

INDUSTRIAL PRODUCT DATASHEET

XIAO ePaper Display Board(nRF52840) - EN05

A compact ePaper driver board with NFC, sensor expansion, and battery support for dynamic, low-power signage and portable labeling projects.

SKU

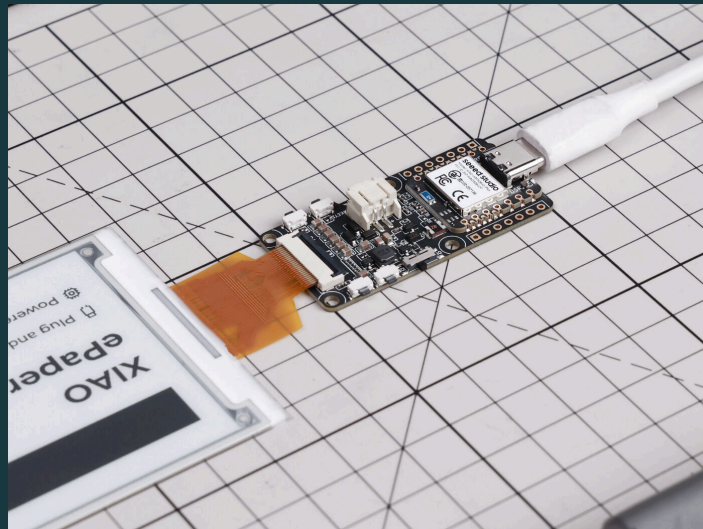
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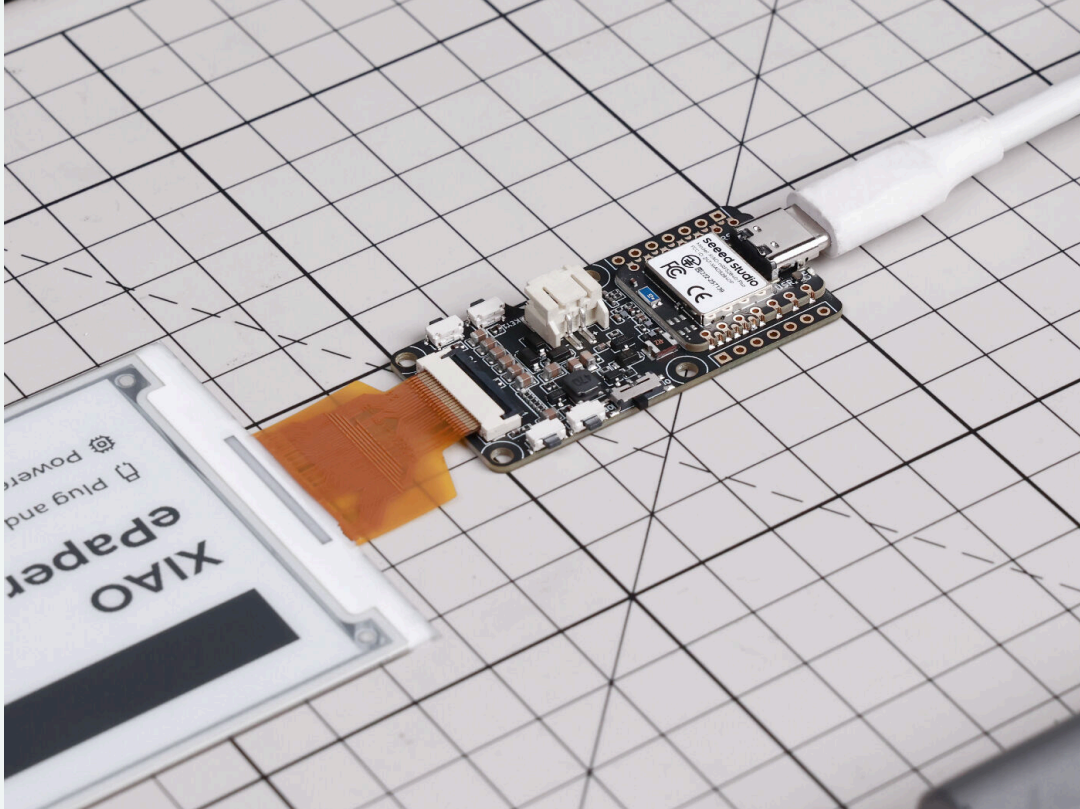
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PRICE

