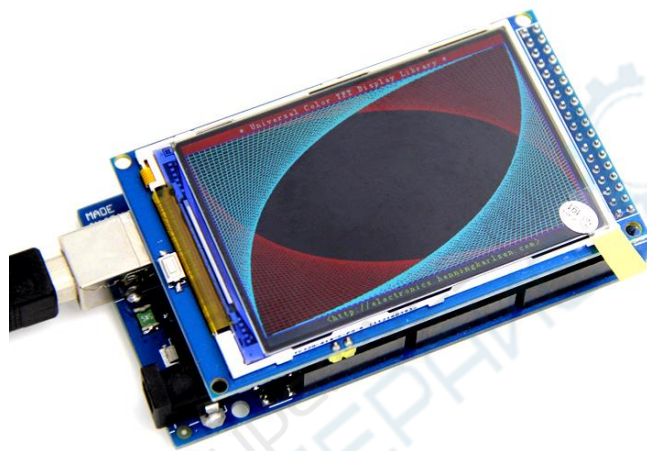


MAR3513-User Manual

3.5inch LCD Module For Mega2560



Overview

MAR3513 module is 3.5" TFT LCD with 262K color 480x 320 resolutions.

The controller of this LCD module is ILI9486/ILI9488, it supports 16-wires DataBus interface. Moreover, this module includes the 5V-3.3V power conversion circuit and Level conversion circuit, This Module can Directly inserted into the **Arduino Mega2560 Board** ,it also includes the SD card socket and SPI FLASH circuit.

Features

- **Support Arduino Mega2560 Directly inserted**
- **OnBoard level conversion chip for 5V/3.3V MCU**
- **Compatible with 3.3/5V operation voltage level**
- **Compatible with Arduino-Series development Board.**
- **Compatible with UTFT / UTFT_Buttons / Utouch Library for arduino.**
- **provided 12-examples with Arduino ,3-examples with STM32**
- **With SD Card Socket**
- **With SPI FLASH circuit**

Specifications

Item	Description
Display Type	3.5 inch TFT LCD Module
Glass Type	TFT
Display Resolution	480XRGBX320 Pixels
Back light	6 chip HighLight white LEDs
Control IC	ILI9486/ILI9488
Interface	16Bit parallel interface
PCB Module size	96.60mmX60.30mm
LCD Area(WxHxT)	84.96mmX55.5mmX2.55mm
Active Area(WxH)	73.44mmX48.96mm
Module weight	TDB

Electrical Characteristics

Specification	Min	Type	Max	Unit	
Power Voltage(VDD/VCC)	4.5	5	5.5	VDC	
IO Pins Voltage	MCU Voltage = 3.3V	2.8	3.3	3.6	V
	MCU Voltage = 5V	4.5	5	5.5	
BackLight Voltage	2.8	3.2	3.3	V	
Current Consumption	-	150	-	mA	

