seeed studio

INDUSTRIAL PRODUCT DATASHEET

XIAO 0.96" IPS Display(ESP32-S3)

The XIAO 0.96" IPS Display(ESP32-S3) is an ultra-compact board with a 0.96-inch 80×160 IPS display, PDM microphone, 6-axis IMU, two buttons, and XIAO ESP32-S3 Plus Wi-Fi and Bluetooth Low Energy, designed for Mini Desktop Dashboard,...

SKU	UPDATED	PRICE
100037468	2026-10-23 07:53:54	$15.90(Excl. VAT)



Overview



The XIAO 0.96" IPS Display(ESP32-S3) is an ultra-compact smart device board featuring a 0.96-inch 80×160 IPS display, onboard PDM microphone, 6-axis IMU, two physical buttons, and XIAO ESP32-S3 Plus with Wi-Fi, Bluetooth Low Energy, 8 MB PSRAM, and 16 MB Flash. It is designed for applications such as Mini Desktop Dashboard, AI Voice Assistant & Agent Terminal Prototype, Smart Home Touch Controller, and Digital Pet and Interactive Toy.

Key Features

- **An Ultra-Compact Smart Device Board**
  With a board width of only 18.8 mm, this is the most compact model in the lineup. It brings display, motion sensing, audio input, physical buttons, battery support, Wi-Fi, and Bluetooth connectivity into a form factor that remains as narrow as the XIAO board itself, making it easier to build compact enclosures, badges, pendants, and portable devices.

- **Essential Information on a Tiny Color Display**
  The 0.96-inch 80 × 160 IPS display is ideal for showing essential information such as connection status, sensor readings, counters, icons, battery voltage, notifications, and simple menus. It gives tiny projects a clear visual interface while keeping the overall device extremely compact.

- **Voice, Motion, and Two-Button Interaction**
  The onboard PDM microphone lets your project react to sound and capture audio data, while the 6-axis IMU detects orientation, shaking, flipping, and movement. Two physical buttons provide simple and reliable user input, allowing you to build interactive devices without adding external modules.

- **Wi-Fi and Bluetooth in a 17.8 mm-Wide Form Factor**
  Powered by XIAO ESP32-S3 Plus, this compact board combines a dual-core processor running at up to 240 MHz with Wi-Fi, Bluetooth Low Energy, 8 MB PSRAM, and 16 MB Flash. This makes it possible to build tiny connected dashboards, notification devices, sensor nodes, and portable interfaces while keeping the hardware footprint small.

Product Gallery

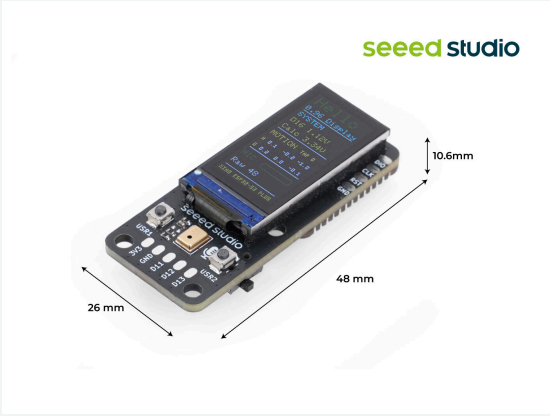










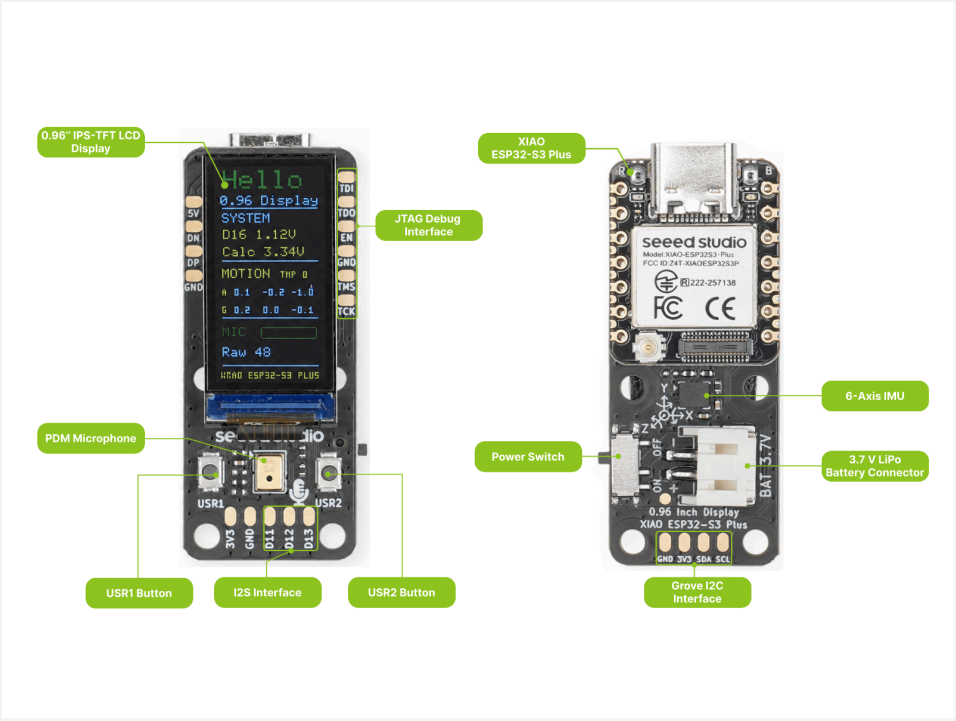


Specification

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

Compliance & Logistics

HSCODE	8517629990
USHSCODE	8517620010
UPC	
EUHSCODE	8517180000
COO	CHINA

Resource Links

- https://www.seeedstudio.com/0-96-Inch-Display-Powered-by-XIAO-ESP32-S3-Plus-p-6993.html
- Wiki-XIAO 0.96" IPS Display(ESP32-S3) Resources
- 3D-Printed Enclosure for XIAO 0.96" Display — Designed by Gokul

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