

TFT DISPLAY SPECIFICATION



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SPECIFICATION

MODULE NO.: WF70C9SYAB4MNC10#

General Specification

Item	Dimension	Unit
Size	7.0	inch
Dot Matrix	280 x RGB x 1424(TFT)	dots
Module dimension	43.3(H) x 201.0(V) x 5.76(D)	mm
Active area	33.60 (H) x 170.88(V)	mm
Pixel pitch	0.12(H) x 0.12(V)	mm
LCD type	TFT, Normally Black, Transmissive	
Viewing Angle	80/80/80/80	
Aspect Ratio	1:5	
TFT Driver IC	OTA7290N-C or equivalent	
TFT Interface	4-Lanes MIPI	
CTP Driver IC	GT911 or equivalent	
CTP Interface	I2C	
CTP FW Version	100	
CTP Resolution	X:1424 , Y:280	
Backlight Type	LED, Normally White	
Touch Panel	Projected capacitive touch screen (PCAP)	
Surface	Glare	

*Color tone slight changed by temperature and driving voltage.

Absolute Maximum Ratings

Item	Symbol	Min	Typ	Max	Unit
Operating Temperature	TOP	-20	—	+70	°C
Storage Temperature	TST	-30	—	+80	°C

Electrical Characteristics

1. TFT LCD Module

Item	Symbol	Min.	Typ.	Max.	Unit
Analog Supply voltage	VCC	3.0	3.3	3.6	V
Analog supply current	I _{cc}	-	115	175	mA
Logic input voltage	V _{IH}	0.7*VCC	-	VCC	V
	V _{IL}	GND	-	0.3*VCC	V
Supply CTP	VDDT	2.8	3.3	3.6	V
	IDDT	-	12.2	20	mA

2. Backlight Driving Conditions

Parameter	Symbol	Min.	Typ.	Max.	Unit
LED current	-	-	240	-	mA
LED voltage	VLED+	5.5	6.0	6.8	V
LED Life Time	-	50,000	-	-	Hr

Interface

1. LCM PIN Definition

Pin No.	Symbol	Description
1	GND	Ground.
2	D3N	MIPI data input pins
3	D3P	
4	GND	Ground.
5	D2N	MIPI data input pins
6	D2P	
7	GND	Ground.
8	CLKN	MIPI clock input pins.
9	CLKP	
10	GND	Ground.
11	D1N	MIPI data input pins
12	D1P	
13	GND	Ground.
14	D0N	MIPI data input pins
15	D0P	
16	GND	Ground.
17	GND	Ground.
18	TE	Tearing effect output pin to synchronize to frame writing. If not used, open this pin
19	RESET	Reset signal pin
20	GND	Ground.
21-23	VCC	Power supply
24	GND	Ground.
25-26	NC	Not connect
27-28	VLED-	LED cathode
29-30	VLED+	LED anode

2. Touch FPC Pin Assignment

Pin No.	Symbol	Description
1	VSS	Ground
2	INT	Interrupt request to the host
3	RST	Wakeup request from the host
4	SDA	I2C data input and output
5	SCL	I2C clock input
6	VDDT	Power supply

The drawing illustrates the mechanical specifications of a 200.00mm x 200.00mm TFT LCD module. It includes a detailed view of the module assembly with dimensions for the pull tape, TFT panel, and various layers like optical bonding, lens, and silk printing black. The module is shown with a 280 x RGB x 1424 pixel resolution. The drawing also includes a detailed view of the FPC (Flexible Printed Circuit) connector, showing the pin configuration and dimensions for both CTP (Control TFT Panel) and TFT (TFT Panel) FPC. The pin configurations are as follows:

CTP FPC		TFT FPC	
PIN No.	SYMBOL	PIN No.	SYMBOL
1	VSS	1	GND
2	INT	2	D3N
3	RST	3	D3P
4	SDA	4	GND
5	SCL	5	D2N
6	VDDT	6	D2P
		7	GND
		8	CLKN
		9	CLKP
		10	GND
		11	D1N
		12	D1P
		13	GND
		14	D0N
		15	D0P
		16	GND
		17	GND
		18	TE
		19	RESET
		20	GND
		21	VCC
		22	VCC
		23	VCC
		24	GND
		25	NC
		26	NC
		27	VLED-
		28	VLED-
		29	VLED+
		30	VLED+

The non-specified tolerance of dimension is ± 0.3 mm.