2.8 inch TFT Touch Shield
user manual

PRODUCT FEATURE:

- Support Arduino UNO and Mega2560 without wiring.

- Including 5V-3.3V Level conversion circuit，support all the 3.3V, 5V single chip.

- Screen resolution is 320X240 with touch screen function.

- Using 8-bit parallel bus，More quickly and smoothly than SPI

- We provide Arduino libraries so that you can simplify application development.
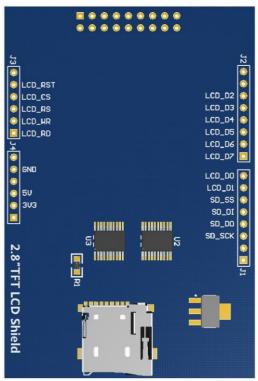
- With Micro-SD card circuit.

PARAMETER:

SKU	60280361205
Screen Size	2.8 inch
Screen Touch	320*240
Display Size	57.6mm*43.3mm
Overall Size	78.22mm*52.7mm
Screen Color	RGB，65K color，colorful
Screen Connection	Using 8-bit parallel bus
Drive chip	LGDP4535

Application:

Arduino Display, digital photo frame, touch handwriting panel, e-books, MP3 players, handheld devices, etc.,

Module interface definition:

Sign	Description
LCD_RST	The bus reset signal of LCD
LCD_CS	Bus selected signal of LCD
LCD_RS	Bus command
LCD_WR	LCD bus to write signal
LCD_RD	LCD bus to read signal
GND	GND
5V	5V power input
3V3	NC
LCD_D0	LCD 8 bits of dataBit0
LCD_D1	LCD 8 bits of dataBit1
LCD_D2	LCD 8 bits of dataBit2
LCD_D3	LCD 8 bits of data Bit3
LCD_D4	LCD 8 bits of data Bit4
LCD_D5	LCD 8 bits of data Bit5
LCD_D6	LCD 8 bits of data Bit6
LCD_D7	LCD 8 bits of data Bit7
SD_SS	SD card SPI Bus selected signal
SD_DI	SD card SPI Bus MOSI signal
SD_DO	SD card SPI Bus MISO signal
SD_SCK	SD card SPI Bus clock signal

Arduino wiring instructions:

Sign	Sign on UNO/Mega2560	Description
LCD_RST	A4	The bus reset signal of LCD
LCD_CS	A3	Bus selected signal of LCD
LCD_RS	A2	Bus command
LCD_WR	A1	LCD bus to write signal
LCD_RD	A0	LCD bus to read signal
GND	GND	GND
5V	5V	5V power input
3V3	3.3V/NC	NC
LCD_D0	8	LCD 8 bits of dataBit0
LCD_D1	9	LCD 8 bits of dataBit1
LCD_D2	2	LCD 8 bits of dataBit2
LCD_D3	3	LCD 8 bits of data Bit3
LCD_D4	4	LCD 8 bits of data Bit4
LCD_D5	5	LCD 8 bits of data Bit5
LCD_D6	6	LCD 8 bits of data Bit6
LCD_D7	7	LCD 8 bits of data Bit7
SD_SS	10	SD card SPI Bus selected signal
SD_DI	11	SD card SPI Bus MOSI signal
SD_DO	12	SD card SPI Bus MISO signal
SD_SCK	13	SD card SPI Bus clock signal

Explanation of Arduino Code :

1) Texting development board: Arduino UNO , ArduinoMega2560

2) Open the CD, open ..\Arduino Demo_UNO&Mega2560\Install libraries, add the libraries into arduino IDE.

3) Before doing the Example05-ShowBMP lesson, You need to copy the picture of \ArduinoDemo_UNO&Mega2560\ShowBMP\PIC to SD card, Then you can insert the SD card. (Caution: SD is only working on UNO, but not MEGA)

4) Upload the program.

5) The reason why SD card program is only working on UNO is that the IO of SPI bus of MEGA and UNO is different.

Program	Function
Example01-Simple test	This program is the most basic test program. It does not rely on any library, and it can run independently. Upload the program, the screen will be filled in turn red, green, blue
Example02-DisplayString	Display the most simple English strings and Numbers
Example03-graphicstest	Various GUI presentation graphics functions filling effect, arbitrary rotating screen demonstration.
Example04-Touch	Make a handwritten sketchpad by touch screen
Example05-ShowBMP	Simple digital photo frame program, directly read the BMP images from SD card, decode and display
SDCard Exten Example	SD card testing programs, including 6 basic program