seeed studio

INDUSTRIAL PRODUCT DATASHEET

XIAO 1.47'' IPS Touch Display(ESP32-S3)

A compact ESP32-S3 board with 1.47'' IPS touch display, built-in microphone and motion sensor, designed for connected AIoT projects like desktop dashboards, voice assistants, smart home controls, and interactive toys.

SKU	UPDATED	PRICE
100069905	2026-09-24 01:02:51	$19.90(Excl. VAT)

Overview

The XIAO 1.47'' IPS Touch Display (ESP32-S3) is a mini smart device board that integrates a 1.47-inch color touch screen, microphone, IMU, and Wi-Fi/Bluetooth connectivity to build complete, interactive projects. It suits applications such as mini desktop dashboards, AI voice assistant and agent terminal prototypes, smart home touch controllers, and digital pets and interactive toys.

Key Features

- **A Mini Smart Device Board, Ready for Your Next Project**
  For many small hardware projects, the hard part is not starting the controller. It is turning a screen, touch input, microphone, sensors, battery, and buttons into a small device that feels complete and usable. This board already brings these key parts together, so you can spend more time building the actual experience: designing the UI, reading data, adding interaction, and connecting to the network, instead of wiring modules one by one.

- **Make Your Projects That Look and Feel More Finished**
  The 1.47-inch color touch display helps your project move beyond serial output, LEDs, or rough test setups. You can build menus, status pages, icons, buttons, sensor dashboards, and simple animations, making your prototype easier to show, use, and share. For demos, customer presentations, classroom projects, and maker builds, it helps the final result feel much more complete.

- **Touch, Voice, and Motion in One Small Board**
  This board does more than show information. It also gives your project multiple ways to respond to the user. The touch screen is great for menus and controls. The microphone can be used for recording, sound triggers, or voice interaction. The IMU can detect orientation, shaking, flipping, and motion. With these built in, you can build a small device that can “listen”, “move”, and respond to touch, not just display data.

- **Built for Connected AIoT Ideas**
  Powered by **XIAO ESP32-S3 Plus**, this board is a strong fit for small devices that need Wi-Fi and Bluetooth connectivity. Build a desktop weather screen, server status monitor, Home Assistant panel, smart home touch controller, cloud data display, or a mini AIoT node that connects sensors with online services.

Product Gallery

Specification

Specification	XIAO 1.47" IPS Display(ESP32-S3)	XIAO 1.14" IPS Display(ESP32-S3)	XIAO 0.96" IPS Display(ESP32-S3)

Positioning	Touch & Full Interaction	Sensing & Expansion	Ultra-Compact
Core Controller	Seeed Studio XIAO ESP32-S3 Plus		
Processor	ESP32-S3R8, Dual-Core, up to 240 MHz		
Memory	8 MB PSRAM + 16 MB Flash		
Wireless	2.4 GHz Wi-Fi + BLE 5.0		
Display	1.47" IPS TFT	1.14" IPS TFT	0.96" IPS TFT
Resolution	172 × 320	135 × 240	80 × 160
Display Driver	JD9853A	ST7789	ST7789
Touch	Capacitive Touch	No	No
6-Axis IMU	Yes		
PDM Digital Microphone	Yes		
MicroSD Card Slot	Yes	No	No
Grove I2C Connector	No	Yes	No
User Buttons	2	3	2
Battery Connector	2-pin JST, 3.7 V LiPo		
Battery Monitoring	Battery voltage monitoring via D16 ADC; battery level can be estimated from the measured voltage. Battery status detection is not supported.		
Expansion Interfaces	1x I2C Interface 1x I2S Interface 1x JTAG Interface 2x User Button Interface	1x I2C Interface 1x I2S Interface 1x JTAG Interface 3x User Button Interface	1x I2C Interface 1x I2S Interface 1x JTAG Interface 2x User Button Interface
Board Size	26.4 × 51.4 × 12.6 mm	26 × 48 × 10.6 mm	18.8 × 43.6 × 10.6 mm
Best For	Touch UI, portable HMI, local media & data logging	Sensor dashboards, Grove projects, physical controllers	Tiny IoT devices, wearables, status displays

Hardware Overview

Applications

- **Mini Desktop Dashboard**
- **AI Voice Assistant & Agent Terminal Prototype**
- **Smart Home Touch Controller**
- **Digital Pet and Interactive Toy**

Part List

XIAO 1.47'' IPS Display(ESP32-S3)	×1
2.4GHz FPC Antenna A-02 for XIAO ESP32-S3	×1

Compliance & Logistics

HSCODE	8543709990
USHSCODE	8517180050
UPC	
EUHSCODE	8543709099
COO	CHINA

Resource Links

- https://www.seeedstudio.com/1-47-Inch-Touch-Display-Powered-by-XIAO-ESP32-S3-Plus-p-6996.html
- Wiki-XIAO 1.47" IPS Touch Display(ESP32-S3) Resources
- 3D-Printed Enclosure for XIAO 1.47" Touch Display — Designed by Gokul

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