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INDUSTRIAL PRODUCT DATASHEET

Wio ESP32 CAN Dev Kit - embedded STM32WLE5JC&ESP32-C3, supports WiFi/Bluetooth&CAN FD&CAN2.0

Wio ESP32 CAN Dev kit is based on the ESP32C3 and uses the Wio-E5 STM32WLE5JC module as the Long Range controller.

SKU	UPDATED	PRICE
114992985	2026-11-11 08:52:22	$29.90(Excl. VAT)



Overview



Wio ESP32 CAN Dev kit is based on the ESP32C3 and uses the Wio-E5 STM32WLE5JC module as the Long Range controller. It supports CAN FD & CAN2.0 communication and features outstanding RF performance and high extensibility. It's ideal for car hacking and Long Range sensor network management.

Key Features

01 **Outstanding RF performance**

PowerfulESP32-C3 SoCand U.FL antenna that supports WiFi/Bluetooth connection over 100m. It also supports a Global Long Range frequency plan with a long-distance transmission range of 10km(ideal value in open areas)

02 **2 Independent CAN FD Interface**

Supports CAN FD, CAN2.0 communication

03 **High extendability with various sensors**

full GPIOs led out to rich interfaces, including Grove modules for GPS, environmental detection, etc

04 **Support industrial standards**

a wide working temperature at -40 ℃ ~ 85℃, high sensitivity between -116.5 dBm ~ -136 dBm, and power output up to +20.8dBm at 3.3V

05 **Easy to use**

User-friendly IP66 waterproof case for better outdoor deployment and enables temporary use when lacking an external power source

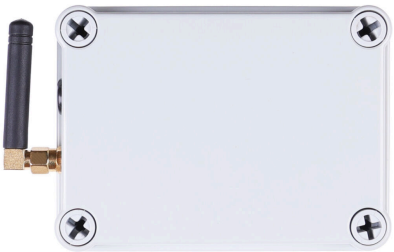
06 **Different from the previous Wio-E5 CAN Dev Kit, it's embedded with a highly-integrated ESP32-C3 chip, built around a 32-bit RISC-V chip processor with a four-stage pipeline that operates at up to 160 MHz. This chip has been installed with a complete 2.4GHz Wi-Fi subsystem which means it supports Station mode, SoftAP mode, SoftAP & Station mode, and promiscuous mode for multiple Wi-Fi applications. It works under an ultra-low power state, also supporting features of Bluetooth 5 and Bluetooth mesh. There are 400 KB SRAM & 4 MB Flash on the chip, allowing for more programming space, and bringing more possibilities to the IoT control scenarios.**

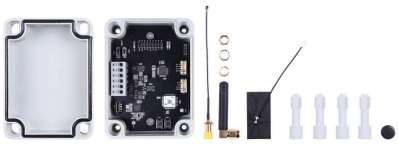
07 **It uses the Wio-E5 STM32WLE5JC module as the Long Range controller which supports the Long Range protocol on the global frequency band with a long-distance transmission range of 10km(ideal value in open areas).**

Product Gallery











Applications

- **Long Range sensor network management: Many sensors in the industry are transmitted through CAN BUS. With the Wio ESP32 CAN Dev board, you can use the onboard CAN BUS function to read the sensors and send the data through Long Range.**
- **Car hacking: Since the circuit board can receive 7-28V input, the user can connect the circuit board to the OBD interface, and get the data of the car.**
- **CAN Gateways: Since it enables the possibility of connecting different CAN networks (or sub-networks) with different baud rates and protocols, or integrating with CAN with different network types, such as Ethernet.**

Resource Links

- https://www.seeedstudio.com/Wio-ESP32-CAN-Dev-Kit-p-5466.html
- Arduino Library for CAN FD
- Eagle File
- WiFi Usage for ESP32C3
- Wio-E5 datasheet and specifications
- Wio-E5 AT Command Specification
- STM32WLE5JC Datasheet

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