

113991114 | Seeed Studio XIAO ESP32-S3

SKU: 113991114

Product Overview

The Seeed Studio XIAO ESP32S3 features a 240MHz Xtensa 32-bit LX7 dual-core processor and supports both WiFi and BLE 5.0 wireless connectivity. It includes a 2.4GHz rod antenna and can enter deep sleep mode with power consumption as low as 14uA, supporting lithium battery charging management.

Features

Powerful MCU Board: Incorporate the ESP32-S3 32-bit, dual-core, Xtensa processor running at up to 240MHz, mounted multiple development ports, Arduino / MicroPython supported

Outstanding RF performance: Supports 2.4GHz WiFi and BLE 5.0 dual wireless communication, support 100m+ remote communication when connected with U.FL antenna

Elaborate Power Design: Lithium battery charge management capability, offer 4 power consumption model which allows for deep sleep mode with power consumption as low as 14uA

Thumb-sized Compact Design: 21 x 17.8mm, adopting the classic form factor of XIAO, suitable for space limited projects like wearable devices

Perfect for Production: Breadboard-friendly & SMD design, no components on the back Production-Ready Design with Fusion PCBA Support All Seeed Studio XIAO dev boards feature a production-optimized SMD (Surface Mount Device) design with standardized stamp holes, making it perfect for commercial PCBA (Printed Circuit Board Assembly) integration. Through our Fusion PCBA Sponsorship program, you can not only enjoy the lowest unit prices for all XIAO modules from our Fusion Open Parts Library, but also fabricate and scale your XIAO-based PCBA designs at low cost (30% off) with FREE Design for Manufacturing consulting services, streamlining your journey from prototype to production.

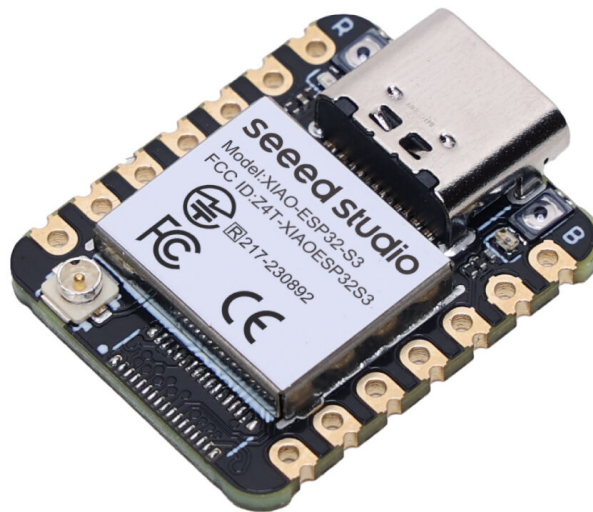
Seeed Technology Co.,Ltd.

9F, Building G3, International E City,
Zhongshanyuan Road,
Nanshan, Shenzhen, China

Contact:

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

Product Image



Product image

Specifications

Seeed Studio XIAO ESP32-C3

Parameter	Seeed Studio XIAO ESP32-S3	
Processor	ESP32-S3R8 SoC	ESP32-C3 SoC
Xtensa LX7 dual-core, 32-bit processor running up to 240 MHz	RISC-V single-core 32-bit chip processor with a four-stage pipeline that operates at up to 160 MHz	
Wireless	Complete 2.4GHz WiFi subsystem	
Bluetooth Low Energy 5.0 / Bluetooth Mesh		
On-chip Memory	8MB PSRAM & 8MB Flash	400KB SRAM & 4MB Flash
Interface	1x UART1x IIC1x SPI11x GPIO(PWM)9x ADC1x User LED1x Charge LED	1x UART1x IIC1x SPI11x GPIO(PWM)4x ADC1x Charge LED
1x Reset button1x Boot button		
Dimensions	21 x 17.8mm	
Power(Typ.)	Input voltage (Type-C): 5VInput voltage (BAT): 3.7V	Input voltage (Type-C): 5VInput voltage (BAT): 3.7V

Seeed Technology Co.,Ltd.

