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. : WL0F0007000A8GAAFSK00-FC

Summary

7 Inch Smart Display (CAN series) Features

1. +12V power supply input with 8V to 35V dynamic range power input, the power consumption is around 6 Watt.
2. Self-testing after booting function.
3. CAN bus communication interface.
4. Supports Custom CAN ID protocol, default baud rate at 250Kbps.
5. Built in 16MB external flash memory to store the font and Object Dictionary Data.
6. Support capacitive touch panel (CTP).
7. Build in buzzer and can be controlled by Master Device.
8. Demo set HOST can be used on multiple platforms, such as Computer (with USB to CAN Dongle), MCU, Raspberry Pi (with PiCAN2).
9. GPIO PIN support with 3.3V TTL.
10. The product, with its housing, meets the IP54 rating. It is protected against limited amounts of dust and other particles, and it is also safeguarded from water sprays from all directions.

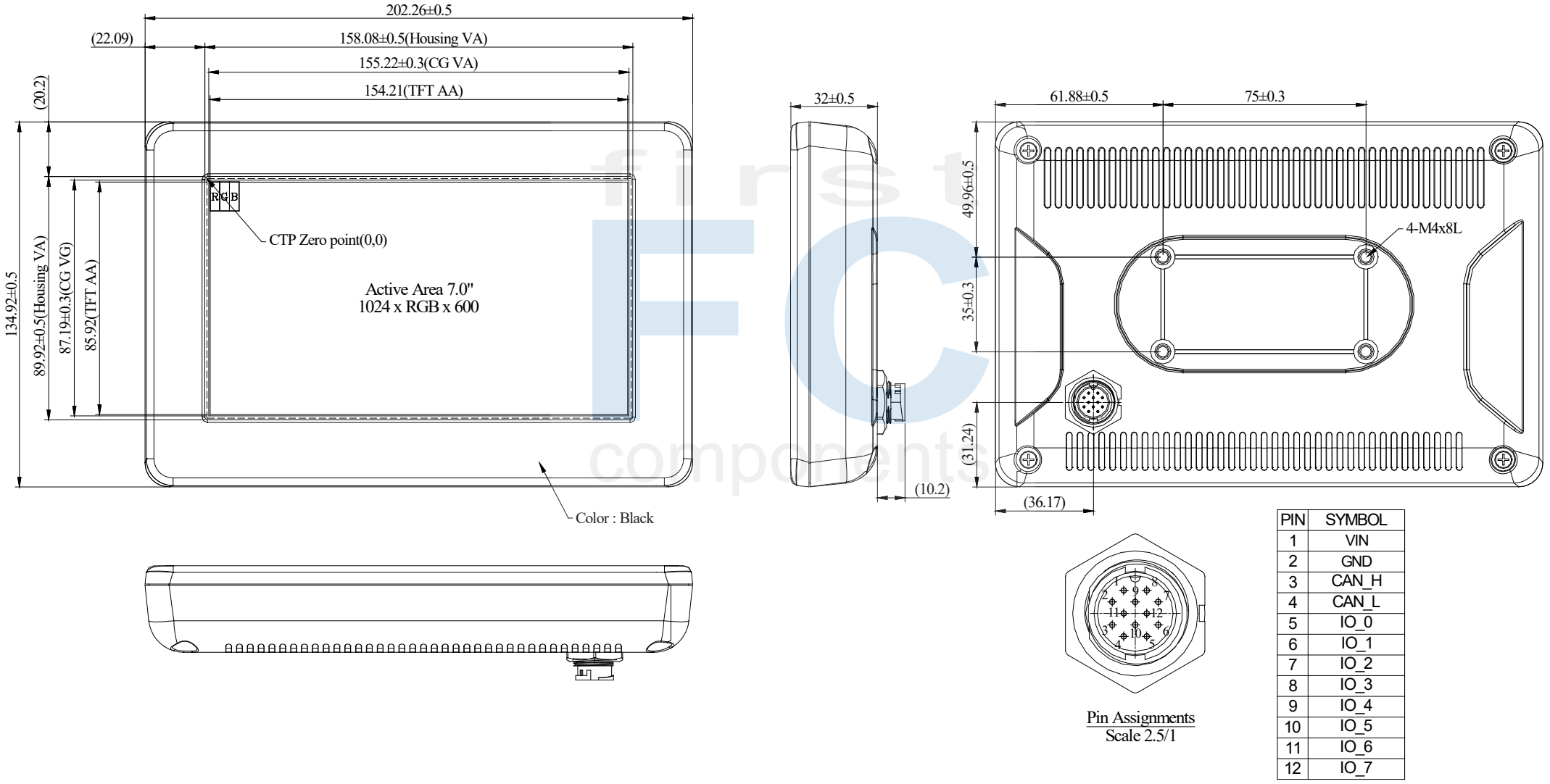
