SPECIFICATION

MODULE NO.: WF88BTYA8MNG10#

General Specifications

Item	Dimension	Unit
Size	8.8	inch
Dot Matrix	480 x R.G.B. x 1920	dots
Module dimension	241.3 x 74.3 x 8.5	mm
Active area	218.88 x 54.72	mm
Pixel pitch	0.114 x 0.114	mm
LCD type	TFT, Normally black, Transmissive	
Viewing angle	85/85/85/85	
Aspect Ratio	1:4	
Backlight Type	LED ,Normally White	
TFT Driver IC	OTA7290N	
TFT Interface	4-Lanes MIPI	
CTP Driver IC	GT928or equivalent	
CTP Interface	I2C	
CTP FW Version	66	
CTP Resolution	480*1920	
Touch Panel	Projected Capacitive Touch Panel (PCAP)	
Surface	Glare	

*Color tone slight changed by temperature and driving voltage.

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Absolute Maximum Ratings

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

Electrical Characteristics

TFT LCD Module

Item	Symbol	Min.	Typ.	Max.	Unit
Supply Voltage	VDD	3.0	3.3	3.6	V
	VGH	17.0	18.0	19.0	V
	VGL	-11	-10	-9	V
	AVDD	11.8	12	12.2	V
VCOM	VCOM	4.5	4.88	5.2	V
Input signal voltage	ViH	0.7 VDD	-	VDD	V
	ViL	0	-	0.3 VDD	V
Current of power supply	IDD	-	-	35	mA
	IADD	-	-	30	mA
	IGH	-	-	5	mA
	IGL	-	-	-5	mA
	Ivcom	-	-	0.1	mA
Supply CTP	VDDT3.3V	2.8	-	3.3	V
	$I_{DDT3.3V}$	-	13.4	21.0	mA

Backlight Unit

Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
LED Current	IF	-	160	-	mA	Ta=25℃
LED Voltage	VF	-	-	17.5	V	Ta=25℃
LED Life-Time	N/A		30,000	-	Hour	Ta=25℃ IF=160 mA Note (2)

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Interface

1. LCM PIN Definition

Pin No.	Symbol	I/O	Function
1	GND	P	Ground
2	NC	---	No connection
3	LED+	P	LED Anode
4	LED+	P	LED Anode
5	NC	---	No connection
6	LED-	P	LED Cathode
7	LED-	P	LED Cathode
8	NC	---	No connection
9	GND	P	Ground
10	NC	---	No connection
11	AVDD	P	Power supply for analog circuit
12	NC	---	No connection
13	VGH	P	Power supply for analog circuit
14	NC	---	No connection
15	VGL	P	Power supply for analog circuit
16	NC	---	No connection
17	GND	P	Ground
18	VCOM	P	Power supply for common voltage
19	GND	P	Ground
20	GND	P	Ground
21	RESET	I	Global reset
22	VDD	P	Power supply for digital circuits
23	STBYB	I	Standby mode
24	TP_Sync	O	Sync signal for touch panel
25	GND	P	Ground
26	D0P	I	MIPI Data Input Lane0 positive-end
27	D0N	I	MIPI Data Input Lane0 negtive-end
28	GND	P	Ground
29	D1P	I	MIPI Data Input Lane1 positive-end
30	D1N	I	MIPI Data Input Lane1 negtive-end
31	GND	P	Ground

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32	CLKP	I	MIPI Clock Input positive-end
33	CLKN	I	MIPI Clock Input negtive-end
34	GND	P	Ground
35	D2P	I	MIPI Data Input Lane2 positive-end
36	D2N	I	MIPI Data Input Lane2 negtive-end
37	GND	P	Ground
38	D3P	I	MIPI Data Input Lane3 positive-end
39	D3N	I	MIPI Data Input Lane3 negtive-end
40	GND	P	Ground

2. CTP PIN Definition

Pin	Symbol	Function
1	NC	No connection
2	NC	No connection
3	NC	No connection
4	NC	No connection
5	VSS	Ground for analog circuit
6	SDA	I2C data input and output
7	SCL	I2C clock input
8	RST	External Reset, Low is active
9	INT	External interrupt to the host
10	VDDT3.3V	Power Supply : +3.3V

