Nova Basic Kit (a Coin-sized Arduino Compatible Controller)

SKU:KIT0042

INTRODUCTION

"A new generation of leonardo" now comes in compact size and has powerful functionality. The new "Nova" is the smallest controller among all Leonardos. With a size of 21.5mm in length and 20mm in width, you can put it in any project with ease.

Nova integragte a Triple Axis Accelerometer and you can directly read the data via IIC communication. You will not need to add any accelerometer which will bring excessive space.

Small size doesn't mean compromised functionality. Nova allow you to have up to 10 digital I/O, 6 analog I/O and 4 PWM I/O. To make full use of Leonardo's commuincation power, we also equipped it with independent IIC interface, UART seriel interface and micro USB.

To make it user-friendly, we designed a mini expansion shield and special cables to for connections with sensors. You will find mini 3-Pin I/O interface and micro usb and just use and program it like Arduino Leonardo.

We also integrated a mini lipo battery management system. You can charge the tiny lipo battery with micro USB. And if there is no USB power, the battery will automatically supply a stable 5V power. If you are tired of Arduino Lilypad which is powered by Atmega328, this is the chance to try our Nova which has ATmega32u4.

An RGB LED driven by Nova and LIPO battery inside

SPECIFICATION

- Microcontroller: ATmega32u4
- Operating Voltage: 5V
- Digital I/O Pins: 10 (of which 4 provide PWM output)
- Analog Input Pins:6
- Size:21.5mm * 20mm.(0.85"x0.79")
- Envionment Friendly: Rohs Compliance.
- Accelerometer integrated.
- Highly compacted power management system for charging and boosting.
- Perfect for wearable and interactive project.
- Expansion shield and cables available.

Specification of microcontroller

- Bootloader：Arduino Leonardo
- Digital I/O Pins: 10
- PWM Channels: 4
- Analog Input Channels: 6
- Independent UART Seriel interface: （RXD(D0),TXD(D1)
- Independent IIC Inerface
- Flash Memory 32 KB (ATmega32u4) of which 4 KB used by bootloader
- SRAM: 2.5 KB (ATmega32u4)
- EEPROM: 1 KB (ATmega32u4)

SHIPPING LIST

- Nova controller   x1
- Nova IO Expension shield   x1
- Digital Cable   x6
- Analog Cable   x3
- UART Serial Cable   x1
- IIC Cable   x1
- Lipo Battery for Nova (3.7v) x1