

# TFT DISPLAY SPECIFICATION



**WINSTAR Display Co.,Ltd.**  
**華凌光電股份有限公司**



## SPECIFICATION

**MODULE NO.: WF101JSYAHDNN0#**

### General Specifications

| Item             | Dimension                             | Unit |
|------------------|---------------------------------------|------|
| Size             | 10.1                                  | inch |
| Dot Matrix       | 1024 RGB× 600                         | dots |
| Module dimension | 235.0(W) ×143.0(H) × 5.05(D)          | mm   |
| Active area      | 222.72 (H) × 125.28(V)                | mm   |
| Pixel pitch      | 0.2175(W) × 0.2088(H)                 | mm   |
| LCD type         | TFT, Normally Black, Transmissive     |      |
| TFT Interface    | 24 bit RGB                            |      |
| TFT Driver IC    | EK79001HN-S+EK73215BCGA or equivalent |      |
| Viewing Angle    | 85/85/85/85                           |      |
| Aspect Ratio     | 16:9                                  |      |
| Backlight Type   | LED, Normally White                   |      |
| Touch Panel      | Without Touch Panel                   |      |
| 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

Typical Operation Conditions (At Ta = 25 °C,)

| Item                                 | Symbol | Min        | Typ   | Max        | Unit |
|--------------------------------------|--------|------------|-------|------------|------|
| Digital Power Supply Voltage For LCD | Vcc    | 3.0        | 3.3   | 3.6        | V    |
| Analog Power Supply Voltage          | AVDD   | 9.89       | 10.2  | 10.5       | V    |
| Gate On Power Supply Voltage         | VGH    | 19.4       | 20.0  | 20.6       | V    |
| Gate Off Power Supply Voltage        | VGL    | -10.3      | -10.0 | -9.7       | V    |
| Common Power Supply Voltage          | VCOM   | 4.0        | 4.3   | 4.6        | V    |
| Input logic high voltage             | VIH    | 0.7<br>Vcc | -     | Vcc        | V    |
| Input logic low voltage              | VIL    | 0          | -     | 0.3<br>Vcc | V    |

