



WINSTAR Display Co.,Ltd.
華凌光電股份有限公司



SPECIFICATION

MODEL NO. : WL0F0007000A2GFAAEA00

Summary

WL0F0007000A2GFAAEA00 is built in TFT 7.0" TN display and the features are described as below:

7.0 Inch Smart Display Feature

1. DC 5V working voltage.
2. Built in 16MB flash memory.
3. Supports PCAP touch screen.
4. UART Interface with customized UART protocol, default baud rate at 19200 bit/Sec.
5. Build in SD card slot.
6. USBC power supply.

WL0F0007000A2GFAAEA00 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	7.0	inch
Dot Matrix	800 × RGB × 480	dots
Module dimension	180(W) × 100(H) ×15.8(D)	mm
Active area	154.08 × 85.92	mm
Pixel pitch	0.1926(W) ×0.179(H)	mm
Brightness	250min, 350typ	cd/m ²
LCD type	TFT, Normally White, Transmissive	
View Direction	12 o'clock	
Aspect Ratio	16:9	
Touch Panel	PCAP	
Surface	Glare	

Top View Dimensions:

- 100(TFT OD)
- 99.45(TP OD)
- 87.19(TP VA)
- 85.92(TFT AA)
- 0.3±0.5
- 3.35±0.5
- 3.88
- 4.02±0.5
- 4.52
- 7.5±0.5
- 165(TFT OD)
- 164.4(TP OD)
- 155.22(TP VA)
- 154.08(TFT AA)
- 2.0 MAX

Side View Dimensions:

- 15.8 MAX
- 7.55±0.5
- 5.85±0.3
- 1.6(PCB)
- Component Area (Height=6 MAX)

Bottom View Dimensions:

- 180±0.5(PCB)
- 174
- 3
- 33.03
- 94
- P2.54*11=27.94
- 2.5
- 16.54
- 48.56
- 16.29
- 33.03
- P2.54*11=27.94
- 2.5

Pin Configurations:

CON2

PIN	SYMBOL
1	GND
2	UART_TX
3	UART_RX
4	+5V
5	D+
6	D-
7	GND
8	/REST
9	GND
10	PWM
11	GND
12	+5V

CON3

PIN	SYMBOL
1	GND
2	SW1
3	SW2
4	SW3
5	SW4
6	GND
7	NC
8	NC
9	NC
10	NC
11	INT
12	+5V

Other Labels:

- R G B
- CTP Zero point(0,0)
- Active Area 7.0" 800 x RGB x 480
- Pull Tab
- 24-Ø1.0PTH 24-Ø1.8PAD
- 4-Ø3.5PTH 4-Ø6.0PAD
- CON1
- CON2
- CON3
- SD
- USB
- CTP
- COMPONENT AREA

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

Absolute Maximum Ratings

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

Electrical Characteristics

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

BOM

Item	Description
LCM	WF70A2TIAGDNGA#
PCBA	SV10007R00A2B00N0100

Interface

CON2 definition:

Pin	Symbol	Function	Remark
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	Remark
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	