

INDUSTRIAL PRODUCT DATASHEET

Seeed Studio XIAO ESP32-S3(Tape & Reel)

This is the Tape & Reel version of Seeed Studio XIAO ESP 32-S 3, designed for automated SMT assembly and high-volume production. It leverages a 240 MHz Xtensa 32-bit LX 7 dual-core processor, supporting both Wi-Fi and BLE 5.0 wireless connectivity. Equipped with a 2.4 GHz rod antenna, it supports deep sleep mode with power consumption as low as 14 μ A and integrates lithium

SKU

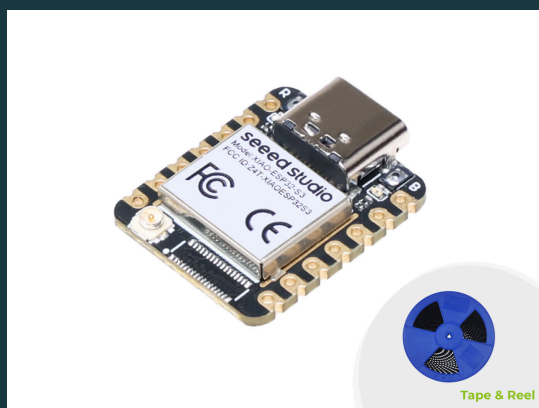
100092361

UPDATED

2026-04-15 07:02:50

PRICE

\$6.90(Excl. VAT)



Overview

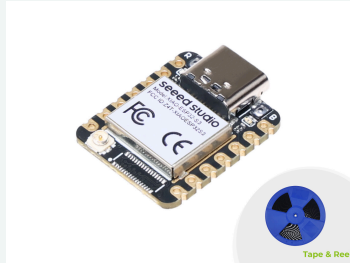


Figure 1. 100092361 Seeed Studio Xla0 Esp32 S3 Tape Reel

This is the Tape & Reel version of Seeed Studio XIAO ESP 32-S 3, designed for automated SMT assembly and high-volume production. It leverages a 240 MHz Xtensa 32-bit LX 7 dual-core processor, supporting both Wi-Fi and BLE 5.0 wireless connectivity. Equipped with a 2.4 GHz rod antenna, it supports deep sleep mode with power consumption as low as 14 μ A and integrates lithium battery charging management. This makes it an excellent choice for IoT applications, smart home devices, wearable electronics, and robotics projects that demand low power consumption and reliable wireless performance.

Key Features

01

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

02

Outstanding RF performance

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

03

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 14 μ A

04

Thumb-sized Compact Design

21 x 17.8mm, adopting the classic form factor of XIAO, suitable for space limited projects like wearable devices

05

Perfect for Production

Breadboard-friendly & SMD design, no components on the back

06

Production-Ready Design with Fusion PCBA Support

07

Starter Kit with free Course for all Electronics Neophytes and Enthusiasts

08

Seed Studio XIAO Kit Courses | Seed Studio Wiki

09

We already have 15 XIAO products based on different solutions in the XIAO family, to help you better understand the differences and choose the most suitable part for your projects, please refer to the Seed Studio XIAO Series Page.

Product Gallery



Figure 1. 100092361 Seede Studio Xla0 Esp32 S3 Tape Reel



Figure 2. 100092361 Seede Studio Xla0 Esp32 S3 Tape Reel



Figure 3. 100092361 Seede Studio Xla0 Esp32 S3 Tape Reel

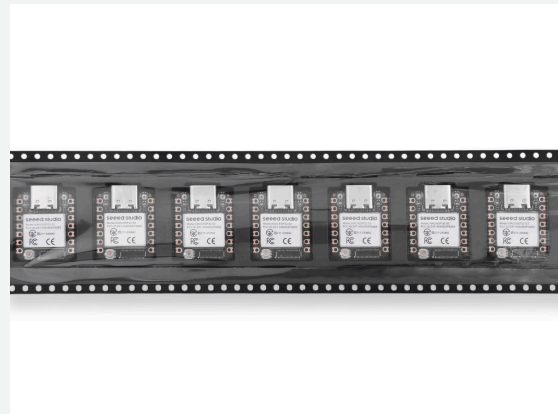


Figure 4. 100092361 Seede Studio Xla0 Esp32 S3 Tape Reel

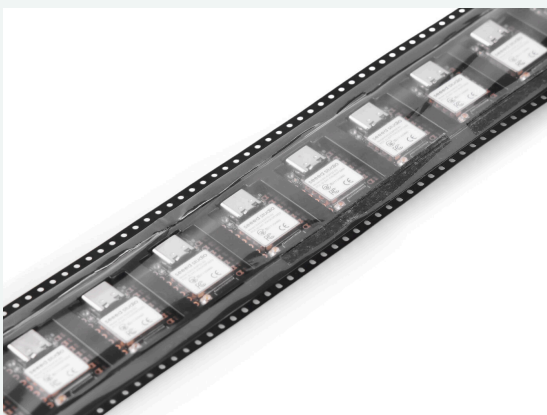


Figure 5. 100092361 Seede Studio Xla0 Esp32 S3 Tape Reel

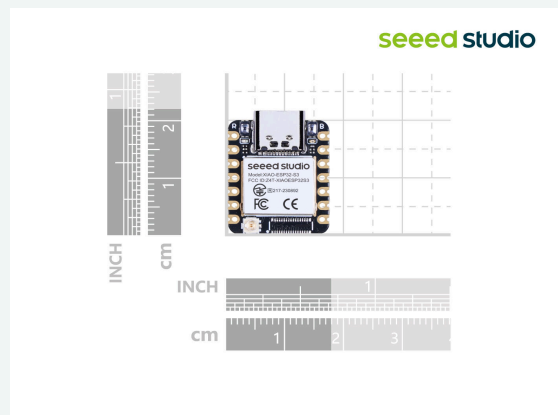


Figure 6. 100092361 Seede Studio Xla0 Esp32 S3 Tape Reel

Specification

Seed Studio XIAO ESP32-C3(Tape & Reel)

Parameter	Seed Studio XIAO ESP32-S3(Tape & Reel)	Seed Studio XIAO ESP32-C3(Tape & Reel)
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 SPI1x GPIO(PWM)9x ADC1x User LED1x Charge LED	1x UART1x IIC1x SPI1x 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
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 Mode: 27 mALight-sleep Mode: 2mADeep Sleep Mode: 14 μ A	Modem-sleep Mode: 24 mALight-sleep Mode: 3 mADeep Sleep Mode: 44 μ A
WiFi Enabled Power Consumption (Typ.)	Active Mode: 220 mA	Active Mode: 103 mA
BLE Enabled Power Consumption (Typ.)	Activex Mode: 217 mA	/
Working Temperature	-40°C ~ 65°C	-40°C ~ 85°C

Seeed Studio XIAO
ESP32-S3 (Tape&Reel) ×1

Compliance & Logistics

HSCODE	8543709990
USHSCODE	8517180050
UPC	
EUHSCODE	8543709099
COO	CHINA

Logistics	Value
ECCN	5A992
HSCODE	8543709990
USHSCODE	8517180050
EUHSCODE	8543709099
COO	CHINA

Resource Links

- <https://www.seeedstudio.com/Seeed-Studio-XIAO-ESP32-S3-Tape-Reel-p-6640.html>
- [Wiki-XIAO ESP32-S3 Series Resources](#)
- [Seeed Studio XIAO Use Case](#)
- [TinyML Case Studies](#)
- [3D Printing "Case" Studies](#)

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