**TFT(Thin-Film-Translator) Display with Arduino**

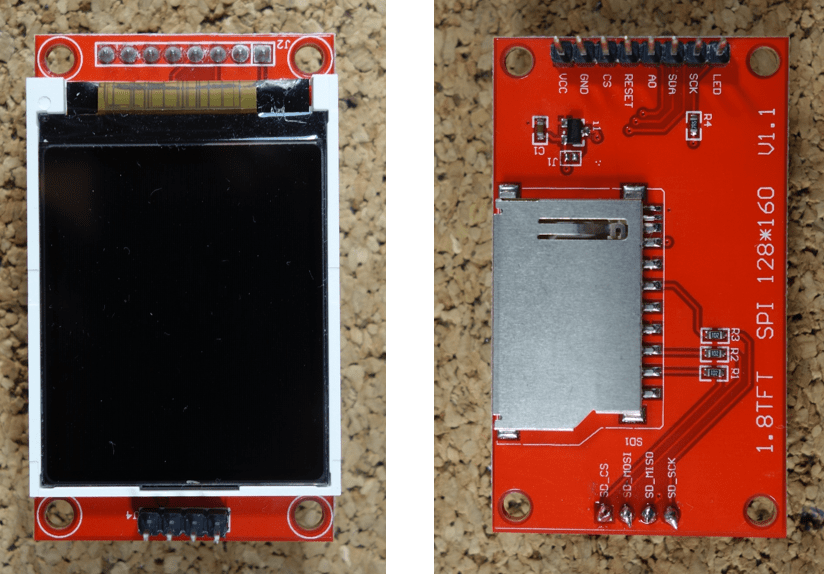
**Description**: In this project, we will show how TFT display works and text show in the TFT display.

**Hardware Requirement:**

* Arduino board
* TFT display-8pin[LED,SCK,SDK,A0,RESET,CS,GND,VCC]
* Jumper wire
* Breadboard
* USB cable

**TFT display and it’s Connection**:

TFT Display:



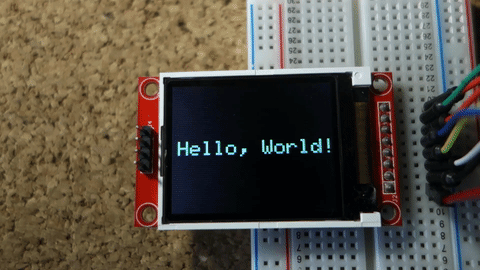
**Connection:**

|  |  |
| --- | --- |
| **1.8 TFT Display** | **Wiring to Arduino Uno** |
| LED | 3.3 V |
| SCK | 13 |
| SDA | 11 |
| A0 or DC | 9 |
| RESET | 8 |
| CS | 10 |
| GND | GND |
| VCC | 5 V |

Code:

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| --- |
| #include<TFT.h> #include<SPI.h> #define cs   10 #define dc   9 #define rst  8   // create an instance of the library TFT tft = TFT(cs, dc, rst); void setup() {   // put your setup code here, to run once: tft.begin();     // clear the screen with a black background   tft.background(0, 0, 0);   //set the text size   tft.setTextSize(2); }   void loop() {   // put your main code here, to run repeatedly:       // set a random font color   tft.stroke(0,255,0);   tft.setCursor(0,40);      //tft.setCursor(column, row);   tft.print("Hellow World!"); } |

**Output:**



**Code for the text moving from up to down:**

|  |
| --- |
| #include<TFT.h> #include<SPI.h> #define cs   10 #define dc   9 #define rst  8     // create an instance of the library TFT tft = TFT(cs, dc, rst); void setup() {   // put your setup code here, to run once: tft.begin();     // clear the screen with a black background   tft.background(0, 0, 0);   //set the text size   tft.setTextSize(2); }   void loop() {   // put your main code here, to run repeatedly:       // set a random font color   int i=0;     for(i;i<100;i+=5)   {     tft.background(0,0,0);     tft.stroke(0,250,0);   tft.text("HELLOW",5,i);    //  (" ",col,row)  delay(100);   }; } |

Overwrite :

When I print one text into the TFT display and then again print another text into the TFT display, it will overwrite into the previous text.

To stop overwriting on TFT display and send the text from the terminal or Bluetooth terminal , the code is :

|  |
| --- |
| #include<TFT.h> #include<SPI.h> #define cs   10 #define dc   9 #define rst  8     String s;  // create an instance of the library TFT tft = TFT(cs, dc, rst); void setup() {   // put your setup code here, to run once: tft.begin();  Serial.begin(9600);    // clear the screen with a black background   //set the text size   tft.setTextSize(2); }  void loop() {   // put your main code here, to run repeatedly:      if(Serial.available()!=0)   {   tft.background(0,0,0);      s=Serial.readString();        }   // set a random font color      tft.stroke(0,255,0);   tft.setCursor(0,30);   tft.print(s);     } |

Link for TFT basic:

<https://create.arduino.cc/projecthub/electropeak/ultimate-beginner-s-guide-to-run-tft-lcd-displays-by-arduino-081006>