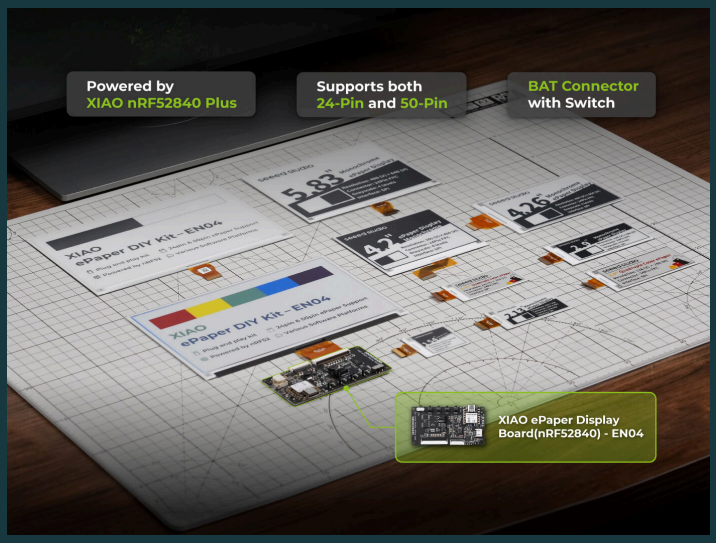
seeed studio

INDUSTRIAL PRODUCT DATASHEET

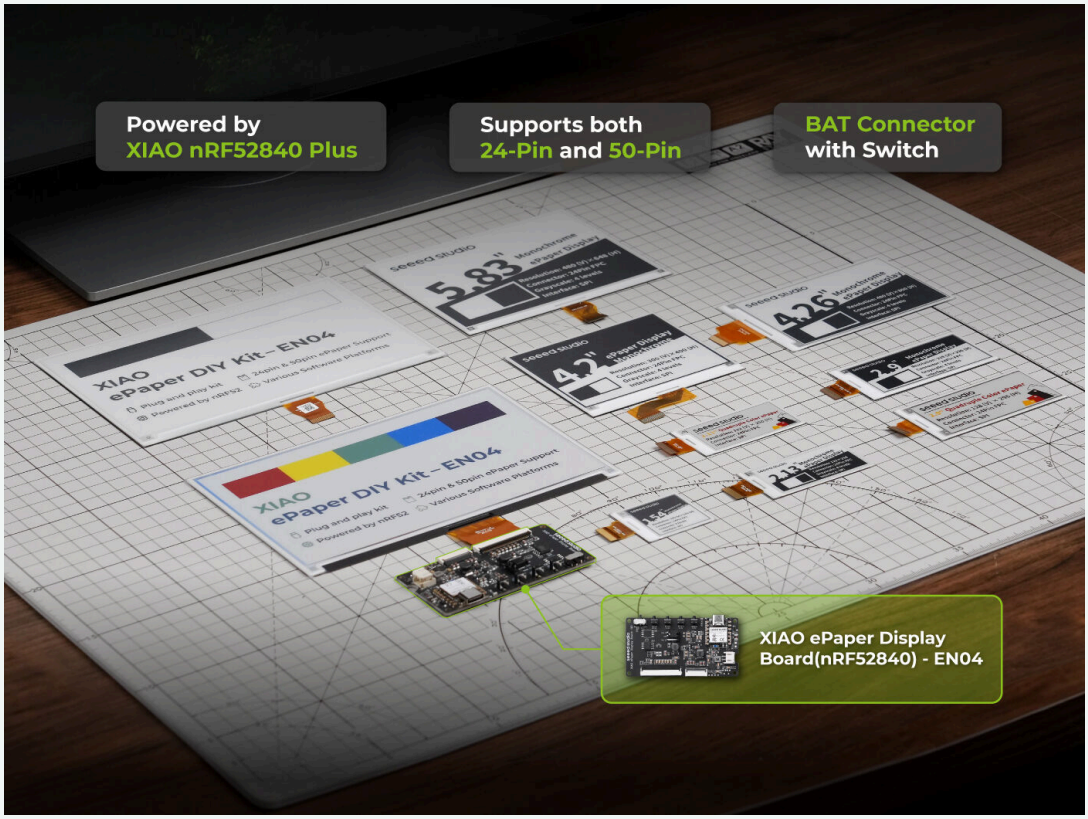
XIAO ePaper DIY Kit(nRF52840) - EN04

The XIAO ePaper DIY Kit(nRF52840) - EN04 is a driver board for ePaper displays featuring NFC, user buttons, battery management, and support for Arduino, PlatformIO, and ESPHome.

SKU	UPDATED
E25120101	2026-04-27 06:08:57



Overview



The XIAO ePaper DIY Kit(nRF52840) - EN04 leverages the XIAO nRF52840 Plus to drive ePaper displays with NFC tap-to-configure, jumper-selectable 24-Pin/50-Pin interfaces, and a BAT connector with switch for battery operation. It enables applications such as smart name badges, dynamic price tags, meeting room signage, and portable checklists, enhanced by one reset and three programmable buttons and compatibility with Arduino, PlatformIO, and ESPHome.

