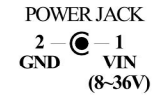
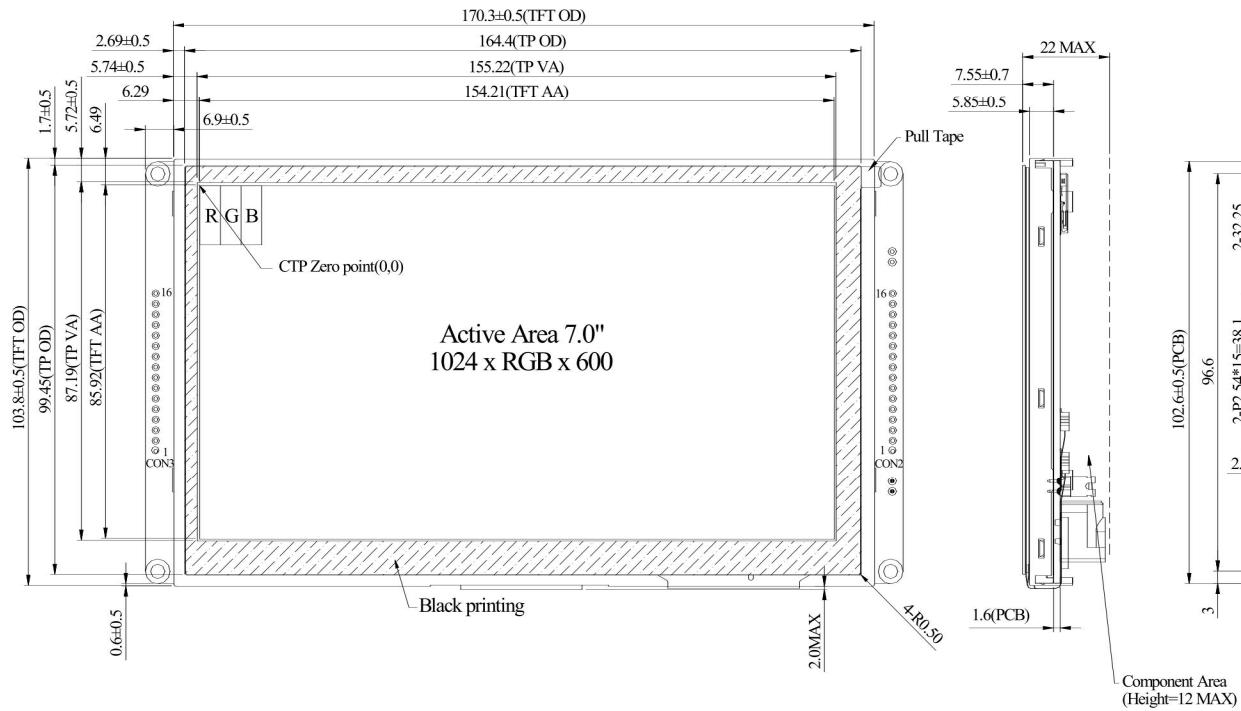


Product information

General information

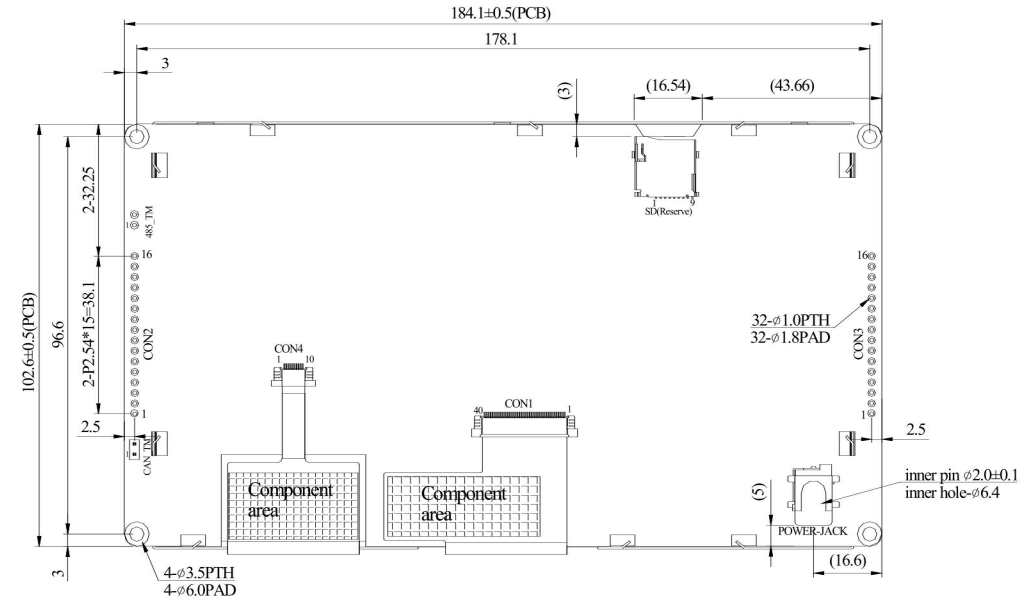
Item	Standard Value	Unit
Operating voltage	8~35	Vdc
Communication Interface	RS485	--
MCU	STM32F746	N/A
Flash Memory	32	MB
SDRAM Frequency	100	MHz
LCD display size	7.0	inch
Dot Matrix	1024 x RGB x 600(TFT)	dot
Module dimension	184.1(W) x 103.8(H) x 22(D)	mm
Active area	154.2144 x 85.92	mm
Pixel pitch	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	Projected Capacitive Touch Panel (PCAP)	
Surface	Glare	

