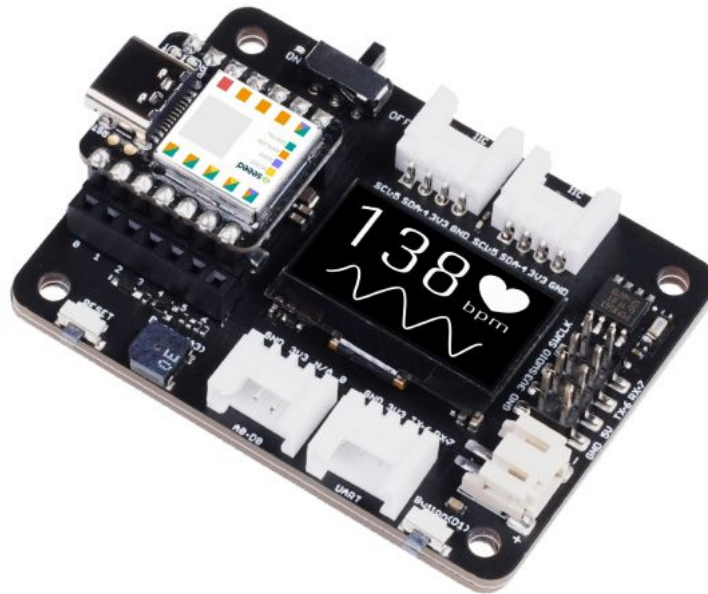


Seeeduino XIAO Expansion board



Key Features

Quick Prototyping: Easy debug and Reset with RESET button and SWD pin led out to the male header. 0.96" OLED, enables visual data to display without PC serial monitor.

Rich peripherals: OLED display, RTC, expandable memory space, passive buzzer, user button, on board battery management chip... One board on hand to explore infinite possibilities of Seeeduino XIAO.

No Soldering Needed: All pin led out. Convenient plug and play Grove connectors support multiple data protocols, including IIC, Uart, Analog/Digital.

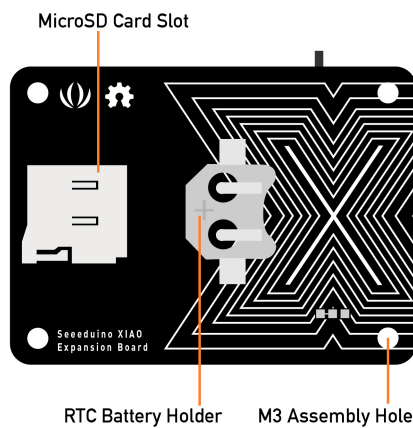
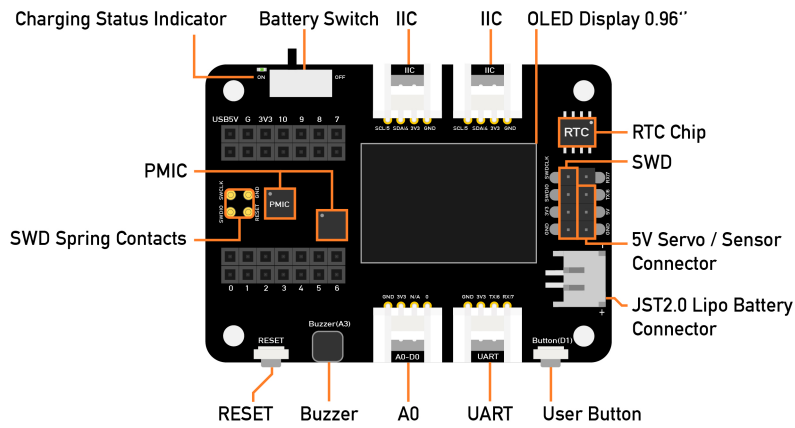
Circuit Python Supported: Well supports circuit python. MicroSD card slot enables memory space to expand, making it possible to allocate more libraries needed in prototyping and project building.

Mini Size: Compact and elegant with only half Raspberry Pi 4 size, perfect for tiny and wearable projects.