Hardware

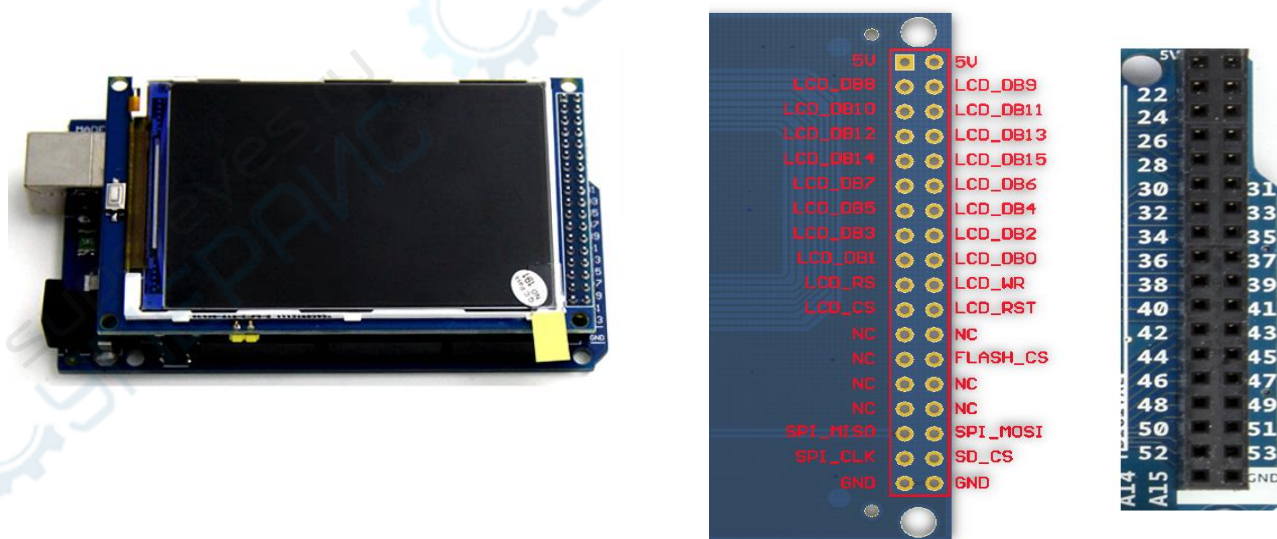
Pin Map			
No	Pin	Type*	Description
1	5V	P	5V Power Supply in
2	5V	P	5V Power Supply in
3	LCD_DB8	I	Data Bus
4	LCD_DB9	I	Data Bus
5	LCD_DB10	I	Data Bus
6	LCD_DB11	I	Data Bus
7	LCD_DB12	I	Data Bus
8	LCD_DB13	I	Data Bus
9	LCD_DB14	I	Data Bus
10	LCD_DB15	I	Data Bus
11	LCD_DB7	I	Data Bus
12	LCD_DB6	I	Data Bus
13	LCD_DB5	I	Data Bus
14	LCD_DB4	I	Data Bus
15	LCD_DB3	I	Data Bus
16	LCD_DB2	I	Data Bus
17	LCD_DB1	I	Data Bus
18	LCD_DB0	I	Data Bus
19	LCD_RS	I	LCD Cammand/Data Selection(0:cammand;1:Data)
20	LCD_WR	I	LCD Write signal
21	LCD_CS	I	LCD Chip Selection,Low level active
22	LCD_RST	I	LCD Reset(Low level Enable)
23	NC	-	No connection
24	NC	-	No connection
25	NC	-	No connection
26	FLASH_CS	I	Exten circuit: SPI_FLASH Chip Sellation
27	NC	-	No connection
28	NC	-	No connection
29	NC	-	No connection
30	NC	-	No connection
31	SPI_MISO	O	Exten circuit: SPI Bus Data output
32	SPI_MOSI	I	Exten circuit: SPI Bus Data input
33	SPI_CLK	I	Exten circuit: SPI Bus Clock
34	SD_CS	I	Exten circuit: Extern SDCard Chip Sellation
35	GND	G	Ground
36	GND	G	Ground

