Winstar Display Co., LTD
華凌光電股份有限公司
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# SPECIFICATION

## MODULE NO.: WF57-320240QD#004-FC

# General Specifications

| Item | Dimension | Unit |
|---|---|---|
| Size | 5.7 | inch |
| Dot Matrix | 320 x RGBx240(TFT) | dots |
| Module dimension | 141.12x 101.55 x 13.5 | mm |
| Active area | 115.2 x 86.4 | 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 | |
| Backlight Type | LED ,Normally White | |
| Controller IC | SSD1963 | |
| Interface | Digital 8080 family MPU 8bit/16bit | |
| With /Without TP | Without TP | |
| Surface | No Anti-Glare | |

*Color tone slight changed by temperature and driving voltage.

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# Absolute Maximum Ratings

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

# Electrical Characteristics

**Operating conditions: (CON3.Pin1=GND, Pin2=VDD)**

| Item | Symbol | Condition | Min | Typ | Max | Unit |
|---|---|---|---|---|---|---|
| Supply Voltage For LCM | VDD | — | 3.0 | 3.1 | 3.3 | V |
| Supply Current For LCM | IDD | — | — | 350 | 550 | mA |

**Backlight driving conditions (CON3.Pin33,34=VLED-, Pin35,36=VLED+)**

| Parameter | Symbol | Min. | Typ. | Max. | Unit |
|---|---|---|---|---|---|
| Operation Current For LED Driver | VLED=5V | 250 | — | 375 | mA |
| Power Consumption | VLED=5V | 1250 | — | 1875 | mW |
| Supply Voltage For LED Driver | VLED+ | — | 5 | — | V |
| LED Life Time | | — | 50,000 | — | Hr |

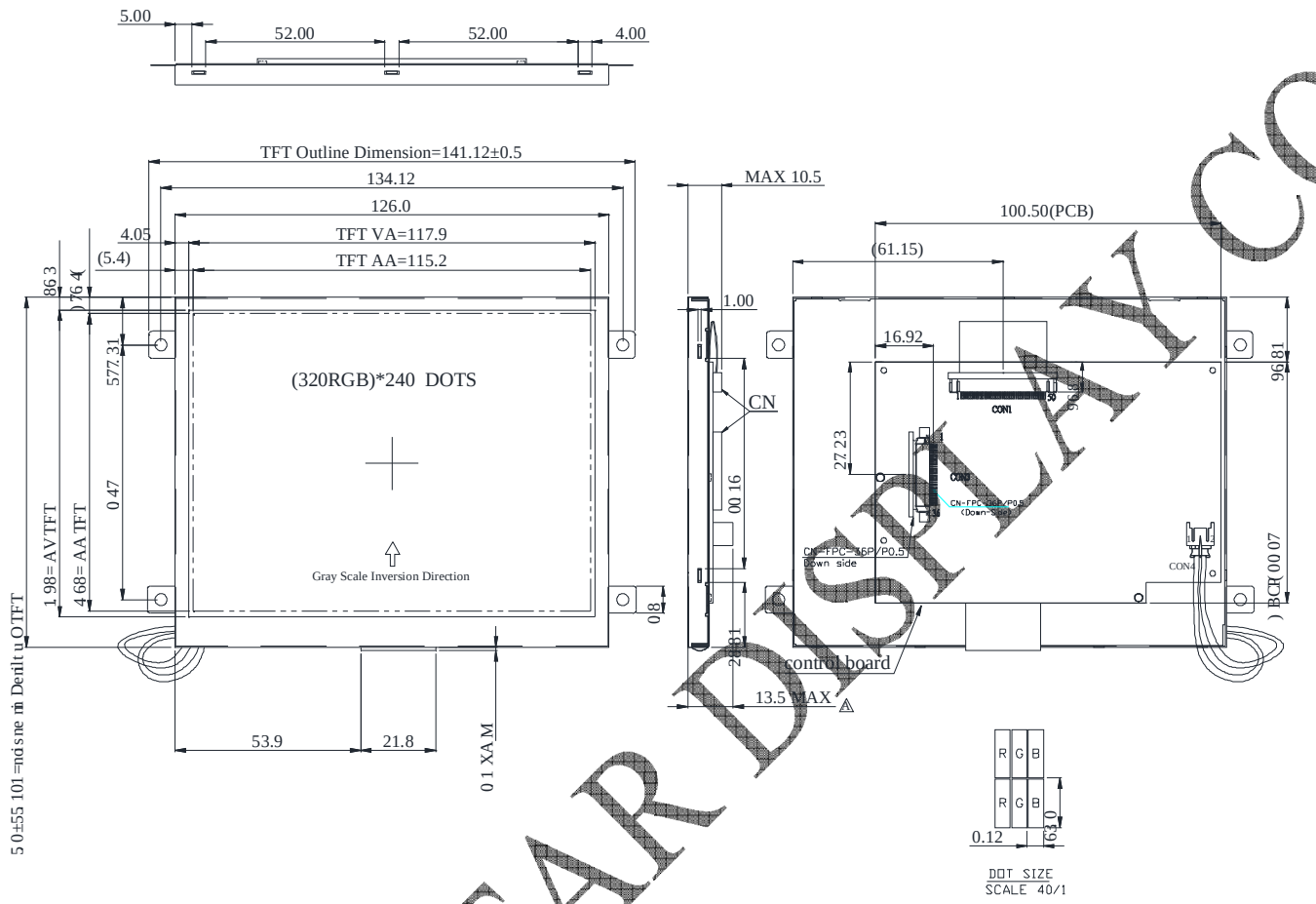
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# Interface

