

ESPuno Pi Zero

STEM Technology for the Community

THREAD

April 2025



5V 44 to 7

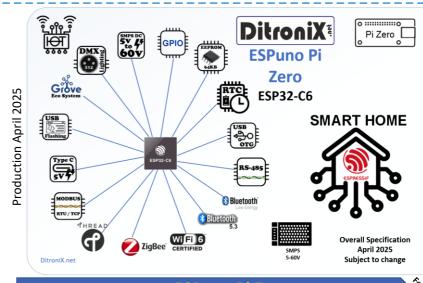






Powerful Compact Flexible Innovative

Information provided is preliminary and is subject to change or be improved, or have additional features



ESPuno Pi Zero ESP32-C6-MINI

Wi-Fi, Bluetooth 5 (BLE) Zigbee and Thread 60V DC Wide range of Input DC Voltages 5V to 60V

Wrapped in a compact mechanical Pi Zero form

Powered – USB C, External 5-60V DC, Battery **RS-485** Industry Standard MODBUS / DMX512 Interface

PCA9671 GPIO Expander

TMP102 Temperature Sensor

Voltage Regulators 3V3 and 5V

GROVE I2C Expansion Interface

EEPROM (64Kbit) for On-board Data Logging and User Parameters

UART Integrated Type C 'ESP32-C6 DEV' Interface

RTC On-Board 32.768 kHz XTAL for Real Time Clock

RGB Status User Programmable LED

Tactile Buttons Reset and PGM / User

ESPuno Pi Zero - C6

Espessif ESP32-C6

WiFi 6, BT 5.3, Zigbee

ESP32-C6-MINI-1-N4 (PCB Antenna)

ESP32-C6-MINI-1U-N4 (U.FL Connector for External Antenna)

Home Automation – IoT
Internet of Things - Smart Devices

ESPuno Pi Zero - Radio

- * **Wi-Fi** 6 2.4 GHz 802.11ax | 802.11b/g/n
- * Bluetooth | LE | 5.3 | Mesh
- * Thread 1.4 | 802.15.4 | Mesh
- * **Zigbee** 3.0 | 802.15.4 | Mesh

Interfaces

- * Raspberry Pi GPIO
 - * ADC Inputs
 - * **PWM** Output
- * **RS-485** (MODBUS/ DMX512)
 - * **GROVE** Expansion
 - * Type C C6 and UART

DC Power

- * SMPS High Voltage Input 5V to 60V DC
 - * LDO Regulator 5V to 3V3
 - * USB Type C 5V
 - * 3V3 External



ESPuno Pi Zero - ESP32-C6

SDK Board STEM Overview



IoT Smart Home Energy Automation

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