Contour Drawing



CON2			
PIN	SYMBOL	PIN	SYMBOL
1	VIN	9	NC
2	GND	10	Reserve
3	Reserve	11	Reserve
4	Reserve	12	GND
5	GND	13	VIN
6	GND	14	RS485 _B
7	Reserve	15	RS485 _A
8	Reserve	16	GND

CON3			
PIN	SYMBOL	PIN	SYMBOL
1	+3V3	9	IO_0
2	SWCLK	10	IO_1
3	GND	11	IO_2
4	SWDIO	12	IO_3
5	NRST	13	IO_4
6	GND	14	IO_5
7	WKUP	15	IO_6
8	BOOT0	16	IO_7



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

Absolute Maximum Ratings

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

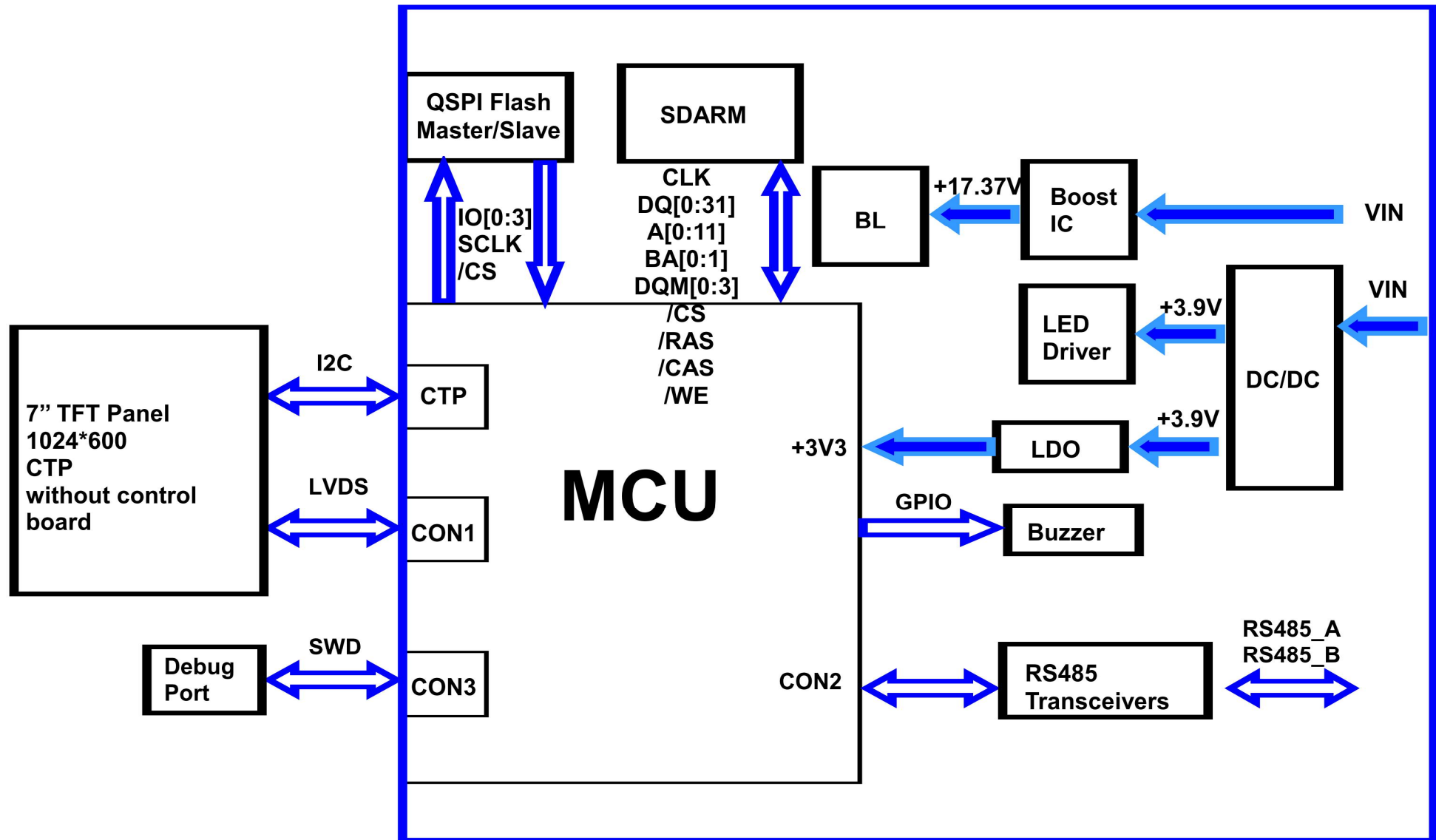
Electrical Characteristics

Item	Symbol	Condition	Min	Typ	Max	Unit
Supply Voltage	VIN	—	8	12	35	V
Supply current	I(mA)	—	—	490	—	mA

BOM

Item	Description
LCM	WF70A8TYAHLNGB#
PCBA	SV10007R00A8C00N0109

Block diagram



Interface

CON2 definition:

Pin	Symbol	Function	Remark
1	VIN	Power supply V+	Input
2	GND	Power supply GND 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	VBUS	—	—
10	Reserve	UART RX interface(Reserve)	Reserve
11	Reserve	UART TX interface(Reserve)	Reserve
12	GND	GND	GND
13	Reserve	—	—
14	RS485_B	RS485 B	I/O
15	RS485_A	RS485 A	I/O
16	GND	GND	GND

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