

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

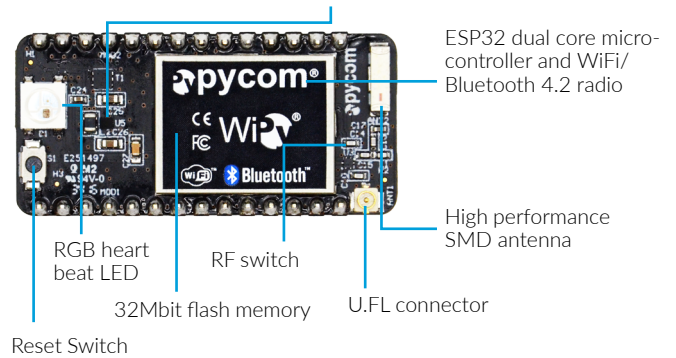
Locally or remotely

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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WiPy 2.0

隆重介绍 WiPy 2.0. 它是基于 Python 语言开发的 WiFi 和蓝牙物联网开发平台。1 千米无线网络连接距离。拥有最先进的乐鑫 ESP32 芯片和双处理器，WiPy 就是所有关于物联网最新发展级别的革新产品。

建立和连接您的应用在任何地点，快速！

WiPy 性能

- 强大的运算器，低功耗蓝牙和最先进的无线局域网
- 无线网络连接距离可达 1 千米
- 在应用 MicroPython 语言开发环境下，可以大幅的缩短 Linux 物联网应用的开发周期
- 配备标准的扩展接口，令开发调试和拓展应用更加便捷自如
- 超低功率损耗：只是相比较于其他控制器的极小一部分功耗

处理器

- 乐鑫 ESP32 芯片
- 双处理器+WiFi 无线通信系统芯片
- 网络处理器负责 WiFi 连接和互联网协议栈版本 6
- 主处理器完全开放运行开发者的应用
- 一个额外的低功耗处理器可以监控输入输出端口，数模转换通道以及控制大部分的内部外围设备在其深度睡眠模式，消耗电流仅为 25 微安培。

使用 Pymakr 集成开发环境

超级简单的代码编辑可以让您轻松编写属于您的 Python 运行脚本文件。

快速的校验

可以方便和快速的通过远程登录协议或者串口方式，使用交互式外壳程序进行调试。

简单的上传

通过文件传输协议服务器上传你的脚本文件和其它任何的文件到你的 LoPy。

本地或者远程控制

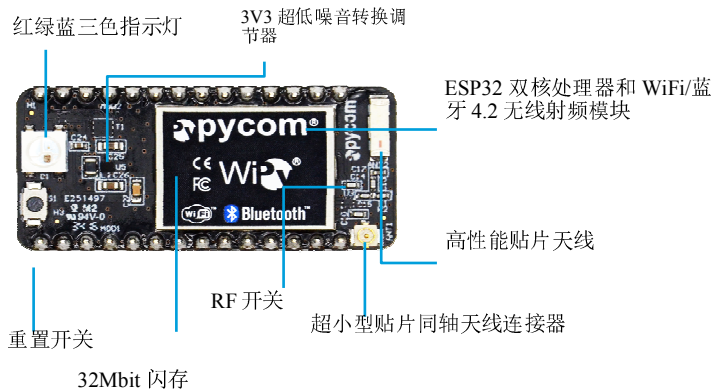
可以通过本地或者远程登录控制实现重启 LoPy。

通过 Pycom 公司发布。

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机械

尺寸: 42mm x 20mm x 3.5mm (不包括拓展连接排插)



接口

- 2 个通用异步收发器接口，2 个串行外设接口，两线式串行接口，集成电路内置音频总线接口，微型 SD 卡接口
- 模拟通道: 8x12 位模数转换器
- 定时器: 4x16 位脉宽调制和通道输入捕捉
- 所有外围设备可直接存取
- 通用输入输出接口: 多达 24

散列 / 加密

安全散列算法, 消息摘要算法 5, 数据加密算法, 高级加密标准

无线网络

802.11b/g/n 16mbps

蓝牙

低功耗和经典

实时时钟

运行在 32KHz

电源

- 输入 3.3V - 5.5V
- 3V3 输出可提供电流达 500mA.

安全 & 认证

- 加密套接字协议/安全传输层协议
- 无线网络安全存取企业级安全保障
- FCC 产品编号 2AJMTWIPY2R
- CE 0700

存储器

- 闪存: 512KB
- 外部闪存 4MB

数十个准备就绪的模板和库文件很快可以在 Pycom Exchange 中使用，这将使开发新的物联网解决方案变得更加容易和快速。对 Blynk 的附加支持: 简单邮件传输协议, 消息队列遥测传输, URLLIB, 单总线, 加速器, MicroPython 与通用硬件应用程序的相结合，允许我们去建立一个强大的, 稳健并且便携式的库文件跨硬件平台。

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