TFT DISPLAY SPECIFICATION

WINSTAR Display Co.,Ltd.

華凌光電股份有限公司

SPECIFICATION

MODULE NO.: WF52QTLBSDBG0

General Specifications

Item	Dimension	Unit
Size	5.2	inch
Dot Matrix	480 x RGB x 128	dots
Module dimension	180.0 x 65.0 x 11.8	mm
Active area	127.152 x 33.9072	mm
Dot pitch	0.0883 x 0.2649	mm
LCD type	TFT, Normally White, Transmissive	
View Direction	6o'clock	
Gray Scale Inversion Direction	12 o'clock	
Aspect Ratio	Bar Type	
Backlight Type	LED, Normally White	
Driver IC	SSD1963	
Interface	Digital 8080 family MPU 8bit/16bit	
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	-20	—	+70	℃
Storage Temperature	TST	-30	—	+80	℃

Electrical Characteristics

1. Operating conditions: (CON4.Pin1=GND, Pin2=VDD)

Item	Symbol	Condition	Min	Typ	Max	Unit
Supply Voltage For LCM	VDD	—	3.0	3.1	3.3	V
Supply Current For LCM	IDD	—	—	200	—	mA

2. Backlight driving conditions (CON4.Pin33,34=VLED-, Pin35,36=VLED+)

Parameter	Symbol	Min.	Typ.	Max.	Unit
Operation Current For LED Driver	VLED=5V	-	250	-	mA
Supply Voltage For LED Driver	VLED+	-	5	-	V
LED Life Time		-	50,000	-	Hr

