



SPECIFICATION

OLED SPECIFICATION

Model No:

REX009616A

General Specification

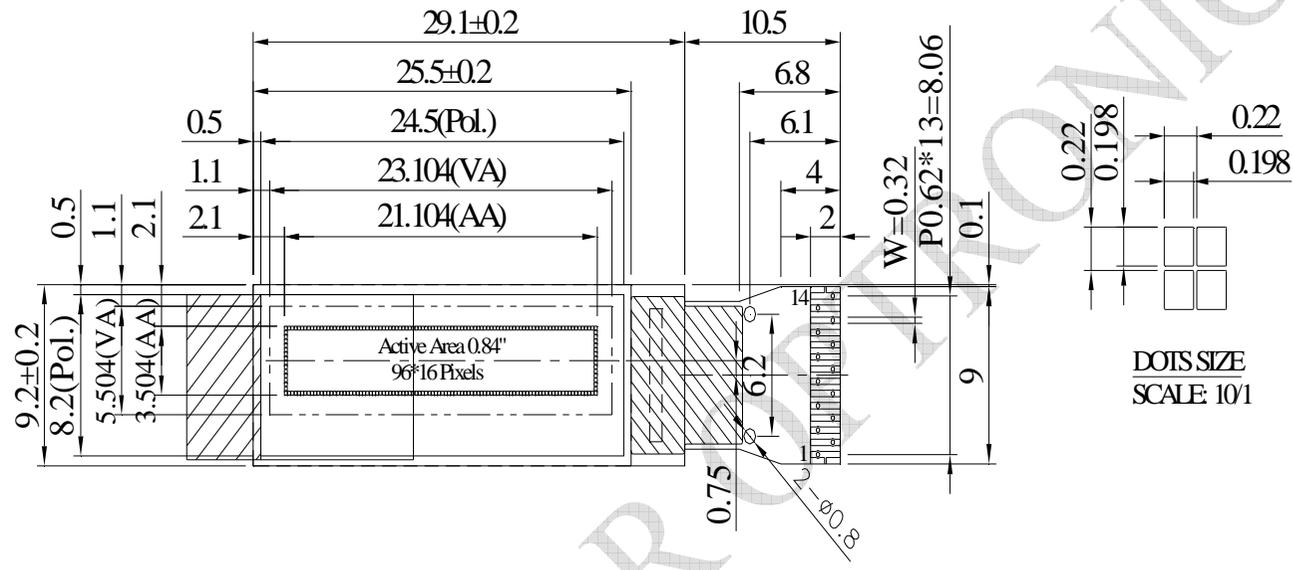
The Features is described as follow:

- Module dimension: 29.1× 9.2 ×1.26mm
- Active area: 21.104×3.504 mm
- Dot Matrix: 96×16
- Pixel size: 0.198 × 0.198 mm
- Pixel pitch: 0.220 × 0.220 mm
- Display Mode: Passive Matrix
- Duty: 1/16 Duty
- Display Color: Monochrome
- IC: SSD1306
- Interface: I2C
- Size: 0.84 inch

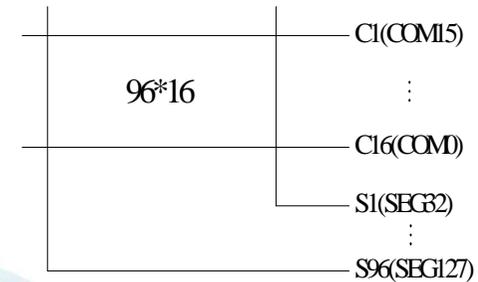
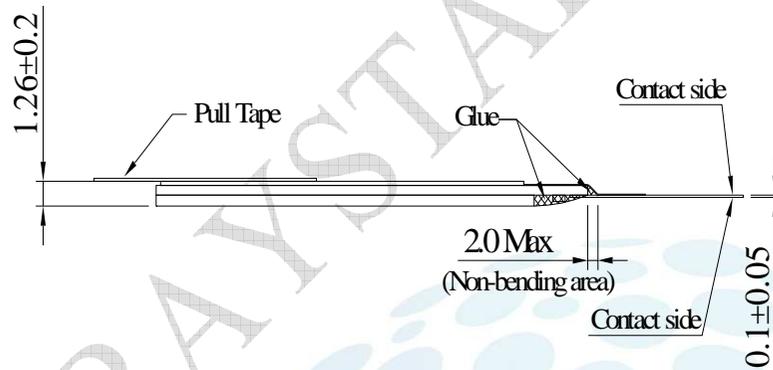
Interface Pin Function

