

TFT DISPLAY SPECIFICATION



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SPECIFICATION

MODULE NO.: WF57TZGCDNN0#

General Specifications

| Item | Dimension | Unit |
|--------------------------------|-----------------------------------|------|
| Size | 5.7 | inch |
| Dot Matrix | 320 x RGBx240(TFT) | dots |
| Module dimension | 141.12(W) x 101.55(H) x 6.05(D) | mm |
| Active area | 115.2 x 86.40 | mm |
| Dot pitch | 0.12 x 0.36 | mm |
| LCD type | TFT, Normally White, Transmissive | |
| View Direction | 12 o'clock | |
| Gray Scale Inversion Direction | 6 o'clock | |
| TFT Drive IC | HX8218+HX8615 or Equivalent | |
| Interface | 24-bit RGB | |
| Aspect Ratio | 4:3 | |
| Backlight Type | LED, Normally White | |
| Touch Panel | Without touch panel | |
| Surface | Anti-Glare | |

Absolute Maximum Ratings

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

Electrical Characteristics

Operating conditions

| Item | Symbol | Condition | Min | Typ | Max | Unit |
|----------------------------|--------|-----------|---------|------|---------|------|
| Supply Voltage For Logic | VCC | — | 3.2 | 3.3 | 3.4 | V |
| Input High Volt. | VIH | — | 0.7 Vcc | — | Vcc | V |
| Input Low Volt. | VIL | — | 0 | — | 0.3 Vcc | V |
| LCD Driving Supply Voltage | VGH *1 | Ta=25°C | 15 | 16 | 17 | V*3 |
| | VGL*2 | | -6 | -5 | -4 | |
| | VcomH | | — | 4.5 | — | |
| | VcomL | | — | -0.5 | — | |
| Supply Current | IVCC | VCC=3.3V | — | 30 | 45 | mA |

LED driving conditions

| Parameter | Symbol | Min. | Typ. | Max. | Unit |
|-------------------|--------|------|--------|------|------|
| LED current | | - | 140 | - | mA |
| Power Consumption | | 1204 | - | 1470 | mW |
| LED voltage | VBL+ | 8.6 | 9.5 | 10.5 | V |
| LED Life Time | | | 50,000 | | Hr |

