SMART DISPLAY SPECIFICATION



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SPECIFICATION

MODEL NO. : WL0F00101000JGDAESA02-FC

Summary

10.1 Inch Smart Display (RS485 series) Features

1. +12V power supply input with 8V to 28V dynamic range power input, the power consumption is around 6 Watt.
2. Self-testing after booting function.
3. RS485 communication interface.
4. Built in 32MB flash memory, store the font and Object Dictionary Data.
5. Support capacitive touch panel (CTP).
6. Embedded buzzer controlled by Master Device.
7. HOST can be used on multiple platforms, such as Computer (with USB to RS-485 Dongle), MCU.
8. GPIO PIN support.

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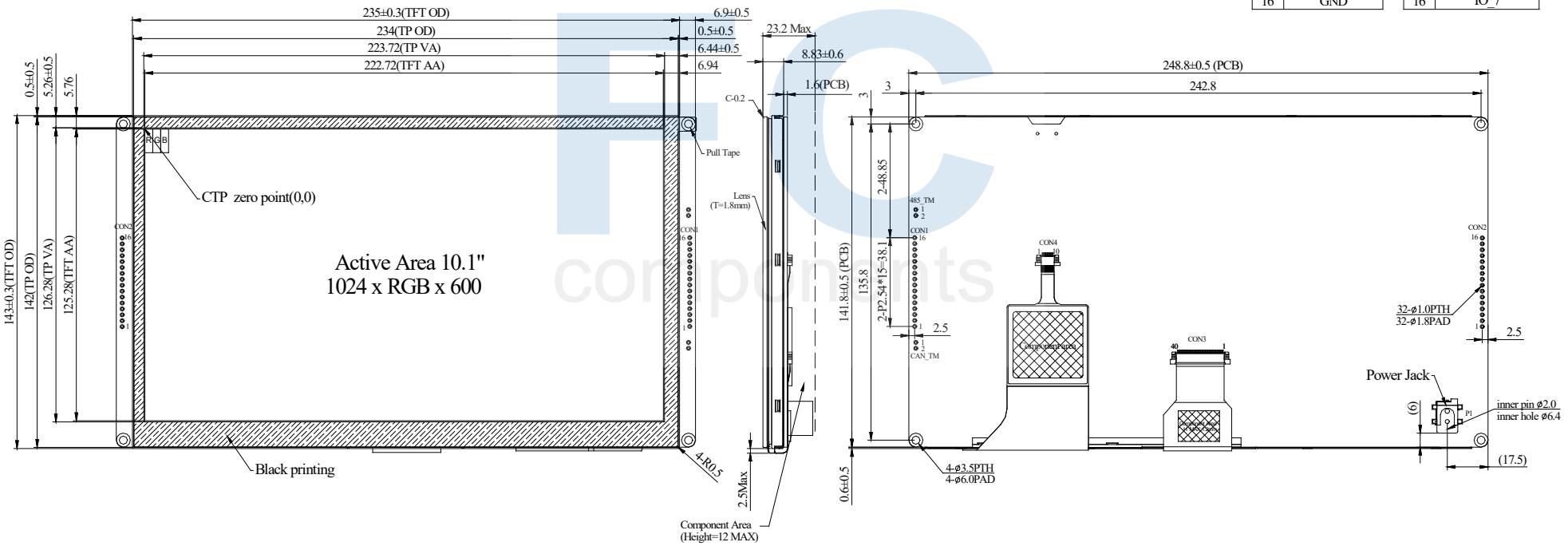
Product information

General information

Item	Standard Value	Unit
Operating voltage	8V~28V dynamic	Vdc
Communication Interface	RS485	Vpp
MCU	STM32F746	N/A
Flash Memory	32	MB
LCD display size	10.1	inch
Dot Matrix	1024 x RGBx600(TFT)	dot
Module dimension	248.8(W) x 143(H) x 23.2(D)	mm
Active area	222.72 (H) x 125.28(V)	mm
Pixel pitch	0.2175(W) x 0.2088(H)	mm
Brightness	Min: 300; Typ: 400	
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



Power Jack

2 (GND) — 1 (8V~28V)

CON1	
PIN	SYMBOL
1	VIN
2	GND
3	NC
4	NC
5	GND
6	GND
7	Reserve
8	Reserve
9	NC
10	Reserve
11	Reserve
12	GND
13	VIN
14	RS485_B
15	RS485_A
16	GND

CON2	
PIN	SYMBOL
1	+3V3
2	SWCLK
3	GND
4	SWDIO
5	NRST
6	GND
7	IO_8
8	REST
9	IO_0
10	IO_1
11	IO_2
12	IO_3
13	IO_4
14	IO_5
15	IO_6
16	IO_7