Product information

General information

Item	Standard Value	Unit
Operating voltage	8~35	Vdc
Communication Interface	CAN bus	--
MCU	STM32F746	N/A
Flash Memory	16	MB
SDRAM Memory	16	MB
LCD display size	7.0	inch
Dot Matrix	1024 x RGB x 600(TFT)	dot
Module dimension	202.26(W) x 134.92(H) x 32(D)	mm
Active area	154.2144 x 85.92	mm
Pixel pitch	0.1506 x 0.1432	mm
Brightness	Min:400; Typ:450	cd/m^2
LCD type	TFT, Normally Black, Transmissive	
View Direction	85/85/85/85	
Aspect Ratio	16:9	
Touch Panel	With PCAP	
Surface	Glare	

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Contour Drawing



Pin Assignments
Scale 2.5/1

PIN	SYMBOL
1	VIN
2	GND
3	CAN_H
4	CAN_L
5	IO_0
6	IO_1
7	IO_2
8	IO_3
9	IO_4
10	IO_5
11	IO_6
12	IO_7

Absolute Maximum Ratings

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

Electrical Characteristics

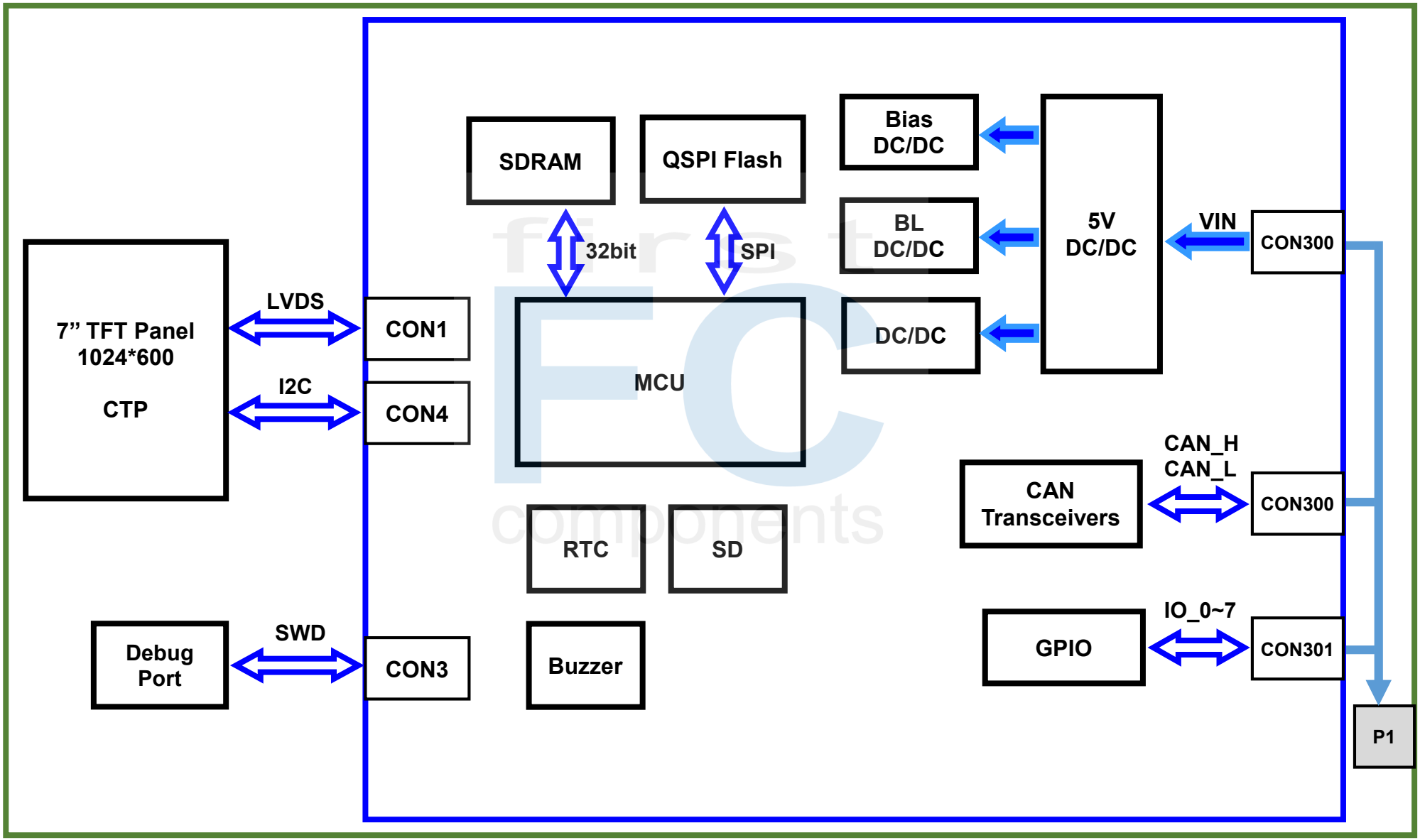
Item	Symbol	Condition	Min	Typ	Max	Unit
Supply Voltage	VIN	—	8	12	35	V
Operating current	I(mA)	—	—	520	—	mA

