



WINSTAR Display Co.,Ltd.
華凌光電股份有限公司



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SPECIFICATION

MODULE NO.: WF70MTIBGDRGA#

General Specifications

Item	Dimension	Unit
Size	7.0	inch
Dot Matrix	800 x RGB x 480(TFT)	dots
Module dimension	180.0(W) x 101.2(H) x 15.0 (D)	mm
Active area	154.08 x 85.92	mm
Dot pitch	0.0642 x 0.179	mm
LCD type	TFT, Normally White, Transmissive	
View Direction	12 o'clock	
Gray Scale Inversion Direction	6 o'clock	
Aspect Ratio	16:9	
Backlight Type	LED, Normally White	
Interface	Uart 19200 Baud rate/SPI	
PCAP IC	ILI2130 or equivalent	
PCAP FW Version	0x07.0x00.0x00.0x00.0x65.0x90.0x00.0x01	
PCAP Resolution	16384*16384	
Touch Panel	With PCAP	
Surface	Glare	
Operating mode	Slave mode	
Flash Memory Size	32M bits	
SD card format	FAT, exFAT	

*Color tone slight changed by temperature and driving voltage

*SD format does not support NTFS

Absolute Maximum Ratings

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

Electrical Characteristics

Operating conditions:

Item	Symbol	Condition	Min	Typ	Max	Unit
Supply Voltage For LCM	VBUS	—	4.5	5	5.5	V
Supply Current For LCM	IBUS	—	—	520	780	mA
Power Consumption	—	VBUS=5V	—	2250	3685	mW

Interface

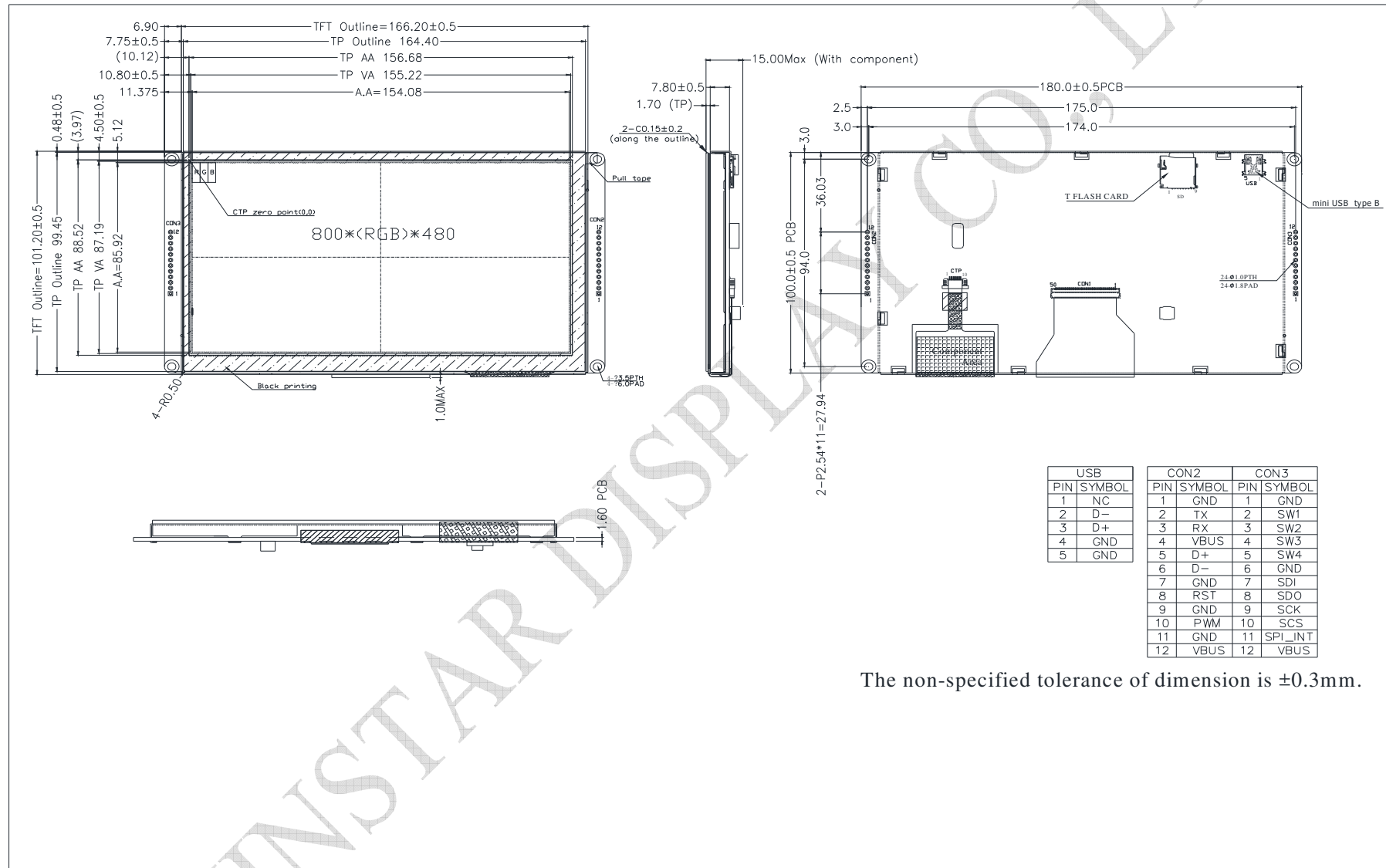
CON 2			
Pin	Symbol	I/O	Function
1	GND	Power Supply	Power Ground
2	TX	O	Uart Transmit pin
3	RX	I	Uart Receive pin
4	VBUS	Power Supply	Power supply : 5V
5	D+	I/O	USB Data +
6	D-	I/O	USB Data -
7	GND	Power Supply	Power Ground
8	RST	I	Reset (active Low)
9	GND	Power Supply	Power Ground
10	PWM	O	Pulse width modulation
11	GND	Power Supply	Power Ground
12	VBUS	Power Supply	Power supply : 5V

CON 3			
Pin	Symbol	I/O	Function
1	GND	Power Supply	Power Ground
2	SW1	I	Switch (active low)
3	SW2	I	Switch (active low)
4	SW3	I	Switch (active low)
5	SW4	I	Switch (active low)
6	GND	Power Supply	Power Ground
7	SDI	O	Master Input Slave Output (MISO)
8	SDO	I	Master Output Slave Input (MOSI)
9	SCK	I	Serial Clock
10	SCS	I	Serial Chip selection
11	SPI_INT	O	Serial Interrupt
12	VBUS	Power Supply	Power supply : 5V

USB			
Pin	Symbol	Function	Remark
1	NC	No connection	
2	D-	Data line -	
3	D+	Data line +	
4	GND	Power Ground	
5	GND	Power Ground	

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Contour Drawing



USB	
PIN	SYMBOL
1	NC
2	D-
3	D+
4	GND
5	GND

CON2		CON3	
PIN	SYMBOL	PIN	SYMBOL
1	GND	1	GND
2	TX	2	SW1
3	RX	3	SW2
4	VBUS	4	SW3
5	D+	5	SW4
6	D-	6	GND
7	GND	7	SDI
8	RST	8	SDO
9	GND	9	SCK
10	PWM	10	SCS
11	GND	11	SPI_INT
12	VBUS	12	VBUS

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