1. Record Nr. UNINA9910254858003321

Autore	Bell Charles
Titolo	MicroPython for the Internet of Things : A Beginner's Guide to Programming with Python on Microcontrollers / / by Charles Bell
Pubbl/distr/stampa	Berkeley, CA : , : Apress : , : Imprint : Apress, , 2017
ISBN	9781484231234 1484231236
Edizione	[1st ed. 2017.]
Descrizione fisica	1 online resource (XXI, 445 p. 168 illus. in color.)
Disciplina	005.133
Soggetti	Python (Computer program language) Computer input-output equipment Open source software Computer programming Python Hardware and Maker Open Source
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	1. What Is the Internet of Things? -- 2. Introducing MicroPython -- 3. MicroPython Hardware -- 4. How to Program in MicroPython -- 5. MicroPython Libraries -- 6. Low-Level Hardware Support -- 7. Electronics for Beginners -- 8. Project 1: Hello, World! MicroPython Style -- 9. Project 2: Stoplight Simulator -- 10. Project 3: Plant Monitoring -- 11. Project 4: Using Weather Sensors -- 12. Where to Go from Here -- 13. Appendix.
Sommario/riassunto	Quickly learn to program for microcontrollers and IoT devices without a lot of study and expense. MicroPython and controllers that support it eliminate the need for programming in a C-like language, making the creation of IoT applications and devices easier and more accessible than ever. MicroPython for the Internet of Things is ideal for readers new to electronics and the world of IoT. Specific examples are provided covering a range of supported devices, sensors, and MicroPython boards such as Pycom's WiPy modules and MicroPython's pyboard. Never has programming for microcontrollers been easier. The book

takes a practical and hands-on approach without a lot of detours into the depths of theory. The book: Shows a faster and easier way to program microcontrollers and IoT devices Teaches MicroPython, a variant of one of the most widely used scripting languages Is friendly and accessible to those new to electronics, with fun example projects What You'll Learn: Program in MicroPython Understand sensors and basic electronics Develop your own IoT projects Build applications for popular boards such as WiPy and pyboard Load MicroPython on the ESP8266 and similar boards Interface with hardware breakout boards Connect hardware to software through MicroPython Explore the easy-to-use Adafruit IO connecting your microcontroller to the cloud.