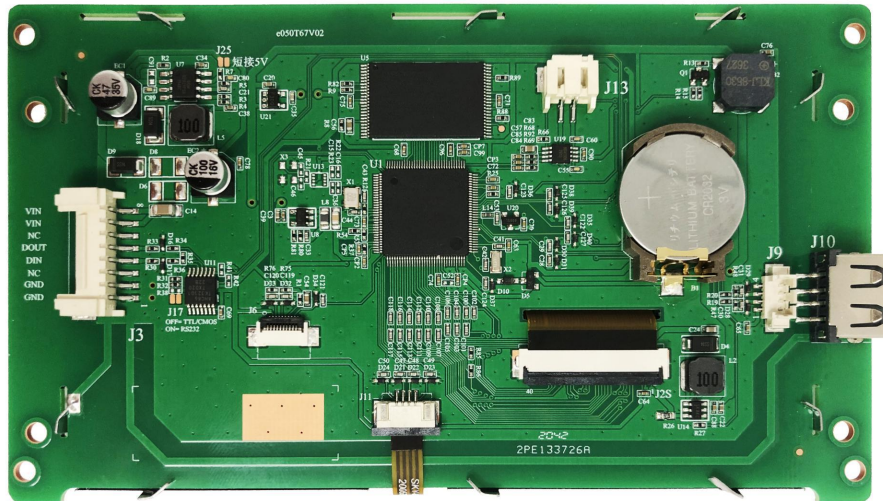


# P80480V50C\_T17

5.0 Inches, 800xRGBx480, 65K Colors



## Modification Record

Date	Content
2019/01/16	First release
2020/10/16	ESD reliability testing has been added

## Features

- Support wide range of power supply: Default is 6~35V, use jumper to choose 4.5~5.5V;
- Support RS232/TTL/CMOS, the max baud rate is 921600bps;
- Support audio and video;
- Support hardware JPG decoding which makes storage more efficient and display quicker;
- Support offline batch download through USB Flash Drive, which improves download efficiency and reduce requirements for operators;
- Support backlight brightness adjustment and automatic standby screen saver function;
- Support multi-language font library, picture, TWO-DIMENSIONAL code display;
- Support number and English input, customizable keyboard interface;
- Support 90 degrees, 180 degrees, 270 degrees screen rotation, adjustable visual angle;
- Easy-to-use UnicView GUIs Development, no coding skills required;
- Instant operation when power on without system load time;
- Excellent electromagnetic compatibility characteristics.

Display					
<b>Color</b>	65K (65536) colors, 16 bit color 5R6G5B				
<b>Visual Angle L/R/U/D</b>	70°/70°/50°/70°				
<b>Resolution</b>	800*480, 90° rotated display (480*800)				
<b>Backlight /Lifecycle/Brightness</b>	LED/20,000 HOURS/ 400 cd/m <sup>2</sup> / (100 level adjustment)				
<b>Working Temperature</b>	-20~+70°C/-30~+80°C				
Voltage & Current					
Item	Condition	Min.	Typ.	Max.	Unit
<b>Power Voltage</b>		6	12	35	V
<b>Operation Current</b>	VIN = 12V, Backlight on	—	185	—	mA
	VIN = 12V, Backlight off	—	98	—	
Note: Short-circuit J25 to choose Power Input as 5V (4.5V~5.5V)					
Interface					
Item	Condition	Min.	Typ.	Max.	Unit
<b>Baud Rate</b>	Standard	1200	—	921600	bps
<b>Interface</b>	TTL/CMOS (Short-circuit J17 to choose RS-232C)				
<b>Data Format</b>	1 byte for initial, 8 bytes for data, invalid bytes for checksum, 1 byte for end.				
Peripherals					
<b>Buzzer</b>	YES				
<b>RTC</b>	YES				
<b>Audio Port</b>	Support *.MP3 format. No time limit for single file. Theoretically 4096 files at maximum. Loudspeaker: 8Ω2W.				
<b>USB</b>	YES. For downloading offline or data copy.				
<b>Memory</b>	128M(support *.jpg files, maximum 65536 files theoretically), extended to 1G at maximum.				
Pin definition					
J3 Pin Num.	Pin Name	Remarks	J3 Pin Num.	Pin Name	Remarks
1	GND	—	5	DOUT	Serial output
2	GND	—	6	NC	Undefined
3	NC	Undefined	7	VIN	Power input
4	DIN	Serial input	8	VIN	Power input
Packaging and physical dimensions					
Parameter	Data				
Net weight of single piece	121g (no touch)/138g(resistive touch screen)/149g (capacitive touch screen)				
Weight of whole case	8.9kg (no touch)/10.0kg(resistive touch screen)/10.7kg (capacitive touch screen)				
Packing box size	500(mm)×370(mm)×205(mm)				
Packing specification	64 pieces /box				

