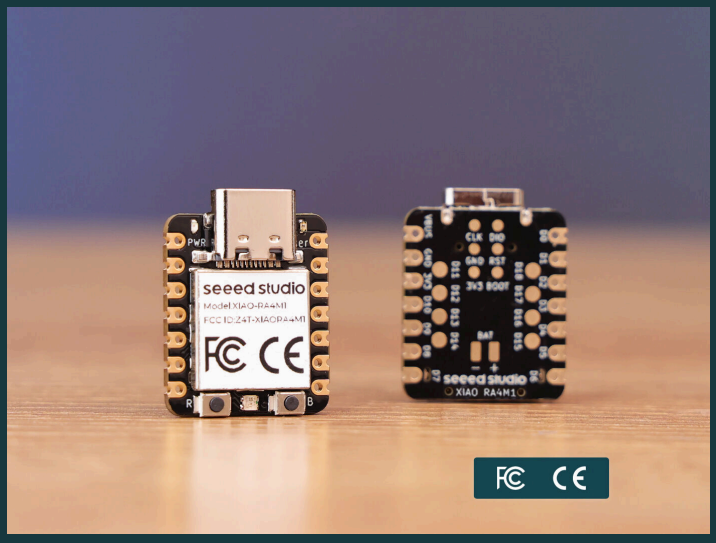
seeed studio

INDUSTRIAL PRODUCT DATASHEET

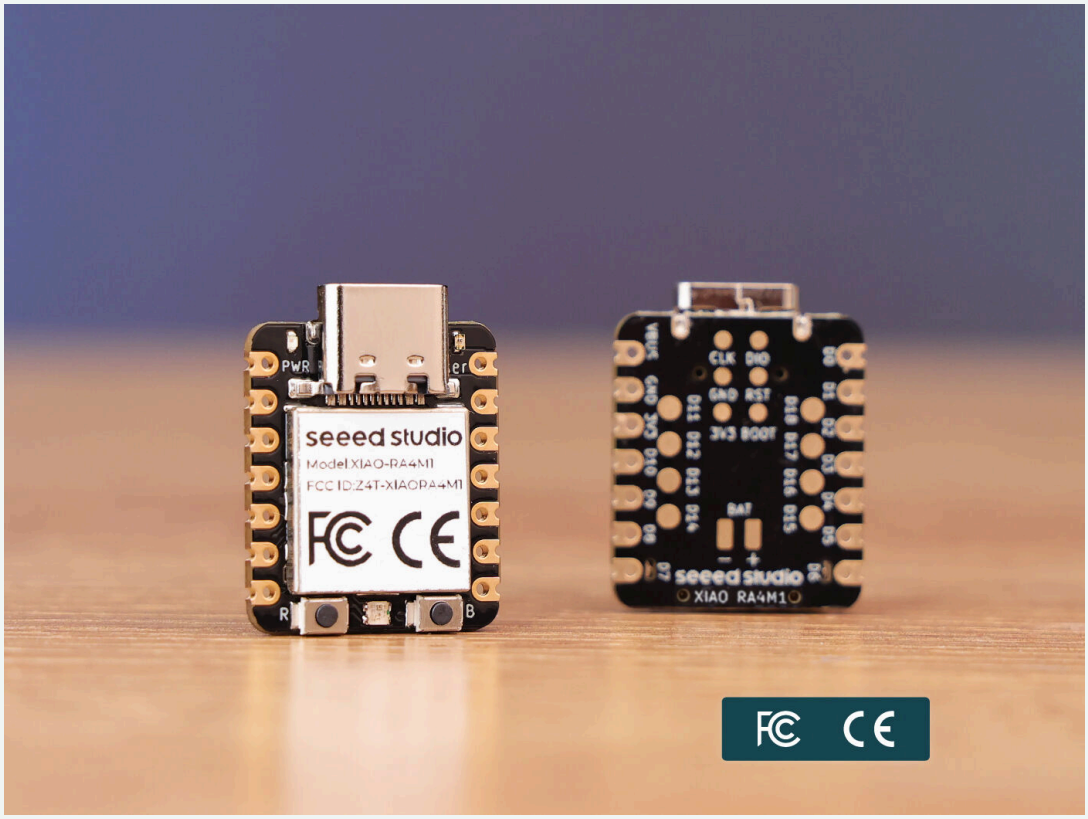
Seeed Studio XIAO RA4M1

The XIAO RA4M1 integrates Renesas' RA4M1 chip (32-bit ARM® Cortex®-M4 MCU up to 48 MHz with FPU) into the classic XIAO form factor.