* : P:Power supply;G:Ground;I:Input;O:Output

PinMap

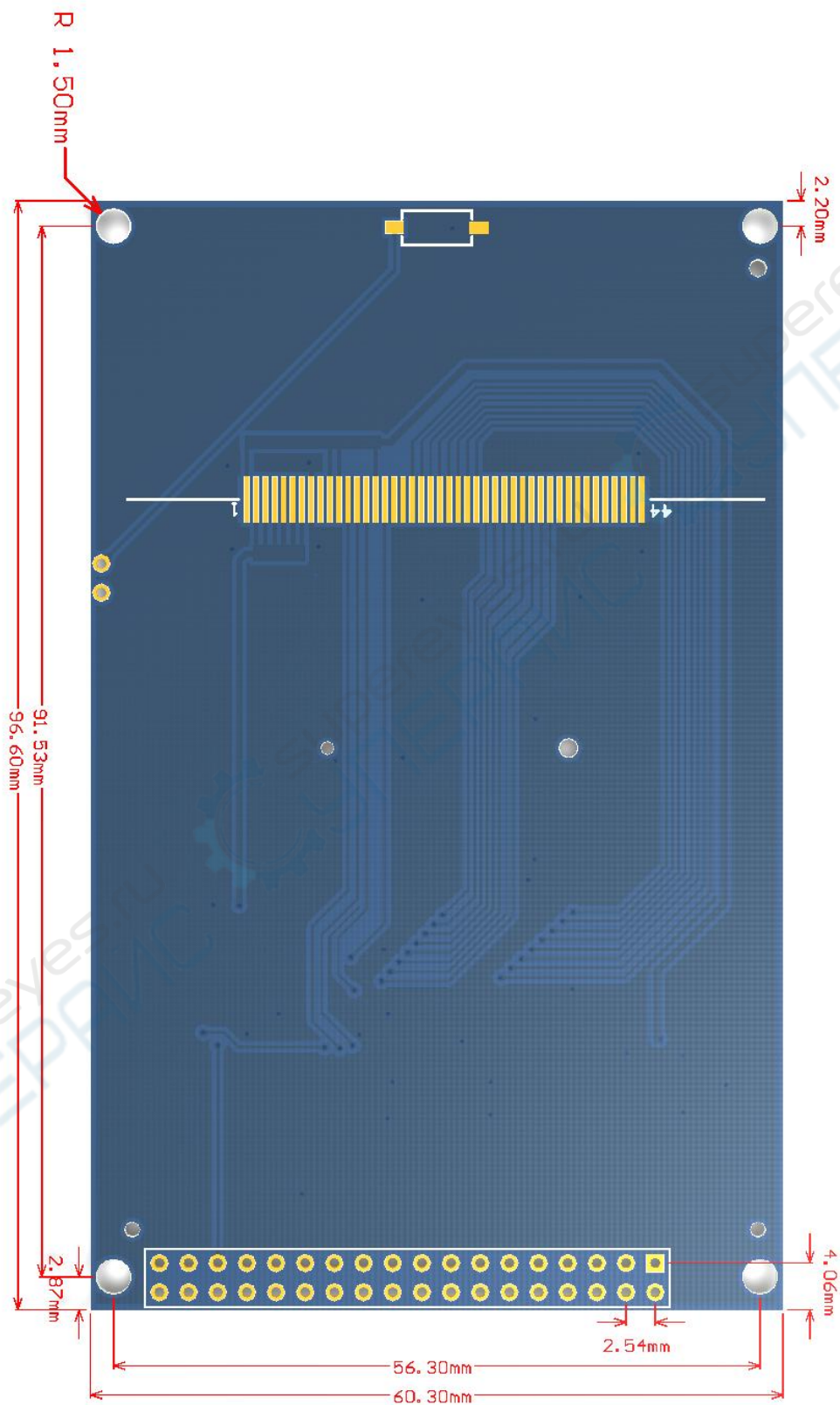


How to Connect with Mega2560



Top view

Module Structure



The professional LCD supplier

Development Document

- 6 examples with UTFT librarie for Arduino.
- 6 SDCard Exten examples with SD library for Arduino.
- 3 examples for STM32.
- 1 examples for C51.
- Develop toos and documents.

The development of information we provide:

The image shows a directory tree for a development project. The root folder is '3.2寸Arduino_IPS模块配套资料320X480'. It contains several sub-folders, each with a red callout indicating the number of examples or documents provided:

