1.54 Inch Graphic OLED Display with 128x64 Dots Resolution and I2C Interface

Our Product Introduction

Basic Information

Product Specification

- Operating Temperature: -40°C To +70°C (Customizable)
- Outline Screen Size: 47.0(L) X 43.0(W) X 13.8(T) Mm
- Number Of Pixels: 128*64
- Interface: 12C
- Drive Ic: SSD1309 Or Equivalent
- Optics: All Viewing Angles
- Pixel Pitch: 0.274 X 0.274 Mm
- Aa Size: 35.06(L) X 17.52(W) Mm
- Highlight: **1.54 Inch OLED Display**, **128x64 Dots Resolution OLED Screen**, **I2C Interface Graphic OLED Module**

Our Product Introduction

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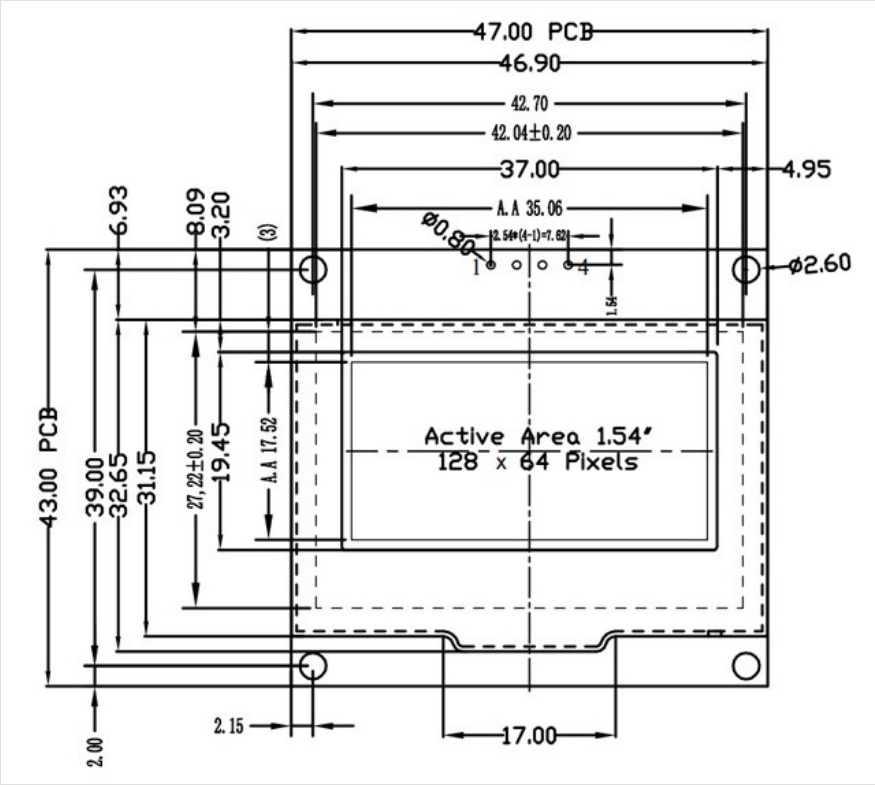
Product Description

1.54 Inch Graphic OLED Display SSD1309 128x64 Dots Resolution I2C Interface

Product Specifications

Product:	1.54" Inch OLED Screen
Resolution:	128x64 Dots Resolution
Interface:	I2C
Display Mode:	Passive Matrix Display
Optics:	All Viewing Angles
Outline Dimensions:	47.0(L) X 43.0(W) X 13.8(T) Mm
Active Area:	35.06(L) X 17.52(W) Mm
Pixel Pitch:	0.274 X 0.274 Mm
Driving Method:	1/64 Duty Cycle
Operating Temperature:	-40°C To +70°C (Customizable)
Storage Temperature:	-40°C To +85°C
Pin Number:	4 Header Pins
Driver IC:	SSD1309 Or Equivalent



Product Overview

This single-color passive matrix (PM-OLED) graphic dot matrix display module features a 1.54-inch diagonal size with 128×64 pixel resolution. Equipped with the dedicated SSD1309 driver control IC from Solomon Systech, this version utilizes the I2C (IIC) two-wire/four-wire interface for simple wiring and easy integration into various small devices.

Display Performance

Self-luminous without backlight, providing extremely high contrast and full viewing angle (close to 180°) for clear visibility. Available in common single-color options (white, blue, yellow/amber) with support for 256 levels of brightness adjustment. Features fast response speed with no ghosting and operates within a temperature range of -40°C to +70°C, making it suitable for outdoor and industrial environments.

