



# SPECIFICATION

# OLED SPECIFICATION

Model No:

REA012832D

## General Specification

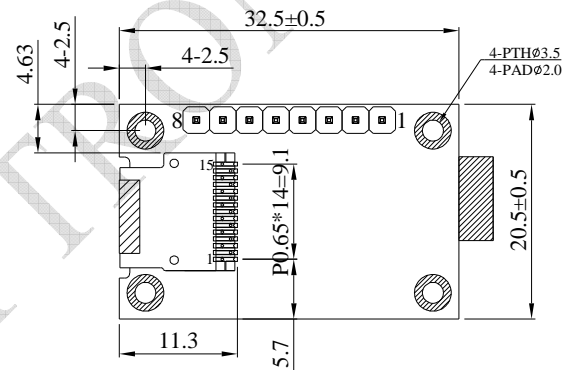
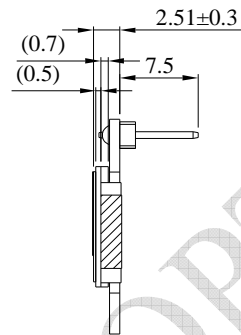
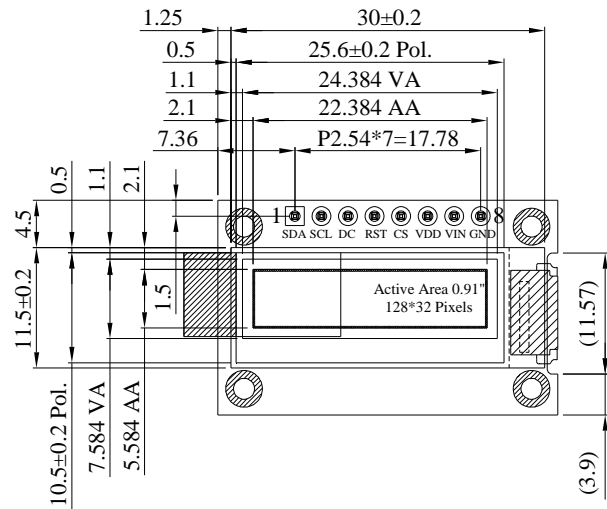
The Features is described as follow:

- Module dimension: 32.5 × 20.5 × 2.51 mm
- Active area: 22.384 × 5.584 mm
- Dot Matrix: 128 × 32
- Dot size: 0.152 × 0.152 mm
- Dot pitch: 0.175 × 0.175 mm
- Display Mode: Passive Matrix
- Duty: 1/32 Duty
- Display Color: Monochrome
- IC: SSD1306BZ
- Interface: SPI
- Size: 0.91 inch

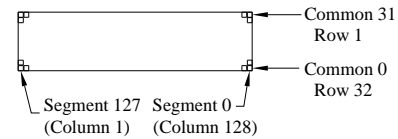
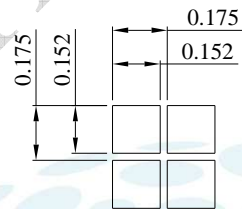
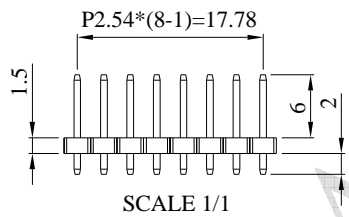
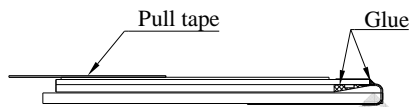
## Interface Pin Function

| No. | Symbol | Function  |
|-----|--------|---|
| 1   | SDA    | The I2C mode is selected, D2, D1 should be tied together and serve as SDAout, SDAin in application and D0 is the serial clock input, SCL.                             |
| 2   | SCL    |   |
| 3   | DC     | In I2C mode, this pin acts as SA0 for slave address selection. When 3-wire serial interface is selected, this pin must be connected to VSS.                           |
| 4   | RST    | This pin is reset signal input. When the pin is pulled LOW, initialization of the chip is executed. Keep this pin HIGH (i.e. connect to VDD) during normal operation. |
| 5   | CS     | This pin is the chip select input. (active LOW).  |
| 6   | VDD    | 2.8 ~ 3.3V Power supply pin for core logic operation.   |
| 7   | VIN    | 4.8 ~ 5.2V Power supply pin for core logic operation.   |
| 8   | GND    | This is a ground pin.   |

# Contour Drawing & Block Diagram



| PIN | SYMBOL |
|-----|--------|
| 1   | SDA    |
| 2   | SCL    |
| 3   | DC     |
| 4   | RST    |
| 5   | CS     |
| 6   | VDD    |
| 7   | VIN    |
| 8   | GND    |



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



## Absolute Maximum Ratings

| Parameter                  | Symbol | Min  | Max  | Unit |
|----------------------------|--------|------|------|------|
| Supply Voltage for Logic   | VDD    | 1.65 | 3.3  | V    |
| Supply Voltage for Logic   | VIN    | 4.0  | 6.0  | V    |
| Supply Voltage for Display | VCC    | 0    | 16.0 | V    |
| Operating Temperature      | TOP    | -40  | +80  | °C   |
| Storage Temperature        | TSTG   | -40  | +85  | °C   |

## Electrical Characteristics

### DC Electrical Characteristics

| Item                              | Symbol | Condition | Min     | Typ  | Max     | Unit |
|-----------------------------------|--------|-----------|---------|------|---------|------|
| Supply Voltage for Logic          | VDD    | —         | 2.8     | 3.0  | 3.3     | V    |
| Supply Voltage for Logic          | VIN    | —         | 4.8     | 5.0  | 5.2     | V    |
| Supply Voltage for Display        | VCC    | —         | 7.0     | 7.5  | 8.0     | V    |
| Input High Volt.                  | VIH    | —         | 0.8×VDD | —    | VDDIO   | V    |
| Input Low Volt.                   | VIL    | —         | 0       | —    | 0.2×VDD | V    |
| Output High Volt.                 | VOH    | —         | 0.9×VDD | —    | VDDIO   | V    |
| Output Low Volt.                  | VOL    | —         | 0       | —    | 0.1×VDD | V    |
| 50% Check Board operating Current | ICC    | Vcc=7.5V  | —       | 13.0 | 26.0    | mA   |