

# TFT DISPLAY SPECIFICATION



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



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### SPECIFICATION

MODULE NO.: WF101LSYAPLNN0#

### General Specifications

| Item              | Dimension                     | Unit |
|-------------------|-------------------------------|------|
| Screen Diagonal   | 10.1                          | inch |
| Number of Pixels  | 1280 x 3(R GB) x 800          | dots |
| Module dimension  | 230.56 x 155.01 x 6.4         | mm   |
| Active area       | 216.96 (H) x 135.6(V)         | mm   |
| Pixel pitch       | 0.1695 x 0.1695               | mm   |
| Display Mode      | Normally Black , Transmissive |      |
| Viewing Angle     | 80/80/80/80                   |      |
| Pixel Arrangement | R.G.B. Vertical Stripe        |      |
| TFT Drive IC      | EK79202B1 or Equivalent       |      |
| Backlight Type    | LED, Normally White           |      |
| Aspect Ratio      | 16:10                         |      |
| TFT Interface     | LVDS                          |      |
| 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

| Item          | Symbol | Values |       |       | Unit |
|---------------|--------|--------|-------|-------|------|
|               |        | Min.   | Typ.  | MAX.  |      |
| Power voltage | VCC    | 3.0    | 3.3   | 3.5   | V    |
|               | VGH    | 17.5   | 18.0  | 18.5  | V    |
|               | VGL    | -11.5  | -10.5 | -10.0 | V    |
|               | VSP    | —      | 5.5   | —     | V    |
|               | VSN    | —      | -5.5  | —     | V    |

# Interface

## 1.Interface Connector

| Pin No. | Symbol | I/O | Function                       |
|---------|--------|-----|--------------------------------|
| 1       | NC     | -   | No connection                  |
| 2       | VCC    | P   | Power Supply                   |
| 3       | VCC    | P   | Power Supply                   |
| 4       | NC     | -   | No connection                  |
| 5       | NC     | -   | No connection                  |
| 6       | NC     | -   | No connection                  |
| 7       | GND    | P   | Ground                         |
| 8       | Rxin0- | I   | -LVDS Differential Data Input  |
| 9       | Rxin0+ | I   | +LVDS Differential Data Input  |
| 10      | GND    | P   | Ground                         |
| 11      | Rxin1- | I   | -LVDS Differential Data Input  |
| 12      | Rxin1+ | I   | +LVDS Differential Data Input  |
| 13      | GND    | P   | Ground                         |
| 14      | Rxin2- | I   | -LVDS Differential Data Input  |
| 15      | Rxin2+ | I   | +LVDS Differential Data Input  |
| 16      | GND    | P   | Ground                         |
| 17      | RxCLK- | I   | -LVDS Differential Clock Input |
| 18      | RxCLK+ | I   | +LVDS Differential Clock Input |
| 19      | GND    | P   | Ground                         |
| 20      | Rxin3- | I   | -LVDS Differential Data Input  |
| 21      | Rxin3+ | I   | +LVDS Differential Data Input  |
| 22      | GND    | P   | Ground                         |
| 23      | NC     | -   | No connection                  |
| 24      | NC     | -   | No connection                  |
| 25      | GND    | P   | Ground                         |
| 26      | NC     | -   | No connection                  |
| 27      | NC     | -   | No connection                  |
| 28      | NC     | -   | No connection                  |
| 29      | NC     | -   | No connection                  |
| 30      | GND    | P   | Ground                         |
| 31      | NC     | -   | No connection                  |