Electrical & Structural Features

Standard 3.3V power supply with extremely low static display power consumption, ideal for battery-powered portable products. Utilizes COG (Chip On Glass) process for ultra-thin, lightweight modules. The I2C interface requires minimal MCU pins for high development efficiency, with most modules also compatible with SPI interface mode.

Development & Integration

Mature driver libraries available for mainstream microcontroller platforms including Arduino, ESP32, and STM32. No complex low-level development required - capable of directly displaying characters, icons, simple graphics, and custom dot matrix content.

Core Applications

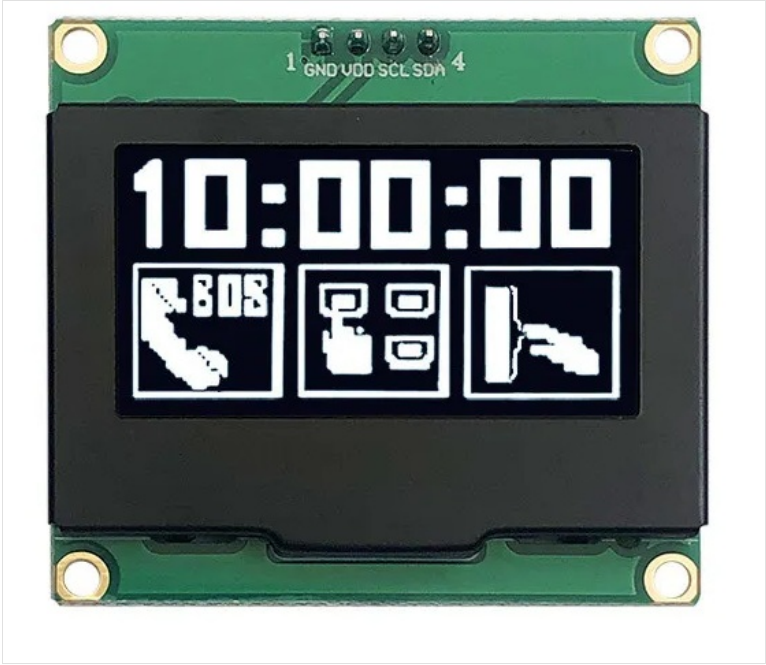
Maker/DIY and Open Source Hardware: Status display for Arduino/ESP32 projects (temperature and humidity, sensor readings, network IP, battery power); control panel for small robots, mini display for 3D printers.

Wearable Devices: Main/secondary screens for simple smart bracelets, sports watches, portable health monitors (heart rate, steps, blood pressure data).

Industrial and Internet of Things (IoT): Display for sensor nodes, smart home panels, small instruments, outdoor data collection terminals. Resistance to high and low temperatures and low power consumption are particularly crucial.

Consumer Electronics and Healthcare: Status display for MP3 players, Bluetooth speakers; reading screens for portable blood glucose meters, blood oxygen meters, and other small medical devices.

Automotive and Outdoor Equipment: Tire pressure monitors, mini dashboards for vehicles, cycling odometers, camping lights.



Frequently Asked Questions

I want the LCD display 8 digits and the outline size is 65x30x2.8mm. Can you provide this?

No problem. Please send us your specification/drawing paper. If you don't have specifications, you can provide samples and we will recommend suitable products. We can also customize based on your requirements.

This LCD is just what we want, but it is big size. Do you have any smaller size? And the display content needs to be changed a little.

For segment type LCD modules, if you need to modify the outline size or display content, a new LCD glass module is required. We will need to create new tooling for you.

This LCD display is HTN type, but I want STN type. Can you make it?

That's all right. We can change it for you as per your request.

I want to customize a new LCD module. Can you do this?

Yes, we can. Please send your drawing paper. If you don't have one, please advise us of the outline size of the LCD display, display information (glass thickness, polarizer, display type, connector mode, storage temperature, operating temperature, supply voltage, viewing direction, drive condition). We can customize for you.

What is the lead time for tooling?

Generally, it takes 15 to 25 days after drawing paper confirmation and tooling charge payment. We will report the exact time when you confirm the drawing paper.

Can you send us samples for checking?

Yes. Sample orders are available.

What is the lead time?

If we have stock for standard products, the lead time is one day after payment. For mass production of special products, the lead time is about 15-30 days. If we can finish earlier, we will report the information in advance.

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