SMART DISPLAY SPECIFICATION



WINSTAR Display Co.,Ltd.
華凌光電股份有限公司

Represented by:

first FC components
FIRST Components s.r.l.
www.first-components.com
technical@first-components.com
+39 0332 1888005

SPECIFICATION

MODEL NO. : WL0F00024000MNFAANA00-FC

Summary

WL0F00024000MNFAANA00-FC Feature

1. 5V working voltage with USB Type-C interface.
2. It works within temperature range from -20 to +70℃ and storage temperature ranges from -30 to +80℃.
3. Without touch
4. 1 UART interface.
5. With SD card slot.

first FC components

Product information

General information

Item	Standard Value	Unit
Operating voltage	5	Vdc
Communication Interface	UART	--
MCU	STM32G0B1RET6	N/A
LCD display size	2.4	inch
Dot Matrix	240 × R.G.B. × 320 (TFT)	dot
Module dimension	54.32(W) × 61.45(H) ×11.0(D)	mm
Active area	36.72 x 48.96	mm
Pixel pitch	0.153(W) × 0.153(H)	mm
Brightness	Min: 400; Typ: 500	cd/m^2
LCD type	TFT, Normally White, TN, Transmissive	
View Direction	6 o'clock	
Aspect Ratio	Portrait	
Touch Panel	Without Touch Panel	
Surface	Glare	

