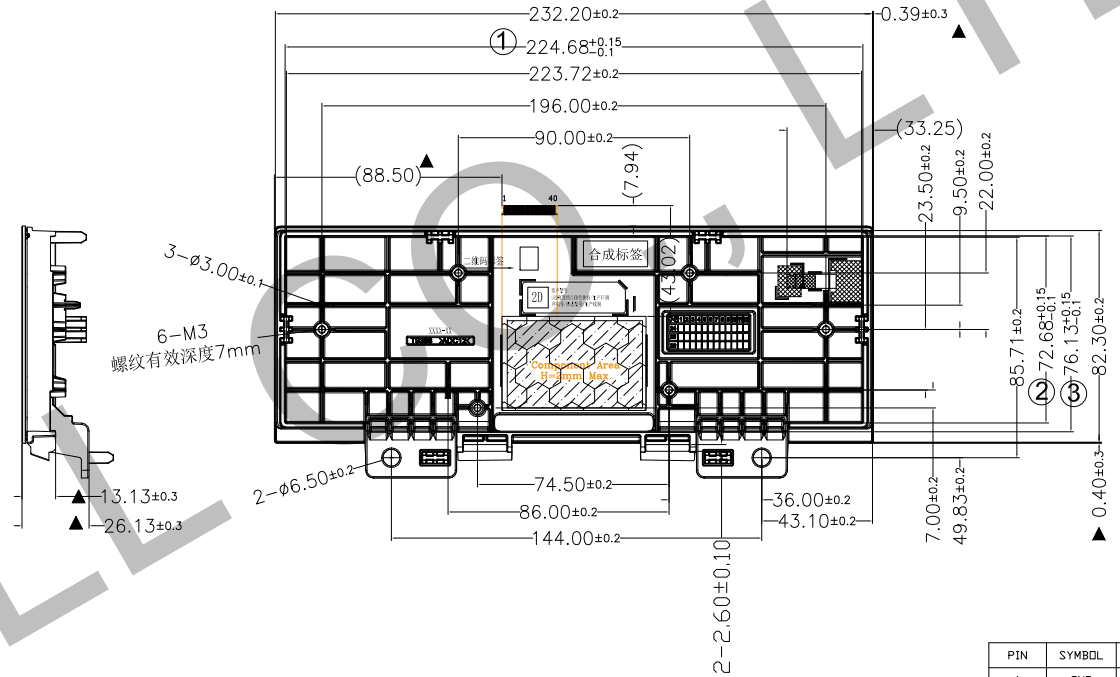
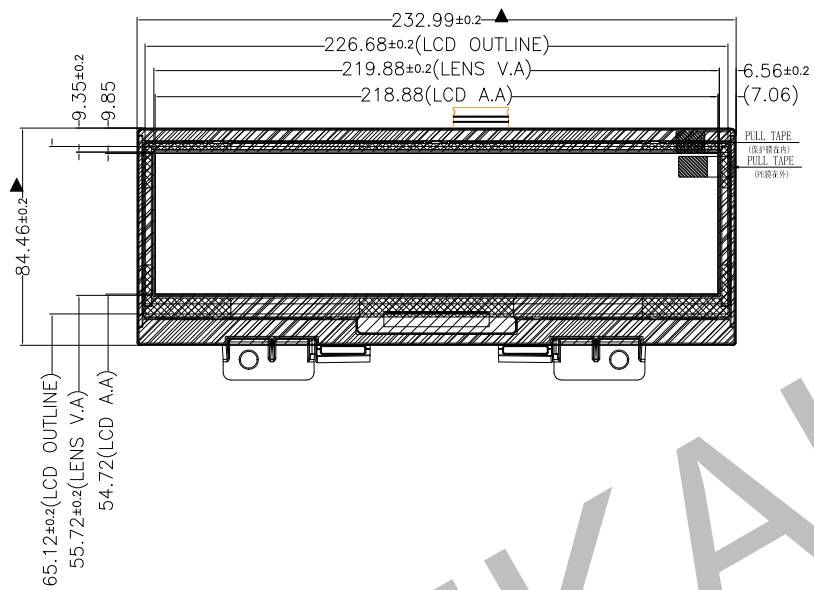




| PIN | SYMBOL   | PIN | SYMBOL  |
|-----|----------|-----|---------|
| 1   | GND      | 21  | GND     |
| 2   | NC       | 22  | OIN     |
| 3   | VCC      | 23  | OIP     |
| 4   | VCC      | 24  | GND     |
| 5   | VCC      | 25  | DCLKN   |
| 6   | NC       | 26  | DCLKP   |
| 7   | BISTEN   | 27  | GND     |
| 8   | ATREN    | 28  | O2N     |
| 9   | GND      | 29  | O2P     |
| 10  | RL       | 30  | GND     |
| 11  | TB       | 31  | O3N     |
| 12  | I2CEN    | 32  | O3P     |
| 13  | RESET    | 33  | GND     |
| 14  | STBYB    | 34  | CSB     |
| 15  | GND      | 35  | SCL     |
| 16  | Fail_det | 36  | SDA     |
| 17  | NC       | 37  | I2C_SDA |
| 18  | GND      | 38  | VDD_OTP |
| 19  | OON      | 39  | I2C_SCL |
| 20  | OOP      | 40  | GND     |

