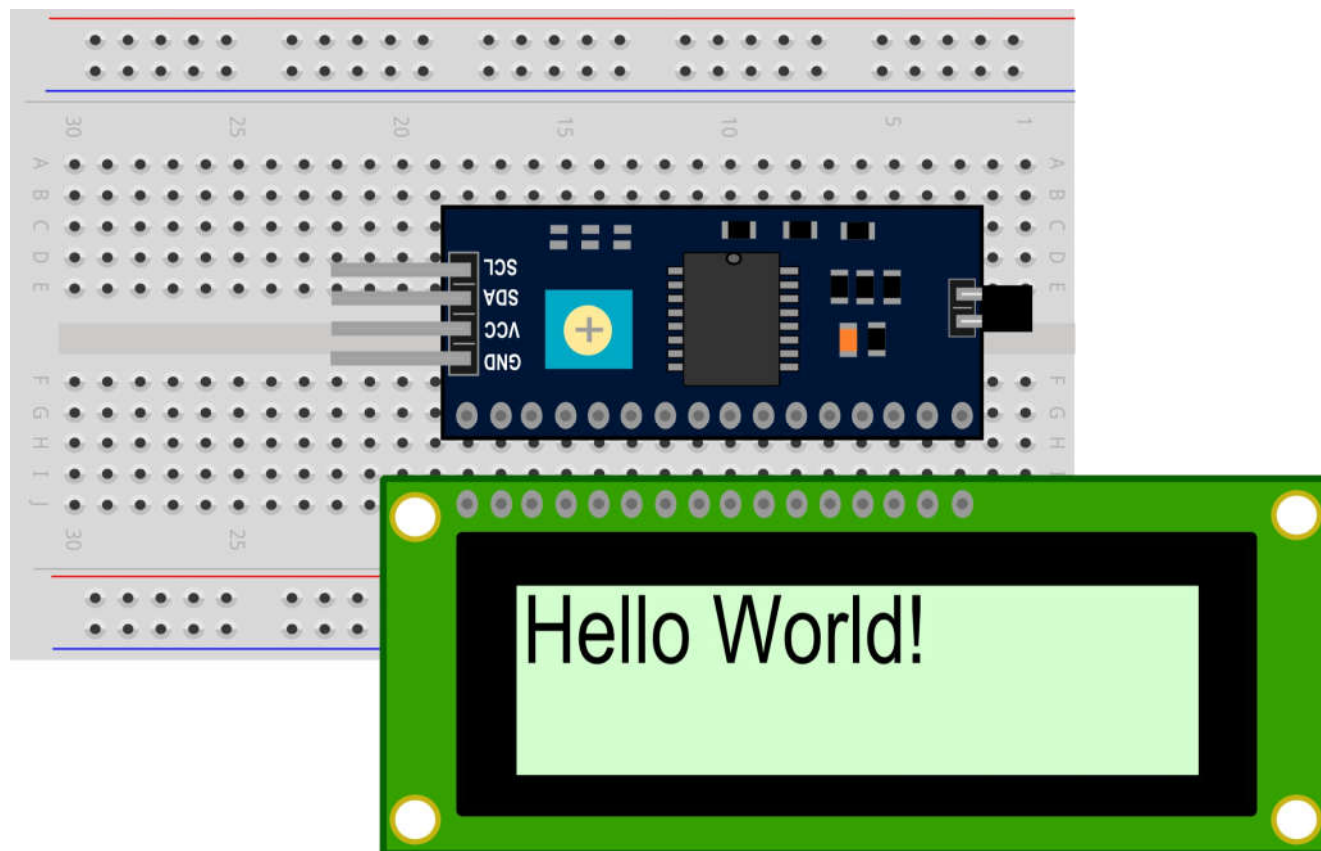| NAME	PIN DESCRIPTIONS
GND	Ground
VCC	+5V DC Input Supply
SDA	I2C Data line pin
SCL	I2C Clock line pin
RV1	Adjustment of contrast

Figure 2. Major parts presentation of I2C Serial Interface for LCD Display with LCD 2x16 Display (for 4x20 LCD display also the same connection)

Wiring Connections:
I2C Module to GizDuino PLUS
GND ------ GND
VCC ------ VCC
SDA ------ SDA (D25)
SCL ------ SCL (D24)

