



WINSTAR Display Co.,Ltd.
華凌光電股份有限公司



SPECIFICATION

MODEL NO. : WLOF00035000XGDAASA00

Summary

3.5 Inch Smart Display Feature

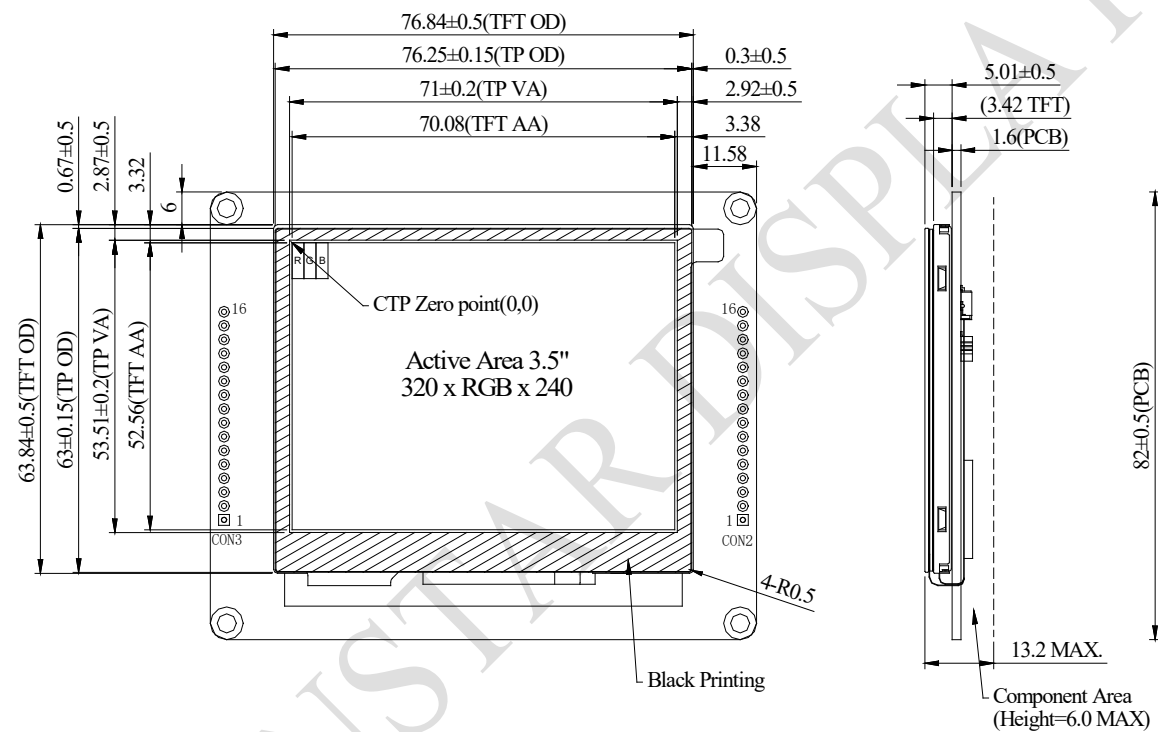
1. DC 5V~24V working voltage and low power consumption.
2. Self testing after booting function.
3. RS485 communication interface.
4. Built in 16MB flash memory, store the font and Object Dictionary Data.
5. Support capacitive touch panel (CTP).
6. Embedded buzzer controlled by Master Device.
7. HOST can be used on multiple platforms, such as Computer (with USB to RS-485 Dongle), MCU.