| No. | Symbol | Function |
|-----|--------|---|
| 1 | C2N | <i>Positive Terminal of the Flying Inverting Capacitor Negative Terminal of the Flying Boost Capacitor</i> The charge-pump capacitors are required between the terminals. They must be floated when the converter is not used. |
| 2 | C2P | |
| 3 | C1P | |
| 4 | C1N | |
| 5 | VBAT | <i>Power Supply for DC/DC Converter Circuit</i> This is the power supply pin for the internal buffer of the DC/DC voltage converter. It must be connected to external source when the converter is used. It should be connected to VDD when the converter is not used. |
| 6 | NC | No connection |
| 7 | VSS | <i>Ground of Logic Circuit</i> This is a ground pin. It acts as a reference for the logic pins. It must be connected to external ground. |
| 8 | VDD | <i>Power Supply for Logic</i> This is a voltage supply pin. It must be connected to external source. |
| 9 | RES# | <i>Power Reset for Controller and Driver</i> This pin is reset signal input. When the pin is low, initialization of the chip is executed. |
| 10 | SCL | <i>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.</i> |
| 11 | SDA | |
| 12 | IREF | <i>Current Reference for Brightness Adjustment</i> This pin is segment current reference pin. A resistor should be connected between this pin and VSS. Set the current lower than 12.5 μ A. |
| 13 | VCOMH | <i>Voltage Output High Level for COM Signal</i> This pin is the input pin for the voltage output high level for COM signals. A capacitor should be connected between this pin and VSS. |
| 14 | VCC | <i>Power Supply for OEL Panel</i> This is the most positive voltage supply pin of the chip. A stabilization capacitor should be connected between this pin and VSS when the converter is used. It must be connected to external source when the converter is not used. |

Contour Drawing & Block Diagram



| PIN | SYMBOL |
|-----|--------|
| 1 | C2N |
| 2 | C2P |
| 3 | C1P |
| 4 | C1N |
| 5 | VBAT |
| 6 | NC |
| 7 | VSS |
| 8 | VDD |
| 9 | RES# |
| 10 | SCL |
| 11 | SDA |
| 12 | IREF |
| 13 | VCOMH |
| 14 | VCC |



The non-specified tolerance of dimension is ± 0.3 mm.

Absolute Maximum Ratings

| Parameter | Symbol | Min | Max | Unit |
|----------------------------|--------|-----|-----|------|
| Supply Voltage for Logic | VDD | 0 | 4 | V |
| Supply Voltage for Display | VCC | 0 | 16 | V |
| Operating Temperature | TOP | -40 | +70 | °C |
| Storage Temperature | TSTG | -40 | +85 | °C |

Electrical Characteristics

| Item | Symbol | Condition | Min | Typ | Max | Unit |
|--|-----------------|-----------|---------|-----|---------|------|
| Supply Voltage for Logic | VDD | — | 2.8 | 3.0 | 3.3 | V |
| Supply Voltage for Display (Supplied Externally) | VCC | — | 7.0 | 7.5 | 7.8 | V |
| Charge Pump Regulator Supply Voltage | VBAT | — | 3.3 | — | 4.2 | V |
| Charge Pump Output Voltage for Display (Generated by Internal DC/DC) | Charge Pump VCC | — | 7.0 | 7.5 | 7.8 | V |
| Input High Volt. | VIH | — | 0.8xVDD | — | VDD | V |
| Input Low Volt. | VIL | — | 0 | — | 0.2xVDD | V |
| Output High Volt. | VOH | — | 0.9xVDD | — | VDD | V |
| Output Low Volt. | VOL | — | 0 | — | 0.1xVDD | V |
| 50% check Board operating Current (VCC Supplied Externally) | ICC | — | — | 7 | 15 | mA |
| 50% check Board operating Current (VCC Generated by Internal DC/DC) | IBAT | — | 10 | 15 | 25 | mA |