\$9.90(Excl. VAT)



Overview

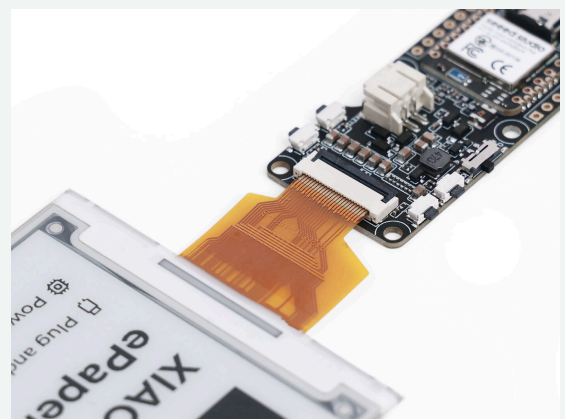
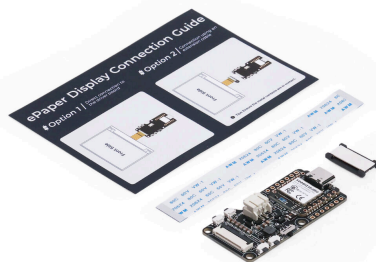
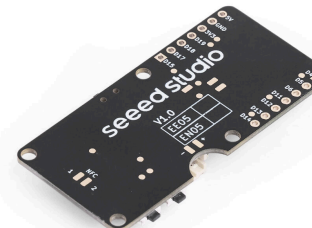
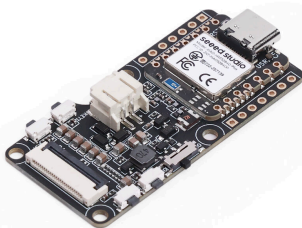
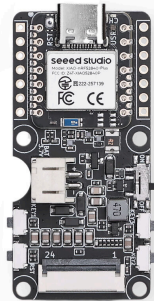


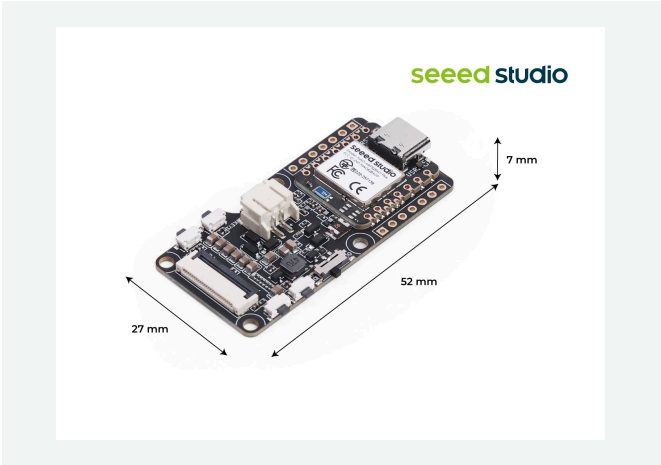
The XIAO ePaper Display Board(nRF52840) - EN05, powered by XIAO nRF52840 Plus, provides immediate compatibility with 24-pin ePaper displays, onboard NFC for tap-to-configure, extension IO for sensors, and a BAT connector with switch for efficient battery management. It supports Arduino, PlatformIO, ESPHome, making it ideal for low-power applications like smart name badges, dynamic price tags, meeting room signage, and portable checklists.