Product information

General information

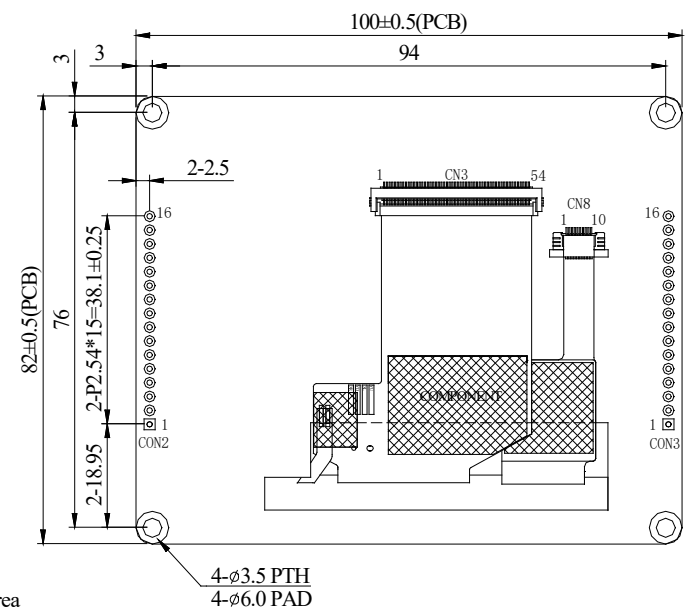
Item	Standard Value	Unit
Operating voltage	5 ~ 24	Vdc
Communication Interface	RS485 differential	-
MCU	STM32F750	N/A
Flash Memory	16	MB
SDRAM Memory	8	MB
LCD display size	3.5	inch
Dot Matrix	320× 3(RGB) × 240	dot
Module dimension	100(W) x 82(H) x 13.2(D)	mm
Active area	70.08(W) x 52.56(H)	mm
Pixel pitch	0.219 x 0.219	mm
Brightness	Min: 300; Typ: 400	
LCD type	TFT, Normally Black, Transmissive	
View Direction	80/80/80/80	
Aspect Ratio	4:3	
Touch Panel	Projected Capacitive Touch Panel	
Surface	Glare	

Contour Drawing



CON3			
PIN	SYMBOL	PIN	SYMBOL
1	Reserve	9	Reserve
2	Reserve	10	Reserve
3	Reserve	11	Reserve
4	Reserve	12	NRST
5	Reserve	13	SWDI
6	Reserve	14	GND
7	Reserve	15	SWCLK
8	Reserve	16	+3V3

CON2			
PIN	SYMBOL	PIN	SYMBOL
1	GND	9	Reserve
2	RS485_A	10	Reserve
3	RS485_B	11	Reserve
4	VIN	12	Reserve
5	Reserve	13	Reserve
6	Reserve	14	Reserve
7	Reserve	15	Reserve
8	Reserve	16	Reserve



The non-specified tolerance of dimension is $\pm 0.3\text{mm}$.

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Absolute Maximum Ratings

Item	Symbol	Min	Typ	Max	Unit
Operating Temperature	TOP	-30	—	+80	°C
Storage Temperature	TST	-30	—	+80	°C

Electrical Characteristics

Item	Symbol	Min	Typ	Max	Unit
Supply Voltage	VIN	5	12	24	V
Supply Current	ICC	-	150	-	mA

