SMART DISPLAY SPECIFICATION



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SPECIFICATION

CUSTOMER : _____

MODEL NO. : WL0F00101000JGFAASA00-FC

APPROVED BY: **(FOR CUSTOMER USE ONLY)**	

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VERSION	DATE	REVISED PAGE NO.	SUMMARY
0	2024/08/09		First issue

Summary

10.1 Inch Smart Display (UART series) Features

1. +12V power supply input, the power consumption is around 6W.
2. Self testing after booting function.
3. UART communication interface.
4. Supports UART protocol, default baud rate at 115200Kbps.
5. Built in flash memory, store the font and Object Dictionary Data.
6. Support capacitive touch panel (CTP).
7. Embedded buzzer controlled by Master Device.
8. Demo set HOST can be used on multiple platforms, such as Computer (with USB to UART Dongle), MCU, Raspberry Pi (with PiCAN2).
9. GPIO PIN support.

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Product information

General information

Item	Standard Value	Unit
Operating voltage	8V~28V dynamic	Vdc
Communication Interface	UART	--
MCU	STM32F746	N/A
Flash Memory	16	MB
LCD display size	10.1	inch
Dot Matrix	1024 x RGBx600(TFT)	dot
Module dimension	235(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	LED, Normally White	
View Direction	85/85/85/85	
Aspect Ratio	16:9	
With /Without TP	With CTP	
Surface	Glare	

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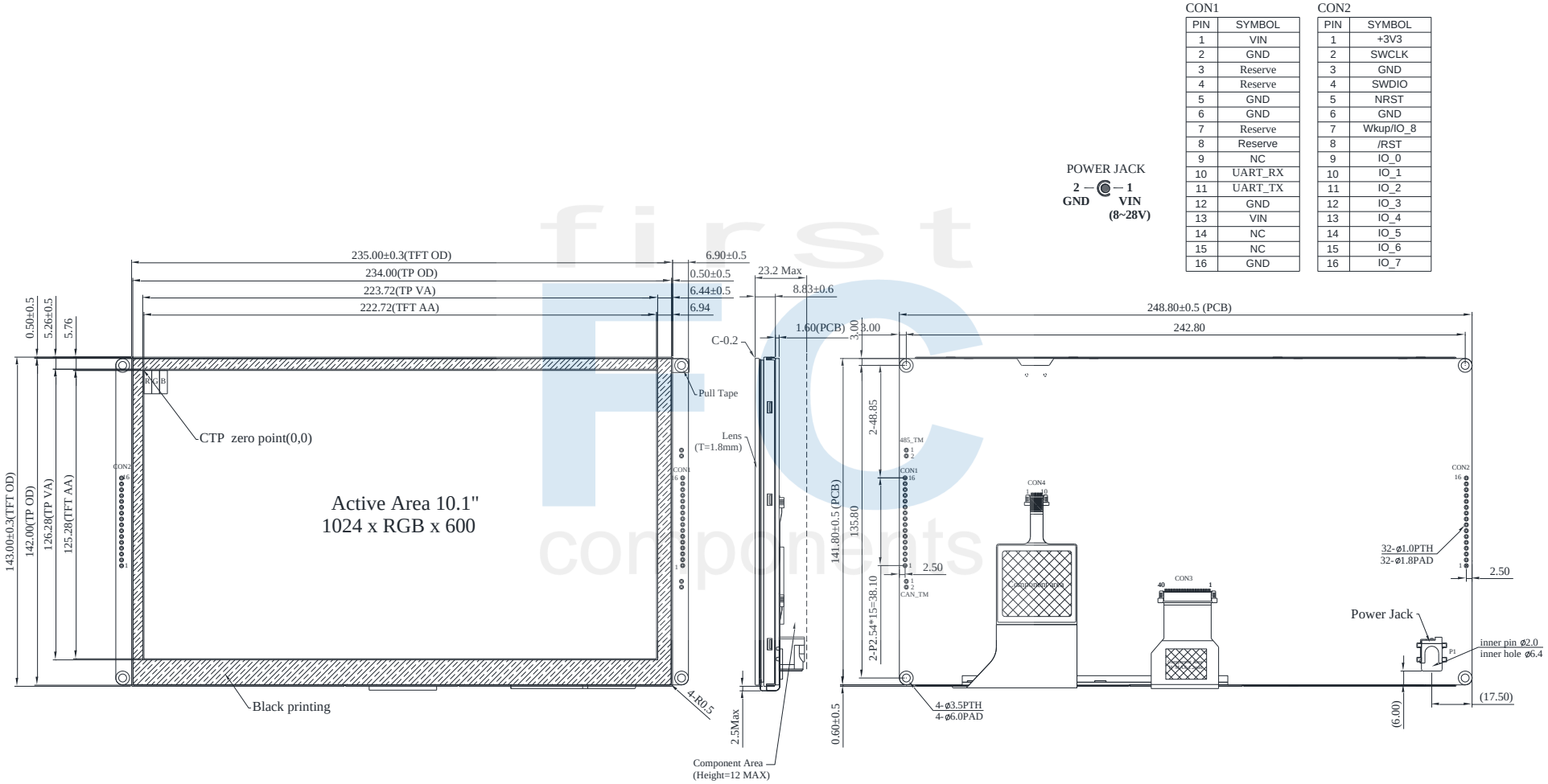
Contour Drawing

CON1

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

CON2

PIN	SYMBOL
1	+3V3
2	SWCLK
3	GND
4	SWDIO
5	NRST
6	GND
7	Wkup/IO_8
8	/RST
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	℃