Key Features

- **Powered by XIAO nRF52840 Plus:** Works immediately when connected to a compatible ePaper display, with onboard NFC interface for tap-to-configure, pairing, or triggering content updates.
- **Versatile Display Support:** Compatible with a wide range of 24-pin ePaper displays, supporting 24-Pin epaper displays for various project requirements.
- **Extension IO Port:** Enables connection of additional sensors, such as temperature and humidity sensors, for enhanced functionality.
- **BAT Connector with Switch:** Provides simple battery connection and integrates a switch, enabling efficient power management and energy savings.
- **Compatible with Various Software Platforms:** Whether you prefer coding with Arduino, Platform IO, ESPHome and more, this driver board both approaches, providing maximum flexibility for your projects.

Product Gallery

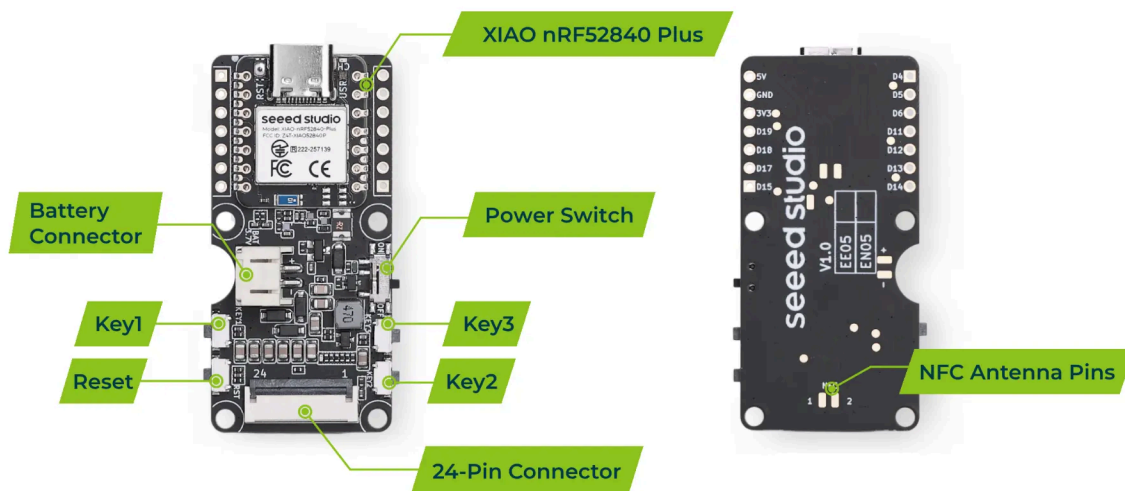




Specification

Parameter	Description
Processor	XIAO nRF52840 Plus
ePaper Connector	FPC 24 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
Software	Support Arduino/PlatformIO development platform

Hardware Overview



Applications

- **Smart Name Badge:** Create battery-powered ePaper name tags for events or offices, updated via NFC tap or wireless connection, with buttons to switch profiles or display QR codes.
- **Dynamic Price Tags:** Build low-power retail labels that show prices, stock levels, or promotions on different size ePaper, updated periodically without needing constant power.
- **Meeting Room Signage:** Use as status boards for meeting rooms, showing booking info, occupant name, or “Do Not Disturb” states, with buttons to quickly change modes.
- **Portable Checklist Board:** Make handheld task boards or packing lists that keep their content even when powered off.

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		√	√
		250x122			√
		212x104		√	
		296x128			
		296x128		√	√
		296x128			√
		400x300		√	
		800x480			√
		648x480		√	
		800x480			√
		800x480		√	√
		1404x1872		√	√
		1600x1200			√

Part List

XIAO ePaper Display Board EN05	×1
24Pin Adapter and 24Pin FFC Extension Cable	×1

Compliance & Logistics

HSCODE	8543909000
USHSCODE	8543903500
UPC	
EUHSCODE	8471707000
COO	CHINA

Resource Links

- <https://www.seeedstudio.com/XIAO-ePaper-Display-Board-nRF52840-EN05-p-6756.html>
- [Wiki-XIAO ePaper Display Board EN05 Resources](#)

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