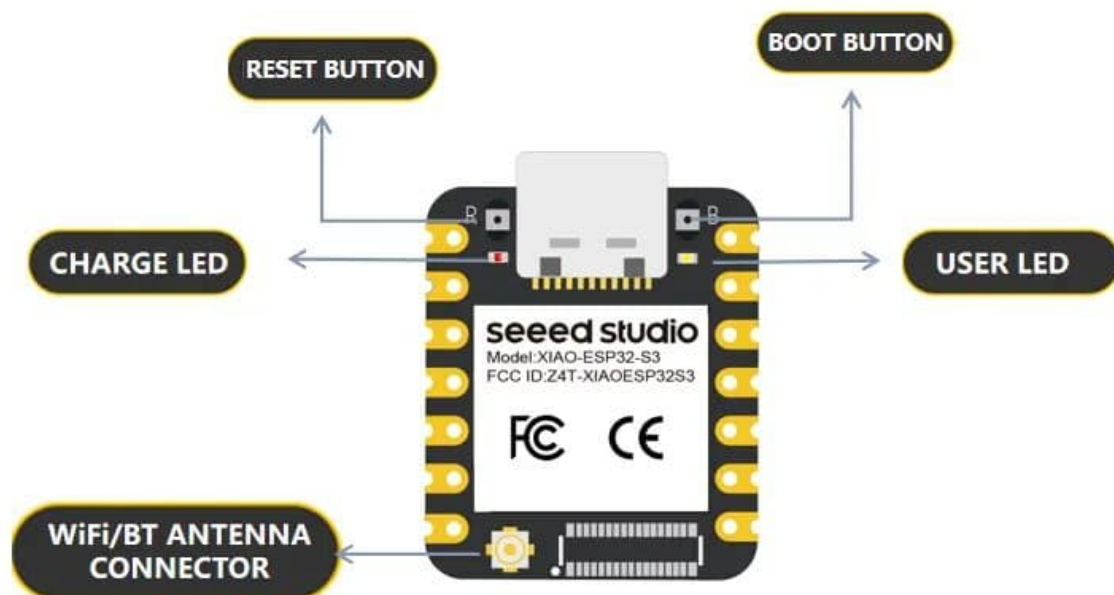
9F, Building G3, International E City,
Zhongshanyuan Road,
Nanshan, Shenzhen, China

Contact:

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

Parameter	Seeed Studio XIAO ESP32-S3	
Circuit operating Voltage:- Type-C: 5V@19mA- BAT: 3.8V@22mA	Circuit operating Voltage:- USB:5V@9mA- BAT:3.8V@9mA	
Charging current:50mA(Fast) / 3.8mA(Trickle)	Charging current: 380mA(Fast) / 40mA(Trickle)	
Low Power Consumption Mode(Typ.)(Supply Power: 3.8V)	Modem-sleep Model: 27 mALight-sleep Model: 2mADeep Sleep Model: 14 uA	Modem-sleep Model: 24 mALight-sleep Model: 3 mADeep Sleep Model: 44 uA
WiFi Enabled Power Consumption(Typ.)	Active Mode: 220 mA	Active Mode: 103 mA
BLE Enabled Power Consumption(Typ.)	Activex Mode: 217 mA	/
Working Temperature	40degC 65degC	40degC 85degC

Hardware Overview



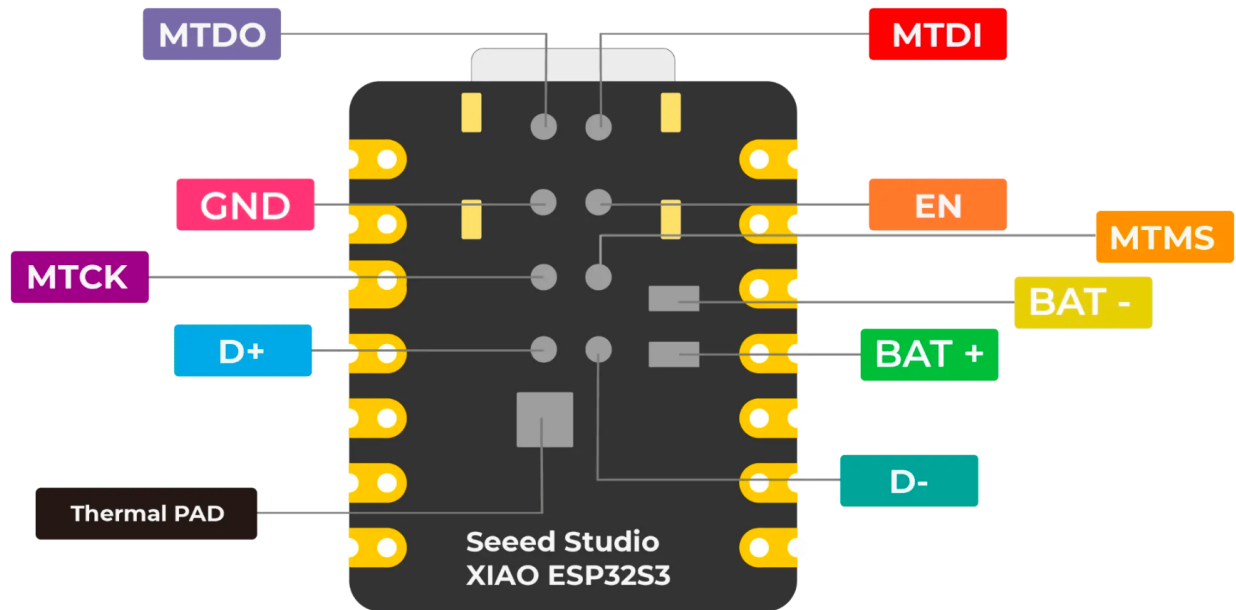
Hardware overview image

Seeed Technology Co.,Ltd.

9F, Building G3, International E City,
Zhongshanyuan Road,
Nanshan, Shenzhen, China

Contact:

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



Hardware overview image