## General specification

| Item                                                         | specifications         | Unit  |
|--------------------------------------------------------------|------------------------|-------|
| Active screen size                                           | 8.88 inch Diagonal     | -     |
| Display resolution                                           | 1920x RGB x480         | pixel |
| Module size (W x H x T)                                      | 232.99 × 84.46 × 26.13 | mm    |
| Active area (W x H)                                          | 218.88 x 54.72         | mm    |
| Pixel pitch ( W×H )                                          | 0.114x 0.114           | mm    |
| Interface                                                    | LVDS                   | -     |
| Module weight                                                | TBD±10%                | g     |
| Our components and processes are compliant to RoHS standard. |                        |       |

| Item                              | specifications |
|-----------------------------------|----------------|
| LCD type                          | a-Si TFT       |
| LCD mode                          | Normally Black |
| Polarizer mode                    | Transmissive   |
| Pixel arrangement                 | RGB-stripe     |
| Backlight type                    | LED            |
| Viewing direction(Gray inversion) | 85/85/85/85    |

## Interface pin

| Pin No. | Symbol   | Function                                                                                                                                                                                                                              |
|---------|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1       | GND      | Ground                                                                                                                                                                                                                                |
| 2       | NC       | Not connect                                                                                                                                                                                                                           |
| 3~5     | VCC      | Power input for main and I/O power                                                                                                                                                                                                    |
| 6       | NC       | Not connect                                                                                                                                                                                                                           |
| 7       | BISTEN   | Normal Operation/BIST pattern select.                                                                                                                                                                                                 |
| 8       | ATREN    | Not connect                                                                                                                                                                                                                           |
| 9       | GND      | Ground                                                                                                                                                                                                                                |
| 10      | RL       | Source Right or Left sequence control.<br>SHLR= 0, shift left: last data =S1←S2←S3.....←S1920= first data.<br>SHLR= 1, shift right: first data = S1→S2→S3.....→S1920= last data.                                                      |
| 11      | TB       | For Up or Down sequence control.<br>UPDN = 1, U2D sequence<br>UPDN = 0, D2U sequence                                                                                                                                                  |
| 12      | I2CEN    | Enable I2C interface.<br>I2CEN = 1, enable I2C interface.<br>I2CEN = 0, disable I2C interface and enable SPI.                                                                                                                         |
| 13      | RESET    | Global reset pin.<br>GRB = 1, normal operation.<br>GRB = 0, the driver is in reset state.<br>Suggest to connect with an RC reset circuit for stability.                                                                               |
| 14      | STBYB    | Standby mode.<br>STBYB = 1, normal operation.<br>STBYB = 0, timing controller and source driver will turn off and all output are                                                                                                      |
| 15      | GND      | Ground                                                                                                                                                                                                                                |
| 16      | FAIL_DET | For ASIL detection results output.<br>ASIL is including as below<br>Power abnormal<br>System abnormal (HV/DE/CLK)<br>Gate abnormal (STV/CKV)<br>SD abnormal                                                                           |
| 17      | NC       | Not connect                                                                                                                                                                                                                           |
| 18      | GND      | Ground                                                                                                                                                                                                                                |
| 19      | D0N      | Data input                                                                                                                                                                                                                            |
| 20      | D0P      | Data input                                                                                                                                                                                                                            |
| 21      | GND      | Ground                                                                                                                                                                                                                                |
| 22      | D1N      | Data input                                                                                                                                                                                                                            |
| 23      | D1P      | Data input                                                                                                                                                                                                                            |
| 24      | GND      | Ground                                                                                                                                                                                                                                |
| 25      | DCLKN    | CLK input                                                                                                                                                                                                                             |
| 26      | DCLKP    | CLK input                                                                                                                                                                                                                             |
| 27      | GND      | Ground                                                                                                                                                                                                                                |
| 28      | D2N      | Data input                                                                                                                                                                                                                            |
| 29      | D2P      | Data input                                                                                                                                                                                                                            |
| 30      | GND      | Ground                                                                                                                                                                                                                                |
| 31      | D3N      | Data input                                                                                                                                                                                                                            |
| 32      | D3P      | Data input                                                                                                                                                                                                                            |
| 33      | GND      | Ground                                                                                                                                                                                                                                |
| 34      | CSB      | Serial communication chip select for SPI.<br>SPI_CSB= 1, Not selected<br>SPI_CSB= 0, Selected<br>If not using SPI function, please tied to VCC.                                                                                       |
| 35      | SCL      | Serial communication clock pin.<br>Note: If I2CEN = 1 and not using I2C function,<br>please tied SPI SCL to GND for normal operation.                                                                                                 |
| 36      | SDA      | Serial Interface address and data input/output for SPI.<br>If not using SPI function, please floating                                                                                                                                 |
| 37      | I2C_SDA  | Serial communication clock pin for I2C interface<br>External pull high resistor, 4.7 KΩ, is needed.                                                                                                                                   |
| 38      | VDD_OTP  | Power input for OTP programming (9.85V).<br>Note1 : Leave this pin open or connect it to VDD when not programming OTP.<br>Note2 : The whole OTP programming procedure sequence (apply 9.85V to VPP pin) should complete in 6 seconds. |
| 39      | I2C_SCL  | Serial Interface address and data input/output for I2C interface.<br>External pull high resistor, 4.7 KΩ, is needed.                                                                                                                  |
| 40      | GND      | Ground                                                                                                                                                                                                                                |