# Immunity Test

## ESD test for electrostatic discharge

Test ambient temperature: 25°C

Test ambient humidity: 50%

Test process: Carry out contact and air discharge on the periphery of the iron frame and the display area of the serial port screen in turn, and observe whether the screen has abnormal working phenomena such as reset restart, black screen, white screen, communication interruption, and other abnormalities.

Discharge type	Discharge value	Result
Contact discharge	±6KV	Working properly.
Air discharge	±15KV	Working properly.

Note: All tests are conducted when the products are exposed. In the actual use process, when the serial port screen is assembled on the user equipment, the screen and the equipment are kept well-grounded, the ESD performance of the whole machine will be better.

## EFT Test

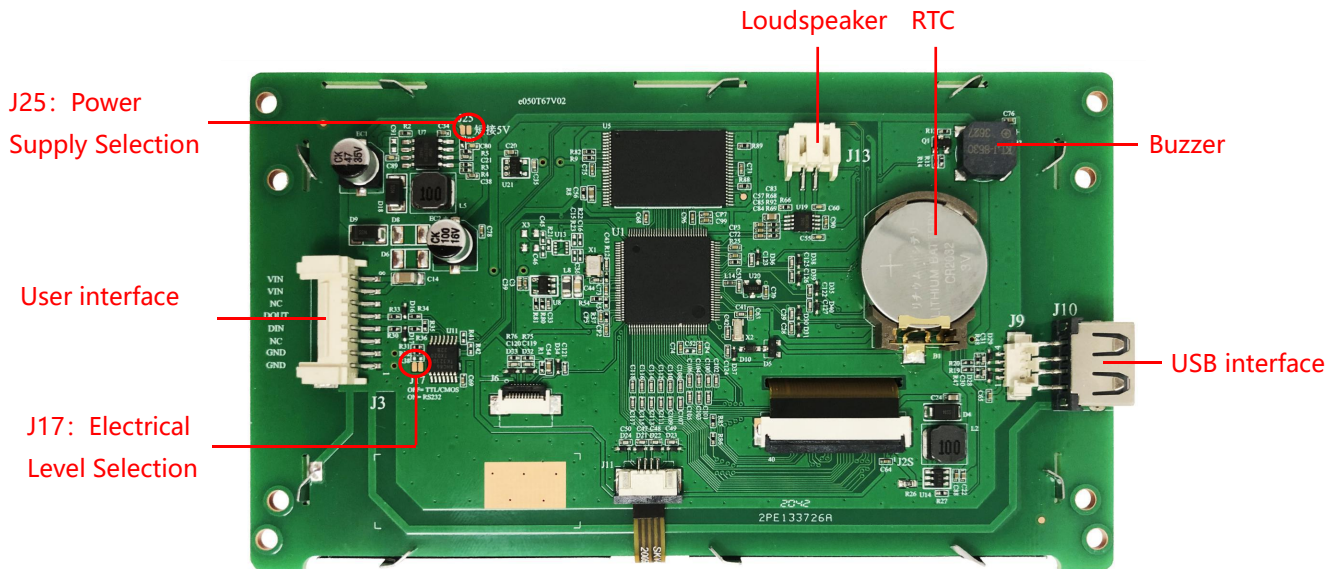
Test ambient temperature: 25°C

Test ambient humidity: 50%

Test process: The power supply line supplies power to the screen through the power supply after the pulse Group generator is coupled with the pulse Group; the serial port signal line carries out serial port communication with the screen through the signal after the pulse Group generator is coupled with the pulse Group; and the screen is observed whether abnormal working phenomena such as reset restart, black screen, white screen, abnormal communication, and communication interruption.