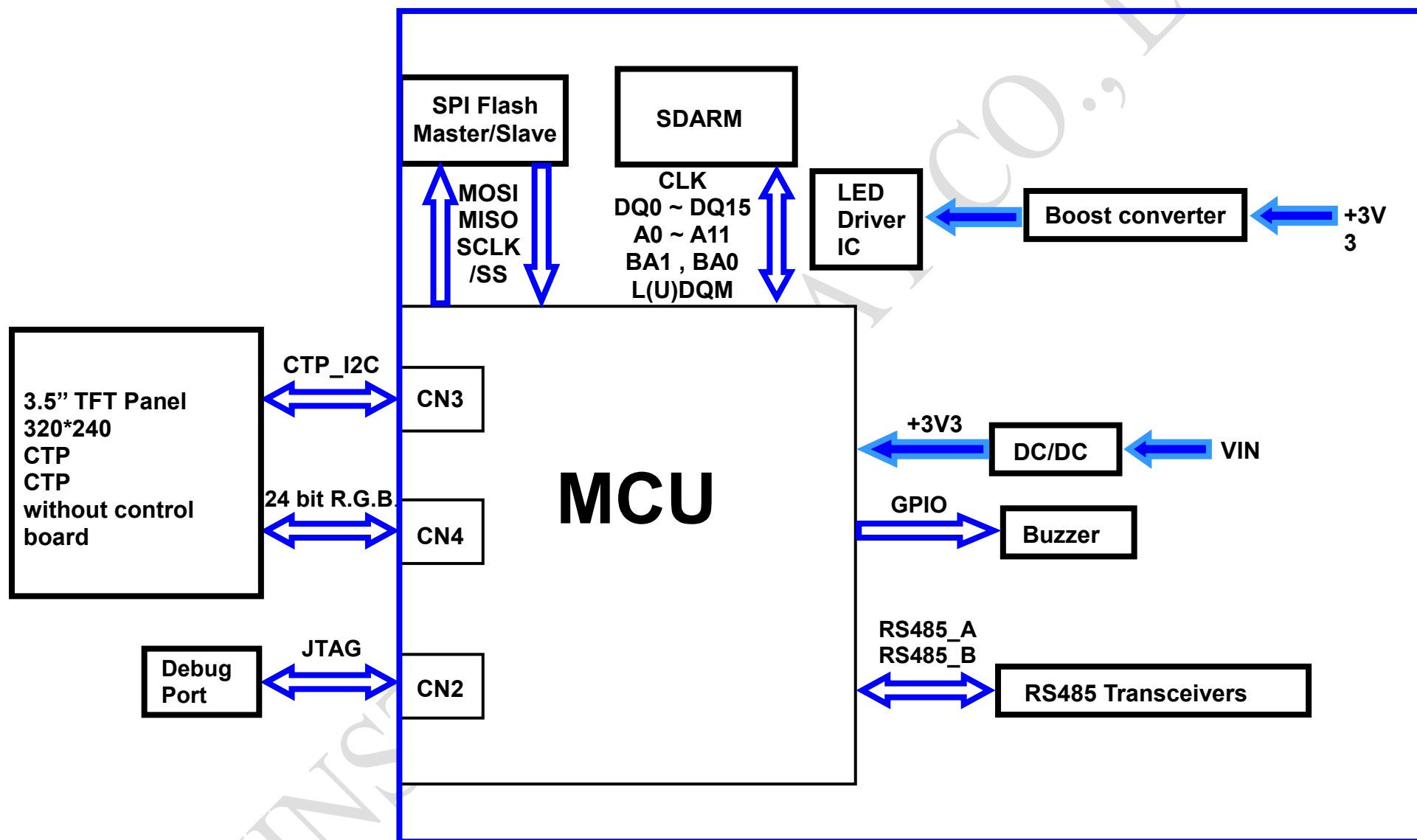
Note: To ensure reliable operation, it is recommended to maintain the power supply voltage within the specified range.

Excessive voltage surges beyond the rated limits may impact device performance or longevity.

BOM

Item	Description
LCM	WF35XTWACDNG0#
PCBA	SV100035000XA00N0103

Block diagram



Interface

CON2 definition:

Pin	Symbol	Function	Remark
1	GND	Power supply GND input	-
2	RS485_A	RS485 DATA+	I/O
3	RS485_B	RS485 DATA-	I/O
4	VIN	Power supply +5V~24V	-
5-16	Reserve	--	--

CON3 definition:

Pin	Symbol	Function	Remark
1-11	Reserve	--	--
12	NRST	Reset pin for JTAG interface	Input
13	SWDI	Data pin for JTAG interface	I/O
14	GND	GND for JTAG interface	Input
15	SWCLK	CLK pin for JTAG interface	Input
16	+3V3	3.3V power for JTAG interface	Output