



WINSTAR Display Co.,Ltd.
華凌光電股份有限公司



SPECIFICATION

MODEL NO. : WLOF00101000JGDAASA00

Summary

10.1 Inch Smart Display (RS485 series) Features

1. +12V power supply input, the power consumption is around 6W.
2. Self-testing after booting function.
3. RS485 communication interface.
4. Built in flash memory, store the font and Object Dictionary Data.
5. Support capacitive touch panel (CTP).
6. Embedded buzzer controlled by Master Device.
7. Demo set HOST can be used on multiple platforms, such as Computer (with USB to RS-485 Dongle), MCU.

Product information

General information

Item	Standard Value	Unit
Operating voltage	12	Vdc
Communication Interface	RS485 differential	-
MCU	STM32F746	N/A
Flash Memory	16	MB
SDRAM Frequency	166	MHz
LCD display size	10.1	inch
Dot Matrix	1024 x RGBx600(TFT)	dots
Module dimension	248.8(W) x 143(H) x 23.13(D)	mm
Active area	222.72 (H) x 125.28(V)	mm
Pixel pitch	0.2175(W) x 0.2088(H)	mm
Brightness	Min: 300; Typ: 400	cd/m ²
LCD type	TFT, Normally Black, Transmissive	
View Direction	85/85/85/85	
Aspect Ratio	16:9	
Touch Panel	Projected Capacitive Touch Panel	
Surface	Glare	

The technical drawing illustrates the dimensions and specifications of the LCD module. The front view (left) shows a display area of 1024 X RGB X 600. Key dimensions include a total width of 235.0±0.3 TFT OD and a total height of 145.0±0.3 TFT OD. The display area is defined by 222.72 TP AA (H) and 125.28 TP VA (V). The rear view (right) shows the module's profile with a total width of 248.8±0.5 (PCB) and a total height of 141.8±0.5 (PCB). It includes a component area with a lens (T=1.8mm) and a pull tape (C=0.2). The drawing also shows the location of the power jack and the component area.

1	Lcd Type	TFT
2	Viewing Angle	85/85/85/85
3	Surface	Glare
4	Screen size	10.1"(diagonal)
5	Display format	1024 x RGB x 600
6	Operating Temperature	-20°C ~70°C
7	Storage Temperature	-30°C ~80°C
8	Active area	222.72(H) x 125.28(V) mm
9	Pixel pitch	0.2175(H) x 0.2088(V) mm
10	Color arrangement	RGB-STRIPE
11	Brightness	300min. 400typ. cd/m2
12	CTP Driver IC	ILI2511 or equivalent

POWER JACK	
PIN	SYMBOL
1	12V
2	GND
3	NC

CN2	
PIN	SYMBOL
1	VDD3V
2	JTAG_SWCLK
3	GND
4	JTAG_SWDIO
5	NRST
6	GND
7	BOOT
8	BOOT0
9	PA5
10	PA6
11	PA7
12	PA8
13	NC
14	NC
15	PA11
16	PA12

CN1	
PIN	SYMBOL
1	12V
2	GND
3	CAN_High
4	CAN_Low
5	GND
6	GND
7	NC
8	NC
9	NC
10	RX
11	TX
12	GND
13	5V
14	RS485_B
15	RS485_A
16	GND

2 (GND) 1 (5V)

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

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	Condition	Min	Typ	Max	Unit
Supply Voltage	VCC	—	11.4	12	12.6	V
Supply LCM current	I(mA)	-	-	435	-	mA

BOM

Item	Description
LCM	WF101JTYAHLNB0#
PCBA	SV100101000JA00N0100

1. Interface

CON1 definition:

Pin	Symbol	Function	Remark
1	12V	Power supply 12V input	Power
2	GND	Power supply GND input	Power
3	–	–	–
4	–	–	–
5	GND	Power supply GND input	Power
6	GND	Power supply GND input	Power
7	–	–	–
8	–	–	–
9	NC	–	–
10	–	–	–
11	–	–	–
12	GND	GND	GND
13	5V	Power supply 5V output	Power
14	RS485_B	RS485 DATA-	I/O
15	RS485_A	RS485 DATA+	I/O
16	GND	GND	GND

CON2 definition:

Pin	Symbol	Function	Remark
1	VDD3V	3.3V power for JTAG interface	Output
2	JTAG SWCLK	CLK pin for JTAG interface	Input
3	GND	GND for JTAG interface	Output
4	JTAG SWDIO	Data pin for JTAG interface	I/O
5	NRST	Reset pin for JTAG interface	Input
6	GND	GND	Output
7	BOOT	Reserve	
8	BOOT0	Reserve	
9	PA5	Reserve	
10	PA6	Reserve	
11	PA7	Reserve	
12	PA8	Reserve	
13	NC	–	
14	NC	–	
15	PA11	Reserve	
16	PA12	Reserve	