SKU	UPDATED	PRICE
102010551	2026-11-11 09:05:15	$5.90(Excl. VAT)



Overview



The XIAO RA4M1 integrates Renesas' RA4M1 chip (32-bit ARM® Cortex®-M4 MCU up to 48 MHz with FPU) into the classic XIAO form factor. This development board offers 256KB Flash, 32KB SRAM, 8KB EEPROM, a USB 2.0 connector, reset and boot buttons, 3 LEDs, a 14-bit A/D converter, a 12-bit D/A converter, and a CAN BUS interface. With onboard charging circuitry and low-power modes (as low as 45μA), it’s ideal for battery-powered applications. Sharing the same 32-bit microcontroller as the Arduino Uno R4, it's natively compatible with Arduino IDE, making it the perfect starting point for electronics projects thanks to the extensive XIAO accessories.

Key Features

01 **Popular MicrocontrollerOnboard**

Powered by Renesas RA4M1, an 32-bit ARM® Cortex®-M4 R7FA4M1AB3CNE MCU operating at up to 48 MHz with FPU, 256 KB of Flash memory, and 32 KB of SRAM.

02 **Highlighted Onboard Resources**

Equipped with a 14-bit ADC, 12-bit DAC, USB 2.0, and an onboard RGB LED.

03 **Expanded 8 New IOs**

Adds 8 new IO pins on the back compared to previous XIAO boards (19 GPIOs in total), enabling more complex applications.

04 **Powerful Security Features**

Built-in hardware encryption, secure boot, key storage, and other functions to ensure application security.

05 **Software Compatibility**

Fully compatible with Arduino IDE for seamless project development and prototyping.

06 **Efficient Power Design**

Offers 4 operating modes with power consumption as low as 45μA in deep sleep, and supports lithium battery charge management.

07 **Compact Thumb-Sized Design**

Measuring 21 x 17.8mm, adopting Seeed Studio's classic XIAO form factor, ideal for space-conscious applications.

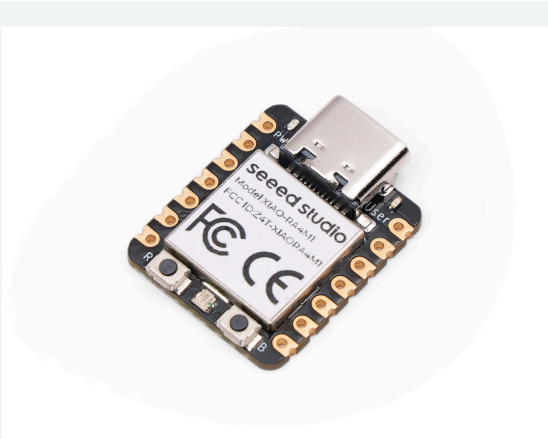
08 **Production-Friendly**

Surface Mount Device (SMD) design with all components on the front and stamp holes on both sides, facilitating efficient mass production.

