



WINSTAR Display Co.,Ltd.
華凌光電股份有限公司



SPECIFICATION

MODEL NO. : WLOF0007000A8GFADSA00

Summary

7 Inch Smart Display (UART series) Features

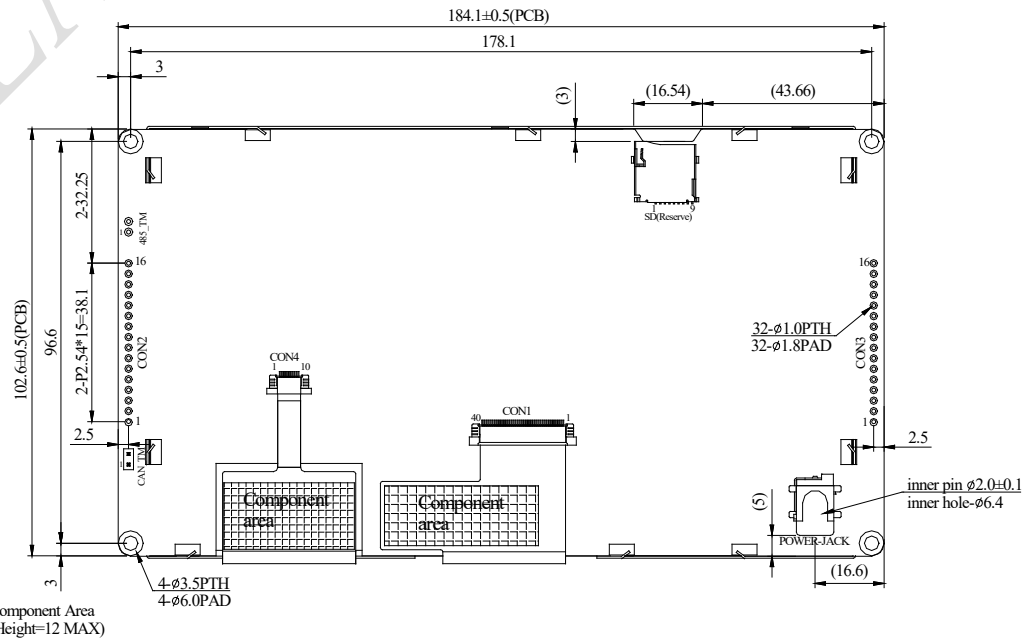
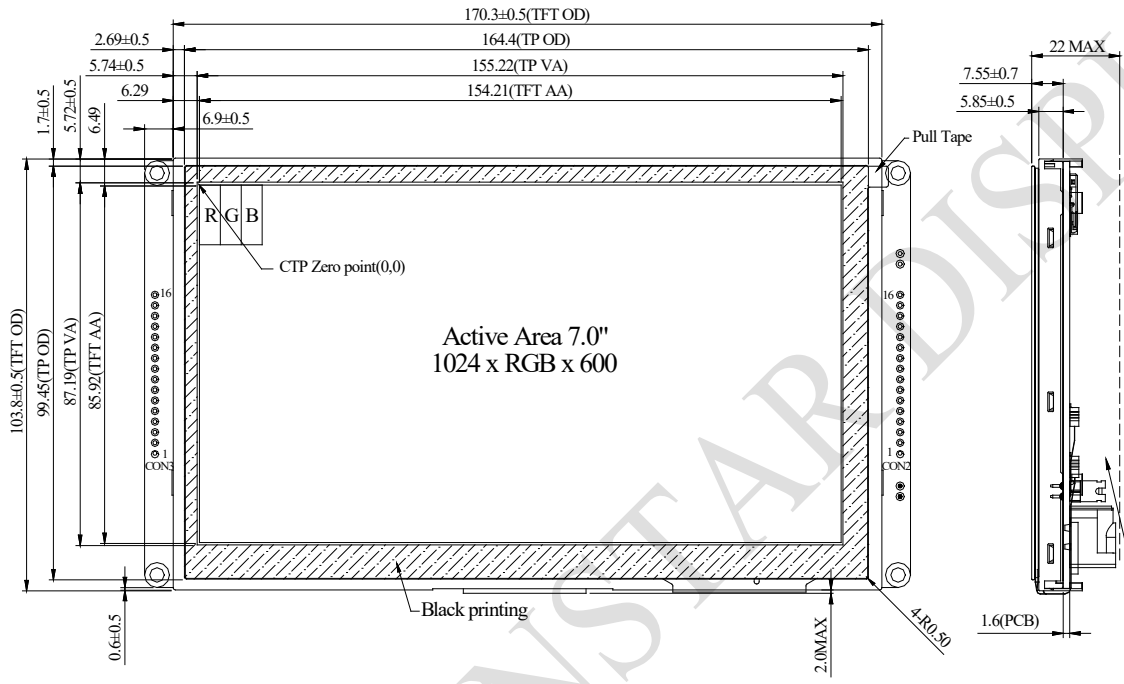
1. +12V power supply input with 8V to 35V dynamic range power input, the power consumption is around 6 Watt.
2. Self-testing after booting function.
3. UART communication interface.
4. Supports UART protocol, default baud rate at 115200Kbps.
5. Built in 16M external flash memory to store the font and 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 UART Dongle), MCU, Raspberry Pi (with PiCAN2).
9. GPIO PIN support with 3.3V TTL.

