seeed studio

INDUSTRIAL PRODUCT DATASHEET

Seeed Studio XIAO ESP32-C3 (3PCS)

The Seeed Studio XIAO ESP32-C3 (3PCS) is a compact, low-power Wi-Fi and Bluetooth Low Energy development board for IoT, wearables, health monitoring, education, low-power networking, rapid prototyping, smart private garage, and...

SKU	UPDATED	PRICE
102010572	2026-11-06 10:30:43	$13.49(Excl. VAT)



Overview



The Seeed Studio XIAO ESP32-C3 (3PCS) is a thumb-sized flexible MCU board featuring the ESP32-C3 32-bit RISC-V chip up to 160 MHz, complete Wi-Fi and Bluetooth Low Energy, multiple development ports, and 4 power modes as low as 44 μA in deep sleep with lithium battery charge management. It is developer friendly with support for Arduino IDE, MicroPython, CircuitPython, PlatformIO, ESP IDF, Zephyr, Matter, ESPNow, Meshtastic, WLED, ESPHome, Home Assistant, and Ubidots, and is suitable for Internet of Things, wearable devices, health monitoring, education, low-power networking, rapid prototyping, smart private garage, and remote forest tracker applications.

Key Features

01 **Flexible MCU Board**

Incorporate the ESP32-C3 32-bit RISC-V chip, operating up to 160 MHz, mounted multiple development ports,

02 **Developer Friendly**

Compatible with Arduino IDE, MicroPython, CircuitPython, PlatformIO, ESP IDF, Zephyr, Matter, ESPNow, Meshtastic, WLED, ESPHome, Home Assistant, Ubidots

03 **Outstanding RF performance**

Complete Wi-Fi functions and Bluetooth Low Energy, while supporting communication over 100m with anFL antenna

04 **Elaborate Power Design**

4 working modes as low as 44 μA in deep sleep mode, while supporting lithium battery charge management

05 **Thumb-sized Design**

21 x 17.8mm, Seeed Studio XIAO series classic form factor

06 **Perfect for Production**

Breadboard-friendly with elegant Surface-Mounted SMD design, no components on the back

07 **Production-Ready Design with Fusion PCBA Support**

08 **Attention**

09 **Connecting the antenna to the board for the first time might be a bit challenging. Please connect the antenna vertically and avoid any horizontal dragging.**

10 **We already have 15 XIAO MCUs based on popular chipsets of SAMD21, nRF52840, ESP32-C3, ESP32-S3, and ESP32-C6. To help you better understand the differences and choose the most suitable one for your projects, please visit the Seeed Studio XIAO Series Page.**