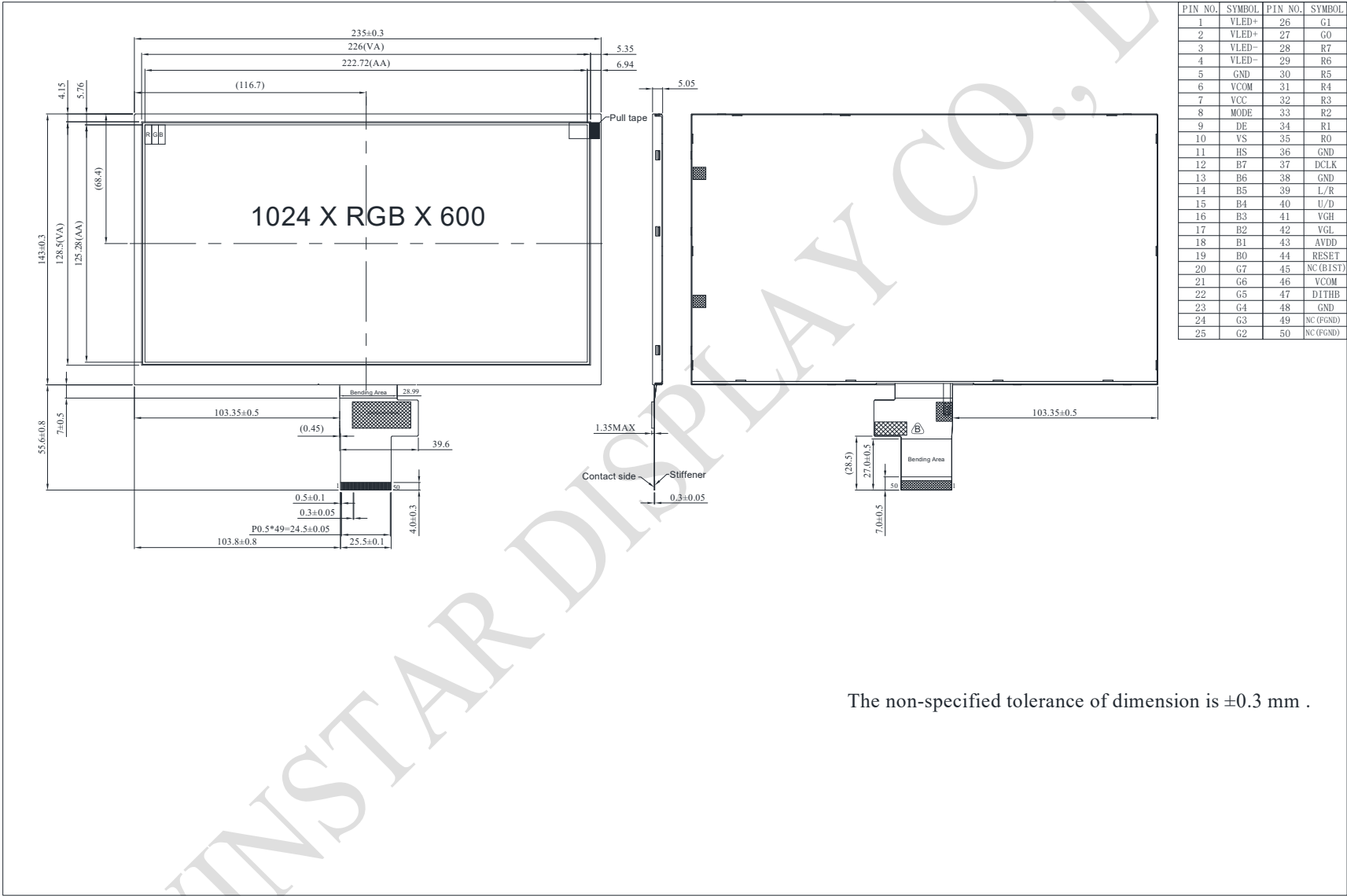
# Interface

## TFT LCD Module

| Pin No. | Symbol | Function                    |
|---------|--------|-----------------------------|
| 1       | VLED+  | LED Anode                   |
| 2       | VLED+  | LED Anode                   |
| 3       | VLED-  | LED Cathode                 |
| 4       | VLED-  | LED Cathode                 |
| 5       | GND    | Ground                      |
| 6       | VCOM   | Common voltage              |
| 7       | VCC    | Power for Digital Circuit   |
| 8       | MODE   | DE/SYNC mode select         |
| 9       | DE     | Data Input Enable (DEN)     |
| 10      | VS     | Vertical Sync Input (VSD)   |
| 11      | HS     | Horizontal Sync Input (HSD) |
| 12      | B7     | Blue data(MSB)              |
| 13      | B6     | Blue data                   |
| 14      | B5     | Blue data                   |
| 15      | B4     | Blue data                   |
| 16      | B3     | Blue data                   |
| 17      | B2     | Blue data                   |
| 18      | B1     | Blue data                   |
| 19      | B0     | Blue data(LSB)              |
| 20      | G7     | Green data(MSB)             |
| 21      | G6     | Green data                  |
| 22      | G5     | Green data                  |
| 23      | G4     | Green data                  |
| 24      | G3     | Green data                  |
| 25      | G2     | Green data                  |
| 26      | G1     | Green data                  |
| 27      | G0     | Green data(LSB)             |
| 28      | R7     | Red data(MSB)               |
| 29      | R6     | Red data                    |
| 30      | R5     | Red data                    |
| 31      | R4     | Red data                    |

|    |          |                          |
|----|----------|--------------------------|
| 32 | R3       | Red data                 |
| 33 | R2       | Red data                 |
| 34 | R1       | Red data                 |
| 35 | R0       | Red data(LSB)            |
| 36 | GND      | Power Ground             |
| 37 | DCLK     | Sample clock (CLK)       |
| 38 | GND      | Power Ground             |
| 39 | L/R      | Left / right selection   |
| 40 | U/D      | Up/down selection        |
| 41 | VGH      | Gate ON Voltage          |
| 42 | VGL      | Gate OFF Voltage         |
| 43 | AVDD     | Power for Analog Circuit |
| 44 | RESET    | Global reset pin.        |
| 45 | NC(BIST) | No connection            |
| 46 | VCOM     | Common Voltage           |
| 47 | DITHB    | Dithering function       |
| 48 | GND      | Power Ground             |
| 49 | NC(FGND) | No connection            |
| 50 | NC(FGND) | No connection            |

# Contour Drawing



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