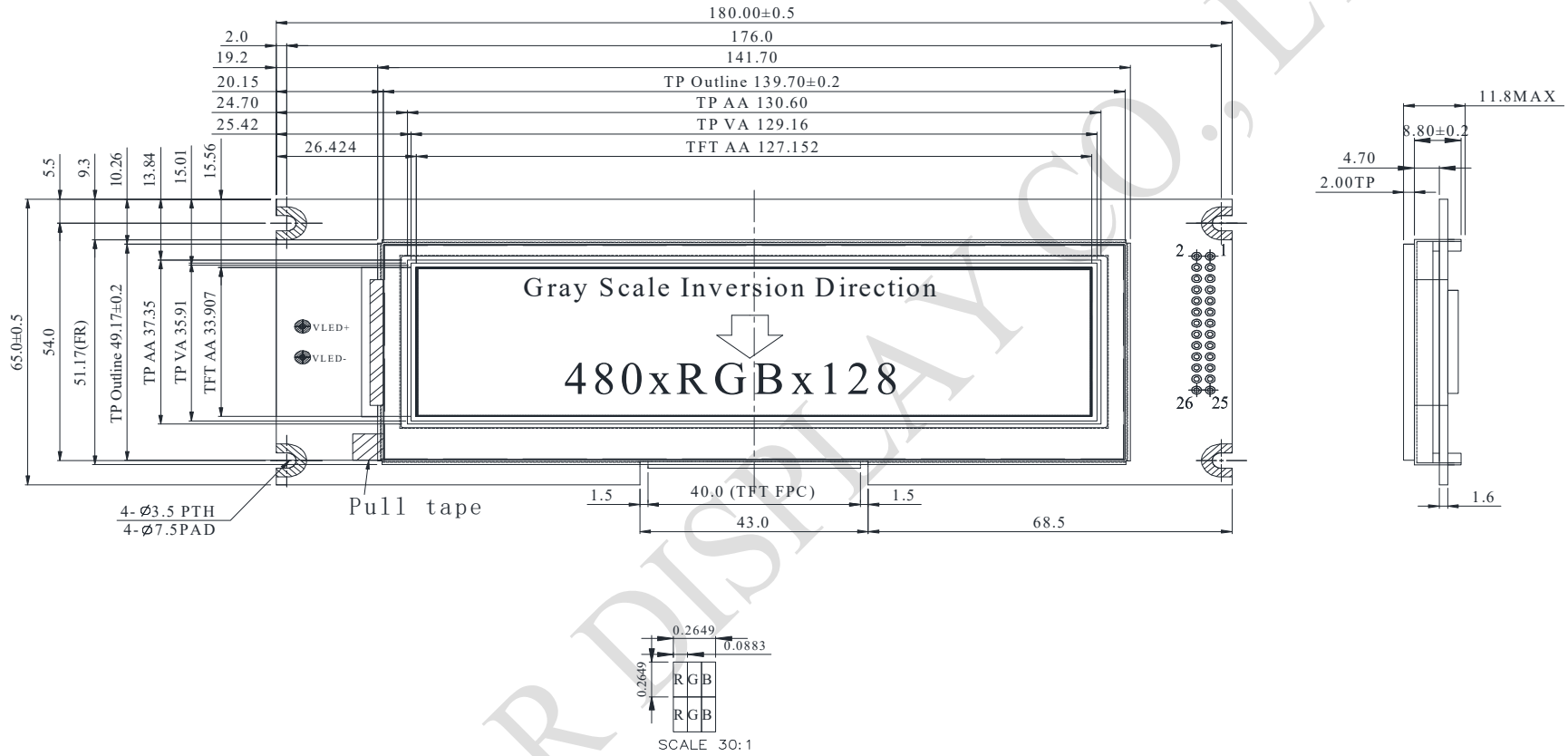
Interface

1. LCM PIN Definition (CON4)

Pin	Symbol	Function
1	GND	System round pin of the IC. Connect to system ground.
2	VDD	Power Supply : +3.3V
3	BL_E	Backlight control signal , H: On \ L: Off
4	D/C	Data/Command select
5	WR	Write strobe signal
6	RD	Read strobe signal
7	DB0	Data bus
8	DB1	Data bus
9	DB2	Data bus
10	DB3	Data bus
11	DB4	Data bus
12	DB5	Data bus
13	DB6	Data bus
14	DB7	Data bus
15	DB8	Data bus (When select 8bits mode, this pin is NC)
16	DB9	Data bus (When select 8bits mode, this pin is NC)
17	DB10	Data bus (When select 8bits mode, this pin is NC)
18	DB11	Data bus (When select 8bits mode, this pin is NC)
19	DB12	Data bus (When select 8bits mode, this pin is NC)
20	DB13	Data bus (When select 8bits mode, this pin is NC)
21	DB14	Data bus (When select 8bits mode, this pin is NC)
22	DB15	Data bus (When select 8bits mode, this pin is NC)
23	NC	No connect
24	CTP_INT	CTP_ External interrupt to the host
25	CS	Chip select
26	RESET	Hardware reset
27	LR	Right /Left selection; Default R/L is Pull High
28	UD	Up/down selection; Default U/D is Pull High
29	CTP_SCL	I2C clock input
30	CTP_SDA	I2C data input and output

31	CTP_RST	CTP_ External Reset, Low is active
32	NC	No connect
33	VLED-	VLED- for B/L LED inverter (GND)
34	VLED-	VLED- for B/L LED inverter (GND)
35	VLED+	VLED+ for B/L LED inverter (+5V)
36	VLED+	VLED+ for B/L LED inverter (+5V)

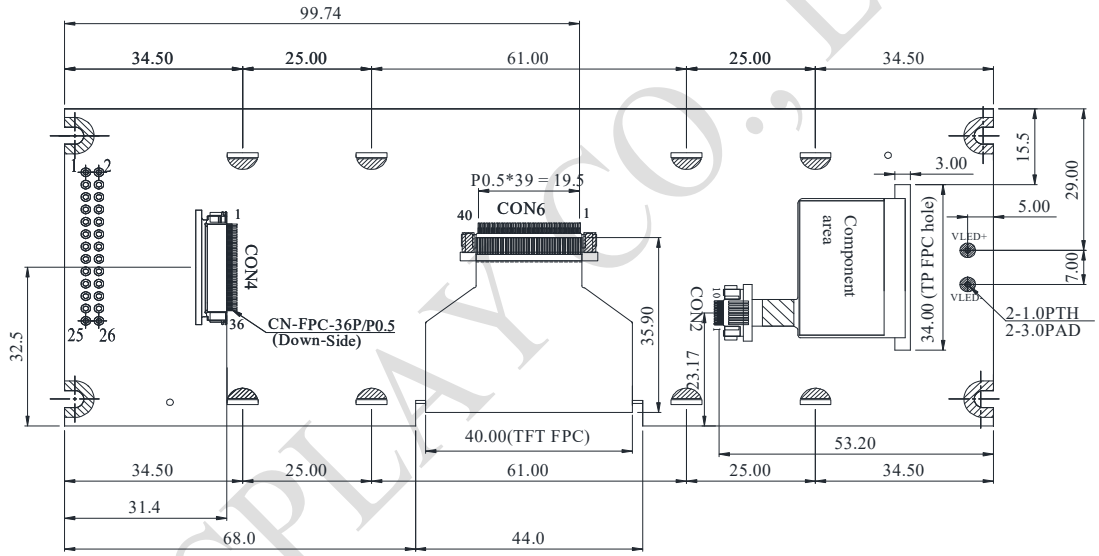
Contour Drawing



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

CON4

PIN NO.	SYMBOL
1	GND
2	VDD
3	BL_E
4	C/D
5	WR
6	RD
7	DB0
8	DB1
9	DB2
10	DB3
11	DB4
12	DB5
13	DB6
14	DB7
15	DB8
16	DB9
17	DB10
18	DB11
19	DB12
20	DB13
21	DB14
22	DB15
23	NC
24	CTP_INT
25	CS
26	RESET
27	LR
28	UD
29	CTP_SCL
30	CTP_SDA
31	CTP_RST
32	NC
33	VLED-
34	VLED-
35	VLED+
36	VLED+



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