



WINSTAR Display Co.,Ltd.
華凌光電股份有限公司



SPECIFICATION

MODEL NO. : WL0F00050000FGFAAEA00

Summary

WL0F00050000FGFAAEA00 is built in TFT 5.0" TN display and the features are described as below:

5.0 Inch Smart Display Feature

1. DC 5V working voltage.
2. UART Interface with customized UART protocol, default baud rate at 19200 bit/Sec.
3. Built in 16M flash memory.

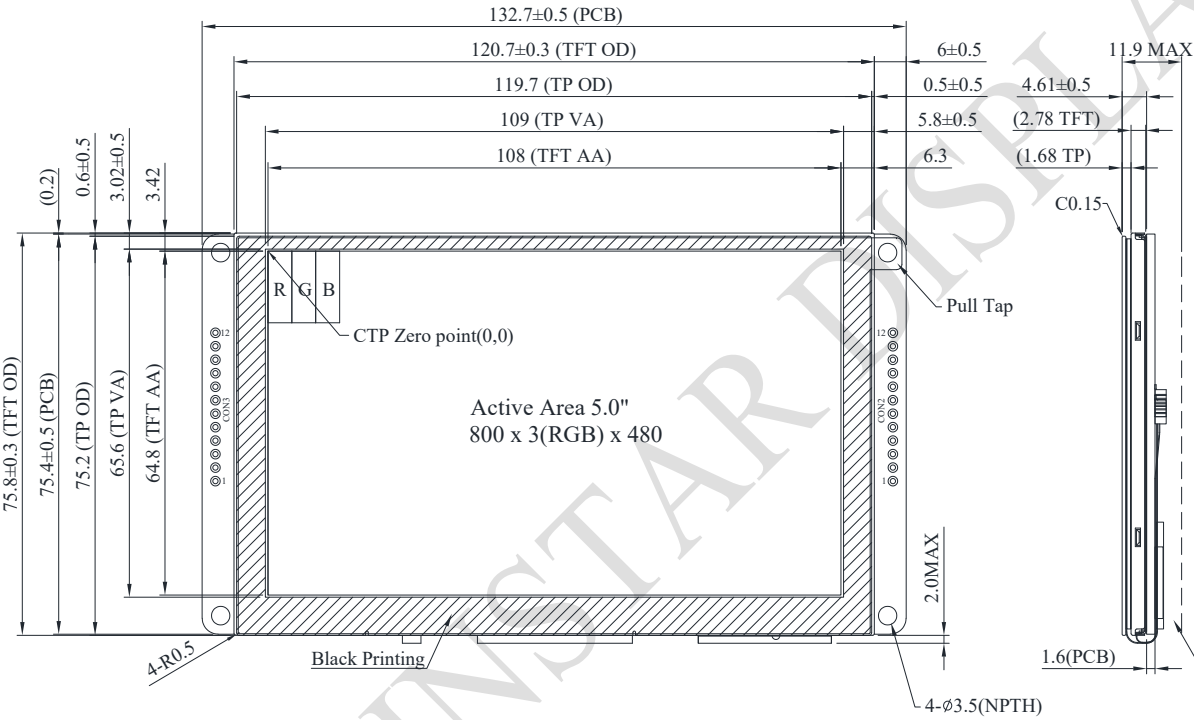
WL0F00050000FGFAAEA00 is defined as a slave device, which is controlled by master device via customized command to render display content on the display screen and return touch event position.

Product information

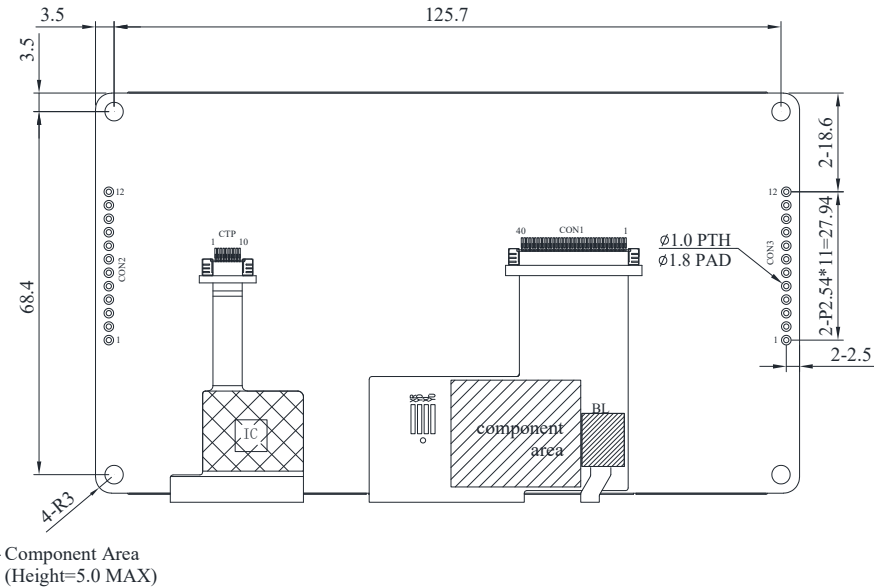
General information

Item	Standard Value	Unit
Operating voltage	5	Vdc
Communication Interface	UART /19200	N/A
MCU	IT9866 /360MHz	N/A
Flash Memory	16	MB
SDRAM Frequency	64MB/ 360MHz	
LCD display size	5.0	inch
Dot Matrix	800× 3(RGB) × 480	dots
Module dimension	132.7(W) ×75.8(H) ×11.9(D)	mm
Active area	108(W) ×64.8 (H)	mm
Pixel pitch	0.135(W) ×0.135(H)	mm
Brightness	300min, 400typ	cd/m ²
LCD type	TFT, Normally Black, Transmissive	
View Direction	80/80/80/80	
Aspect Ratio	5:3	
Touch Panel	With PCAP	
Surface	Glare	

Contour Drawing



CON2		CON3	
PIN	SYMBOL	PIN	SYMBOL
1	GND	1	GND
2	UART_TX	2	SW1
3	UART_RX	3	SW2
4	+5V	4	SW3
5	D+	5	SW4
6	D-	6	GND
7	GND	7	NC
8	/REST	8	NC
9	GND	9	NC
10	PWM	10	NC
11	GND	11	INT
12	+5V	12	+5V



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

Absolute Maximum Ratings

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

Electrical Characteristics

Item	Symbol	Min	Typ	Max	Unit
Supply Voltage	VCC	4.5	5	5.5	V
Supply current	ICC	-	455	-	mA

BOM

Item	Description
LCM	WF50FTWAGDNG0#
PCBA	SV10005R000FH00N0100

Interface

CON2 definition:

Pin	Symbol	Function
1	GND	Power Ground
2	UART_TX	UART TX
3	UART_RX	UART RX
4	+5V	Power supply 5V
5	D+	USB Data+
6	D-	USB Data-
7	GND	Power Ground
8	/REST	Reset (active Low)
9	GND	Power Ground
10	PWM	Pulse width modulation
11	GND	Power Ground
12	+5V	Power supply : 5V

CON3 definition:

Pin	Symbol	Function
1	GND	Power Ground
2	SW1	Switch (active low)
3	SW2	Switch (active low)
4	SW3	Switch (active low)
5	SW4	Switch (active low)
6	GND	Power Ground
7	NC	Reserved
8	NC	Reserved
9	NC	Reserved
10	NC	Reserved
11	INT	Interrupt output for CTP or external switch
12	+5V	Power supply : 5V