Key Features

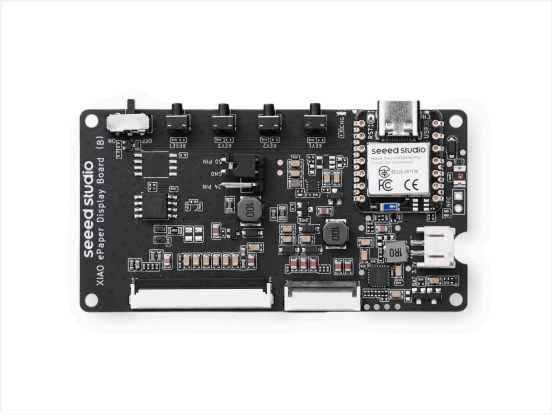
- **Powered by XIAO nRF52840 Plus：** Works immediately when connected to a compatible ePaper display, with onboard NFC for tap-to-configure, pairing, or triggering content updates.
- **Versatile Display Support:** Compatible with a wide range of ePaper screens, supporting both 24-Pin and 50-Pin interfaces 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.
- **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

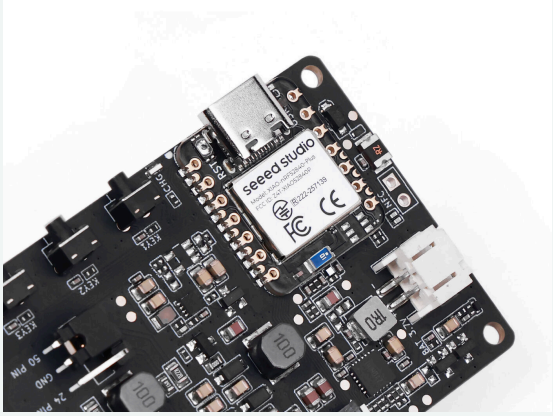


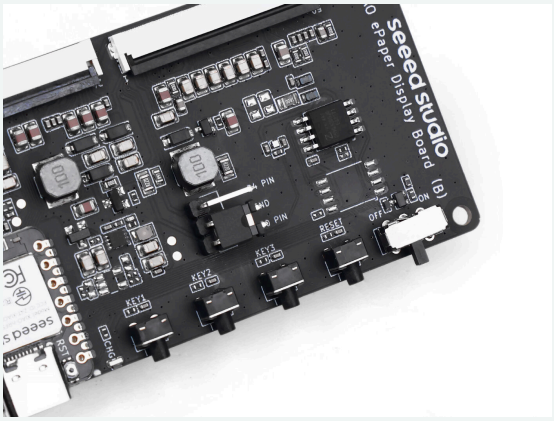








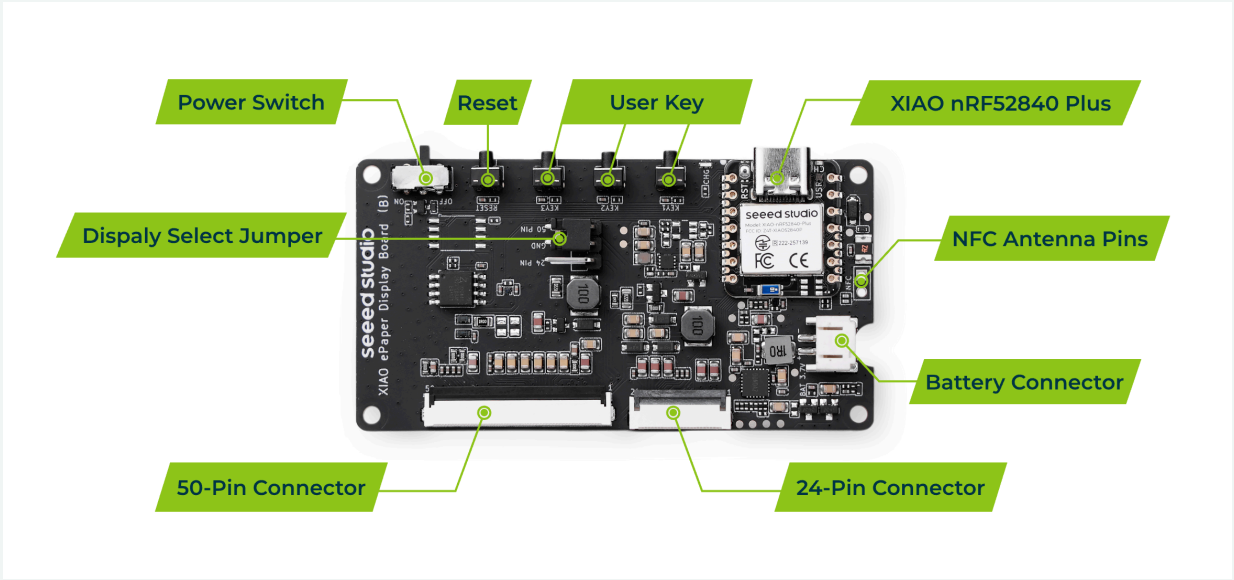




Specification

Parameter	Description
Processor	XIAO nRF52840 Plus
ePaper Connector	FPC 24 Pin 0.5mm FPC 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 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 differerntsize 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.
- **PortableChecklist Board:** Make handheld task boards or packing lists that keep their content even when powered off.

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			√

Resource Links

- https://www.seeedstudio.com/XIAO-ePaper-DIY-Kit-EN04.html
- Wiki-XIAO ePaper Display Board EN04 Resources

Seeed Technology Co.,Ltd.
9F, Building G3, International E City,
Zhongshanyuan Road, Nanshan, Shenzhen, China

Tel: +86 0755-80695676
Web: www.seeed.cc
Shop: www.seeedstudio.com