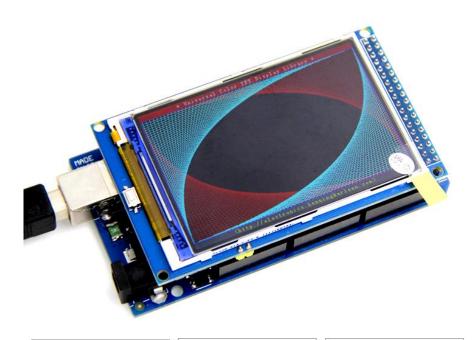
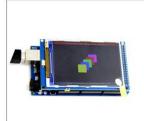
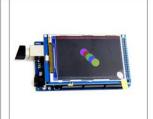
## **QDM320B**









#### **Overview**

QD320DB16NT9481RA module is 3.2" TFT LCD with 262K color 480x 320 resolutions. The controller of this LCD module is ILI9481, 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
- With Full-angle IPS TFT panel
- OnBorad 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	3.2 inch a-si TFT LCD Module
Glass Type	TFT
Display Resolution	480XRGBX320 Pixels
Back light	6 chip HighLight white LEDs
Control IC	ILI9481
Interface	16Bit parallel interface
PCB Module size	89.92mmX54.25mm
LCD Area(WxHxT)	50.74mmX78.35mmX1.88mm
Active Area(WxH)	67.68mmX45.12mm
Module weight	TDB

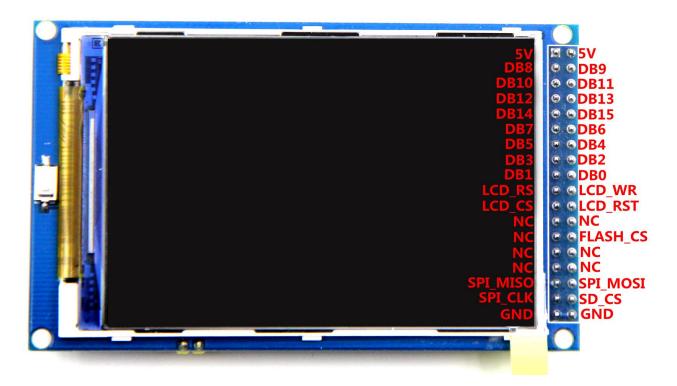
#### **Electrical Characteristics**

Specification			Type	Max	Unit
Power Voltage(VDD/VCC)		3.3	5	5.5	VDC
IO Pins Voltage	MCU Voltage = 3.3V	3	3.3	3.6	\/
	MCU Voltage = 5V	4.5	5	5.5	V
BackLight Voltage		2.8	3.2	3.3	V
Current Consumption		-	100	-	mA

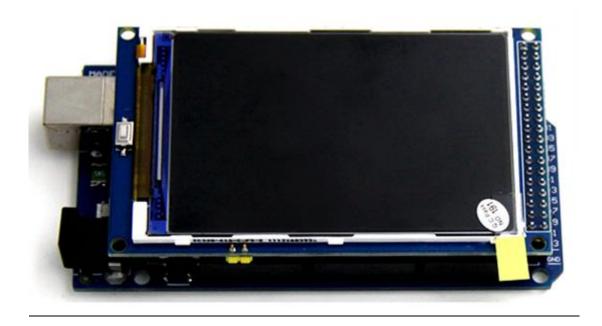
### Hardware

Pin	Pin Map				
No	Pin	Type*	Description		
1	5V	Р	5V Power Supply in		
2	5V	Р	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 Sellection		
27	NC	-	No connection		
28	NC	-	No connection		
29	NC	-	No connection		
30	NC	-	No connection		
31	SPI_MISO	0	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 Sellection		
35	GND	G	Ground		
36	GND	G	Ground		
*:	* : P:Power supply;G:Ground;I:Input;O:Output				