Description

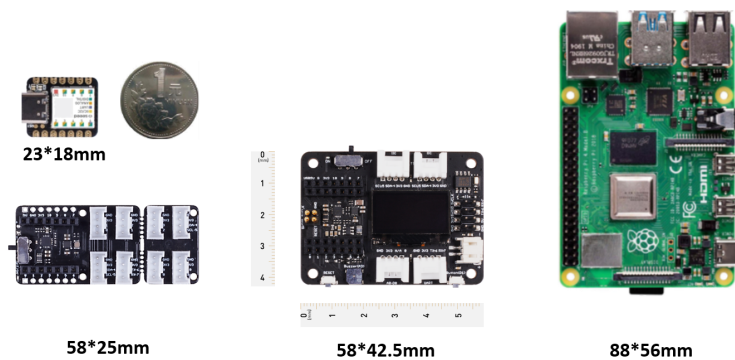
Seeeduino XIAO Expansion Board is a powerful functional expansion board for [Seeeduino XIAO](#) of only half Raspberry Pi 4 size. It enables build prototype and project in an easy and quick way. With its rich peripherals, you could explore infinite possibilities of Seeeduino XIAO. Circuit python is also well supported by this board.

Hardware Overview



Many users adore Seedeuino XIAO because of its mini size and elegant design, so we try our best to keep the size as mini as we could when persuing the powerful function and rich interfaces. As you could see, the board is of only half Raspberry Pi 4 size.

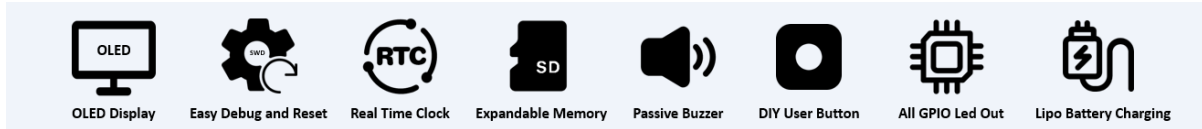
Size Comparison



Rich peripherals on board including:

- **OLED display:** Visual data display without connecting to PC, which enables debug in a more efficient way, and builds application such as a sensor hub, data monitor system, .etc
- **RESET button:** No more jumper wire and short circuit, easy reset with just one click.
- **SWD debug:** SWD pin led out as male pin header, making debugger connection and firmware download much easier.
- **High precision RTC:** High precision real-time clock with battery backup, enable maintain accurate time when the main power is turned off.

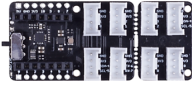
- **Expandable memory:** With a MicroSD card slot on the back, no worry on memory limit any more when adding libraries and using circuit python.
- **User button:** Besides the RESET button, also provide with another user-defined button.
- **Passive buzzer:** Same passive buzzer on Wio Terminal, with which you could change the PWM frequency to award different beep sound to get a "buzzer music".
- **Grove connectors:** All pin led out, plug and play grove connectors support common data protocols (Grove IIC₂, Grove UART₁, A0/Do Grove*1)
- **Lipo Battery Charging:** JST2.0mm standard lipo battery connector and battery management system, supports both USB and lipo bat
- **5V servo connector:** 5V output led out to male header for 5V servo and sensor connection.



Though with all these rich peripherals, you may find Seeeduino XIAO Expansion Board also has very high-cost performance as Seeeduino XIAO does.

Seeeduino XIAO has become one of the hottest products in the Seeeduino series since its release. You may adore its small size and elegant design, powerful CPU powered by SAMD21, or rich interfaces of GPIOs, but no matter what reason makes Seeeduino XIAO attract to you, now you have one more reason now - Seeeduino XIAO Expansion Board, which will definitely help you to explore infinite possibilities with Seeeduino XIAO.

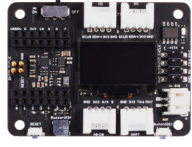
Comparison



Grove Shield for Seeeduino XIAO

- Fulfills the needs of Grove expansion & Battery charging
- More Grove connectors and DIY GPIOs
- Battery and Flash solder to the board manually
- Mini Size and breakable
- Lower price



V.S.