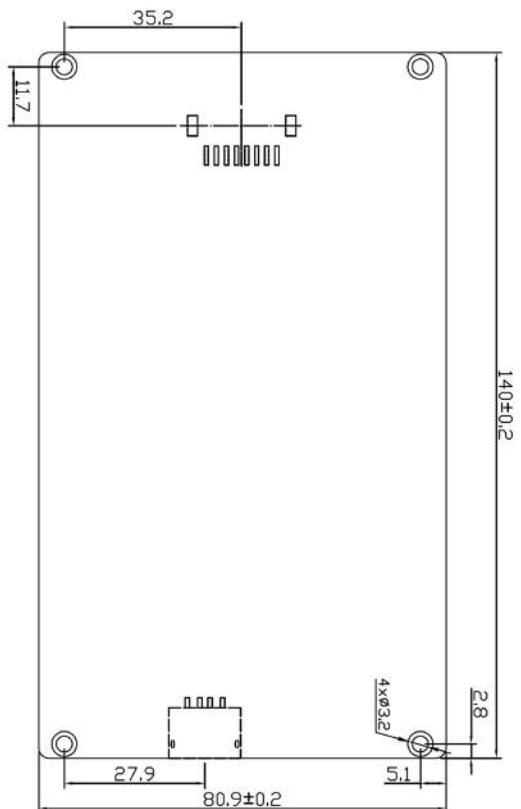
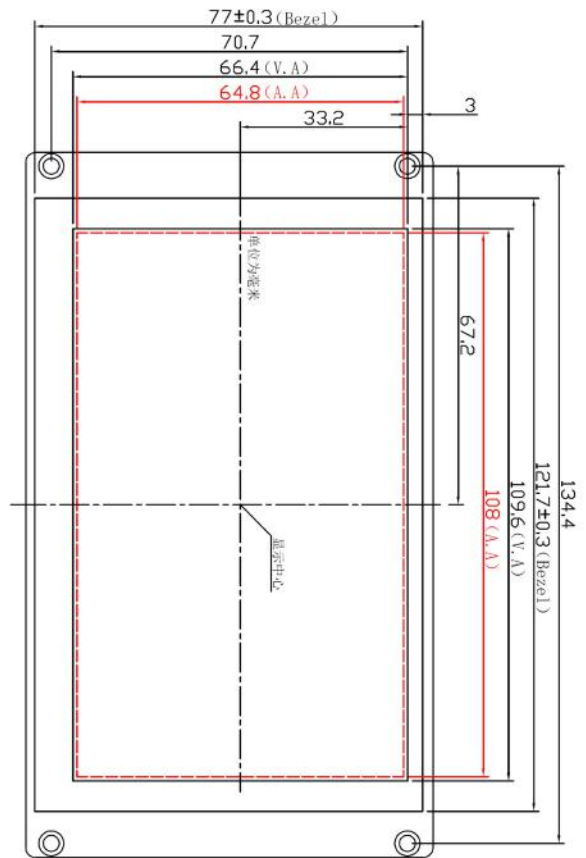
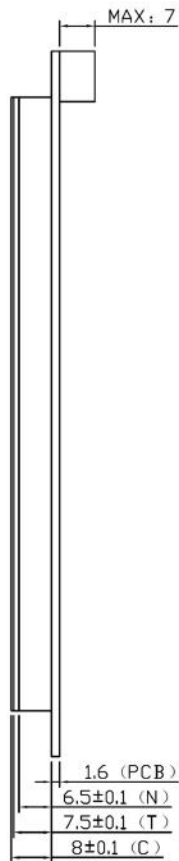
Test item	Test standard		Result
	Voltage	Frequency	
Power cord	4 KV	100 KHz	Working properly.
Signal line	2 KV	100 KHz	Working properly.

## Interface Description



Interface Name	Description
Loudspeaker	8Ω/3W, PH2.0-2 socket.
USB interface	For downloading offline or user data copy. Cannot be used for power supply. Please refer to UnicView Connection Guide.
User interface	Used for power supply serial communication. Standard serial communication protocol. 8 pin_2.0mm socket.

Note: The products of our company may always be updated, and are subject to change without notice unless modification of key structure process or major adjustment of layout is involved. The real products shall prevail.



1. Location hole is used as position reference
  2. Unmarked Tolerance is +/-0.3mm
- Active area is marked in Dash lines

Part No.	P80480V50C_T17				 PROCLUS TECHNOLOGIES INC.	
Datasheet	A4	Drawn by	Proculus	Date		
Proportion	1:1	Verified by		Date		
Unit	mm	Confirmed by		Date		