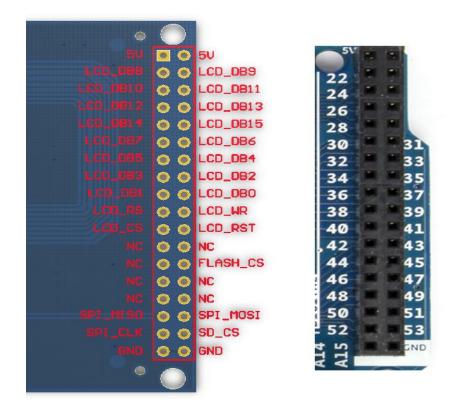
#### PinMap



## **How to Connect with Mega2560**

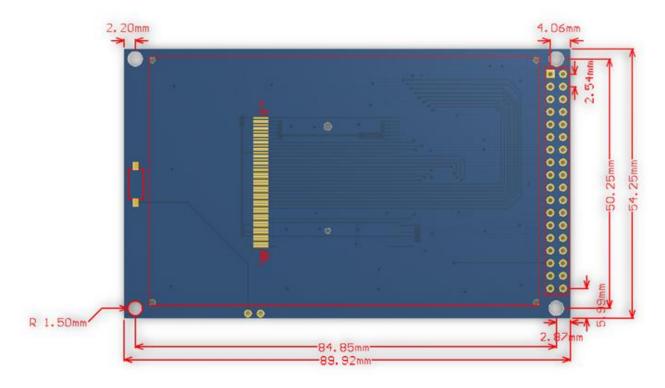


**Top view** 



**Top view** 

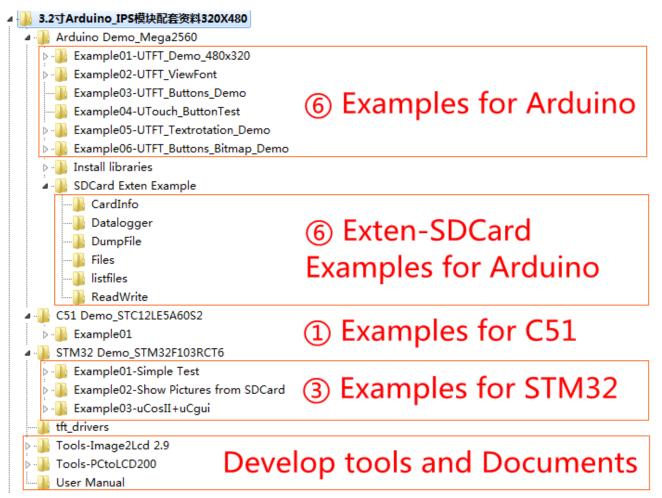
#### **Module Structure**



#### **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.

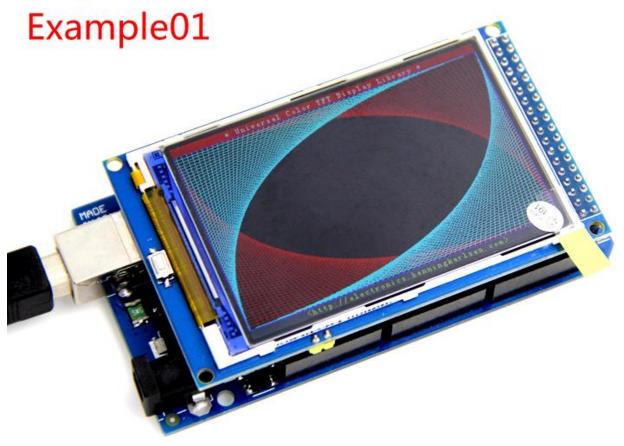
#### The development of information we provide:

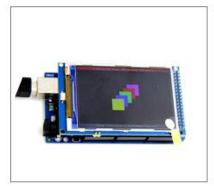


#### **Demo Effect**

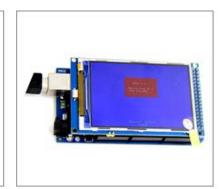
## **UTFT\_Demo Test for Arduino**

Mega2560

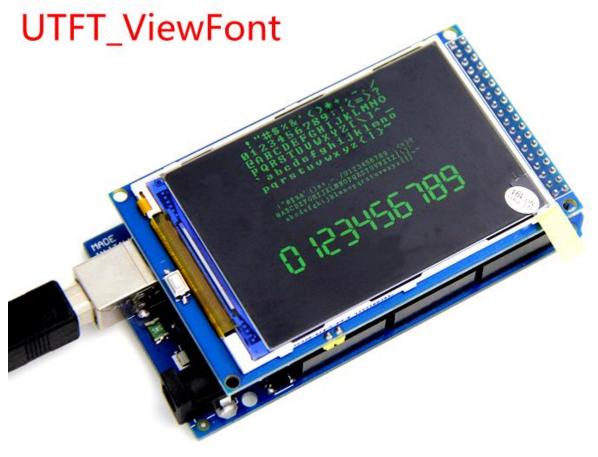






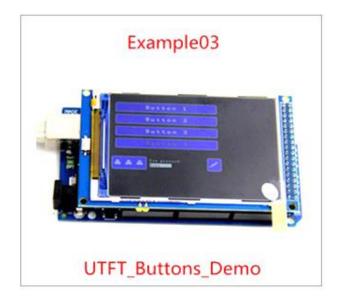


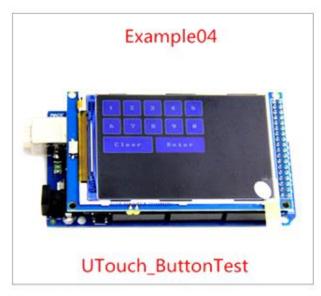
# Example02

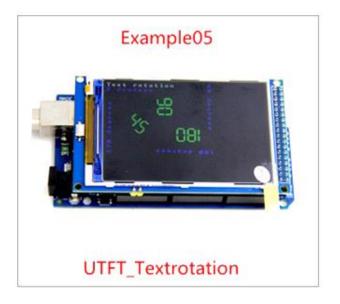














## **Revision History**

Rev.	Description	Release date
V1.0	Initial version	2014/8/25
V1.1 Correction.		2014/9/15