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

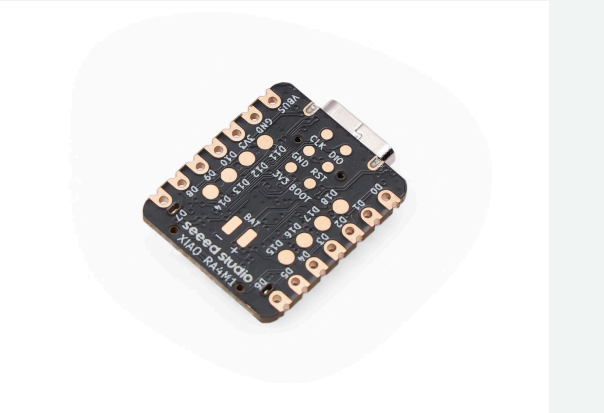
Product Gallery

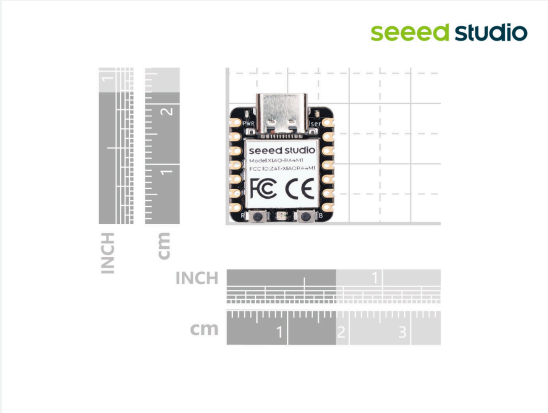




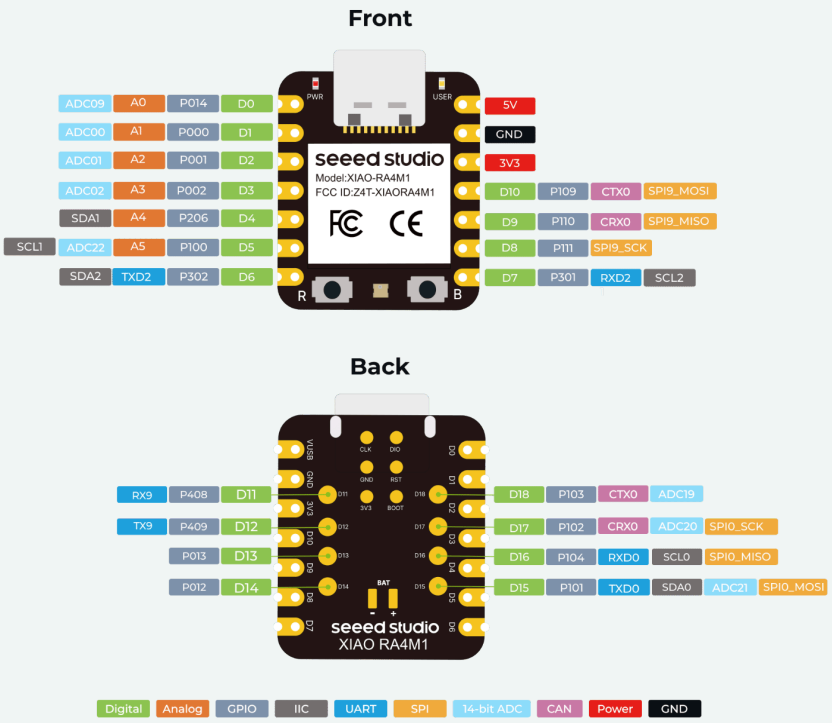


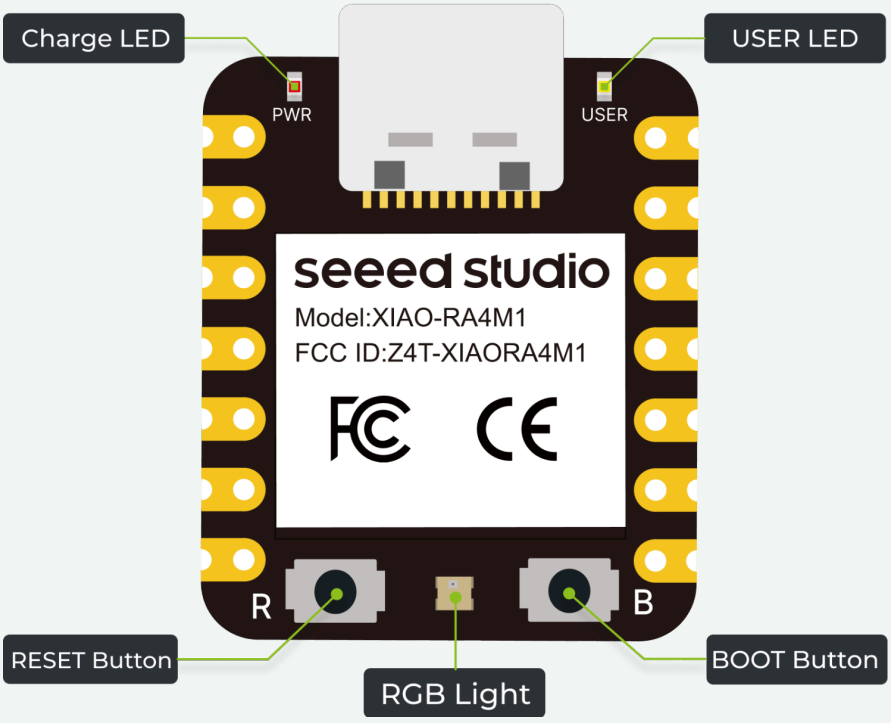






Hardware Overview





Applications

- **Smart Control**
- **Education**
- **Robotics**
- **Wearables**

Resource Links

- https://www.seeedstudio.com/Seeed-XIAO-RA4M1-p-5943.html
- PCN-XIAO Series Packaging Upgrade.pdf
- Wiki-XIAO RA4M1 Resources
- Seeed Studio XIAO Use Case

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