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℃

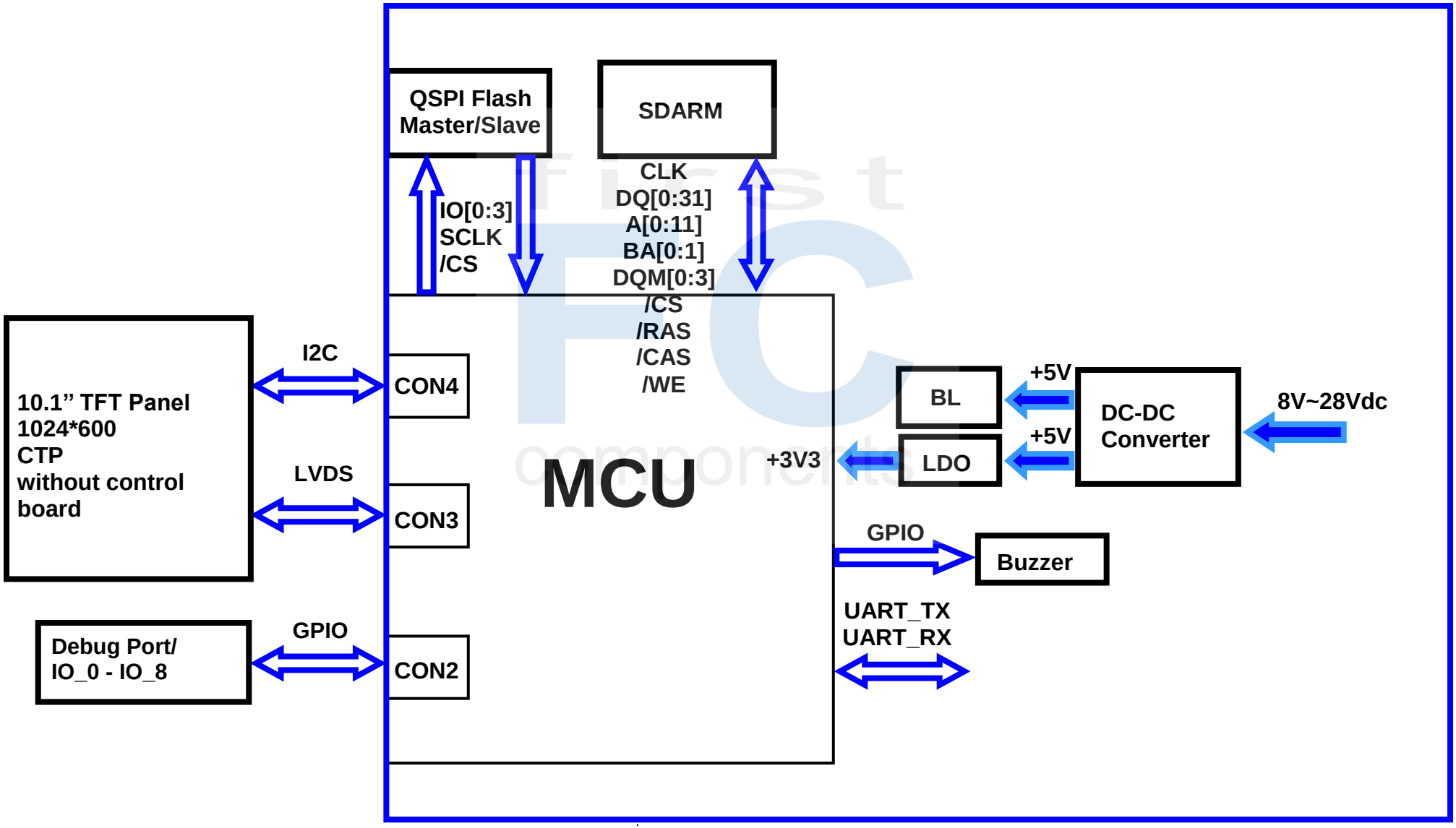
Electrical Characteristics

Item	Symbol	Condition	Min	Typ	Max	Unit
Supply Voltage	VCC	—	8	12	28	V
Supply LCM current	I(mA)	-	-	530	-	mA

BOM

Item	Description	Remark
LCM	WF101-1024600JL#0P8-FC	
PCBA	SV10010R100JB00N0105	

Block diagram



Interface

CON1 definition:

Pin	Symbol	Function	Remark
1	+12V	Power supply12V input	Input
2	GND	Power supply GND input	Input
3	Reserve	-	-
4	Reserve	-	-
5	GND	Power supply GND input	GND
6	GND	Power supply GND input	GND
7	Reserve	-	-
8	Reserve	-	-
9	NC	-	-
10	UART_RX	USART RX interface	I/O
11	UART_TX	USART TX interface	I/O
12	GND	Power supply GND input	GND
13	+12V	Power supply12V input	Input
14	NC	-	-
15	NC	-	-
16	GND	Power supply GND input	Input

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CON2 definition:

Pin	Symbol	Function	Remark
1	VDD3V	3.3V power for JTAG interface	Output
2	JTAG_SWCLK	CLK pin for JTAG interface	Input
3	GND	GND for JTAG interface	Output
4	JTAG_SWDIO	Data pin for JTAG interface	I/O
5	NRST	Reset pin for JTAG interface	Input
6	GND	GND	Output
7	Wkup/ IO_8	(PA0) for system Resume from suspend (Reserve)	WKup,ADC,Timer,Event,I/O
8	/RST	Reset (active Low)	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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