seeed studio

INDUSTRIAL PRODUCT DATASHEET

1.54" Monochrome eInk / ePaper Display with 200x200 Pixels, SPI interface, Support XIAO/Arduino

Ultra-low-power 1.54" monochrome ePaper display with 200x200 pixels and SPI, designed for XIAO/Arduino integration and easy UI development.

SKU	UPDATED	PRICE
104990843	2026-06-01 02:40:25	$6.50(Excl. VAT)



Overview



The 1.54-inch monochrome ePaper display with 200x200 pixels and SPI interface provides exceptional readability and ultra-low power consumption, updating only when needed. It offers seamless plug-and-play integration with XIAO ePaper driver boards (EE04/EE05) and supports no-code customization via SenseCraft HMI for applications like electronic shelf labels and smart wearables.

Key Features

- **Plug & Play with XIAO ePaper Driver Boards:** Natively compatible with a range of 24-pin ePaper displays via the **ePaper Display Board**, these ready-to-use controller boards offer features such as an optional battery connector and a user button to accelerate prototyping and project development.
- **Exceptional Readability:** The display's reflective properties ensure effortless legibility of text and images in different lighting environments.
- **Ultra-Low Power Consumption:** The ePaper consumes power only during updates, resulting in longer battery life and greater energy efficiency.
- **Eye-Friendly and Heat-free:** Eliminate glare, providing a comfortable viewing experience while remaining cool without generating heat.

Seamless Setup and Customization for Your ePaper Display

This ePaper display is designed to work seamlessly with any standard 40-pin driver board. We recommend the **XIAO ePaper Display Board EE04** or **XIAO ePaper Display Board EE05**.

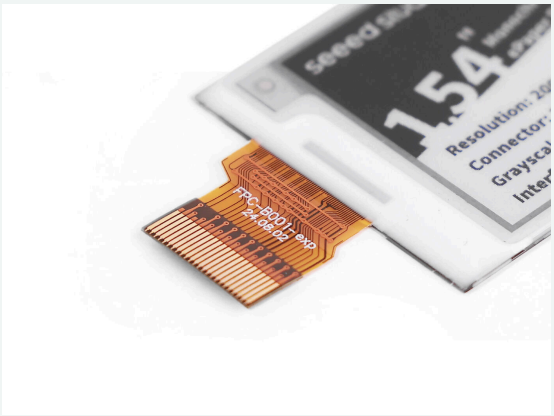
To make things even easier, we're introducing **SenseCraft HMI**—a no-code, AI-powered platform that allows you to quickly design and customize your user interface. Drag and drop elements, choose templates, or let AI generate the perfect layout for you.Get started today and create your ideal display experience with ease!

Product Gallery









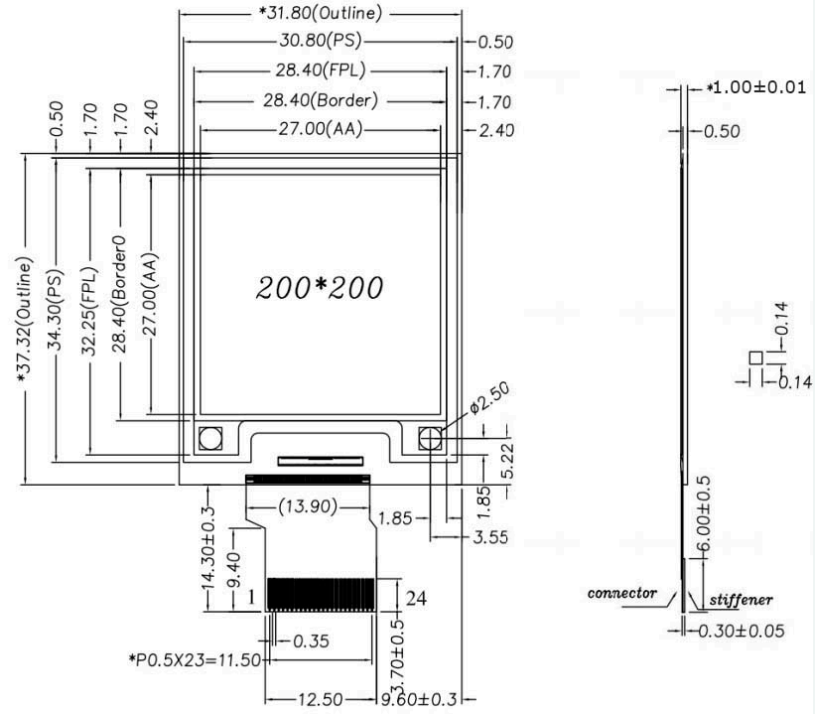


Specification

Parameters	Details
Driver IC	SSD1681
Type	Dot Matrix

Size	1.54 inch
Active Area(mm)	27 x 27
Resolution	200 x 200 pixels
Pixel Pitch(mm)	0.14 x 0.14
Display Color	Black, White
Max Grayscale	4
Interface	SPI
Connector	24 Pin FPC, 0.5mm Pitch
Viewing Angle	>170°
Operating Voltage	3.3V
Operating Temperature	0-50°C
Driver Mode	Support XIAO/Arduino/Micropthon
Drawing	Support GUI Drawing
Power Consumption	4.5mW (typ.)
Standby Consumption	0.003mW
Outline Dimension(mm)	31.8 x 37.32 x 1.00
Weight	3.2g

Hardware Overview



Applications

- **Reading equipment**
- **Mobile device**
- **Electronic tags and price tags**
- **Smart Wearables**
- **Electronic Shelf Labels**
- **Smart Card**

Product						
Processor	XIAOESP32-S3 Plus	XIAOnRF52840 Plus	XIAOESP32-S3 Plus	XIAOnRF52840 Plus	N/A(Compatible with XIAO Series)	
Compatible Displays	24 Pin ePaper	24 Pin ePaper50 Pin ePaper	24 Pin ePaper			
Battery Connector	JST 2.0mm	JST 2.0mm	JST 2.0mm	/		
Battery Power ON/OFF	√	√	√	/		
Button	1x Reset,3x User	1x Reset,3x User	/			
Extension IO Port	√	/	√			
SenseCraft HMI	√	/	√	/	/	

Product	Name	Resolution	Display Color	Partial Refresh	SenseCraft HMI
		200x200		√	√
		250x122		√	√
		250×122			√
		212x104		√	
		296x128			
		296x128		√	√
		296x128			√
		400x300		√	
		800x480			√
		648x480		√	
		800x480		√	
		800x480		√	√
		1404×1872		√	√
		1600x1200			√

Part List

1.54" Monochrome ePaper Display	×1

Compliance & Logistics

HSCODE	8517180050
USHSCODE	8517180050
UPC	
EUHSCODE	8471707000
COO	CHINA

Resource Links

- https://www.seeedstudio.com/1-54-Monochrome-ePaper-Display-with-200x200-Pixels-p-5776.html
- 1.54-inch Monochrome ePaper Display Datasheet

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