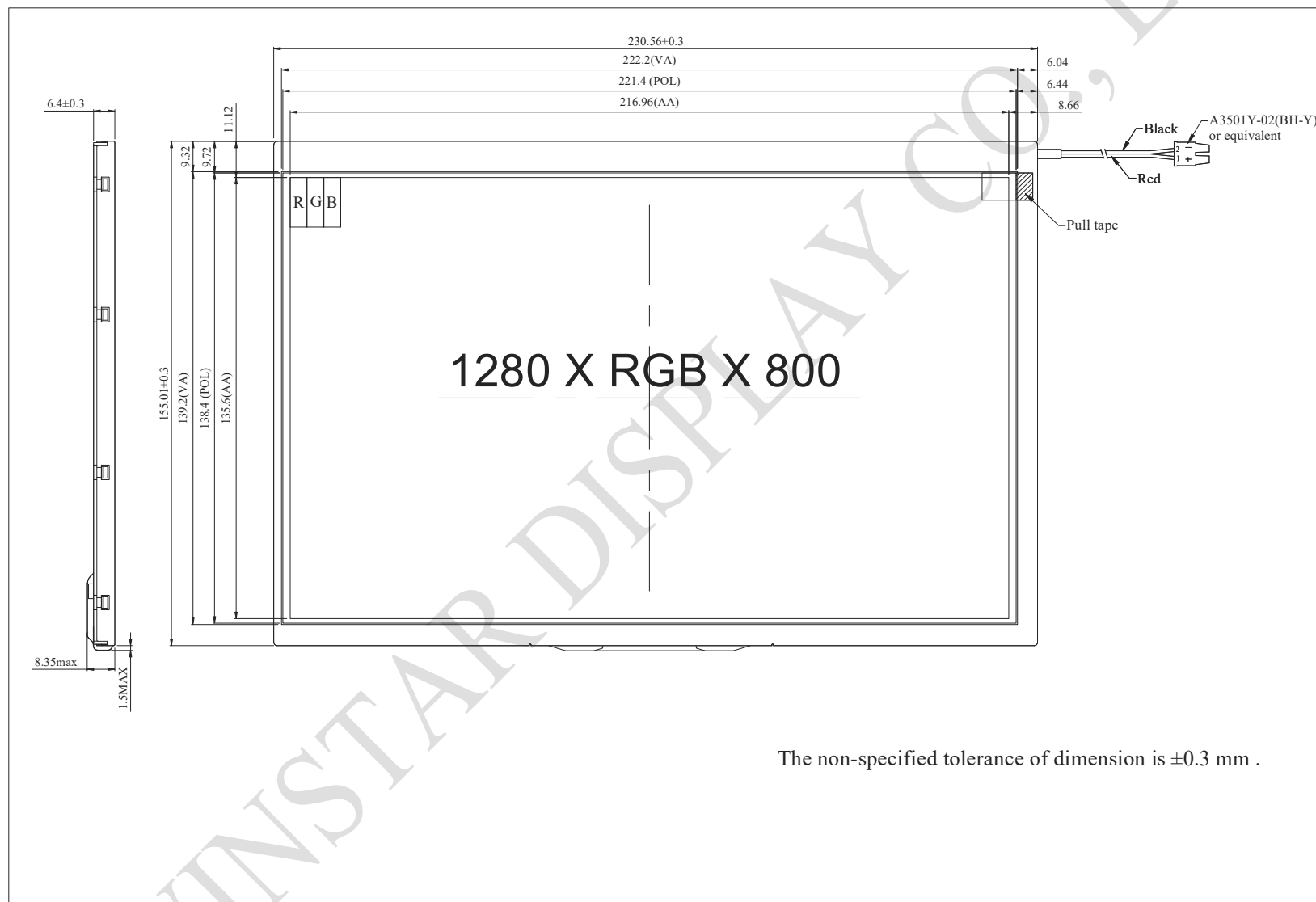
|    |     |   |                  |
|----|-----|---|------------------|
| 32 | NC  | - | No connection    |
| 33 | NC  | - | No connection    |
| 34 | NC  | - | No connection    |
| 35 | VGL | P | Gate OFF Voltage |
| 36 | NC  | - | No connection    |
| 37 | NC  | - | No connection    |
| 38 | VGH | P | Gate ON Voltage  |
| 39 | NC  | - | No connection    |
| 40 | NC  | - | No connection    |

