

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.

Bluetooth Low Energy Capabilities

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 [iOS](#) and [Android](#) Bean Loader apps, or at the comfort of your computer using the standard Arduino IDE ([Mac](#) or [PC](#)). All programming can be 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

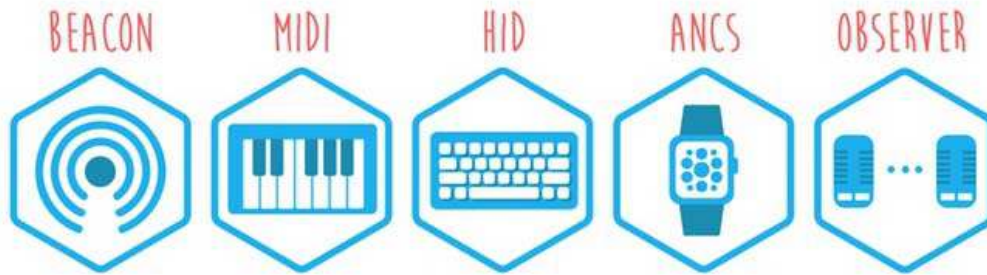
We provide official [iOS](#), [OS X](#) and [Android](#) SDKs that help you develop smartphone apps that interact with the Bean+. These have been put to the test by our own apps, as well as many built by our community.

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.

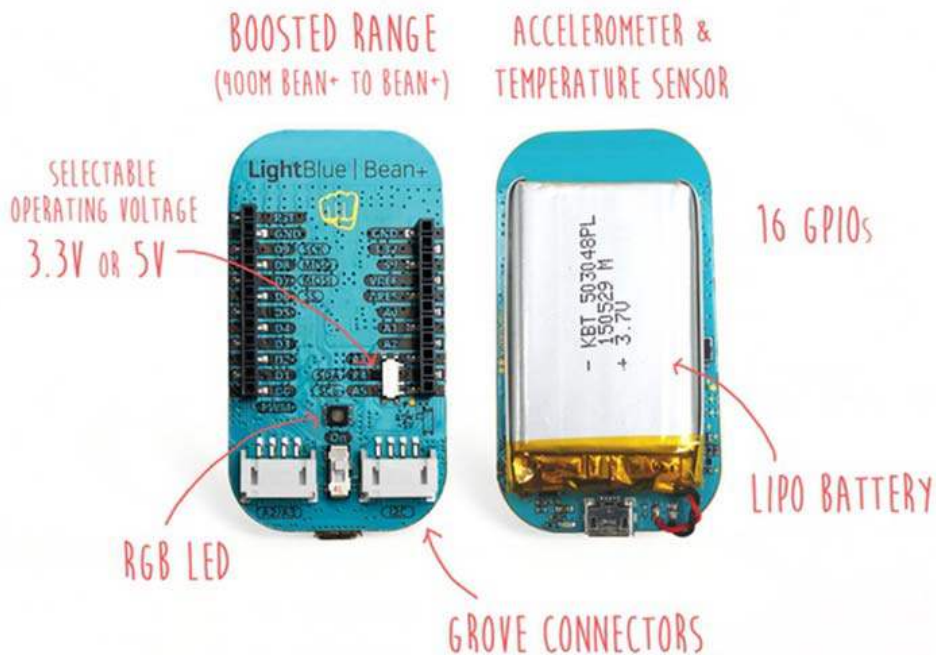
Talented Bean+

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.

Hardware Features

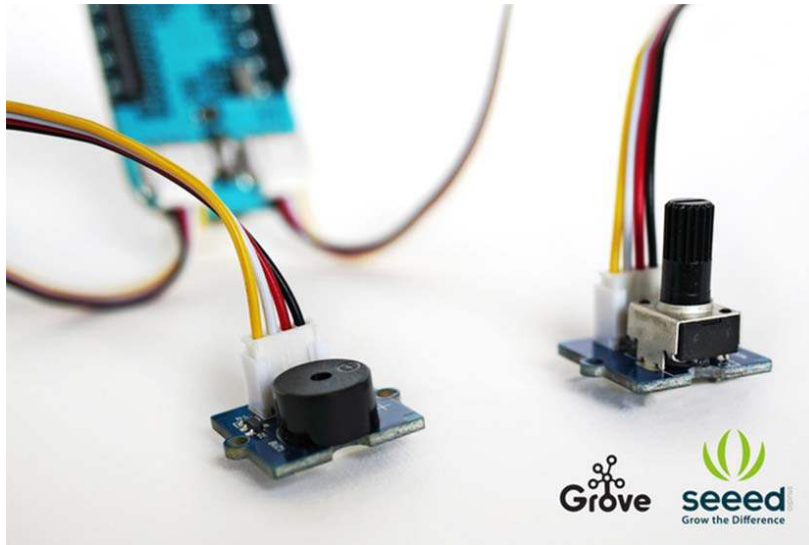


Rechargeable LiPo

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.

Specification

- 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 I²C 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

Part List

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