華凌光電股份有限公司
WINSTAR WINSTAR Display Co., Ltd.

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SMART DISPLAY SPECIFICATION



Think good, Do good, Be good !

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SPECIFICATION

CUSTOMER	WINSTAR
MODEL NO.	WL0F0007000D2TFAASA00-FC
CURRENT VERSION	0
RELEASE DATE	2026/01/14

SALES BY	APPROVED BY	CHECKED BY	PREPARED BY
Corina Yeh	Ginger Xu	Leo Liu	Debby Hsu

APPROVED BY: **(FOR CUSTOMER USE ONLY)**	

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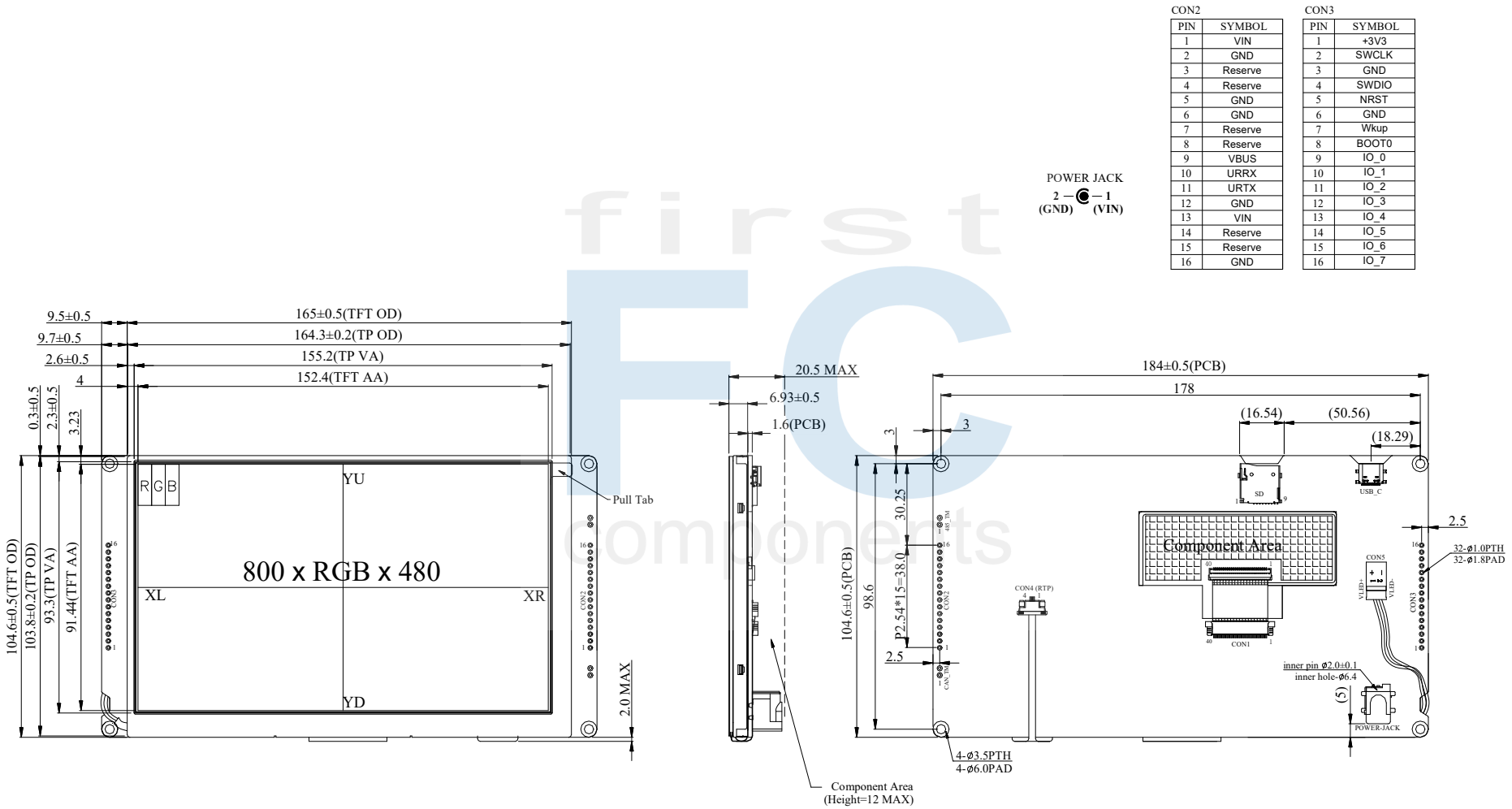
Product Information

General information

Item	Standard Value	Unit
Operating voltage	8V~35V dynamic	Vdc
Communication Interface	UART	--
MCU	STM32F746	--
SDRAM	16	MB
Flash Memory	16	MB
LCD display size	7.0	inch
Dot Matrix	800 x RGB x 480(TFT)	dot
Module dimension	235(W) x 143(H) x 8.78(D)	mm
Active area	152.4 (H) x 91.44(V)	mm
Dot pitch	0.1905(W) x 0.1905(H)	mm
Brightness	Min:750; Typ:850	
LCD type	TFT, Normally Black, Transmissive	
View Direction	85/85/85/85	
Aspect Ratio	15:9	
With /Without TP	With RTP	
Surface	Anti-Glare	

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Contour Drawing



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

Absolute Maximum Ratings

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

Note: Device is subject to be damaged permanently if stresses beyond those absolute maximum ratings listed above

1. Temp. ≦60℃, 90% RH MAX. Temp.＞60℃, Absolute humidity shall be less than 90% RH at 60℃

Electrical Characteristics

Item	Symbol	Condition	Min	Typ	Max	Unit
Supply Voltage	VCC	—	8	12	35	V
Supply LCM current	I(mA)	-	-	385	-	mA

BOM

Item	Description	Remark
LCM	WF70-800480D2D#0SP1-FC	
PCBA	SV10007R00D2B00N0100	

Interface

CON2 definition:

Pin	Symbol	Function	Remark
1	Reserve	-	-
2	Reserve	-	-
3	Reserve	-	-
4	Reserve	-	-
5	Reserve	-	-
6	Reserve	-	-
7	Reserve	-	-
8	Reserve	-	-
9	Reserve	-	-
10	URRX	UART Receiver interface	Input
11	URTX	UART Transceiver interface	Output
12	GND	Power supply GND input	Input
13	VIN	Power supply V+ input	Input
14	Reserve	-	-
15	Reserve	-	-
16	Reserve	-	-

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CON3 definition:

Pin	Symbol	Function	Remark
1	+3V3	3.3V power for JTAG interface	Output
2	SWCLK	CLK pin for JTAG interface	Input
3	GND	GND for JTAG interface	Output
4	SWDIO	Data pin for JTAG interface	I/O
5	NRST	Reset pin for JTAG interface	Input
6	GND	GND	-
7	Wkup	(PA0) for system Resume from suspend (Reserve)	WKup,ADC,Timer,Event,I/O
8	BT0	BOOT0 (Normal Low)	Input
9	IO_0	ADC,DAC,Timer,Event,I/O	PA5
10	IO_1	ADC,Timer,Event,I/O	PA6
11	IO_2	ADC,Timer,Event,I/O	PA7
12	IO_3	RST,Timer,Event,I/O	PA8
13	IO_4	RST,Timer,Event,I/O	PC13
14	IO_5	ADC,Timer,Event,I/O	PB11
15	IO_6	RST,Timer,Event,I/O	PA15
16	IO_7	RST,ADC,Event,I/O	PD11

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