BOM

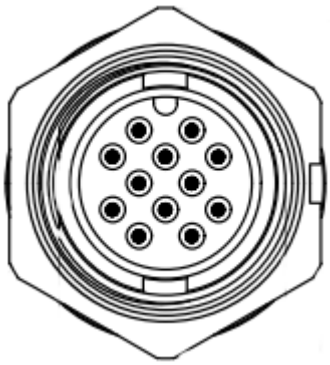
Item	Description
LCM	WF70-1024600A8L#BP3-FC
PCBA	SV30007R00A8D00N0100

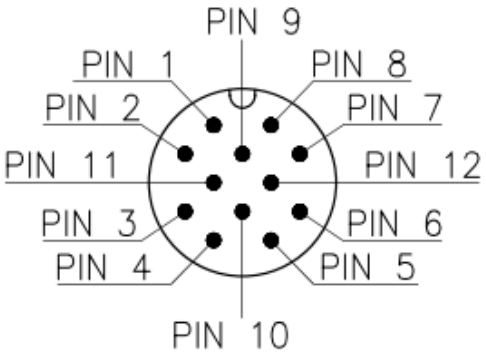
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Block diagram



Interface





P1 PIN definition: WP-12M3-02-11 (WP B Size(M) 12PIN Front Lock)

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	IO_0	ADC,DAC,Timer,Event,I/O @3.3V	I/O
6	IO_1	ADC,Timer,Event,I/O @3.3V	I/O
7	IO_2	ADC,Timer,Event,I/O @3.3V	I/O
8	IO_3	ADC,Timer,Event,I/O @3.3V	I/O
9	IO_4	ADC,Timer,Event,I/O @3.3V	I/O
10	IO_5	ADC,Timer,Event,I/O @3.3V	I/O
11	IO_6	ADC,Timer,Event,I/O @3.3V	I/O
12	IO_7	RST,ADC,Event,I/O @3.3V	I/O

@3.3V : I/O allow below 3.3V input, If exceeding 3.3V may cause MCU damage

