



**CON1:**

## Pin

|                               |                 |     |                               |                       |
|-------------------------------|-----------------|-----|-------------------------------|-----------------------|
| 1                             | V <sub>DD</sub> | P   | Power supply for logic        | 5.0V or 3.3V optional |
| 2                             | V <sub>SS</sub> | P   | Power ground                  |                       |
| 3                             | NC              | -   | No connection                 |                       |
| 4                             | RS              | H/L | Data/Command select           | 3.3V I/O control      |
| 5                             | /WR             | H/L | Write signal                  |                       |
| 6                             | /RD             | H/L | Read signal                   |                       |
| 7~14                          | DB0-DB7         | H/L | Data bus                      |                       |
| 15                            | /CS             | H/L | Chip select signal,active “L” |                       |
| 16                            | /REST           | H/L | Reset signal ,active “L”      |                       |
| 17                            | /WAIT           | H/L | Wait signal                   |                       |
| 18                            | /INT            | H/L | Interrupt signal              |                       |
| Touch panel control interface |                 |     |                               |                       |
| 19                            | TCLK            | H/L | External Clock Input          | 3.3V I/O control      |
| 20                            | TCS             | H/L | Chip Select Input             |                       |
| 21                            | TDIN            | H/L | Serial Data Input             |                       |
| 22                            | TBUSY           | H/L | Busy Output                   |                       |
| 23                            | TDOUT           | H/L | Serial Data Output            |                       |
| 24                            | TINT            | H/L | Pen Interrupt                 |                       |

| Pin | Symbol | I/O |  |
|-----|--------|-----|--|
|-----|--------|-----|--|

|   |       |     |                                               |                  |
|---|-------|-----|-----------------------------------------------|------------------|
| 1 | /SFCS | H/L | Chip select pin for external serial Flash/ROM | 3.3V I/O control |
| 2 | SFDO  | H/L | External Flash/ROM serial data output         |                  |
| 3 | SFDI  | H/L | External Flash/ROM serial data input          |                  |
| 4 | SFCLK | H/L | External Flash/ROM serial clock input         |                  |

## Basic Specifications

| Item                  | Specifications                           |
|-----------------------|------------------------------------------|
| Size                  | 4.3 inch                                 |
| Resolution            | 480×3(RGB)×272                           |
| Color depth           | 65K                                      |
| Viewing direction     | 6 o'clock                                |
| Operation temperature | -20 ℃ ~70 ℃                              |
| Storage temperature   | -30 ℃ ~ 80 ℃                             |
| Driver IC             | RA8875                                   |
| Interface type        | 8 bits 80-serials parallel MPU interface |
| Touch panel           | With RTP                                 |

## DC Electrical Characteristics&Backlight Driving Conditions

| Item                                  | Symbol                          | Min.                 | Typ.  | Max.                 | Unit |
|---------------------------------------|---------------------------------|----------------------|-------|----------------------|------|
| Power supply                          | V <sub>DD</sub> (5.0V)          | 4.5                  | 5.0   | 5.5                  |      |
| Power supply for I/O control          | V <sub>DD1</sub>                | 3.0                  | 3.3   | 3.6                  | V    |
| Supply current                        | I <sub>DD</sub>                 | -                    | -     | -                    | mA   |
| Input signal voltage                  | V <sub>IH</sub>                 | 0.7 V <sub>DD1</sub> | -     | V <sub>DD1</sub>     | V    |
|                                       | V <sub>IL</sub>                 | 0                    | -     | 0.3 V <sub>DD1</sub> | V    |
| Output signal voltage                 | V <sub>OH</sub>                 | 0.8 V <sub>DD1</sub> | -     | V <sub>DD1</sub>     | V    |
|                                       | V <sub>OL</sub>                 | 0                    | -     | 0.2 V <sub>DD1</sub> | V    |
| Power supply for LED backlight        | V <sub>F</sub>                  | 12                   | 13.2  | 14                   | V    |
| Current for LED backlight             | I <sub>F</sub>                  | -                    | 40    | 50                   | mA   |
| Operating life time for LED backlight | Ta=25℃ and I <sub>F</sub> =40mA | -                    | 20000 | -                    | Hrs  |

## Optical Specifications

| Item           |       | Symbol | Condition                       | Min. | Typ. | Max. | Unit              |
|----------------|-------|--------|---------------------------------|------|------|------|-------------------|
| View angles    | VERT  | θT     | CR ≥ 10<br>(Note5)              | 60   | 70   | -    | Degree            |
|                |       | θB     |                                 | 40   | 50   | -    |                   |
|                | HOR   | θL     |                                 | 60   | 70   | -    |                   |
|                |       | θR     |                                 | 60   | 70   | -    |                   |
| Contrast ratio |       | CR     | θ=0°                            | 400  | 500  | -    | -                 |
| Chromaticity   | White | X      | Backlight is on                 | 0.25 | 0.30 | 0.35 |                   |
|                |       | Y      |                                 | 0.25 | 0.30 | 0.35 |                   |
| Luminance      |       | L      | Ta=25℃ and I <sub>F</sub> =40mA | -    | 120  | -    | cd/m <sup>2</sup> |

Note:

1. Built-in RA8875 controller
2. Chinese fonts chip(GB2312) optional
3. Power supply (VDD) 5.0V only , I/O control 3.3V only.
4. LED Backlight controlled by PWM
5. T:Top 12 o'clock; B:Bottom 6 o'clock; L:Left 9 o'clock; R:Right 3 o'clock