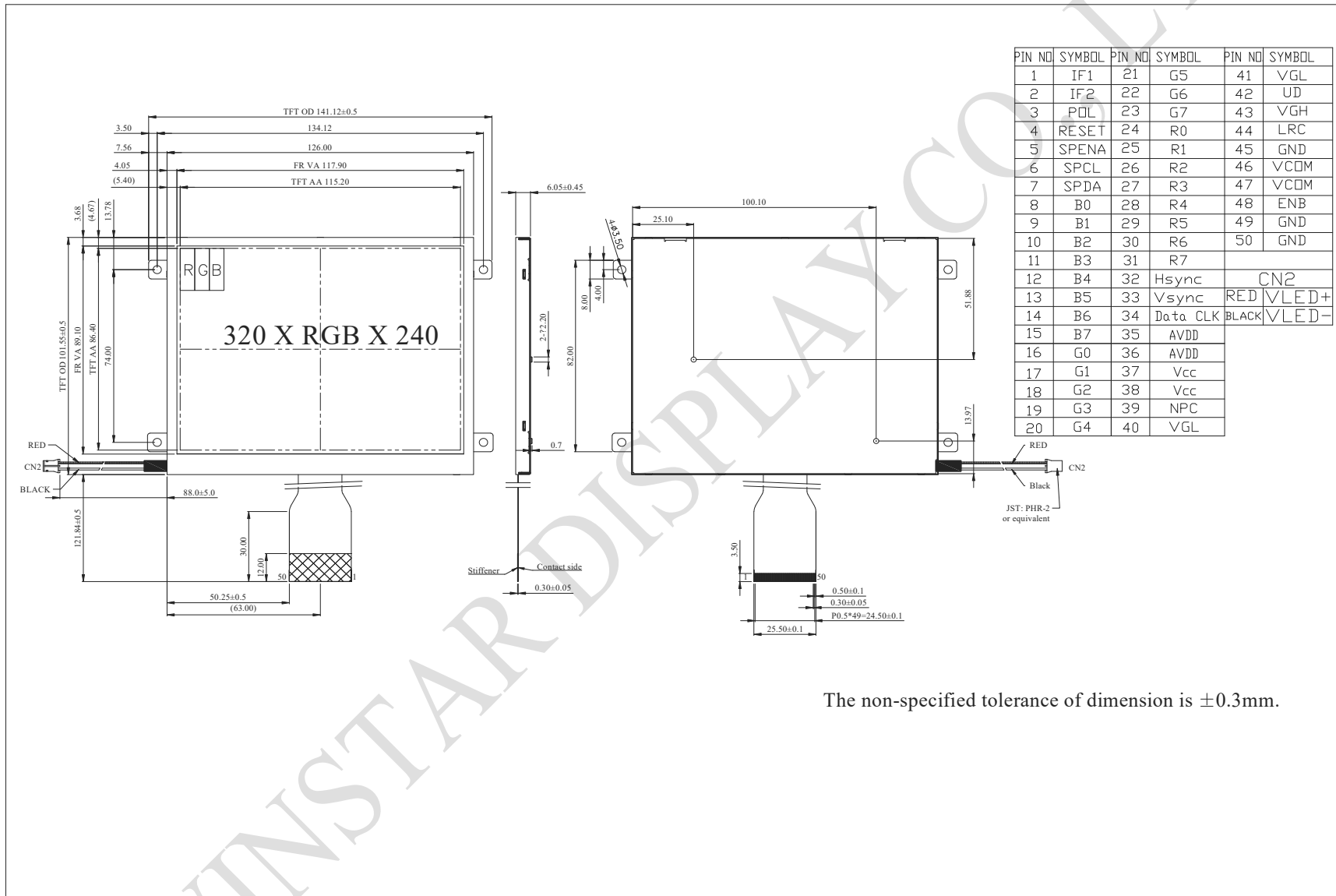
Interface

LCM PIN Definition

| Pin | Symbol | Function |
|-----|--------|--------------------------------------------------|
| 1 | IF1 | Input data format control |
| 2 | IF2 | Input data format control |
| 3 | POL | Polarity Signal connect to VCOM driving circuit. |
| 4 | RESET | Hardware reset |
| 5 | SPENA | Chip select |
| 6 | SPCL | Serial Clock |
| 7 | SPDA | Serial Data |
| 8 | B0 | Blue Data bit |
| 9 | B1 | Blue Data bit |
| 10 | B2 | Blue Data bit |
| 11 | B3 | Blue Data bit |
| 12 | B4 | Blue Data bit |
| 13 | B5 | Blue Data bit |
| 14 | B6 | Blue Data bit |
| 15 | B7 | Blue Data bit |
| 16 | G0 | Green Data bit |
| 17 | G1 | Green Data bit |
| 18 | G2 | Green Data bit |
| 19 | G3 | Green Data bit |
| 20 | G4 | Green Data bit |
| 21 | G5 | Green Data bit |
| 22 | G6 | Green Data bit |
| 23 | G7 | Green Data bit |
| 24 | R0 | Red Data bit |
| 25 | R1 | Red Data bit |
| 26 | R2 | Red Data bit |
| 27 | R3 | Red Data bit |
| 28 | R4 | Red Data bit |
| 29 | R5 | Red Data bit |
| 30 | R6 | Red Data bit |

| | | |
|----|----------|------------------------------------------------------------|
| 31 | R7 | Red Data bit |
| 32 | Hsync | Horizontal synchronous signal |
| 33 | Vsync | Vertical synchronous signal |
| 34 | Data CLK | Dot data clock |
| 35 | AVDD | Analog power: 4.5V~5.5V |
| 36 | AVDD | Analog power: 4.5V~5.5V |
| 37 | VCC | Digital power: 3.2V~3.4V |
| 38 | VCC | Digital power: 3.2V~3.4V |
| 39 | NPC | NTSC/PAL mode Auto detection result H:NTSC/L:PAL |
| 40 | VGL | Gate off power |
| 41 | VGL | Gate off power |
| 42 | UD | Up/down selection |
| 43 | VGH | Gate on power |
| 44 | LRC | Shift direction of device internal shift register control. |
| 45 | GND | System ground pin of the IC. Connect to system ground. |
| 46 | VCOM | VCOM driving input |
| 47 | VCOM | VCOM driving input |
| 48 | ENB | Signal to settle the horizontal display position |
| 49 | GND | System ground pin of the IC. Connect to system ground. |
| 50 | GND | System ground pin of the IC. Connect to system ground. |

Contour Drawing



The non-specified tolerance of dimension is $\pm 0.3\text{mm}$.