



## SPECIFICATION

**MODULE NO.: WF102QTIFGDBN0#**

### General Specifications

| Item                           | Dimension                          | Unit |
|--------------------------------|------------------------------------|------|
| Size                           | 10.2                               | inch |
| Dot Matrix                     | 800 RGB x 480                      | dots |
| Module dimension               | 235.0 (H) x 145.0 (V) x 10.2 (D)   | mm   |
| Active area                    | 222.0(W) x 132.48(H)               | mm   |
| Dot pitch                      | 0.0925(W) x 0.276(H)               | 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                        | 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

Operating conditions: (CON2.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    | —         | —   | 160 | 225 | mA   |

Backlight driving conditions (CON2.Pin33,34=VLED-, Pin35,36=VLED+)

| Parameter                        | Symbol  | Min.   | Typ. | Max. | Unit |
|----------------------------------|---------|--------|------|------|------|
| Operation Current For LED Driver | VLED=5V | 500    | —    | 750  | mA   |
| Power Consumption                | VLED=5V | 2500   | —    | 3750 | mW   |
| Supply Voltage For LED Driver    | VLED+   | —      | 5    | —    | V    |
| LED Life Time                    | —       | 20,000 | —    | —    | Hr   |

# 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  | RST    | 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)                               |

# Contour Drawing

