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INDUSTRIAL PRODUCT DATASHEET

Wio Terminal: ATSAMD51 Core with Realtek RTL8720DN BLE 5.0 & Wi-Fi 2.4G/5G Dev Board with Free Course

Wio Terminal is an Microchip ATSAMD51-based microcontroller with both Bluetooth and Wi-Fi Wireless connectivity powered by Realtek RTL8720DN, compatible with Arduino and MicroPython.

SKU	UPDATED	PRICE
102991299	2026-11-11 10:11:53	$33.00(Excl. VAT)



Overview



Wio Terminal is an Microchip ATSAMD51-based microcontroller with both Bluetooth and Wi-Fi Wireless connectivity powered by Realtek RTL8720DN, compatible with Arduino and MicroPython.

Key Features

01 **Powerful MCU**

Microchip ATSAMD51P19 with ARM Cortex-M4F core running at 120MHz

02 **Reliable Wireless Connectivity**

Equipped with Realtek RTL8720DN, dual-band 2.4Ghz / 5Ghz Wi-Fi

03 **Complete system equipped with Screen + Development Board + Input/Output Interface + Enclosure**

04 **Highly Integrated Design**

2.4" LCD Screen, MCU, IMU, WIFI, BT, and more practical add-ons housed in a compact enclosure with built-in magnets & mounting holes allows you to easily set up your IoT project

05 **Raspberry Pi 40-pin**

Compatible GPIO enables installation as a peripheral to the Raspberry Pi

06 **External onboard multi-functional Grove ports**

Compatible with over 300 Plug&Play Grove modules to explore with IoT

07 **USB OTG Support： can act as a USB host (reads data or signals from a mouse, keyboard, MIDI device, 3D printer, etc.) or USB client (emulates a mouse, keyboard, or MIDI device to a host PC).**

08 **Support Arduino, CircuitPython, Micropython, ArduPy(What is ArduPy?), AT Firmware, Visual Studio Code**

09 **Azure Certified Device**

Sense and tag real-world data and visualize through Azure IoT Central

10 **TELEC certificated**

11 **Description**

Product Gallery









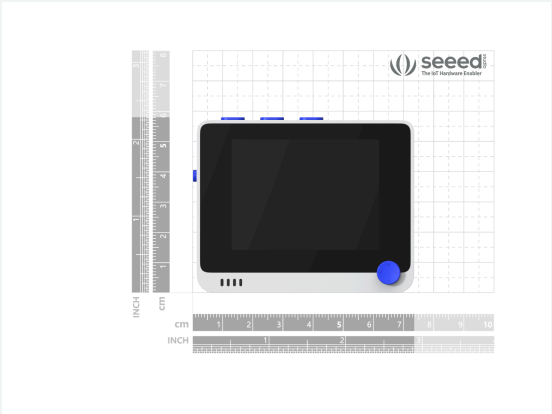







Wio Terminal
Wio Terminal
User Manual


Wio Terminal


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Applications

- Python Terminal Device
- Data Collection Machine Learning powered device
- Hand-held analyzer
- Retro Gaming Device
- IoT Controller
- Smart Robot for Education
- IoT application quick prototyping
- Slave devise / Accessories for Raspberry Pi
- Collaborate With the Worldwide Community!

Resource Links

- https://www.seeedstudio.com/Wio-Terminal-p-4509.html
- ATSAMD51N19A Datasheet
- Wio Terminal Schematics v1.2
- Wio Terminal Enclosure Dimensions - Front
- Wio Terminal Enclosure Dimensions - Back
- Wio-Terminal-Screen-Sticker-Design-File(Wio-Terminal-ちゃん)
- Wio-Terminal-chan-Desgin-File-blue&white
- Wio Terminal Enclosure Dimensions - Front (DXF)
- Wio Terminal Enclosure Dimensions - Back (DXF)
- Wio Terminal Battery Chassis Dimensions (DXF)
- Wio Terminal PCB Dimensions (DXF)
- Wio Terminal User Manual
- TinyML Case Studies
- 3D Printing "Case" Studies

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