11 **XIAO Premium 3pcs Pack with Pin-Headers——Free shipping**

12 Warehouse

Product Gallery





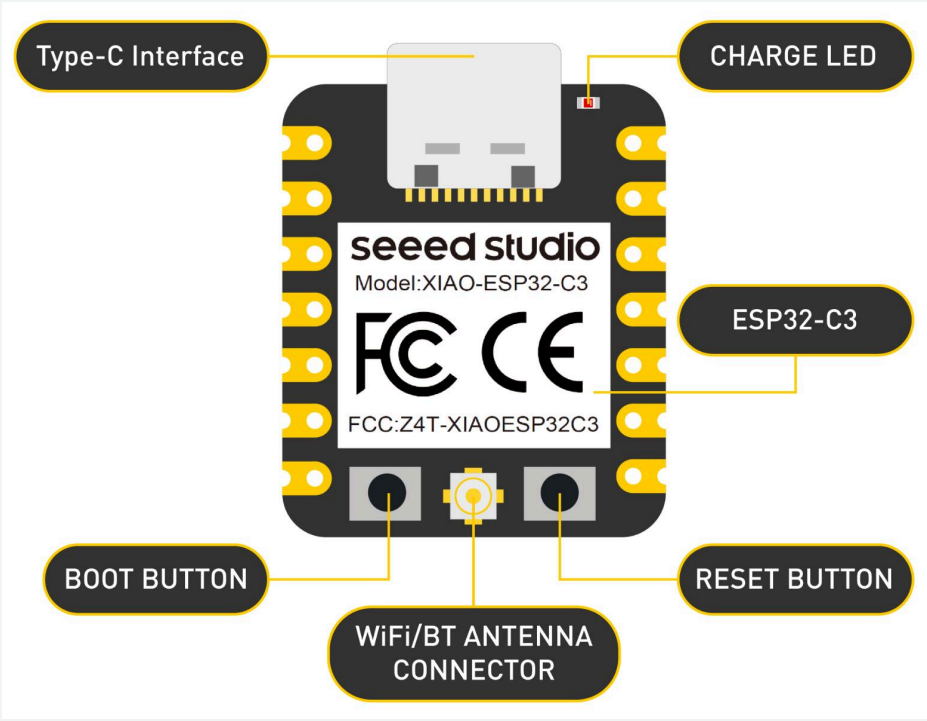


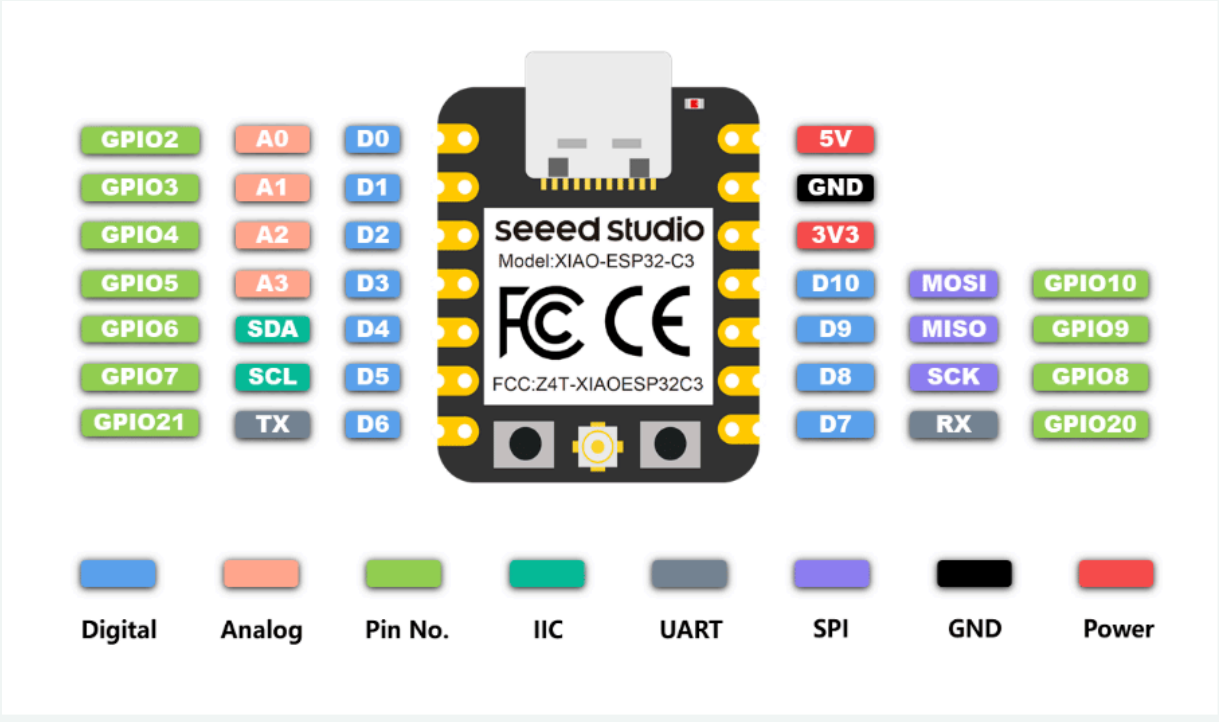






Hardware Overview





Applications

- **Internet of Things**
- **Wearable devices**
- **Health monitoring**
- **Education**
- **Low-Power(LP) networking**
- **Rapid prototyping**
- **Smart Private Garage:** This is a peer-to-peer WiFi communication application. Once two XIAOs detect each other via Wifi, the garage door will open or keep opening, and vice versa.It is nice to add an ultrasonic distance sensor to measure the car-to-door distance and an OLED screen to check the status of the garage. If you want an onboard voice sensor to command the door to open with vocal instruction, try our XIAO BLE Sense.
- **Remote Forest Tracker:** Thanks to the tiny size of the XIAO series, it is suitable to make the wearable devices, such as a small pet trackers. This wearable device can be used as a simple GPS-Tracker which will lock its current location and publish other data via LoRa.A compass that shows direction and distance is a great added value to the tracker that you could consider. Meanwhile, publishing altitude, speed, or other parameters could bring more scenarios to this tracker. Besides, the chip ESP32-C3 allows this tracker to communicate over WiFi or BLE, and therefore, we can upload the tracker's data or realize the Long Range-to-MQTT bridge as well.

Resource Links

- https://www.seeedstudio.com/Seeed-Studio-XIAO-ESP32C3-3PCS-p-5920.html
- 3D Printing "Case" Studies
- Wiki-XIAO ESP32-C3 Resources
- Report of XIAO ESP32-C3 Low Power Consumption
- Seeed Studio XIAO Use Case

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