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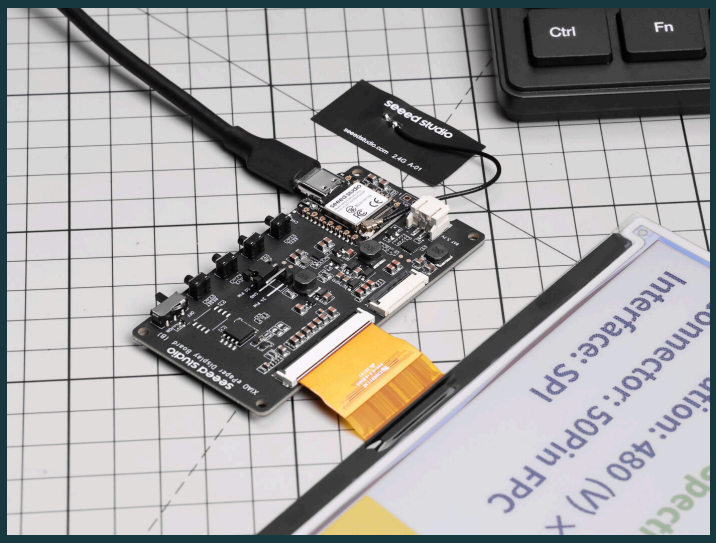
INDUSTRIAL PRODUCT DATASHEET

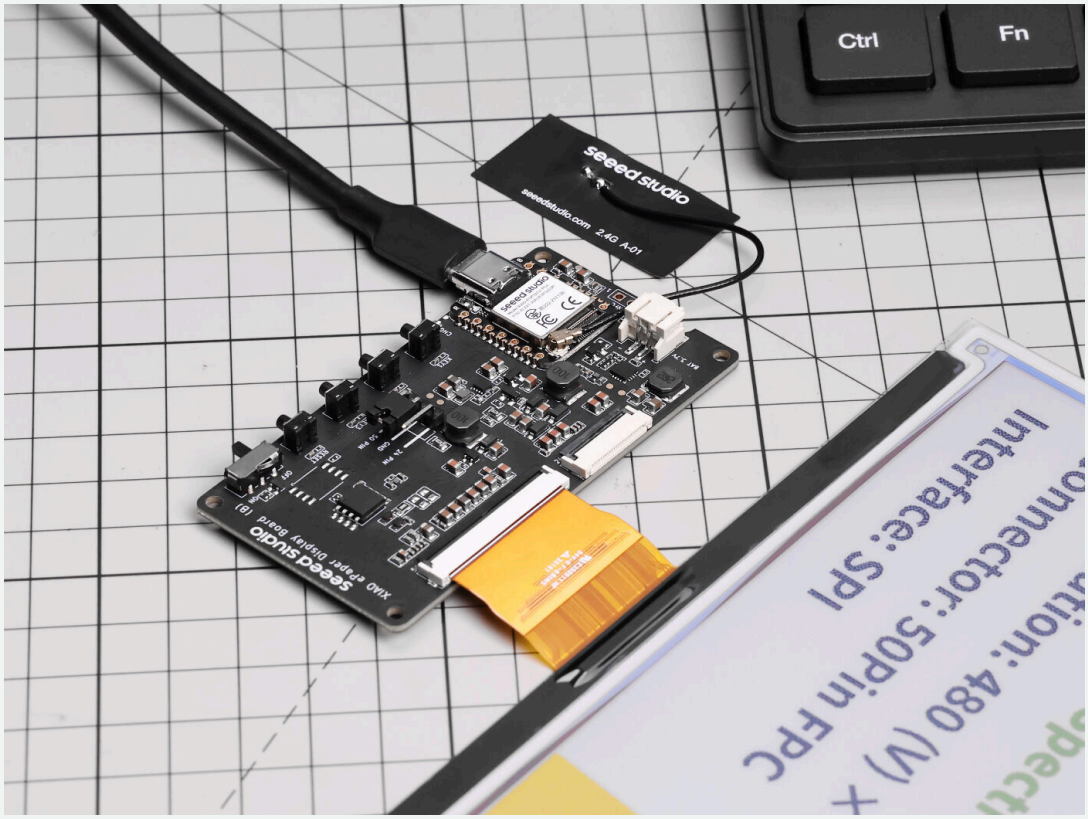
XIAO ePaper Display Board(ESP32-S3) - EE04

The XIAO ePaper Display Board(ESP32-S3) - EE04 is a versatile ePaper display board powered by XIAO ESP32-S3 Plus with no-code UI design and deployment via SenseCraft HMI.