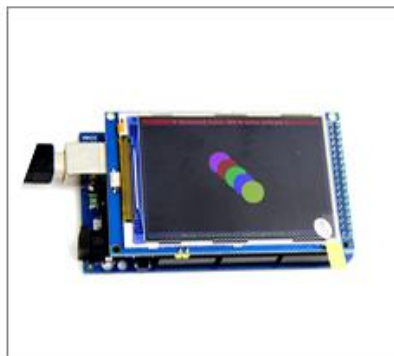
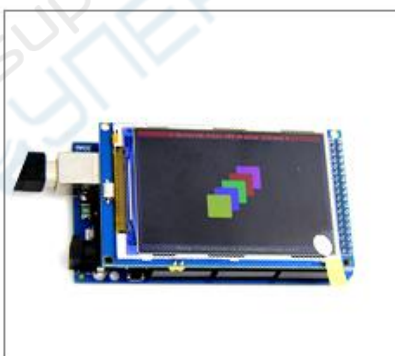
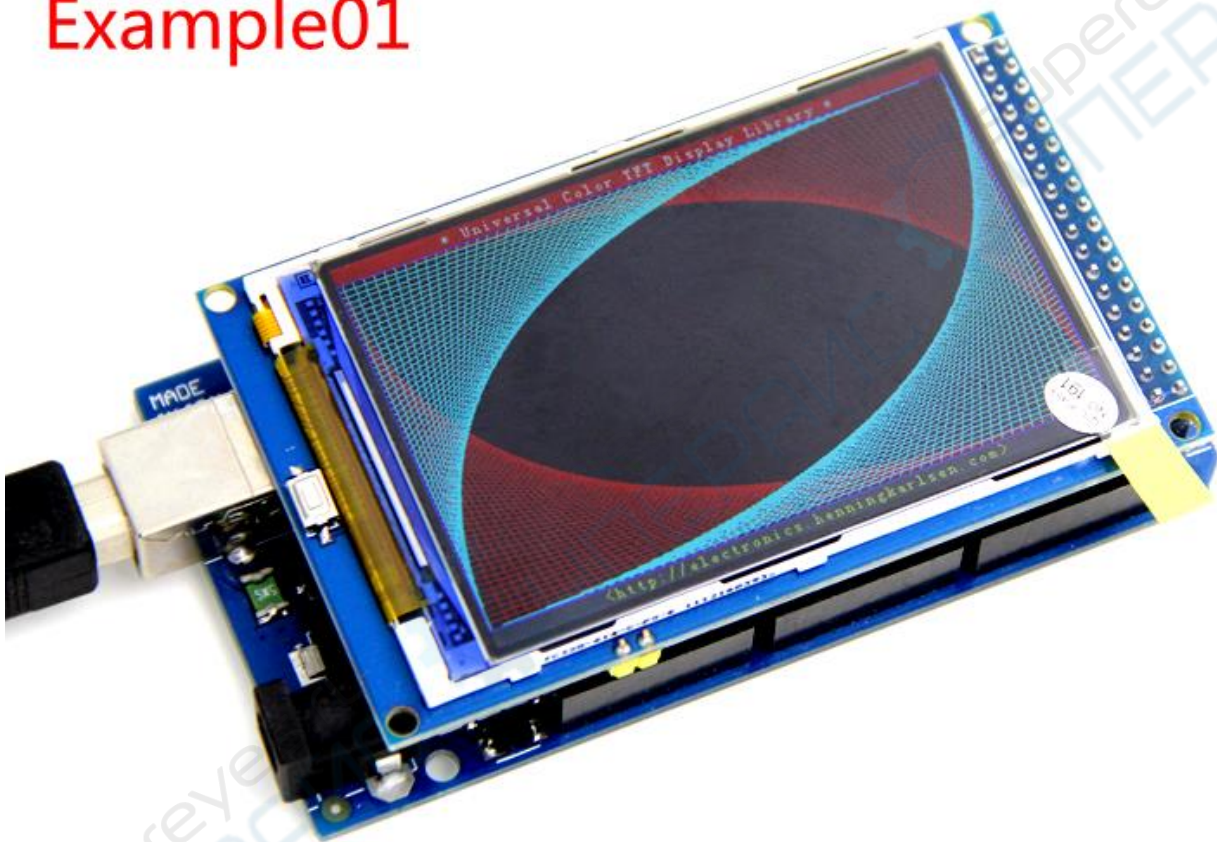
- Arduino Demo_Mega2560**: Contains 6 example folders (Example01-UTFT_Demo_480x320, Example02-UTFT_ViewFont, Example03-UTFT_Buttons_Demo, Example04-UTouch_ButtonTest, Example05-UTFT_Textrotation_Demo, Example06-UTFT_Buttons_Bitmap_Demo). Callout: ⑥ Examples for Arduino.
- Install libraries**: A folder for library installation.
- SDCard Exten Example**: Contains 6 example folders (CardInfo, Datalogger, DumpFile, Files, listfiles, ReadWrite). Callout: ⑥ Exten-SDCard Examples for Arduino.
- C51 Demo_STC12LE5A60S2**: Contains 1 example folder (Example01). Callout: ① Examples for C51.
- STM32 Demo_STM32F103RCT6**: Contains 3 example folders (Example01-Simple Test, Example02-Show Pictures from SDCard, Example03-uCosII+uCgui). Callout: ③ Examples for STM32.
- tft_drivers**: A folder for drivers.
- Tools-Image2Lcd 2.9**: A folder for tools.
- Tools-PctoLCD200**: A folder for tools.
- User Manual**: A folder for documentation. Callout: Develop tools and Documents.

Demo Effect

UTFT_Demo Test for Arduino

Mega2560

Example01



Example02

UTFT_ViewFont



Example03



UTFT_Buttons_Demo

Example04



UTouch_ButtonTest

Example05



UTFT_Textrotation

Example06



UTFT_Buttons_Bitmap

Revision History

Rev.	Description	Release date
V1.0	Initial version	2016/8/25
V1.1	Correction.	2017/9/15