

OLED DISPLAY SPECIFICATION



RAYSTAR

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REX012832P

General Specification

The Features is described as follow:

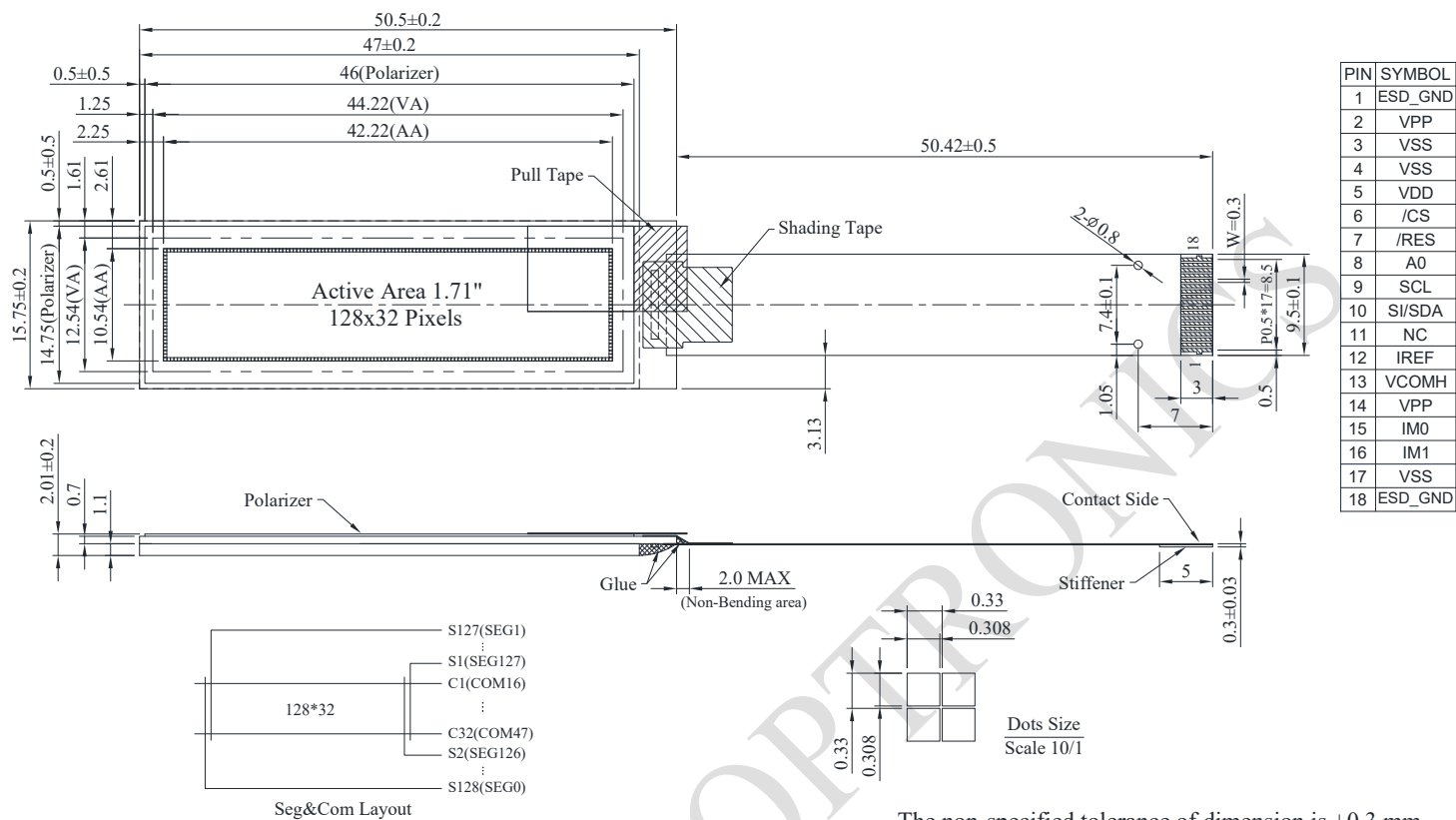
- Module Dimension: 50.50 x 15.75 x 2.01 mm
- Active Area: 42.22 x 10.54 mm
- Dot Matrix: 128 x 32
- Pixel Size: 0.308 x 0.308 mm
- Pixel Pitch: 0.33 x 0.33 mm
- Display Mode: Passive Matrix
- Duty: 1/32 Duty
- Display Color: Monochrome
- IC: CH1115
- Interface: SPI,I2C
- Size: 1.71-inch

Interface Pin Function

Pin No.	Symbol	Function
1	ESD_GND	ESD Ground pin
2	VPP	OLED panel power supply.
3	VSS	This is a ground pin.
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5	VDD	Power Supply for Logic
6	$\overline{CS}$	This pad is the chip select input. When $\overline{CS} = "L"$, then the chip select becomes active, and data/command I/O is enabled.
7	$\overline{RES}$	This is a reset signal input pad. When $\overline{RES}$ is set to "L", the settings are initialized. The reset operation is performed by the $\overline{RES}$ signal level.
8	A0	This is the Data/Command control pad that determines whether the data bits are data or a command. In I2C interface, this pad serves as SA0 to distinguish the different address of OLED driver.
9	SCL	The serial clock input pad
10	SI/SDA	The serial data input pad
11	NC	Dummy Pin
12	IREF	This is a segment current reference pad. A resistor should be connected between this pad and VSS. Set the current at $18.75 \mu A$.
13	VCOMH	The pin is for COM signal deselected voltage level. A capacitor should be connected between this pin and VSS.
14	VPP	OLED panel power supply.

15	IM0	These are the MPU interface mode select pads.			
16	IM1		3SPI	4SPI	I2C
		IM0	1	0	0
		IM1	0	0	1
17	VSS	This is a ground pin.			
18	ESD_GND	ESD Ground pin			

Contour Drawing



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

Absolute Maximum Ratings

Parameter	Symbol	Min	Max	Unit	Notes
Supply Voltage for Logic	VDD	-0.3	3.6	V	1,2
Supply Voltage for Display	VPP	-0.3	14.5	V	1,2
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	—	1.65	3.0	3.3	V
Supply Voltage for Display	VPP	—	6.4	12.0	12.5	V
High Level Input	VIH	—	0.8×VDD	—	VDD	V
Low Level Input	VIL	—	VSS	—	0.2×VDD	V
High Level Output	VOH	—	0.8×VDD	—	VDD	V
Low Level Output	VOL	—	VSS	—	0.2×VDD	V
Display 50% Pixel on	IPP	VPP=12V	—	5	10	mA