SMART DISPLAY SPECIFICATION



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SPECIFICATION

CUSTOMER : _____

MODEL NO. : WL0F0007000A8NAAASA01-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	2024/08/21		First issue

Summary

7 Inch N-TP Smart Display (CAN series) Features

1. +12V power supply input with 5V to 16V dynamic range power input, the power consumption is around 6 Watt.
2. Self testing after booting function.
3. CAN bus communication interface.
4. Support CANopen negotiation. Default baud rate at 250Kbps.
5. Built in 16M external flash memory to store the font and Object Dictionary Data.
6. Without TP
7. Embedded buzzer controlled by Master Device.
8. 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	5~16V	Vdc
Communication Interface	CAN bus differential ± 3.3	N/A
MCU	STM32F746 216MHz	N/A
Flash Memory	16	MB
SDRAM Frequency	108	MHz
LCD display size	7.0	inch
Dot Matrix	1024 x RGBx600(TFT)	dot
Module dimension	184.1(W) x 103.8(H) x 22(D)	mm
Active area	154.2144 x 85.92	mm
Dot pitch	0.1506 x 0.1432	mm
Brightness	Min:500; Typ:600	cd/m^2
LCD type	TFT, Normally Black, Transmissive	
View Direction	85/85/85/85	
Aspect Ratio	16:9	
With /Without TP	Without TP	
Surface	Anti-Glare	

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Contour Drawing

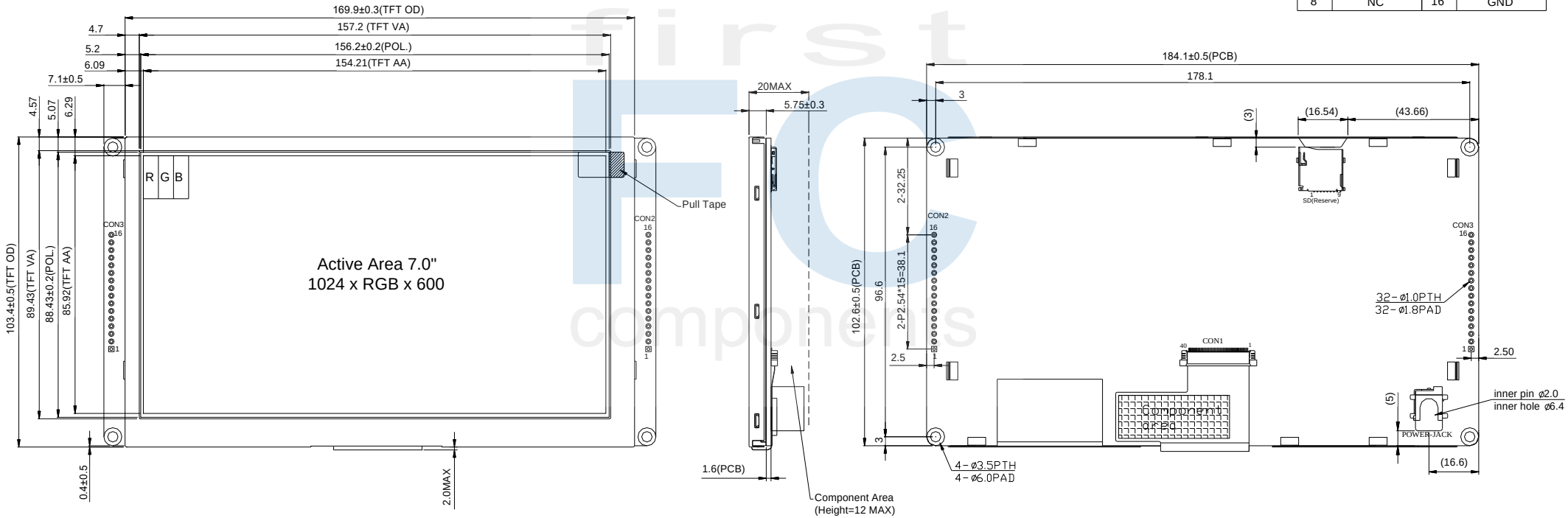
POWER JACK
2 —◉— 1
(GND) (12V)