first components

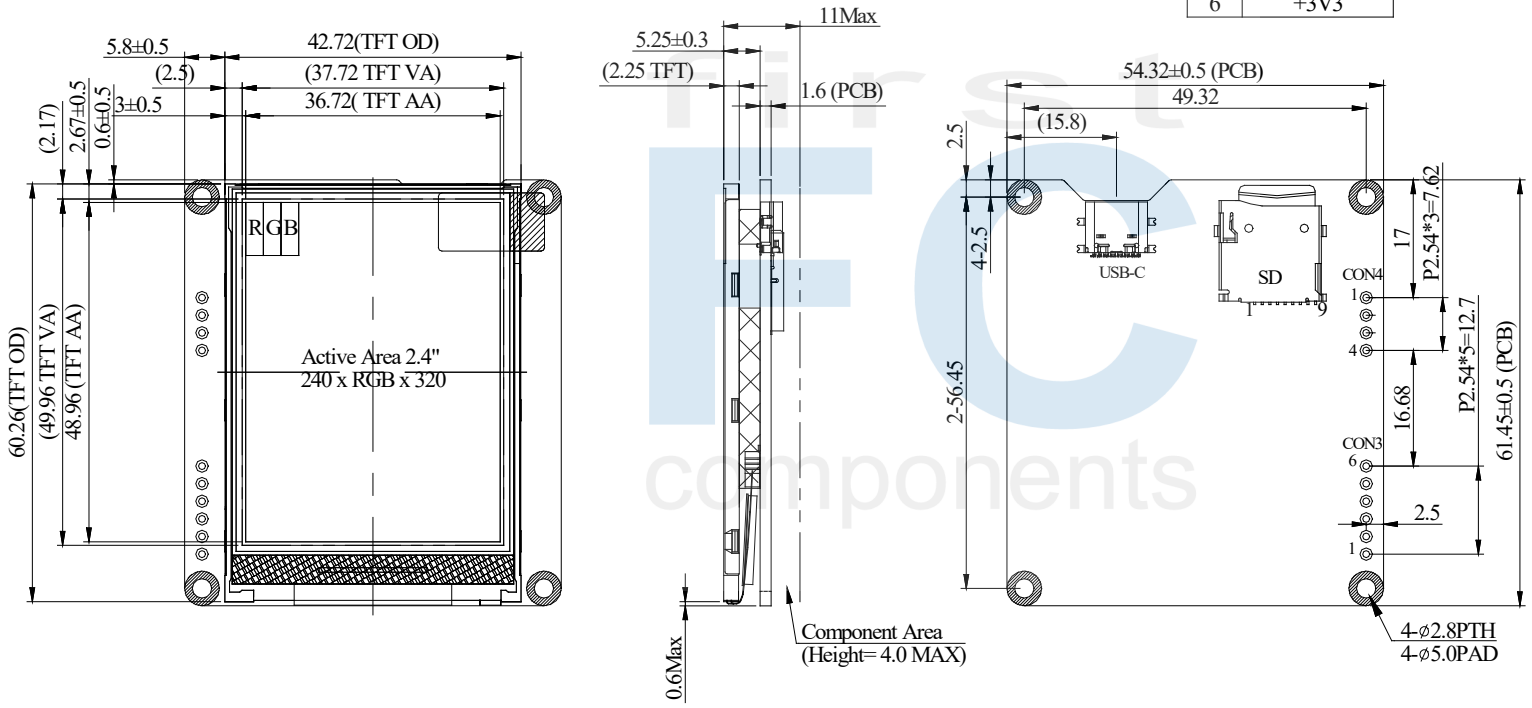
Contour Drawing

CON3

PIN	SYMBOL
1	GND
2	NRST
3	SWDIO
4	GND
5	SWLCK
6	+3V3

CON4

PIN	SYMBOL
1	+5V
2	UART_RX
3	UART_TX
4	GND



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	℃

Electrical Characteristics

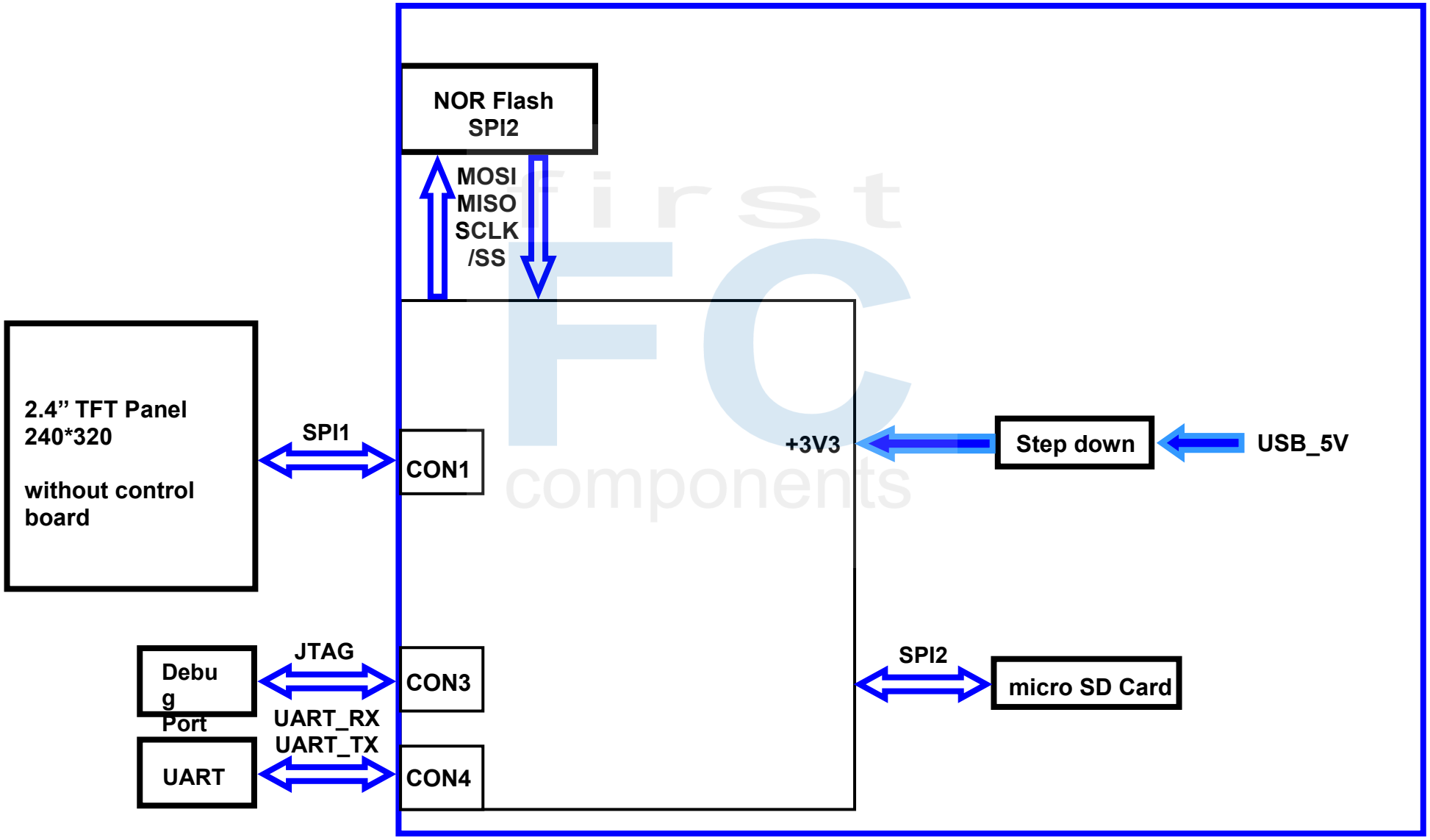
Item	Symbol	Min	Typ	Max	Unit
Supply Voltage	VCC	4.75	5	5.25	V
Supply Current	ICC		-		mA

BOM

Item	Description
LCM	WF24-240320MS#000-FC
PCBA	TBD

first FC components

Block diagram



Interface

CON3 definition:

Pin	Symbol	Function	Remark
1	GND	GND	Output
2	NRST	Reset pin for JTAG interface	Input
3	SWDIO	Data pin for JTAG interface	I/O
4	GND	GND for JTAG interface	Output
5	SWCLK	CLK pin for JTAG interface	Input
6	+3V3	3.3V power for JTAG interface	Output

CON4 definition:

Pin	Symbol	Function	Remark
1	+5V	Power supply 5V input	Input
2	UART_RX	USART RX interface	I/O
3	UART_TX	USART TX interface	I/O
4	GND	GND	Output

first FC components