

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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# LightBlue Bean+

SKU 105990031



It is an Arduino-compatible board that you program wirelessly using Bluetooth Low Energy. With Bean+, you can program wirelessly from any of your devices. Bean+ also comes with a built-in accelerometer, temperature sensor and RGB LED.

# Description

The LightBlue Bean+ is an Arduino-compatible board that you program wirelessly using Bluetooth Low Energy. With Bean+, you can program wirelessly from any of your devices. Bean+ also comes with a built-in accelerometer, temperature sensor and RGB LED.



# Wireless programming

The Bean+ can be programmed from most iOS, OS X, Windows and Android devices with BLE capabilities. Write code on-the-fly using our iOSand Android Bean Loader apps, or at the comfort of your computer using the standard Arduino IDE (Mac or PC). All programming can done wirelessly and you can even program multiple Beans at once. No wires; no worries.

# Interacts with your iPhone

The Bean+ is perfect for any smartphone-controlled project. Use our app LightBlue to quickly interact with the Bean+ without having to make your own app. Make a smartphone-controlled hovercraft or use your iPhone to turn the lights on and off in your roommate's bedroom.

#### iOS and Android SDKs

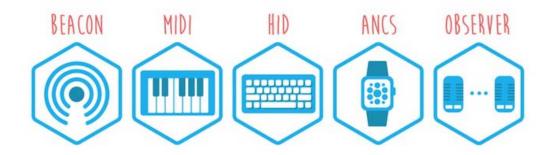
We provide official iOS, OS X and Android SDKs that help you develop smartphone apps that interact with the Bean+. These have been been put to the test by our own apps, as well as many built by our community.

### **Bean to Bean communication**

Your Bean+ can talk to other Beans! This feature uses BLE advertisement packets and the observer role to send simple messages between Beans.

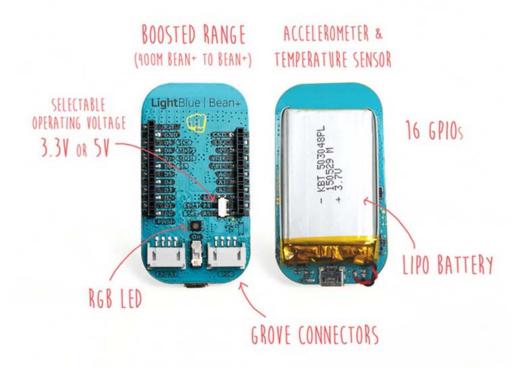
#### **Talented Bean+**

The Bean+ comes equipped with five new Bluetooth Low Energy capabilities: beacon, MIDI, HID, ANCS and observer role.



Have the Bean+ receive your Apple notifications during the weekdays, be a MIDI instrument by Friday and work the weekends as a keyboard or a mouse. Then let it spend its holidays socializing with other Beans.





Rechargeable LiPo

Bean+ comes with a LiPo battery and charges just like any other micro-USB device. If you need more capacity, simply solder on your own LiPo as a replacement.

# **Grove Connectors**

Grove is a system of components designed for makers. The Grove ports on Bean+ make it easy to add parts without soldering.



Built-in accelerometer, temperature sensor and RGB LED

# **Addon Boards**

The built-in headers on Bean+ make it easier than ever to build your own addon boards. Just spin a PCB, add headers and plug it in!

# 3.3V and 5V Operation

Bean+ operates at either 3.3 or 5 volts, so it can talk to all your favorite peripherals. You won't have to limit which parts you can use because of incompatible operating voltages.

# **Boosted range**

With a new RF amplifier, the Bean+ can communicate with other Bean+'s from up to 400 meters (1,300 ft) under ideal conditions, or 250 meters (820 ft) to your smartphone. Upload a new

sketch to your tree house Bean+ without having to leave your bed, or turn on epic welcoming music in your house before you even pull into to your driveway.



- ATmega328p microcontroller @ 8 MHz
- 32KB Flash memory, 2KB SRAM
- 16 accessible I/O pins
- 6 analog input pins on a 10-bit ADC
- 4 pins with PWM support
- 1 SPI port
- 1 I<sup>2</sup>C port

# **Battery Specifications**

- 3.7V 600maH LiPo Rechargeable Battery
- Operating Voltage Range (USB): 5V +/- 10%
- Maximum Current @ 5V: .6A
- Maximum Current @ 3.3V: 1A
- Operating Temperature Range: -40°C to 85°C

# **RF Specifications**

- Maximum Output Power: 8dBm
- Maximum Range(Bean+ to Bean+): 400 m
- Maximum Range(Bean+ to smartphone): 250 m



- 1 x LightBlue Bean+
- 1 x LiPo Rechargeable Battery