

TFT DISPLAY SPECIFICATION



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SPECIFICATION

MODULE NO.: WF35XTWACDNG0#

General Specifications

Item	Dimension	Unit
Size	3.5	inch
Dot Matrix	320 x RGB x 240(TFT)	dots
Module dimension	76.84(W) x 63.84(H) x 4.86(D)	mm
Active area	70.08 x 52.56	mm
Pixel pitch	0.219 x 0.219	mm
LCD type	TFT, normally black, Transmissive	
View Direction	80/80/80/80	
Driver IC	ST7272A or equivalent	
Interface	24-bit RGB	
Aspect Ratio	4:3	
Backlight Type	LED, Normally White	
PCAP IC	ILI2130 or equivalent	
PCAP Interface	I2C	
PCAP FW Version	0x07.0x00.0x00.0x00.0x00.0x35.0x5A.0x01	
PCAP Resolution	16384*16384	
Touch Panel	Projected Capacitive Touch Panel	
Surface	Glare	

*Color tone slight changed by temperature and driving voltage.

Absolute Maximum Ratings

Item	Symbol	Min	Typ	Max	Unit
Operating Temperature	TOP	-30	—	+85	°C
Storage Temperature	TST	-30	—	+85	°C

Electrical Characteristics

1. Operating conditions:

Item	Symbol	Min	Typ	Max	Unit
Supply Voltage For LCM	VCC	3.0	3.3	3.6	V
Supply Current For LCM	ICC	—	20	30	mA
Supply CTP	VDDT	3.1	3.3	3.5	V
	ICTP	—	45	68	mA

Note 1 : This value is test for VCC =3.3V , Ta=25 °C only

2. LED driving conditions

Parameter	Symbol	Min.	Typ.	Max.	Unit
LED current		-	20	-	mA
Power Consumption		324	384	408	mW
LED voltage	LED+	16.2	19.2	20.4	V
LED Life Time		-	50,000	-	Hr

Interface

1. LCM PIN Definition

Pin	Symbol	Function
1	LED-	Power for LED backlight cathode
2	LED-	Power for LED backlight cathode
3	LED+	Power for LED backlight anode
4	LED+	Power for LED backlight anode
5	NC	No connect
6	NC	No connect
7	NC(SPI_IIC_SEL)	No connect
8	/RESET	Hardware reset
9	NC(CS)	No connect
10	NC(SDA)	No connect
11	NC(SCL)	No connect
12	B0	Data bus
13	B1	Data bus
14	B2	Data bus
15	B3	Data bus
16	B4	Data bus
17	B5	Data bus
18	B6	Data bus
19	B7	Data bus
20	G0	Data bus
21	G1	Data bus
22	G2	Data bus
23	G3	Data bus
24	G4	Data bus
25	G5	Data bus
26	G6	Data bus
27	G7	Data bus
28	R0	Data bus
29	R1	Data bus
30	R2	Data bus

31	R3	Data bus
32	R4	Data bus
33	R5	Data bus
34	R6	Data bus
35	R7	Data bus
36	HSYNC	Horizontal sync signal, default is negative polarity.
37	VSYNC	Vertical sync signal, default is negative polarity.
38	DCLK	Dot-clock signal and oscillator source
39	NC(HDIR)	No connect
40	NC(VDIR)	No connect
41	VCC	Power Supply
42	VCC	Power Supply
43	NC	No connect
44	NC	No connect
45	NC(PARA_SERI)	No connect
46	NC(BIST_EN)	No connect
47	NC(ENPROG)	No connect
48	NC	No connect
49	NC	No connect
50	NC	No connect
51	NC(DISPLAY)	No connect
52	DE	Data input enable. Display access is enabled when DE is "H" .
53	GND	Ground
54	GND	Ground

2. PCAP PIN Definition

Pin	Symbol	Function
1	VSS	System ground pin of the IC. Connect to system ground.
2	VDDT	Power Supply : +3.3V
3	SCL	I2C clock input
4	NC	No connect
5	SDA	I2C data input and output
6	NC	No connect
7	/RST	External Reset, Low is active
8	NC	No connect
9	/INT	External interrupt to the host
10	VSS	System ground pin of the IC. Connect to system ground.

Contour Drawing

