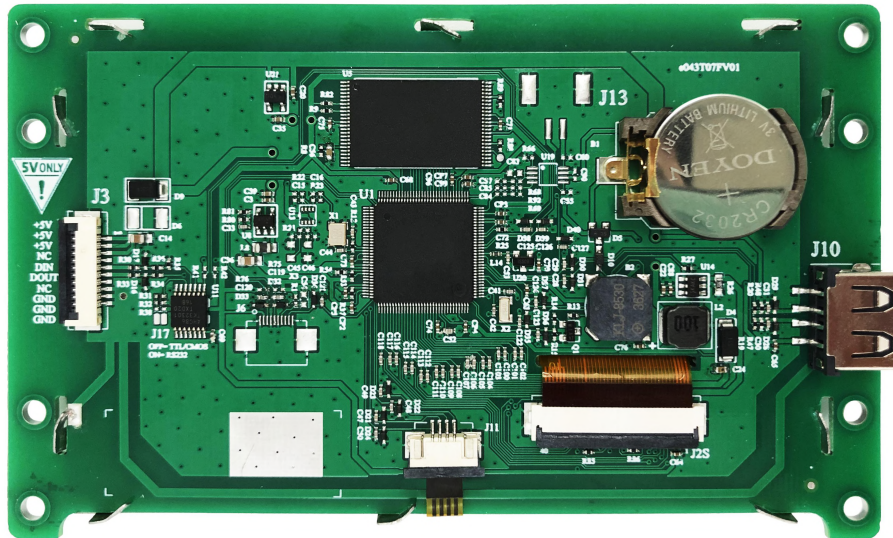


# P48272V43C\_T07

## 4.3 Inches, 482xRGBx272, 65K Colors



### Modification Record

| Date       | Content                                |
|------------|--|
| 2015/07/16 | First release                          |
| 2020/12/11 | 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>   | 480*272, 90° rotated display (272*480)  |              |             |          |               |
| <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>  |   | 4.5          | 5           | 5.5      | V             |
| <b>Operation Current</b>  | VIN = 5V, Backlight on  | —            | 245         | —        | mA            |
|   | VIN = 5V, Backlight off   | —            | 112         | —        |               |
| 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.<br>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  |   |              |             |          |               |
| J4 Pin Num.   | Pin Name  | Remarks      | J4 Pin Num. | Pin Name | Remarks       |
| 1   | +5V   | Power Supply | 6           | DOUT     | Serial output |
| 2   | +5V   | Power Supply | 7           | NC       | Undefined     |
| 3   | +5V   | Power Supply | 8           | GND      | —             |
| 4   | NC  | Undefined    | 9           | GND      | —             |
| 5   | DIN   | Serial input | 10          | GND      | —             |
| Packaging and physical dimensions                               |   |              |             |          |               |
| Parameter   | Data  |              |             |          |               |
| Net weight of single piece                                      | 96g (no touch)/118g(resistive touch screen)/120g (capacitive touch screen)                                      |              |             |          |               |
| Weight of whole case  | 10.7kg (no touch)/12.8kg(resistive touch screen)/13kg (capacitive touch screen)                                 |              |             |          |               |
| Packing box size  | 500(mm)×370(mm)×205(mm)   |              |             |          |               |
| Packing specification   | 96 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

