

# TFT DISPLAY SPECIFICATION



WINSTAR Display Co.,Ltd.  
華凌光電股份有限公司



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**MODULE NO.: WF35XTWACDNN0**

## General Specifications

| Item             | Dimension                         | Unit |
|------------------|-----------------------------------|------|
| Size             | 3.5                               | inch |
| Dot Matrix       | 320 x RGBx240(TFT)                | dots |
| Module dimension | 76.84(W) x 63.84(H) x 3.27(D)     | mm   |
| Active area      | 70.08 x 52.56                     | mm   |
| Dot pitch        | 0.073 x 0.219                     | mm   |
| LCD type         | TFT, normally black, Transmissive |      |
| View Direction   | Wide View                         |      |
| Driver IC        | ST7272A or equivalent             |      |
| Interface        | 24-bit RGB                        |      |
| Aspect Ratio     | 4:3                               |      |
| Backlight Type   | LED, Normally White               |      |
| With /Without TP | Without Touch Panel               |      |
| Surface          | Glare                             |      |

# Absolute Maximum Ratings

| Item                  | Symbol | Min | Typ | Max | Unit |
|-----------------------|--------|-----|-----|-----|------|
| Operating Temperature | TOP    | -30 | —   | +85 | °C   |
| Storage Temperature   | TST    | -40 | —   | +85 | °C   |

# Electrical Characteristics

Operating conditions:

| Item                   | Symbol | Min | Typ | Max | Unit |
|------------------------|--------|-----|-----|-----|------|
| Supply Voltage For LCM | VCC    | 3.0 | 3.3 | 3.6 | V    |
| Supply Current For LCM | ICC    | —   | 20  | 30  | mA   |

# Interface

LCM PIN Definition

| Pin | Symbol          | Function                        |
|-----|-----------------|---------------------------------|
| 1   | LED-            | Power for LED backlight cathode |
| 2   | LED-            | Power for LED backlight cathode |
| 3   | LED+            | Power for LED backlight anode   |
| 4   | LED+            | Power for LED backlight anode   |
| 5   | NC(YU)          | No connect                      |
| 6   | NC(XL)          | No connect                      |
| 7   | NC(SPI_IIC_SEL) | No connect                      |
| 8   | /RESET          | Hardware reset                  |
| 9   | NC(CS)          | No connect                      |
| 10  | NC(SDA)         | No connect                      |
| 11  | NC(SCL)         | No connect                      |
| 12  | B0              | Data bus                        |
| 13  | B1              | Data bus                        |
| 14  | B2              | Data bus                        |
| 15  | B3              | Data bus                        |

|    |               |                                                       |
|----|---------------|-------------------------------------------------------|
| 16 | B4            | Data bus                                              |
| 17 | B5            | Data bus                                              |
| 18 | B6            | Data bus                                              |
| 19 | B7            | Data bus                                              |
| 20 | G0            | Data bus                                              |
| 21 | G1            | Data bus                                              |
| 22 | G2            | Data bus                                              |
| 23 | G3            | Data bus                                              |
| 24 | G4            | Data bus                                              |
| 25 | G5            | Data bus                                              |
| 26 | G6            | Data bus                                              |
| 27 | G7            | Data bus                                              |
| 28 | R0            | Data bus                                              |
| 29 | R1            | Data bus                                              |
| 30 | R2            | Data bus                                              |
| 31 | R3            | Data bus                                              |
| 32 | R4            | Data bus                                              |
| 33 | R5            | Data bus                                              |
| 34 | R6            | Data bus                                              |
| 35 | R7            | Data bus                                              |
| 36 | HSYNC         | Horizontal sync signal, default is negative polarity. |
| 37 | VSYNC         | Vertical sync signal, default is negative polarity.   |
| 38 | DCLK          | Dot-clock signal and oscillator source                |
| 39 | NC(HDIR)      | No connect                                            |
| 40 | NC(VDIR)      | No connect                                            |
| 41 | VCC           | Power Supply                                          |
| 42 | VCC           | Power Supply                                          |
| 43 | NC(YD)        | No connect                                            |
| 44 | NC(XR)        | No connect                                            |
| 45 | NC(PARA_SERI) | No connect                                            |
| 46 | NC(BIST_EN)   | No connect                                            |
| 47 | NC(ENPROG)    | No connect                                            |
| 48 | NC            | No connect                                            |

|    |             |                                                               |
|----|-------------|---------------------------------------------------------------|
| 49 | NC          | No connect                                                    |
| 50 | NC          | No connect                                                    |
| 51 | NC(DISPLAY) | No connect                                                    |
| 52 | DE          | Data input enable. Display access is enabled when DE is "H" . |
| 53 | GND         | Ground                                                        |
| 54 | GND         | Ground                                                        |

# Contour Drawing

