

# TFT DISPLAY SPECIFICATION



WINSTAR Display Co.,Ltd.  
華凌光電股份有限公司



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### SPECIFICATION

**MODULE NO.: WF57WTLECDNT0#**

### General Specifications

| Item                           | Dimension                         | Unit |
|--------------------------------|-----------------------------------|------|
| Size                           | 5.7                               | inch |
| Dot Matrix                     | 320 x RGBx240(TFT)                | dots |
| Module dimension               | 143.5 x 104.1 x 13.85             | mm   |
| Active area                    | 115.2 x 86.4                      | mm   |
| Dot pitch                      | 0.12 x 0.36                       | mm   |
| LCD type                       | TFT, Normally White, Transmissive |      |
| Drive IC                       | HX8218+HX8615 or equivalent       |      |
| Interface                      | 18-bit RGB                        |      |
| View Direction                 | 6 o'clock                         |      |
| Gray Scale Inversion Direction | 12 o'clock                        |      |
| Aspect Ratio                   | 4:3                               |      |
| Backlight Type                 | LED, Normally White               |      |
| Touch Panel                    | Resistive Touch Panel (RTP)       |      |
| Surface                        | Anti-Glare                        |      |

\*Color tone slight changed by temperature and driving voltage.

# Absolute Maximum Ratings

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

# Electrical Characteristics

## 1. Operating conditions:

| Item                   | Symbol | Condition | Min | Typ | Max | Unit |
|------------------------|--------|-----------|-----|-----|-----|------|
| Supply Voltage For LCM | VCC    | —         | 3.0 | 3.3 | 3.6 | V    |
| Supply Current For LCM | ICC    | —         | —   | 110 | 170 | mA   |
| Power Consumption      | —      | —         | —   | 363 | 612 | mW   |

## 2. LED driving conditions

| Item              | Symbol | Min    | Typ | Max  | Unit |
|-------------------|--------|--------|-----|------|------|
| LED current       | —      | —      | 140 | —    | mA   |
| Power Consumption | —      | 1260   | —   | 1470 | mW   |
| LED voltage       | VBL+   | 9.0    | —   | 10.5 | V    |
| LED Life Time     | —      | 50,000 | —   | —    | Hr   |

# Interface

## 1. LCM PIN Definition

| Pin | Symbol | Function                                           |
|-----|--------|----------------------------------------------------|
| 1   | GND    | Ground                                             |
| 2   | CK     | Clock signal for sampling each data signal(DCLK)   |
| 3   | Hsync  | Horizontal synchronous signal                      |
| 4   | Vsync  | Vertical synchronous signal                        |
| 5   | GND    | Ground                                             |
| 6   | R0     | Red Data bit(LSB)                                  |
| 7   | R1     | Red Data bit                                       |
| 8   | R2     | Red Data bit                                       |
| 9   | R3     | Red Data bit                                       |
| 10  | R4     | Red Data bit                                       |
| 11  | R5     | Red Data bit(MSB)                                  |
| 12  | GND    | Ground                                             |
| 13  | G0     | Green Data bit(LSB)                                |
| 14  | G1     | Green Data bit                                     |
| 15  | G2     | Green Data bit                                     |
| 16  | G3     | Green Data bit                                     |
| 17  | G4     | Green Data bit                                     |
| 18  | G5     | Green Data bit(MSB)                                |
| 19  | GND    | Ground                                             |
| 20  | B0     | Blue Data bit(LSB)                                 |
| 21  | B1     | Blue Data bit                                      |
| 22  | B2     | Blue Data bit                                      |
| 23  | B3     | Blue Data bit                                      |
| 24  | B4     | Blue Data bit                                      |
| 25  | B5     | Blue Data bit(MSB)                                 |
| 26  | GND    | Ground                                             |
| 27  | NC     | No connect                                         |
| 28  | VCC    | +3.3V power supply                                 |
| 29  | VCC    | +3.3V power supply                                 |
| 30  | R/L    | Selection signal for horizontal scanning direction |

|    |     |                                                                                           |
|----|-----|-------------------------------------------------------------------------------------------|
|    |     | (L: Normally H: Right-and-left reversal)                                                  |
| 31 | U/D | Selection signal for vertical scanning direction<br>(H: Normally L: Up-and-Down reversal) |
| 32 | NC  | No connect                                                                                |
| 33 | GND | Ground                                                                                    |

## 2. Backlight PIN Definition

| Pin No. | Symbol | Description         |
|---------|--------|---------------------|
| 1       | K      | Black, LED_ Cathode |
| 2       | NC     | No connection       |
| 3       | A      | Red, LED_ Anode     |

# Contour Drawing