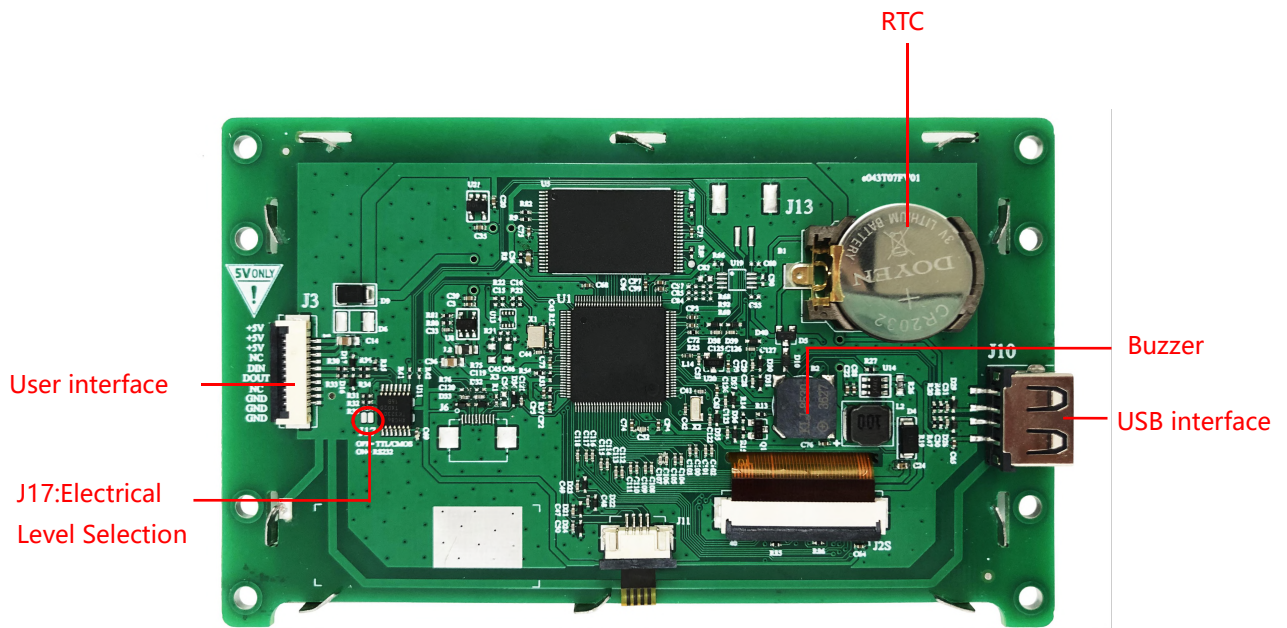
Test ambient temperature: 25°C

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.

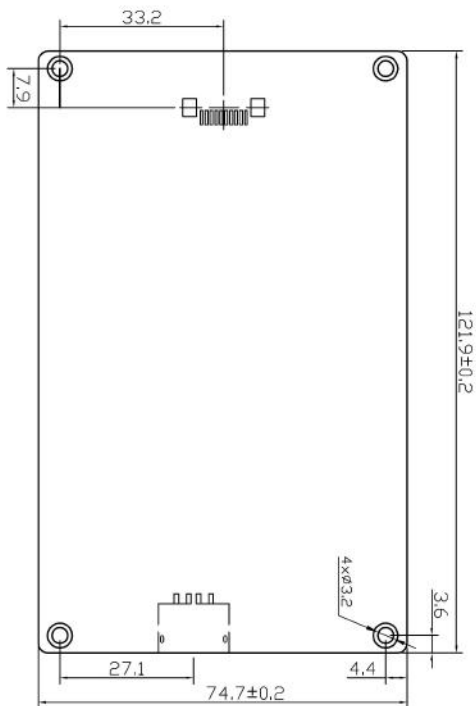
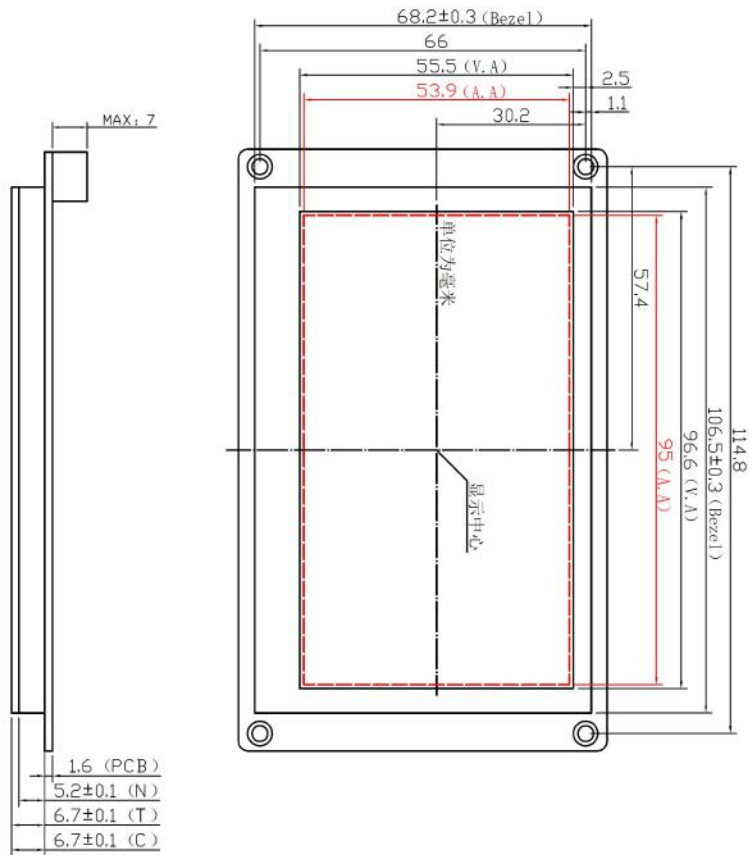
| Test item   | Test standard |           | Result            |
|-------------|---------------|-----------|-------------------|
|             | Voltage       | Frequency |                   |
| Power cord  | 4 KV          | 100 KHz   | Working properly. |
| Signal line | 2 KV          | 100 KHz   | Working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



注:

1. 尺寸定位基准为定位孔
2. 虚线框为有效显示区域
3. N:无触摸; T: 电阻触摸屏; C: 电容触摸屏

|    |  |    |  |
|----|--|----|--|
| 型号 |  | 比例 |  |
| 制图 |  | 材料 |  |
| 审核 |  |    |  |