USER GUIDE

AdamONE Development PCB



Electronic Design, Development and Manufacture Prototypes to Production Since 1984

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Introduction

The AdamONE is an Arduino Uno compatible development board that was developed for the purpose of validating in-house equipment while providing a useful sample for our customers. This PCB is not for sale and only provided to customers of Adam Electronics INC.

In the event you receive this PCB and cannot make use of it, please provide it to a student or hobbyist interested in electronics and/or software development.



Software Requirements

- Latest Arduino IDE available at this link.
- Select the UNO board to connect and program

Feature Additions

The AdamONE has some additional features to allow a richer learning experience without the need to develop external circuitry to learn concepts.

HC05 Connector

The AdamONE has a connector ready for connection to an HC05 Bluetooth module. This is connected directly to the D0/D1 ports and is ready for UART communication. The voltage divider to bring the TX to 3.3V is also in place. This can be used in conjunction with the Serial Monitor through the Arduino IDE.

An example of what to purchase can be found at this link.

Potentiometer 1

The AdamONE has a potentiometer connected to 5V and Ground with the wiper connected to Analog Input A5.

LED 2 and LED 3

In addition to the standard built in LED that is found on an Arduino UNO on D13, the AdamONE has two additional LEDs connected to D10 and D11 by way of an op-amp buffer.

Terminal Block Power Connection

To allow for an easier power connection on a bench setup, wire to board connector X1 was added to allow easy connection and disconnection of wires. On first revision of PCB, the incorrect connector was selected and does not allow for standard Arduino UNO compatible shields to be connected because of the height. On the next revision, this will be changed to correct this issue. Remove if using a shield.