CON3

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

CON2

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

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℃

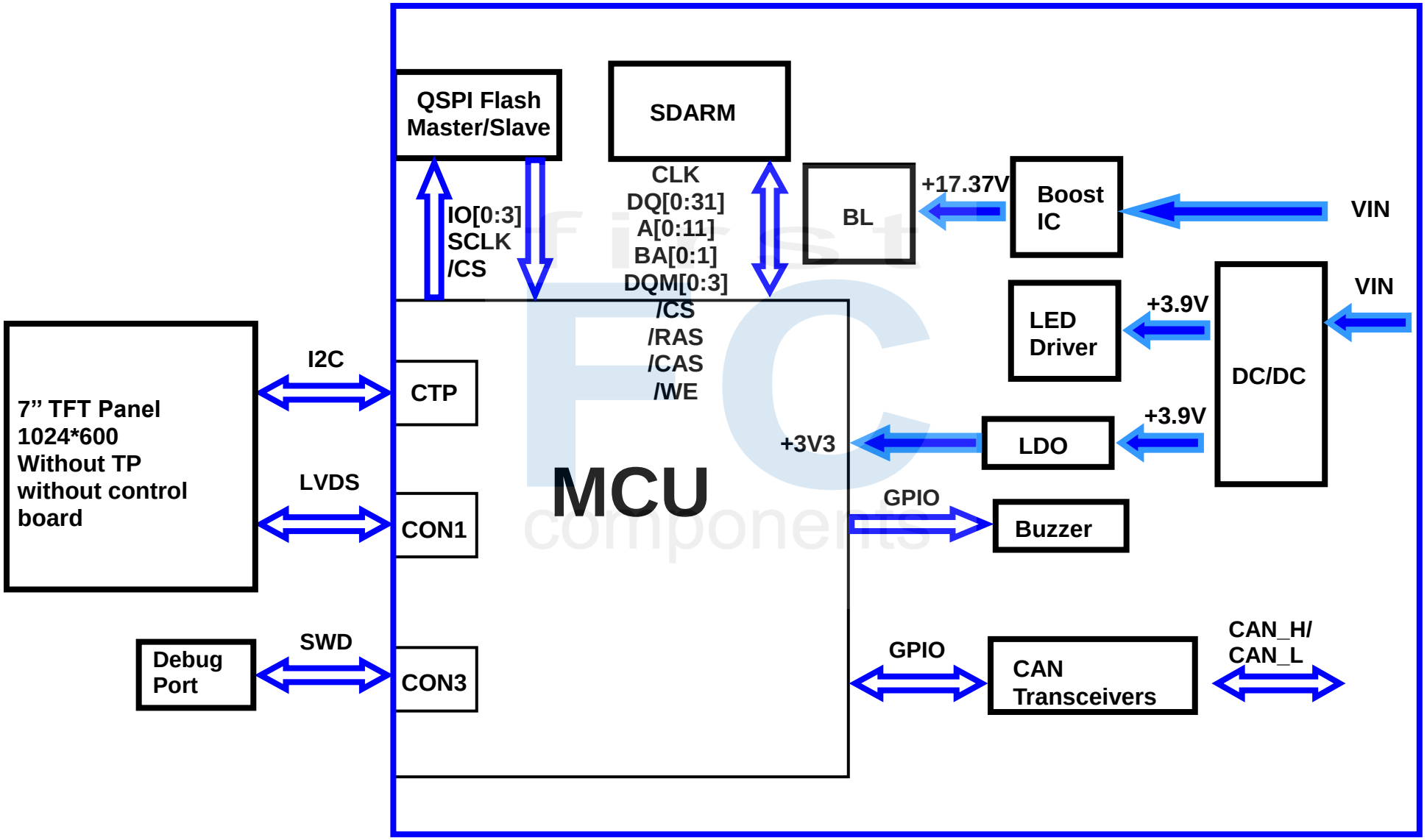
Electrical Characteristics

Item	Symbol	Condition	Min	Typ	Max	Unit
Supply Voltage	VIN	—	5	12	16	V
Supply current	I(mA)	—	—	490	—	mA

BOM

Item	Description	Remark
LCM	WF70-1024600A8L#0P0-FC	
PCBA	SV10007R00AAA00N0117	

Block diagram



Interface

CON2 definition:

Pin	Symbol	Function	Remark
1	VIN	Power supply V+	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	GND	Power supply GND input	Input
6	GND	Power supply GND input	Input
7	NC	_	_
8	NC	_	_
9	Reserve	_	_
10	Reserve	UART RX interface(Reserve)	Reserve
11	Reserve	UART TX interface(Reserve)	Reserve
12	GND	GND	GND
13	Reserve	_	_
14	Reserve	_	_
15	Reserve	_	_
16	GND	GND	GND

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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	Output
7~16	NC	_	_

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