SMART DISPLAY SPECIFICATION



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SPECIFICATION

CUSTOMER : _____

MODEL NO. : WL0F00050000FGAACSA01-FC

APPROVED BY: (FOR CUSTOMER USE ONLY)	

SALES BY	APPROVED BY	CHECKED BY	PREPARED BY
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VERSION	DATE	REVISED PAGE NO.	SUMMARY
0	2023/02/04		First issue

RECORDS OF REVISION			DOC. FIRST ISSUE
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Summary

5 Inch Smart Display Feature

1. DC 5V working voltage.
2. Self-testing after booting function.
3. CAN bus communication interface.
4. Support CANopen protocol with default baud rate 250KB.
5. Built in 16M external flash memory to store the font and Object Dictionary Data.
6. Support capacitive touch panel (CTP).
7. Smart Display scenario is slave device and controlled by Master Device's instruction.
8. Build in buzzer and can be controlled by Master Device.
9. Demo set HOST can be used on multiple platforms, such as Computer (with USB to CAN Dongle), MCU, Raspberry Pi (with PiCAN2).

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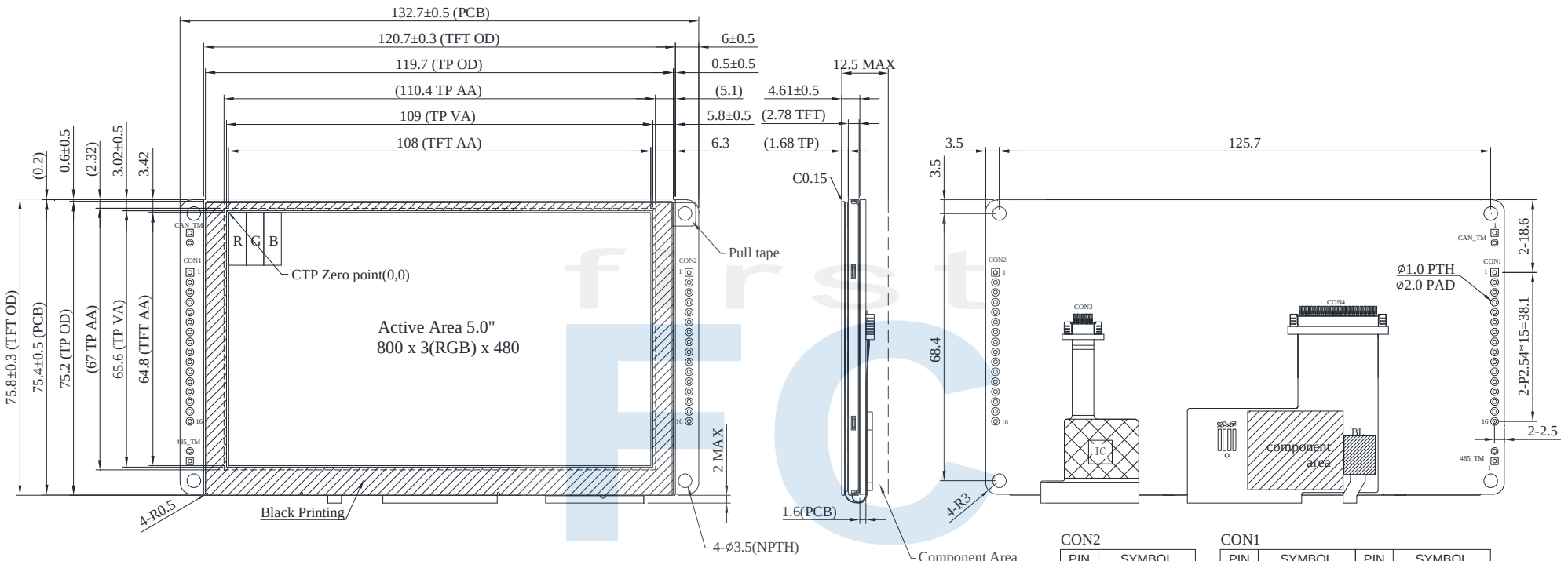
Product information

General information

Item	Standard Value	Unit
Operating voltage	5	Vdc
Communication Interface	CAN bus differential ± 3.3	Vpp
MCU	STM32F750	N/A
Flash Memory	16	MB
SDRAM Frequency	108	MHz
LCD display size	5.0	inch
Dot Matrix	800× 3(RGB) × 480	dot
Module dimension	132.7(W) ×75.8(H) ×12.5	mm
Active area	108(W) ×64.8 (H)	mm
Dot pitch	0.135(W) ×0.135(H)	mm
Brightness	Min: 650; Typ: 750	cd/m^2
LCD type	TFT, Normally White, Transmissive	
View Direction	80/80/80/80	
Aspect Ratio	5:3	
With /Without TP	With CTP	
Surface	Glare	

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Contour Drawing



CON2

PIN	SYMBOL
1	+3V3
2	SWCLK
3	GND
4	SWDIO
5	NRST
6	GND
7~16	NC

CON1

PIN	SYMBOL	PIN	SYMBOL
1	+5V	9	VDD_5V
2	GND	10	Reserve
3	CAN_H	11	Reserve
4	CAN_L	12	GND
5	VDD_5V	13	VDD_5V
6	NC	14	NC
7	NC	15	NC
8	GND	16	GND