| Pin | Symbol | Function |
|---|---|---|
| 1 | GND | System ground pin of the IC .<br>Connect to system ground. |
| 2 | VDD | Power Supply : +3.3V |
| 3 | BLE | Backlight control signal , H: On \ L: Off |
| 4 | D/C | Data/Command select |
| 5 | WR | Write strobe signal |
| 6 | RD | Read strobe signal |
| 7 | DB0 | Data bus |
| 8 | DB1 | Data bus |
| 9 | DB2 | Data bus |
| 10 | DB3 | Data bus |
| 11 | DB4 | Data bus |
| 12 | DB5 | Data bus |
| 13 | DB6 | Data bus |
| 14 | DB7 | Data bus |
| 15 | DB8 | Data bus (When select 8bits Mode, this pin is NC) |
| 16 | DB9 | Data bus (When select 8bits Mode, this pin is NC) |
| 17 | DB10 | Data bus (When select 8bits Mode, this pin is NC) |
| 18 | DB11 | Data bus (When select 8bits Mode, this pin is NC) |
| 19 | DB12 | Data bus (When select 8bits Mode, this pin is NC) |
| 20 | DB13 | Data bus (When select 8bits Mode, this pin is NC) |
| 21 | DB14 | Data bus (When select 8bits Mode, this pin is NC) |
| 22 | DB15 | Data bus (When select 8bits Mode, this pin is NC) |
| 23 | NC | No connect |
| 24 | NC | No connect |
| 25 | CS | Chip select |
| 26 | RESET | Hardware reset |
| 27 | L/R | Left / right selection; Default L/R=H |
| 28 | U/D | Up/down selection; ; Default U/D=L |
| 29 | NC | No connect |
| 30 | NC | No connect |
| 31 | NC | No connect |
| 32 | NC | No connect |
| 33 | VLED- | Power for LED Driver IC(GND) |
| 34 | VLED- | Power for LED Driver IC(GND) |
| 35 | VLED+ | Power for LED Driver IC(+5V) |
| 36 | VLED+ | Power for LED Driver IC(+5V) |

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# Contour Drawing




CON3

| PIN NO. | SYMBOL | PIN NO. | SYMBOL |
|---|---|---|---|
| 1 | GND | 19 | DB12 |
| 2 | VDD | 20 | DB13 |
| 3 | BL_E | 21 | DB14 |
| 4 | D/C | 22 | DB15 |
| 5 | WR | 23 | NC |
| 6 | RD | 24 | NC |
| 7 | DB0 | 25 | CS |
| 8 | DB1 | 26 | RESET |
| 9 | DB2 | 27 | LR |
| 10 | DB3 | 28 | UD |
| 11 | DB4 | 29 | NC |
| 12 | DB5 | 30 | NC |
| 13 | DB6 | 31 | NC |
| 14 | DB7 | 32 | NC |
| 15 | DB8 | 33 | VLED- |
| 16 | DB9 | 34 | VLED- |
| 17 | DB10 | 35 | VLED+ |
| 18 | DB11 | 36 | VLED+ |

The non-specified tolerance of dimension is ±0.3mm.

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