Product information

General information

Item	Standard Value	Unit
Operating voltage	8~35	Vdc
Communication Interface	UART	--
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	184.1(W) x 103.8(H) x 22(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	

Contour Drawing



POWER JACK
2 — 1
GND VIN
(8-35V)

CON2		CON3	
PIN	SYMBOL	PIN	SYMBOL
1	VIN	1	+3V3
2	GND	2	SWCLK
3	Reserve	3	GND
4	Reserve	4	SWDIO
5	GND	5	NRST
6	GND	6	GND
7	Reserve	7	WKUP
8	Reserve	8	BOOT0
9	NC	9	IO_0
10	UART_RX	10	IO_1
11	UART_TX	11	IO_2
12	GND	12	IO_3
13	VIN	13	IO_4
14	Reserve	14	IO_5
15	Reserve	15	IO_6
16	GND	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	°C
Storage Temperature	TST	-30	—	+80	°C

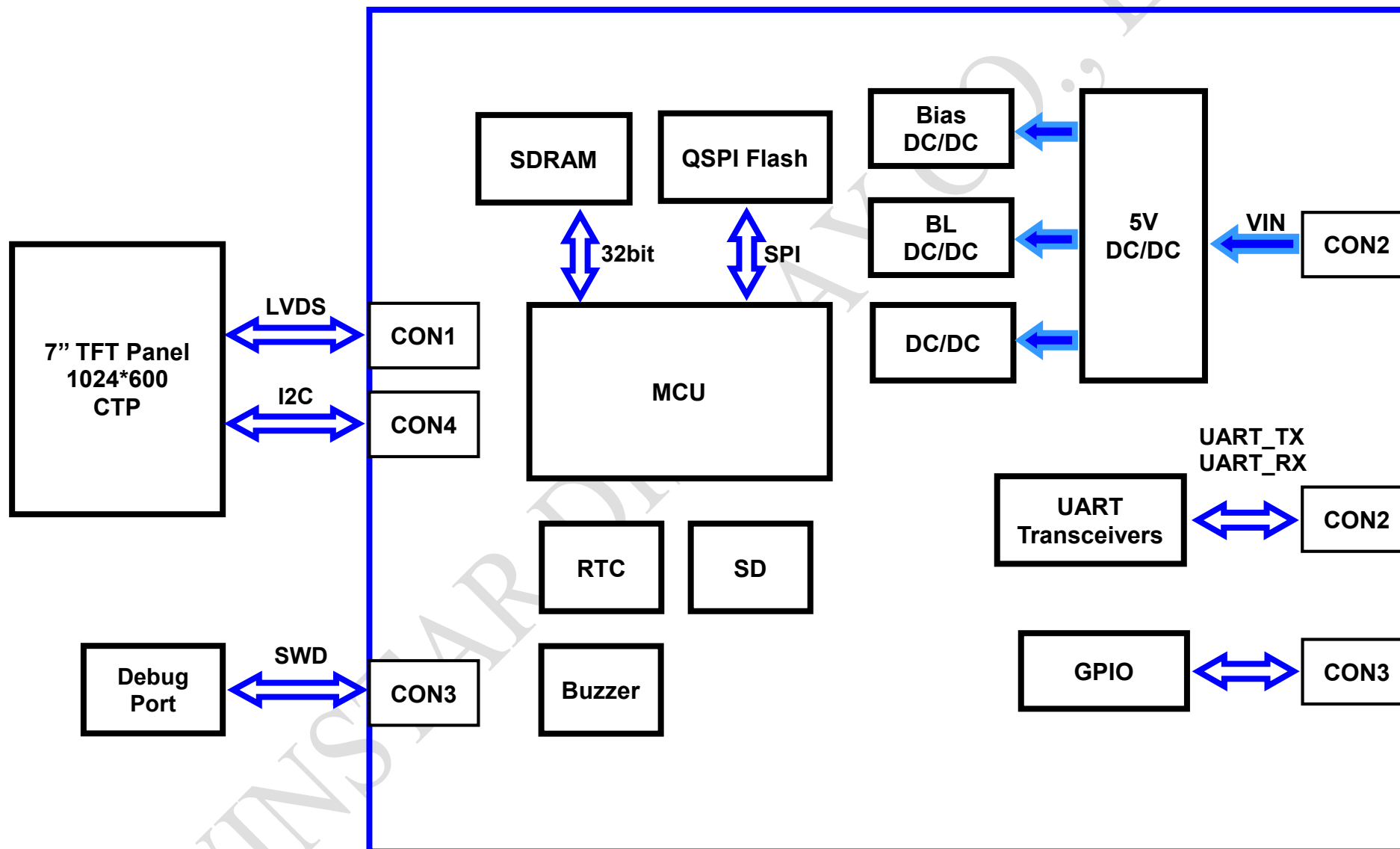
Electrical Characteristics

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

BOM

Item	Description
LCM	WF70A8TYAHLNGB#
PCBA	SV10007R00A8K00N0104

Block diagram



Interface

CON2 definition:

Pin	Symbol	Function	Remark
1	VIN	Power supply GND input	Input
2	GND	Power supply 8V to 35V input	Input
3	Reserve	-	
4	Reserve	-	
5	GND	Power supply GND input	Input
6	GND	Power supply GND input	Input
7	Reserve	-	
8	Reserve	-	
9	NC	-	
10	UART_RX	UART RX interface	I/O
11	UART_TX	UART TX interface	I/O
12	GND	Power supply GND input	Input
13	VIN	Power supply 8V to 35V input	Input
14	Reserve	-	
15	Reserve	-	
16	GND	Power supply GND input	Input

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	Power GND	Output
7	Wkup	WKup,ADC,Timer,Event,I/O	Input
8	BOOT0	Lo: Internal flash boot (Default) Hi: External flash boot	Input
9	IO_0	ADC,DAC,Timer,Event,I/O @3.3V	I/O
10	IO_1	ADC,Timer,Event,I/O @3.3V	I/O
11	IO_2	ADC,Timer,Event,I/O @3.3V	I/O
12	IO_3	ADC,Timer,Event,I/O @3.3V	I/O
13	IO_4	ADC,Timer,Event,I/O @3.3V	I/O
14	IO_5	ADC,Timer,Event,I/O @3.3V	I/O
15	IO_6	ADC,Timer,Event,I/O @3.3V	I/O
16	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