WiPy

The enterprise grade IOT development platform that runs Python in real time with the perfect blend of power, friendliness and flexibility. Create and connect your things. Fast.

All those hardware specs are nice, but the coolest part is that they are super easy to use, because we have written an powerful and intuitive Python API to take advantage of every feature of the hardware. Other WiFi boards are available and you might think, “yet another platform...”, guess what? it’s not. Because it runs Python and that works just like the Python you are used to working with on a PC, the learning curve is minimal, if there’s any at all. Simply put, the WiPy is all about Python and the internet, but taken to the next level.

WiPy Benefits

★ MicroPython – the Linux of IoT for fast deployment ★ small and light to fit in any cavity ★ Low power (in fact a fraction of power consumption of other IoT platforms) means there’s no need for new nuclear power stations to run millions of WiPys ★

With dozens of ready to use templates and much more added options, now you can create almost anything that comes to your mind. Combination of advanced content importers, different layouts, header styles, post types,... gives you a freedom and control you have never seen before.

USE YOUR FAVORITE EDITOR
Use your favorite code editor of choice 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), and... you are ready to rock and roll!
WiPy Specification

**Mechanical**
- Size: 25mm x 45mm (1.0" x 1.77")

**Interfaces**
- UART (x2), SPI, I2C, I2S, SD card
- Analog channels: 3x12 bit ADCs
- Timers: 4x16 bit with PWM and input capture.
- 3v3 output capable of sourcing up to 250mA

**Hash and encryption engines**
- SHA
- MD5
- DES
- AES

**Networking**
- WiFi: 802.11b/g/n 16Mbps

**RTC**
- Of course

**DMA**
- All over the place

**Security**
- SSL/TLS support
- WPA Enterprise security.

**Processing**
- Dual processor + WiFi radio System on Chip.
- Network processor handles the WiFi connectivity and the IP stack.
- Main processor entirely free to run the user application.
- MCU: Texas Instrument CC3200 Cortex-M4 @ 80MHz

**Memory**
- RAM: 256 KBytes
- Flash: 2 MBytes
- GPIO: Up to 25

**MicroPython code already written**
- Built-in Python support for all the SoC features. (10K+ Lines of C code)
- Definition of a universal MicroPython Hardware API.
- External libraries:
  - 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.

To Order contact Pycom on sales@pycom.io