Wiring Connections:
To GizDuino PLUS
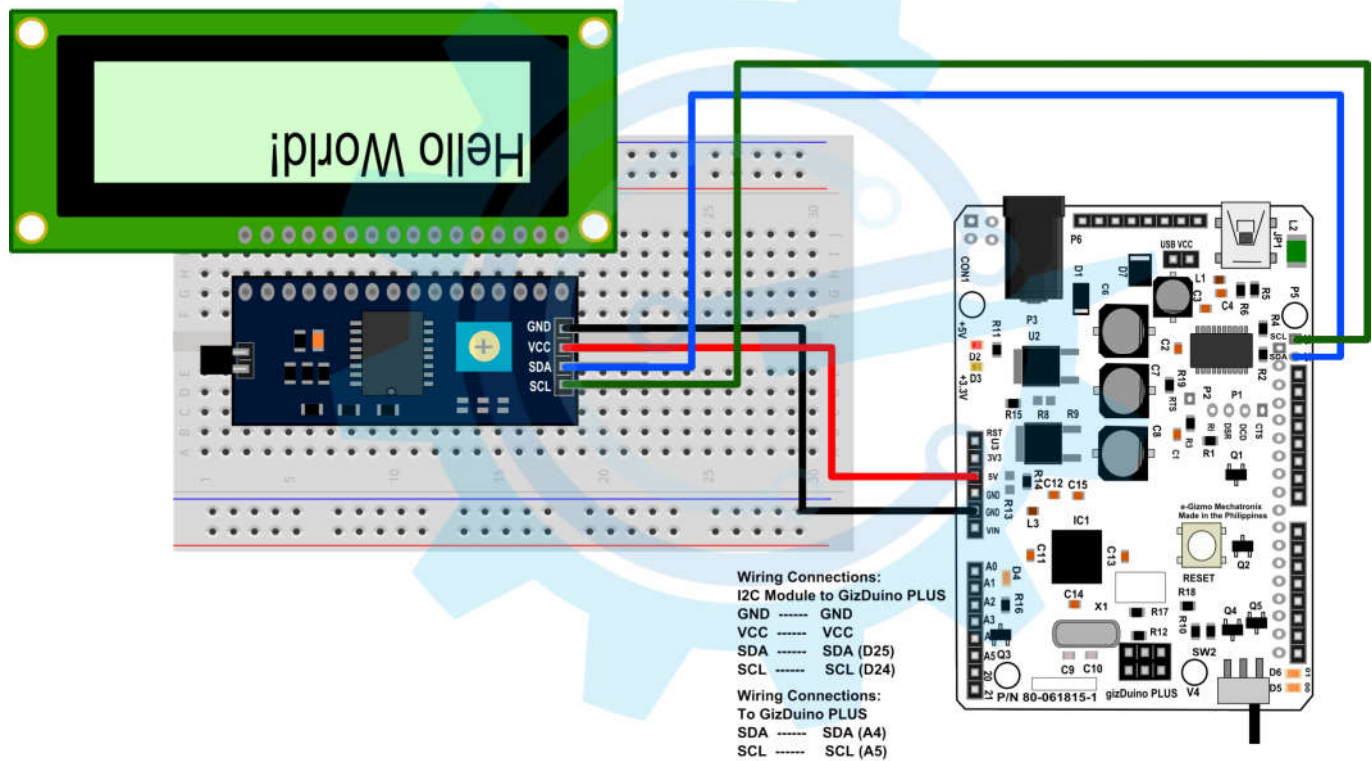SDA ------ SDA (A4)
SCL ------ SCL (A5)

Figure 3. Sample Application of e-Gizmo I2C Serial Interface for
LCD Display module

```
/*
  I2C Serial Interface LCD Module Display
  Sample code

  Library Requirements:
  LiquidCrystal_I2C and Wire
*/

#include <Wire.h>
// Get the LCD I2C Library here:
// https://bitbucket.org/fmalpartida/new-liquidcrystal/downloads
// Move any other LCD libraries to another folder or delete them
// See Library "Docs" folder for possible commands etc.
#include <LiquidCrystal_I2C.h>

// set the LCD address to 0x27 for a 16 chars 2 line display
// A FEW use address 0x3F
// Set the pins on the I2C chip used for LCD connections:
//                  addr, en,rw,rs,d4,d5,d6,d7,bl,blpol
LiquidCrystal_I2C lcd(0x3F, 2, 1, 0, 4, 5, 6, 7, 3, POSITIVE);  // Set the LCD I2C address

void setup(){
  Serial.begin(9600);

  lcd.begin(16,2);   // initialize the lcd for 16 chars 2 lines, turn on backlight

  lcd.setCursor(0,0); //Start at character 4 on line 0
  lcd.print("Hello, world!");

}


void loop()
{

}
```

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