SKU	UPDATED	PRICE
100075670	2026-09-20 06:17:43	$9.90(Excl. VAT)



Overview



The XIAO ePaper Display Board(ESP32-S3) - EE04 is powered by the XIAO ESP32-S3 Plus and supports a wide range of ePaper displays via 24-Pin and 50-Pin interfaces with jumper caps. It includes a BAT connector with switch, reset and 3 user-programmable buttons, and is compatible with SenseCraft HMI v1.0 for no-code UI design and deployment for applications such as smart home dashboards, energy monitoring, security alerts, and digital photo frames.

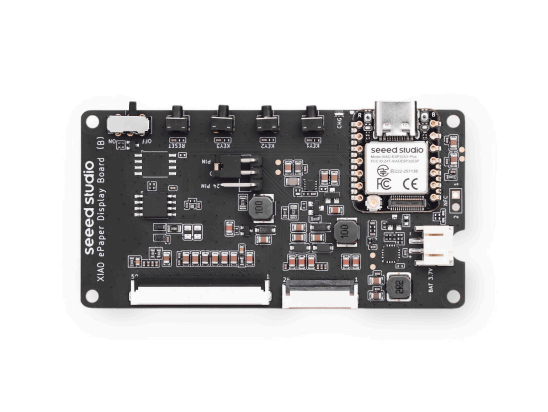
Key Features

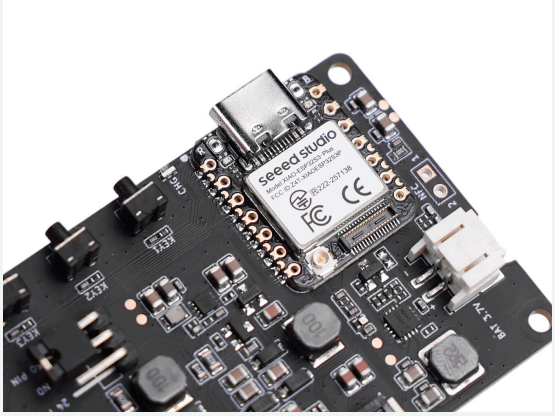
Note:

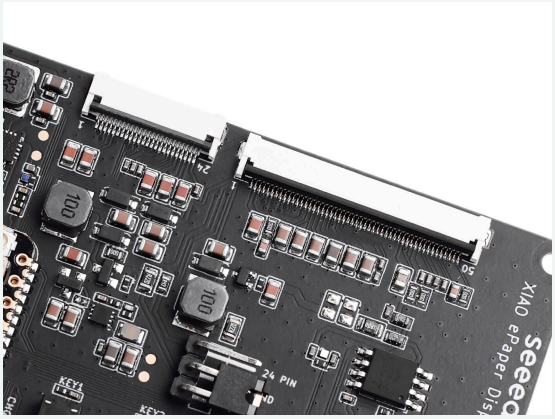
The XIAO ePaper Display Board - EE04 is compatible with **Sensecraft HMI** v1.0, our newly released no-code UI design platform.

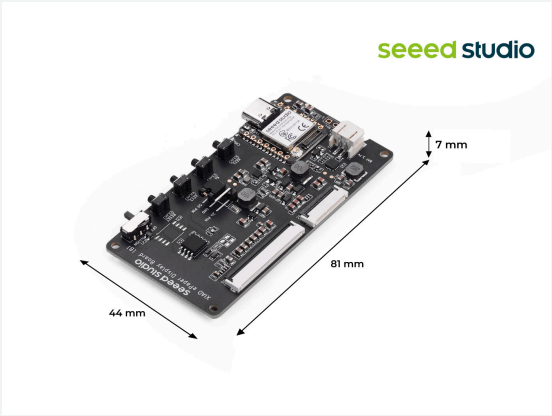
- **Powered by XIAO ESP32-S3 Plus：** Works immediately when connected to a compatible ePaper display.
- **Versatile Display Support:** Compatible with a wide range of ePaper screens, supporting both 24-Pin and 50-Pin interfaces with easy switching via jumper caps.
- **BAT Connector with Switch:** Provides simple battery connection and integrates a switch, enabling efficient power management and energy savings.
- **User-Friendly Buttons:** Includes 1 reset button and 3 user-programmable buttons, offering flexibility for project acceleration and customizable functions.
- **No-Code UI Design & Deployment with SenseCraft HMI:** Design and deploy personalized dashboards effortlessly with **SenseCraft HMI**, our new AI-powered no-code platform. Create your UI through simple drag-and-drop elements, choose from our rich templates, or let AI help you. Connect real-time data from web APIs, then deploy your finished dashboard to epaper display with just a few clicks. From design to data configuration to deployment, everything happens seamlessly on one single platform.

