

WiPy 2.0

Introducing the WiPy 2.0. The tiny Micro Python enabled Wifi & Bluetooth IoT development platform. With a 1KM WiFi range, state of the art Espressif ESP32 chipset and dual processor, the WiPy is all about taking the Internet of Things to the next level.

Create and connect your things everywhere. Fast.

WiPy Features

- Powerful CPU, BLE and state of the art WiFi radio.
- 1KM Wifi Range
- MicroPython enabled, the Linux of IoT for fast deployment
- Fits in a standard breadboard (with headers)
- Ultra-low power usage: a fraction compared to other connected micro controllers

Processing

- Espressif ESP32 chipset
- Dual processor + WiFi radio System on Chip.
- Network processor handles the WiFi connectivity and the IPV6 stack.
- Main processor is entirely free to run the user application.
- An extra ULP-coprocessor that can monitor GPIOs, the ADC channels and control most of the internal peripherals during deep-sleep mode while only consuming 25uA.

Use the Pymakr IDE

Super easy code editor to write your Python scripts.

Quick Verification

For easy and fast debugging use the interactive shell that is accessible through telnet or one of the serial ports.

Easy Upload

Upload your scripts, and any other files you want to the WiPy via the FTP server

Locally or remotely

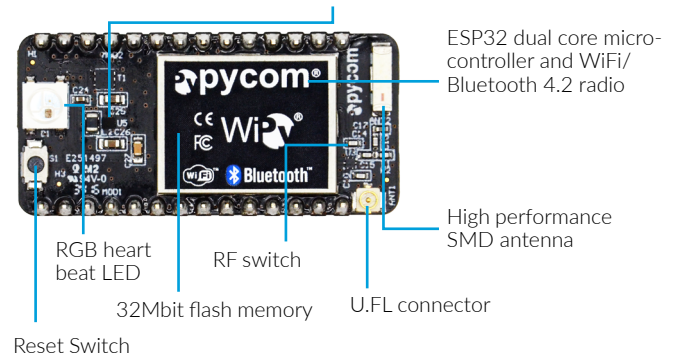
Reset the WiPy (you can do it locally, or remotely via Telnet)

Mechanical

Size: 42mm x 20mm x 3.5mm (excluding headers)

Operating temperature:
-40 to 85 degrees celsius

3V3 ultra low noise switching regulator



Interfaces

- 2 x UART, 2 x SPI, I2C, I2S, micro SD card
- Analog channels: 8x12 bit ADCs
- Timers: 4x16 bit with PWM and input capture
- DMA on all peripherals
- GPIO: Up to 24

Hash / encryption

SHA, MD5, DES, AES

Wifi

802.11b/g/n 16mbps

Bluetooth

Low energy and classic

RTC

Running at 32KHz

Power

- 3.3V to 5.5V

3V3 output capable of sourcing up to 500mA

Security & Certifications

- SSL/TLS support
- WPA Enterprise security
- FCC - 2AJMTWIPY2R
- CE 0700

Memory

- RAM: 512KB
- External flash 4MB
- Hardware floating point acceleration.
- Python multi-threading.

With dozens of ready to use templates and libraries soon to be available on the Pycom Exchange, developing a new IoT solution is now easier and faster. Additional support for Blynk: SMTP, MQTT, URLLIB, ONEWIRE, Accelerometer, Event loop MicroPython together with the universal hardware API allow us to build a large set of powerful, robust, and portable libraries across hardware platforms.

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