Seeeduino XIAO Expansion Board

- Fulfills the needs of rapid prototyping and peripherals expansion.
- Rich peripherals including OLED, RTC, SD card slot, Buzzer, RESET button, SWD pins...
- Plug and play, no soldering needed
- High cost performance

Comparison Chart

Product	Grove Shield for Seeeduino XIAO	Seeeduino XIAO Expansion Board
Appearance		
Main Features	<ul style="list-style-type: none"> • Grove expansion • Battery charging 	<ul style="list-style-type: none"> • Rapid prototyping • Peripherals expansion
Peripherals	No	0.96" OLED, RTC, passive buzzer, RESET button, user button, SWD connector, 5V servo connector
Grove Connector	8 (Grove IIC*2, Grove UART*1, A0/DO Grove*5)	4 (Grove IIC*2, Grove UART*1, A0/DO Grove*1)
Memory Expand	SPI Bonding Pad Reserved	Mini SD Card Slot
Battery Connection	Soldering Needed	JST 2.0 Connector
Size	58*25 mm / 39*25 mm	58*42.5 mm
Breakable	Yes	No
Price	Lower price	High cost performance

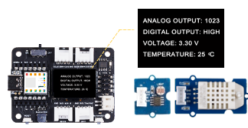
Application

- SWD debug
- Rapid prototyping
- Data display

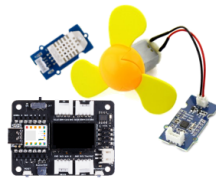
- Mini Size Project



Application Scenarios



Sensor Hub



IoT & Smart Home



Robotics



SWD debug



Wearables

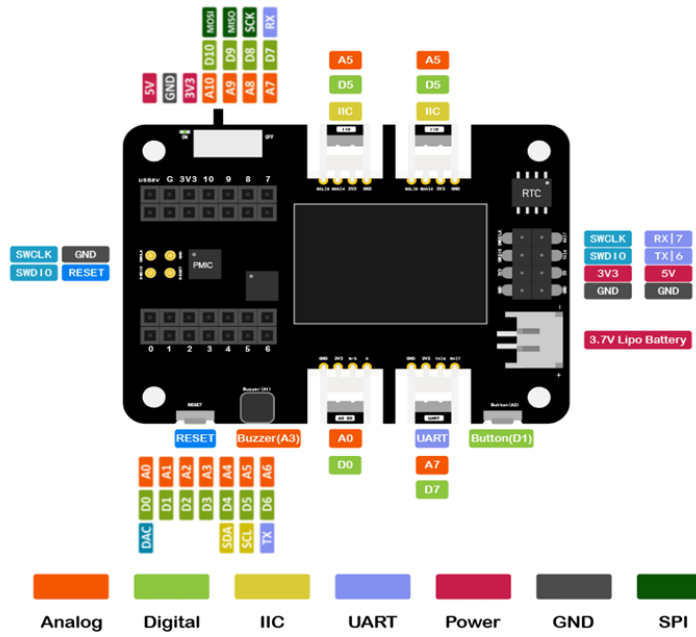


More to Explore...

Specification

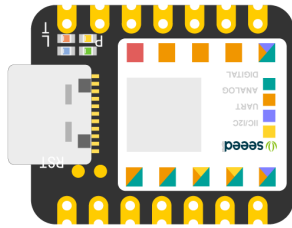
Item	Detail
Power Supply	5v / 3.7V Lithium Battery
RTC chip	PCF8563T/5
RTC battery	CR1220
Expandable memory	MicroSD Card
Screen	0.96 OLED display
Other External Equipment	Passive buzzer, user button, 5Vservo connector
charging current	Max: 460mA
Grove Interface	Grove I2C *2, Grove UART *1, A0/D0 Grove *1

Pinout

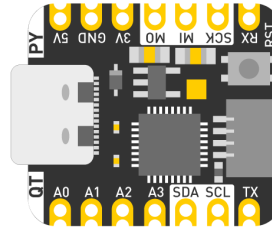


GPIO	0	1	2	3	4	5	6	7	8	9	10	SWCLK	SWDIO	RESET
Interface	A0, D0	D1	SPI	A3	IIC		UART		SPI			SWD		RESET
Components	Grove+1	User Button	mini SD	Buzzer	Grove+2		Grove+1, Headers		mini SD			Headers		Button

Supported Boards



Seeduo XIAO



Adafruit QT Py

Part list

Seeduo XIAO expansion board X 1

Seeduo XIAO and battery is not included in this product