Product Gallery





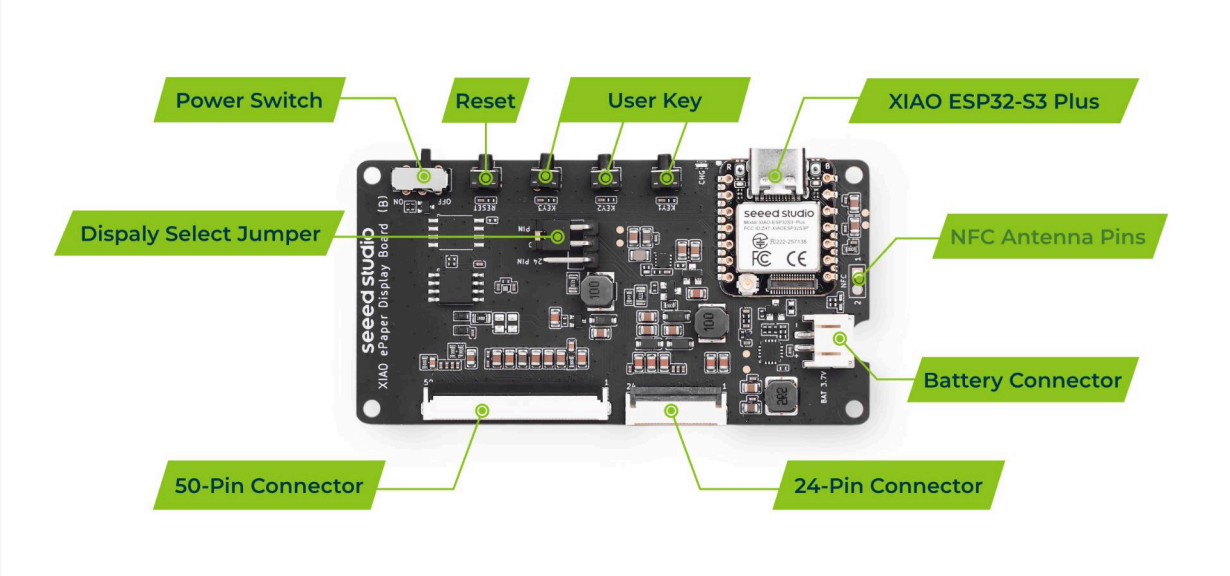




Specification

Parameter	Description
onBoard MCU	XIAO ESP32-S3 Plus
Compatible ePaper Displays	-24 Pin ePaper -50Pin epaper
ePaper Connector	-FPC 24 Pin, 0.5mm -FCP 50 Pin, 0.5mm
Battery Connector	JST 2.0mm
Switch	Battery Power ON/OFF
Power Supply	- 3.7V Li-Battery - USB Type-C
Button	-1x Reset button -3x User button

Hardware Overview



Applications

- **Smart Home Dashboard:** Display real-time information such as weather updates, calendar events, and notifications from various smart home devices.
- **Energy Monitoring:** Show energy consumption data from smart meters, helping homeowners track and manage their energy usage more efficiently.
- **Security Alerts:** Display alerts and notifications about security events, such as motion detection or door/window sensor activation.
- **Digital Photo Frame:** Create a WiFi-enabled digital photo frame that can display images from your smart home network.

Product					
Processor	XIAO ESP32-S3 Plus	XIAO ESP32-S3 Plus	XIAO nRF52840 Plus	N/A(CompatiblewithXIAO Series)	
CompatibleDisplays		24 Pin ePaper50Pin ePaper	24 Pin ePaper	24 Pin ePaper (NOT for 2.9" BWRY & 7.5" BW)	
Battery Connector	JST 2.0mm	JST 2.0mm	JST 2.0mm	/	
Battery Power ON/OFF	√	√	√	/	
Button	1x Reset3x User	1x Reset3x User	/		
Extension IO Port	/	/	√		
SenseCraft HMI	√	√	/	/	

Product								
Processor	XIAOESP32-S3 Plus	XIAOnRF52840 Plus	XIAOESP32-S3 Plus	XIAOnRF52840 Plus	XIAO ESP32-S3 Plus	XIAO ESP32-S3 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	JST 2.0mm	JST 2.0mm	/		
Battery Power ON/OFF	√	√	√	√	√	/		
Button	1x Reset,3x User	1x Reset,3x User	1x Reset3x User	1x Reset3x 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

XIAO ePaper Display Board EE04	×1
24Pin Adapter and 24Pin FFC Extension Cable	×1
50Pin Adapter and 50Pin FFC Extension Cable	×1
2.4GHz FPC Antenna (2.9dBi)	×1

Compliance & Logistics

HSCODE	8543909000
USHSCODE	8543903500
UPC	
EUHSCODE	8543709099
COO	CHINA

Resource Links

- https://www.seeedstudio.com/XIAO-ePaper-Display-Board-EE04-p-6560.html
- Wiki-XIAO ePaperDisplayBoardEE04 Resources
- PCN-ePaper Display Board Series Upgrade v1.0.pdf

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