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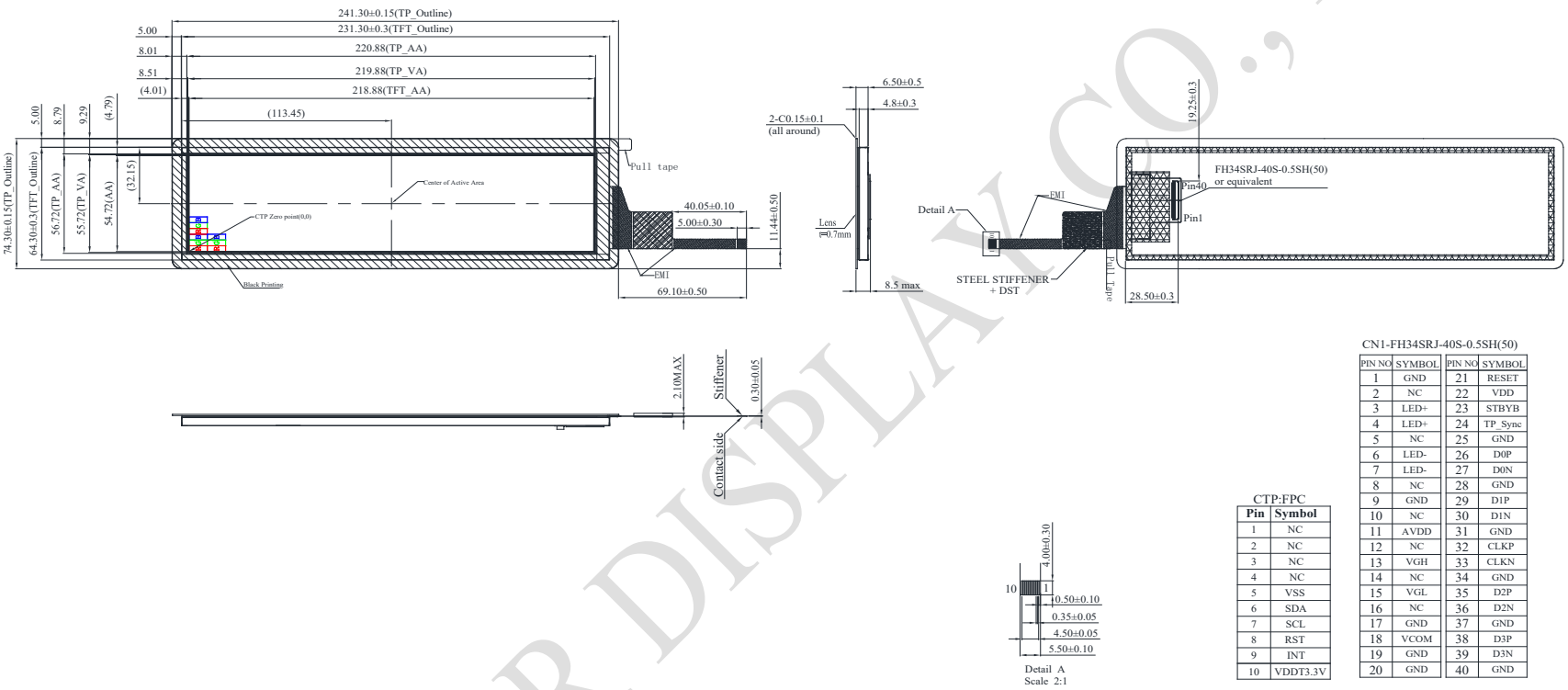
Contour Drawing



CTP:FPC

Pin	Symbol
1	NC
2	NC
3	NC
4	NC
5	VSS
6	SDA
7	SCL
8	RST
9	INT
10	VDDT3.3V

CN1-FH34SRJ-40S-0.5SH(50)

PIN NO	SYMBOL	PIN NO	SYMBOL
1	GND	21	RESET
2	NC	22	VDD
3	LED+	23	STBYB
4	LED+	24	TP_Sync
5	NC	25	GND
6	LED-	26	D0P
7	LED-	27	D0N
8	NC	28	GND
9	GND	29	D1P
10	NC	30	D1N
11	AVDD	31	GND
12	NC	32	CLKP
13	VGH	33	CLKN
14	NC	34	GND
15	VGL	35	D2P
16	NC	36	D2N
17	GND	37	GND
18	VCOM	38	D3P
19	GND	39	D3N
20	GND	40	GND

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

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