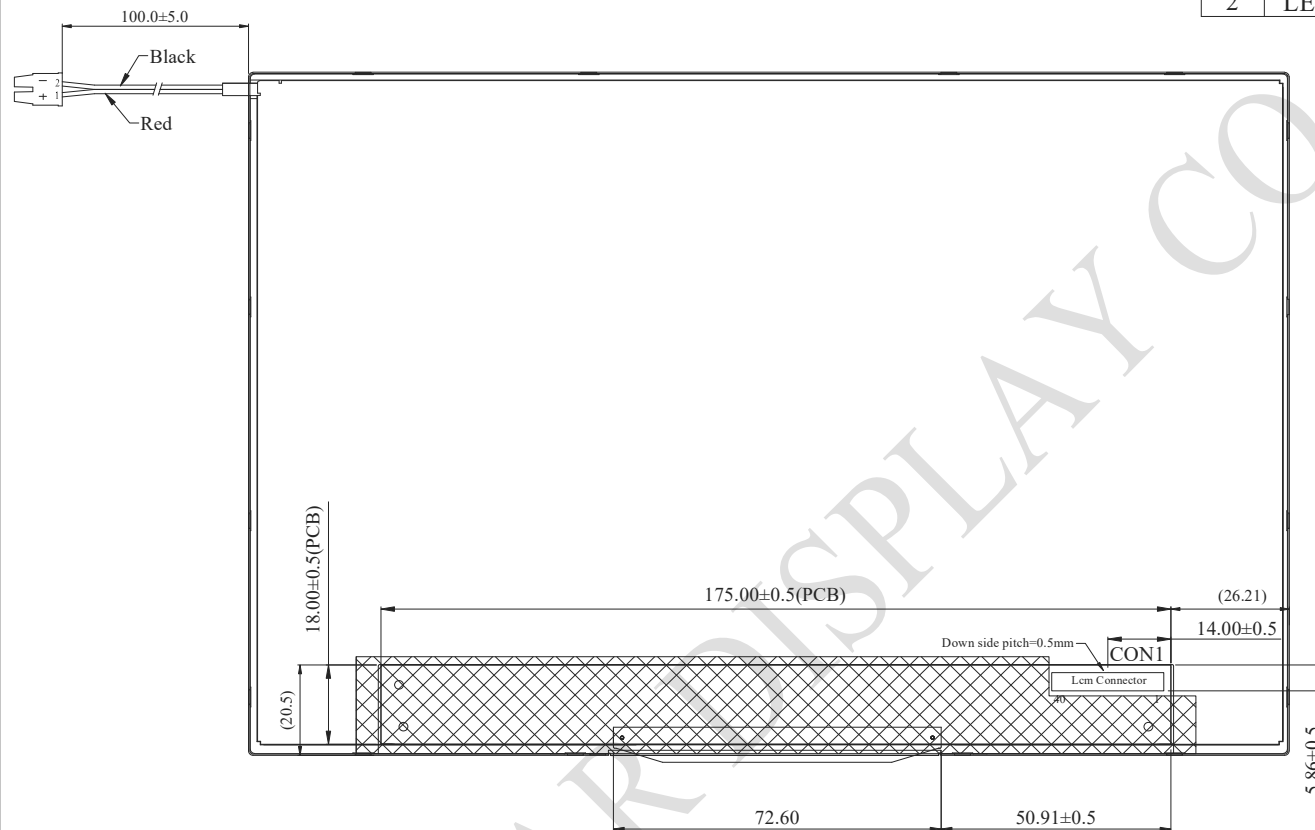
I: input, O: output, P: Power

## 2. Backlight Driving Part

| Pin No. | Symbol | Function            |
|---------|--------|---------------------|
| 1       | LED+   | Red, LED_ Anode     |
| 2       | LED-   | Black, LED_ Cathode |

# Contour Drawing





| PIN NO | SYMBOL |
|--------|--------|
| 1      | LED+   |
| 2      | LED-   |

CON1

| PIN NO. | SYMBOL | PIN NO. | SYMBOL |
|---------|--------|---------|--------|
| 1       | NC     | 21      | Rxin3+ |
| 2       | VCC    | 22      | GND    |
| 3       | VCC    | 23      | NC     |
| 4       | NC     | 24      | NC     |
| 5       | NC     | 25      | GND    |
| 6       | NC     | 26      | NC     |
| 7       | GND    | 27      | NC     |
| 8       | Rxin0- | 28      | NC     |
| 9       | Rxin0+ | 29      | NC     |
| 10      | GND    | 30      | GND    |
| 11      | Rxin1- | 31      | NC     |
| 12      | Rxin1+ | 32      | NC     |
| 13      | GND    | 33      | NC     |
| 14      | Rxin2- | 34      | NC     |
| 15      | Rxin2+ | 35      | VGL    |
| 16      | GND    | 36      | NC     |
| 17      | RxCLK- | 37      | NC     |
| 18      | RxCLK+ | 38      | VGH    |
| 19      | GND    | 39      | NC     |
| 20      | Rxin3- | 40      | NC     |

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