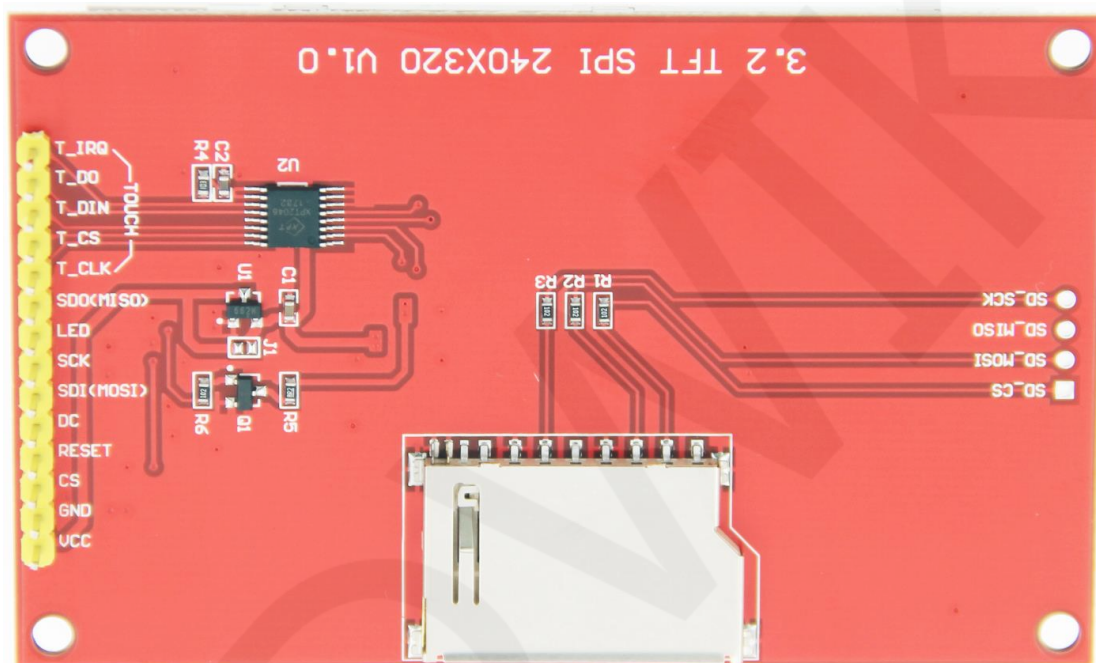


Test platform introduction:

Development board: Arduino UNO/MEGA2560

MCU: AVR_ATmega328P/AVR_ATmega2560(corresponding to the development board in order)

Wiring instructions:



Pin silkscreen picture

Arduino UNO microcontroller test program wiring instructions

| Number | Module Pin | Corresponding to UNO development board wiring pins | Remarks |
|--------|------------|--|--|
| 1 | SDO(MISO) | 12 | SPI bus read data pin (if it does not support read function or does not need the read function, it can not be connected) |
| 2 | LED | A0 | Backlight control pin (if no control is required, connect directly to 3.3V) |
| 3 | SCK | 13 | SPI bus clock pin |

| | | | |
|----|------------------|---------|--|
| 4 | SDI(MOSI) | 11 | SPI bus data pin |
| 5 | DC/RS | A3 | LCD data / command selection control pin |
| 6 | RESET | A4 | LCD reset control pin |
| 7 | CS | A5 | LCD chip select control pin |
| 8 | GND | GND | Power ground pin |
| 9 | VCC | 5V/3.3V | Power positive pin |
| 10 | T_IRQ | 6 | Touch screen interrupt detection pin |
| 11 | T_DO | 4 | Touch screen SPI bus read data pin |
| 12 | T_DIN | 5 | Touch screen SPI bus write data pin |
| 13 | T_CS | 2 | Touch screen chip select control pin |
| 14 | T_CLK | 3 | Touch screen SPI bus clock pin |

Arduino MEGA2560 microcontroller test program wiring instructions

| Number | Module Pin | Corresponding to MEGA2560 development board wiring pins | Remarks |
|--------|------------------|---|--|
| 1 | SDO(MISO) | 50 | SPI bus read data pin (if it does not support read function or does not need the read function, it can not be connected) |
| 2 | LED | A0 | Backlight control pin (if no control is required, connect directly to 3.3V) |
| 3 | SCK | 52 | SPI bus clock pin |
| 4 | SDI(MOSI) | 51 | SPI bus data pin |
| 5 | DC/RS | A3 | LCD data / command selection control pin |
| 6 | RESET | A4 | LCD reset control pin |
| 7 | CS | A5 | LCD chip select control pin |
| 8 | GND | GND | Power ground pin |
| 9 | VCC | 5V/3.3V | Power positive pin |
| 10 | T_IRQ | 49 | Touch screen interrupt detection pin |
| 11 | T_DO | 47 | Touch screen SPI bus read data pin |
| 12 | T_DIN | 48 | Touch screen SPI bus write data pin |
| 13 | T_CS | 45 | Touch screen chip select control pin |

| | | | |
|----|-------|----|--------------------------------|
| 14 | T_CLK | 46 | Touch screen SPI bus clock pin |
|----|-------|----|--------------------------------|

Demo function description:

1. This set of test program procedures is applicable to UNO and Mega2560 platforms;
2. This set of test programs uses the SPI bus to transfer data, including software spi and hardware spi functions;
3. Please select the corresponding test program and development board to follow the above wiring instructions for wiring;
4. The version of the Arduino IDE used in this test program is 1.8.5. Please use the same or higher version for testing.
5. This set of test programs depends on the LCDWIKI library. Before compiling, you need to copy the LCDWIKI library in the Install libraries directory of the test package to the libraries folder of the Arduino project directory (the default Arduino project directory is C:\Users\Administrator\Documents\Arduino\libraries);
6. This set of test procedures contains the following test items:
 - A. Example_01_Simple_test is a brush-free test that does not depend on the library, and can be used to detect the LCD hardware;
 - B. Example_02_clear_screen is a simple brush screen test, in the order of black and white red, green and blue colors, the screen is cycled;
 - C. Example_03_colligate_test is a comprehensive test, showing graphics, lines and statistics program running time;
 - D. Example_04_display_graphics is a graphic display test, showing various graphics;
 - E. Example_05_display_scroll is a scroll test, showing text scrolling;
 - F. Example_06_display_string is a text display test, showing Chinese and English in different sizes;
 - G. Example_07_read_pixe1 is a test for reading the specified pixel color value. If the read function is not supported, this item does not need to be tested;

- H. Example_08_switch_test is a switch touch test, and the switch is triggered by clicking a touch;
- I. Example_09_display_phonecall is a telephone dialing touch test, by touching the analog dialing function;
- J. Example_10_touch_pen is a touch pen drawing test, and draws on the LCD screen by touching with a pen;
- K. touch_screen_calibration is a touch screen calibration program, and calibration parameters are obtained through calibration;