# Technical Article **Programming with Python Is Now Possible with the WiPy**



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As the Internet of Things (IoT) continues to rapidly expand, the need for intuitive and simple ways to connect more of the devices and appliances around us to the internet is critical. WiPy, a new development kit that utilizes the popular Python programming language to enable wireless connected applications, is able to leverage the SimpleLink<sup>™</sup> Wi-Fi® CC3200 wireless microcontroller (MCU) from Texas Instruments to create an ideal starting point for IoT products. Access to the simple, intuitive and flexible Python programming language from a microcontroller is a unique value proposition in today's evolving marketplace.



#### 1. What Is the WiPy?

The WiPy is a small, ultra-low power and low cost Wi-Fi module targeted to the Internet of Things. The core of the software running in the WiPy is MicroPython, a lean and mean implementation of Python 3, specifically optimized in terms of speed and memory to be able to run efficiently on microcontrollers. Thanks to that, the WiPy brings unprecedented levels of flexibility and rapid application development.

## 2. What Makes the WiPy Stand Out from Its Competitors?

The answer here is: **MicroPython**. Until now, high level languages like Python were forbidden in the MCU world, but with the WiPy, embedded systems developers are able to enjoy coding in and feature rich and dynamic language, focusing in writing their application in a hardware and OS agnostic way.

# 3. There Are Many Wireless Connectivity Technologies on the Market. Why Did You Choose to Integrate Wi-Fi in the WiPy?

We chose to integrate Wi-Fi because it is the technology that connects devices to the Internet the easiest and fastest. The Internet of Things, as the name implies is all about being connected to the cloud and Wi-Fi makes it possible in a direct and reliable manner.

#### 4. Why Did You Choose TI's SimpleLink Wi-Fi CC3200 Wireless MCU for Your Product?

There's no other product in the market that offers what TI's <u>SimpleLink Wi-Fi CC3200 wireless MCU</u> does; its low-power capabilities, a powerful ARM Cortex-M4 MCU combined with a state of the art Wi-Fi network processor and many flexible peripherals in a single package. If you add to that, the top notch development tools, high quality software libraries and SDKs, choosing TI is a no-brainer.

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## 5. Where Do You See Your Technology/solution Going in the Next Five Years?

We see our technology going everywhere across the M2M industry, including vending machines, point of sale systems, white goods and in many places within smart homes and smart buildings.

Additional resources for more information on:

- SimpleLink Wi-Fi CC3200 wireless MCU
- WiPy
- MicroPython

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