

# Osptek Display

## OLED SPECIFICATION

Model No:

**ODM096-12864W101-P7**

*osptek*<sup>®</sup>

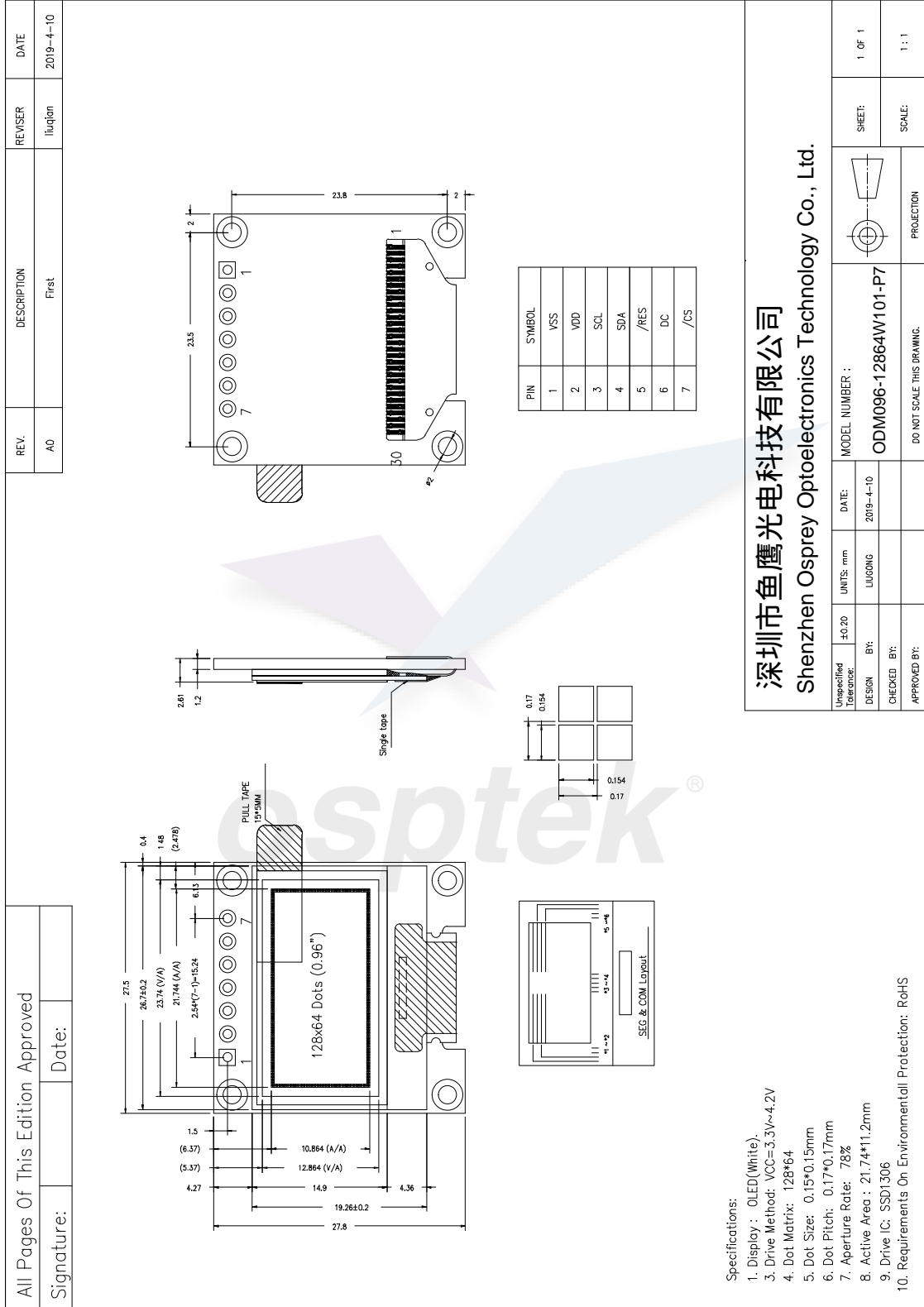
## General Specification

Item	Dimension	Unit
Dot Matrix	128 x 64 Dots	-
Module dimension	27.5 x 27.8 x 2.61	mm
Active Area	21.744 x 10.864	mm
Pixel Size	0.15 x 0.15	mm
Pixel Pitch	0.17 x 0.17	mm
Display Mode	Passive Matrix	
Display Color	White	
Drive Duty	1/64 Duty	
Frame rate	105Hz	
IC	SSD1306	
Interface	I2C	
Size	0.96 inch	



osptek®

# Contour Drawing & Block Diagram



**深圳市鱼鹰光电科技有限公司**  
**Shenzhen Osprey Optoelectronics Technology Co., Ltd.**

UNSPECIFIED TOLERANCE:	DATE:	MODEL NUMBER:	SHEET:
±0.20	2019-4-10	ODM096-12864W101-P7	1 OF 1
DESIGN BY:	UNITS: mm	DO NOT SCALE THIS DRAWING.	PROJECTION:
CHECKED BY:	mm		SCALE:
APPROVED BY:	mm		1 : 1

- Specifications:**
- Display : OLED(White).
  - Drive Method: VCC=3.3V~4.2V
  - Dot Matrix: 128\*64
  - Dot Size: 0.15\*0.15mm
  - Dot Pitch: 0.17\*0.17mm
  - Aperture Rate: 78%
  - Active Area : 21.74\*11.2mm
  - Drive IC: SSD1306
  - Requirements On Environmental Protection: RoHS

## Interface Pin Function

No.	Symbol	Function
1	VSS	Ground of Logic Circuit. This is a ground pin.It acts as a reference for the logic pins. It must be connected to external ground.
2	VDD	Power Supply for Logic. This is a voltage supply pin. It must be connected to external source.
3	SCL	I2C Bus Clock Signal. The transmission of information in the I2C bus is following a clock signal. Each transmission of data bit is taken place during a single clock period of this pin.
4	SDA	I2C Bus Data Signal. This pin acts as a communication channel between the transmitter and the receiver.
5	RES#	This pin is reset signal input When the pin is pulled LOW, initialization of the chip is executed.Keep this pin pull HIGH during normal operation.
6	D/C#	This pin is Data/Command control pin connecting to the MCU. When the pin is pulled HIGH, the data at D[1:0] will be interpreted as data.When the pin is pulled LOW, the data at D[1:0] will be transferred to a command register.
7	CS#	This pin is the chip select input connecting to the MCU. The chip is enabled for MCU communication only when CS# is pulled LOW(active LOW).

osptek®

## Absolute Maximum Ratings

Parameter	Symbol	Min	Max	Unit
Supply Voltage for Logic	VDD	3.3	4.2	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(3V/5V)	VDD	-	3.3	-	4.2	V
Input High Volt.	VIH	-	0.8xVCC	-	VCC	V
Input Low Volt.	VIL			-	0.2xVCC	V
Output High Volt.	VOH	-	0.9xVCC	-	VCC	V
Output Low Volt.	VOL	-	0	-	0.1xVCC	V
50% Check Board operating Current	ICC	VCC=2.8V	-	160	220	mA