

TA0041 Mini Prototyping Board Shield

1 Instructions

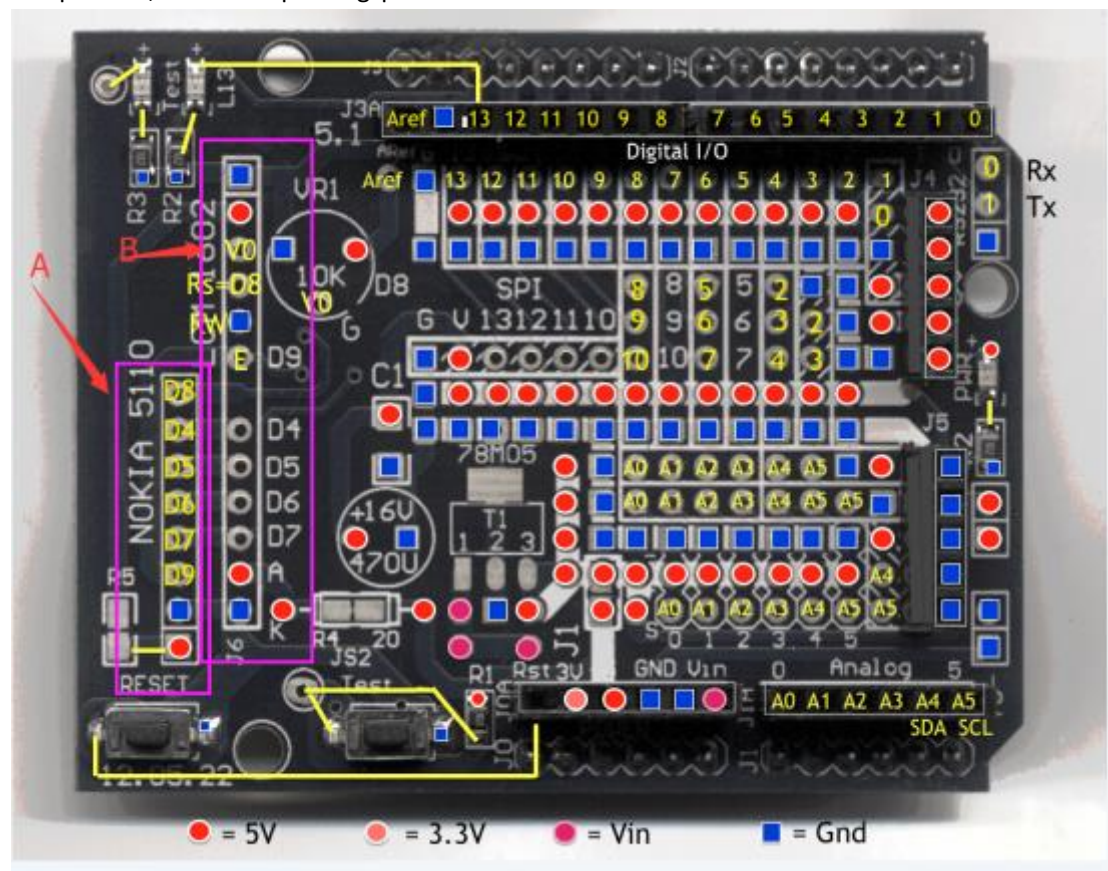
This board is a DIY board that with some pre-positions where need you soldering some electronic components such as one 5V regulator, one 470u capacitor, one 10k variable resistor, one 78M05 chip and two resistors. And this board is designed to suit for Arduino Duemilanove , but it also works with Arduino UNO.

Specifications:

- 1 reset button, 1 general use button, and 2 LED circuits can be used directly.
- 5V, GND, and Raw pins are exposed as well.
- SOIC place for IC
- The mini breadboard has 170 tie points
- The breadboard sticks on the prototype shield with its self-adhesive backing.
- Mini breadboard size: 4.4 * 3.4 * 1cm

2. Pin Instruction

Here is a picture that indicates the pin functions. And Only you soldering some electronic components, the corresponding pin works.



And, the area A is for NOKIA D110, the area is for LCM1602.

3. Example for NOKIA5110

The connection:

```
SCLK=====D8
DN=====D9
D/C=====D5
RST=====D6
SCE=====D7
GND=====Gnd
Vcc=====3.3V
LED=====3.3V(or D4 with a 330Ω resistor)
```

Here is the code:

```
*****code begin*****
#include <LCD5110_Basic.h>
LCD5110 myGLCD(8,9,5,6,7);
extern uint8_t SmallFont[];
void setup()
{
  myGLCD.InitLCD();
  myGLCD.setFont(SmallFont);
}
void loop()
{
  myGLCD.clrScr();
  myGLCD.print("Upper case:", LEFT, 0);
  myGLCD.print("ABCDEFGHJKLM", CENTER, 16);
  myGLCD.print("NOPQRSTUVWXYZ", CENTER, 24);
  myGLCD.print("duinotech.com", CENTER, 40);
  delay (5000);

  myGLCD.clrScr();
  myGLCD.print("Lower case:", LEFT, 0);
  myGLCD.print("abcdefghijklm", CENTER, 16);
  myGLCD.print("nopqrstuvwxyz", CENTER, 24);
  myGLCD.print("geeetech.com", CENTER, 40);
  delay (5000);

  myGLCD.clrScr();
  myGLCD.print("Numbers:", LEFT, 0);
  myGLCD.print("0123456789", CENTER, 16);
  myGLCD.print("duinotech.com", CENTER, 40);
  delay (5000);

  myGLCD.clrScr();
  myGLCD.print("Special:", LEFT, 0);
```

```

myGLCD.print("!\"#$%&'()*+,-.", CENTER, 16);
myGLCD.print("/:;<=>?@[\\]^_`", CENTER, 24);
myGLCD.print("{}~", CENTER, 32);
myGLCD.print("duinotech.com", CENTER, 40);
delay (5000);
}
*****code end*****

```

4.Example for LCM1602

The connection:

```

VSS=====Gnd
VDD=====5V
V0=====V0(need a resistor)
R/W=====RW
RS=====RS
E=====E(D9)
D4=====D4
D5=====D5
D6=====D6
D7=====D7
A=====A
K=====K

```

Code:

```

*****code begin*****
#include <LiquidCrystal.h>
// initialize the library with the numbers of the interface pins
LiquidCrystal lcd(8, 9, 4, 5, 6, 7);

void setup() {
  // set up the LCD's number of columns and rows:
  lcd.begin(16, 2);
  // Print a message to the LCD.
  lcd.print("hello, world!");
}

void loop() {
  // set the cursor to column 0, line 1
  // (note: line 1 is the second row, since counting begins with 0):
  lcd.setCursor(0, 1);
  // print the number of seconds since reset:
  lcd.print(millis()/1000);
}

```

```
}
```

```
*****code end*****
```