



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!



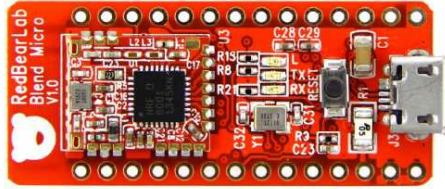
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Blend Micro - an Arduino Development Board with BLE

SKU: 113990059

(images/product/Blend Micro_02.jpg)



(https://www.kickstarter.com/projects/seeed/wio-link-3-steps-5-minutes-build-your-iot-applicat/description?ref=banner_depot)

Description



Blend Micro is our first integrated development board, we have "blend"ed Arduino with Bluetooth 4.0 Low Energy (aka BLE or Bluetooth Smart) into a single board. It is targeted for makers to develop low power Internet-Of-Things (IoT) projects quickly and easily.

The micro-controller unit (MCU) is Atmel ATmega32u4 (<http://www.atmel.com/devices/atmega32u4.aspx>) and the BLE chip is Nordic nRF8001 (<http://www.nordicsemi.com/eng/Products/Bluetooth-R-low-energy/nRF8001>). Blend Micro runs as BLE peripheral role only, it allows BLE central role devices to establish connection with.

Current supported BLE central devices:

iOS 7

- iPhone 4s
- iPhone 5 (all models)
- iPod touch 5

- iPad 3/4/mini/Air

Android 4.3 or above (4.4 recommended for stability) with Bluetooth 4.0 hardware support

- Nexus 4
- Nexus 7
- (please report any other Android devices supported)

Windows 8.1 with built-in Bluetooth 4.0 or USB dongle

Mac OSX 10.9.2 with built-in Bluetooth 4.0 or USB dongle

Linux with BlueZ 5.1 with built-in Bluetooth 4.0 or USB dongle

Features

- First BLE + Arduino board under Arduino AtHeart (<http://arduino.cc/en/ArduinoAtHeart/HomePage>) program
- Works with Nordic Bluetooth Smart SDK for Arduino (<https://devzone.nordicsemi.com/index.php/arduino>)
- Software development using Arduino IDE
- Over-the-Air download of sketch to Blend Micro (available soon)
- Supported by our free Android App (<http://redbearlab.com/app/android>) and iOS App (<http://redbearlab.com/app/ios>)

Technical Specification

Microcontroller	Atmel ATmega32u4 (http://www.atmel.com/devices/atmega32u4.aspx)
Wireless Chip	Nordic nRF8001 (http://www.nordicsemi.com/eng/Products/Bluetooth-R-low-energy/nRF8001)
Operating Voltage	3.3V
Input Voltage	5V (USB) 3.3-12V (VIN) Note: Use either one power source at a time.
Clock Speed	8MHz
Connectivity	Bluetooth 4.0 Low Energy micro-USB Serial (TX/RX) I2C SPI
Flash Memory	32KB (of which 4 KB used by bootloader)
SRAM	2.5KB
EEPROM	1KB
Dimensions	43.6 x 18.4 x 4.3mm (83 x 58 x 25mm with packaging)
Weight	4g (19g with packaging)
Power Consumption	2mA (average - using Interrupt mode)
I/O Pins	24

Document

- Add-on for Arduino IDE (<https://github.com/RedBearLab/Blend/releases>)
- Get Nordic nRF8001 SDK for Arduino (<https://github.com/NordicSemiconductor/ble-sdk-arduino>)
- Get RBL nRF8001 Library (added some simple APIs) (<https://github.com/RedBearLab/nRF8001>)
- Download the signed driver here for Windows (includes up to Windows 8 PC) (<http://support.atmel.com/bin/customer.exe?=&action=viewKbEntry&id=1624>)

Overview



(<http://www.seeedstudio.com/depot/Arduino-t-1.html?ref=pinfo>)

Designer: RedBearLab
(<http://redbearlab.com/>)
Other Products From This
Designer



(<http://www.seeedstudio.com/depot/Maker-Pro-t-1672.html?ref=pinfo>)

(<http://www.seeedstudio.com/depot/RedBearLab-m-52.html?ref=pinfo>)
Weight: 19 g

Document

[Add-on for Arduino IDE](#)

[Get Nordic nRF8001 SDK for Arduino](#)

[Get RBL nRF8001 Library \(added some simple APIs\)](#)

[Download the signed driver here for Windows \(includes up to Windows 8 PC\)](#)