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

Absolute Maximum Ratings

Item	Symbol	Min	Typ	Max	Unit
Operating Temperature	TOP	-30	—	+80	℃
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℃

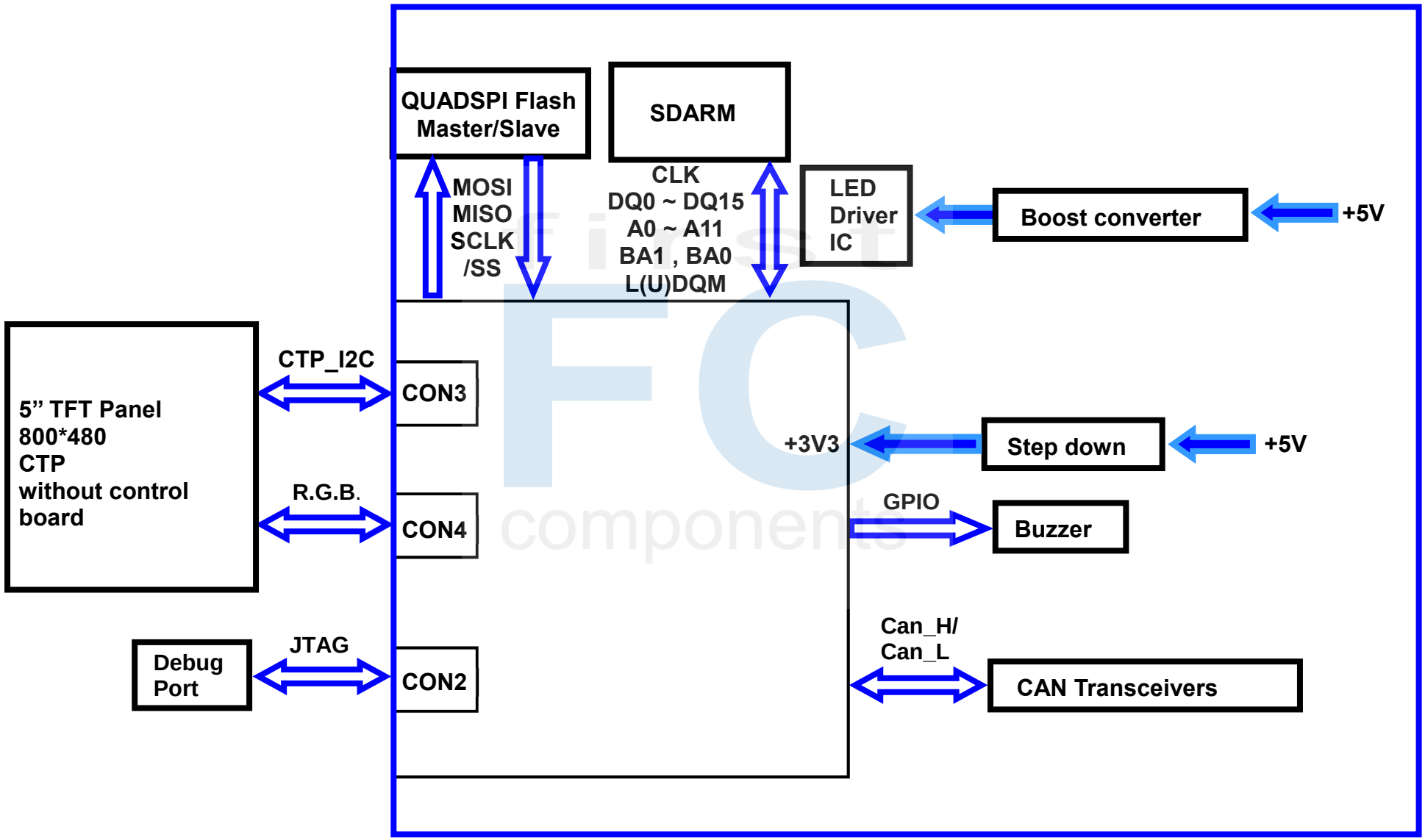
Electrical Characteristics

Item	Symbol	Min	Typ	Max	Unit
Supply Voltage	VCC	4.75	5	5.25	V
Supply Current	ICC		500		mA

BOM

Item	Description	Remark
LCM	WF50FSWAGDNG0#	
PCBA	SV10005R000FF00N0101	

Block diagram



Interface

CON1 definition:

Pin	Symbol	Function	Remark
1	+5V	Power supply 5V input	Input
2	GND	Power supply GND input	Input
3	CAN_H	CAN bus D+	I/O
4	CAN_L	CAN bus D-	I/O
5	VDD_5V	Power supply 5V input	Input
6	NC	--	-
7	NC	--	-
8	GND	Power supply GND input	Input
9	VDD_5V	Power supply 5V input	Input
10	Reserve	USART RX interface(Reserve)	Reserve
11	Reserve	USART TX interface(Reserve)	Reserve
12	GND	Power supply GND input	Input
13	VDD_5V	Power supply 5V input	Input
14	NC	--	-
15	NC	--	-
16	GND	Power supply GND input	Input

CON2 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	Output
7-16	NC	--	-

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