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

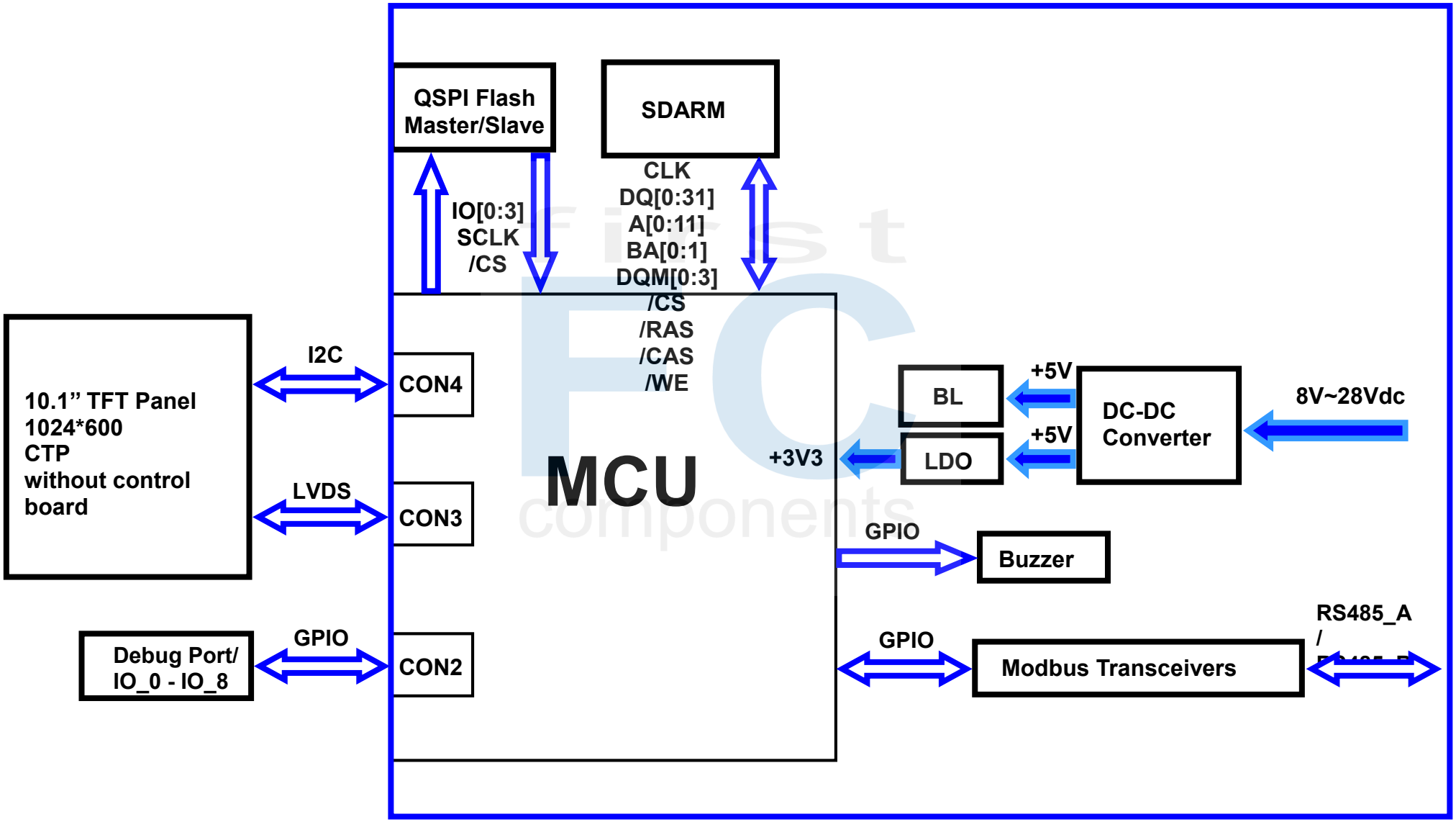
Item	Symbol	Condition	Min	Typ	Max	Unit
Supply Voltage	VCC	—	8	12	28	V
Supply LCM current	I(mA)	-	-	550	-	mA

BOM

Item	Description
LCM	WF101-1024600JL#0P8-FC
PCBA	SV10010R100JC00N0108

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Block diagram



Interface

CON1 definition:

Pin	Symbol	Function	Remark
1	VIN	Power supply 8V to 28V input	Input
2	GND	Power supply GND input	Input
3	NC	-	-
4	NC	-	-
5	GND	Power supply GND input	GND
6	GND	Power supply GND input	GND
7	Reserve	USB_D-	Reserve
8	Reserve	USB_D+	Reserve
9	NC	-	-
10	Reserve	USART RX interface(Reserve)	Reserve
11	Reserve	USART TX interface(Reserve)	Reserve
12	GND	Power supply GND input	GND
13	VIN	Power supply 8V to 28V input	Input
14	485B	RS485 D-	I/O
15	485A	RS485 D+	I/O
16	GND	Power supply GND input	Input

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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	IO_8	IO_8 for system Resume from suspend (Reserve)	WKup,ADC,Timer,Event,I/O
8	REST	Reset (active Low) (Reserve)	I
9	IO_0	ADC,DAC,Timer,Event,I/O	PA5
10	IO_1	ADC,Timer,Event,I/O	PA6
11	IO_2	ADC,Timer,Event,I/O	PA7
12	IO_3	RST,Timer,Event,I/O	PA8
13	IO_4	RST,Timer,Event,I/O	PC13
14	IO_5	ADC,Timer,Event,I/O	PB11
15	IO_6	RST,Timer,Event,I/O	PA15
16	IO_7	RST,ADC,Event,I/O	PD11

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