



SparkFun Blocks for Intel® Edison - Console Block

Introduction

The Console Block is one of the simplest ways to power and communicate with an Intel Edison. Utilizing the FTDI 231X, this creates a USB to serial bridge that is level shifted to the proper 1.8V required by the Edison. The Console is found on UART2. This block is also capable of providing power to the Edison as well as other stacked Blocks.



Console Block

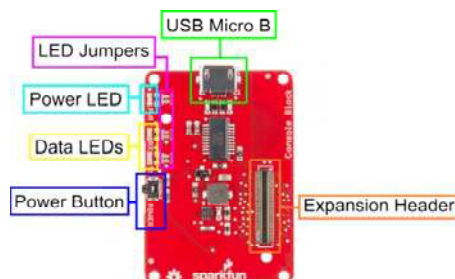
Suggested Reading

If you are unfamiliar with Blocks, take a look at the [General Guide to Sparkfun Blocks for Intel Edison](#).

Other tutorials that may help you on your Edison adventure include:

- [Serial Communication](#)
- [How to Install FTDI Drivers](#)
- [Serial Terminal Basics](#)

Board Overview



Console Block Functional Diagram TOP

- **USB Micro B** - The USB port provides power and a console access port to an Intel Edison Stack. This Block supplies a voltage to the Edison and other Blocks through the VSYS line at 4V. This voltage may vary up to +/-0.1V depending on load.
- **Power Button** - The power switch is connected to the "PWRBTN" line on the Edison. This give the user the ability to place an Edison in sleep or power down the module completely. This does not affect power to other Blocks in the stack.
- **Power LED** - The power LED illuminates when power is present on VSYS. This can come from the Console Block, or any other powered Block in the stack.
- **Data LEDs** - The Data LEDs help the user identify if the console is active. This is a feature commonly found on our FTDI breakout.
- **LED Jumpers** - If power consumption is an issue, cut each jumper to disable LEDs
- **Expansion Header** - The 70-pin Expansion header breaks out the functionality of the Intel Edison. This header also passes signals and power throughout the stack. These function much like an Arduino Shield.

Using the Console Block

To use the console Block, attach an Intel Edison to the back of the board, or add it to your current stack. Blocks can be stacked without hardware, but it leaves the expansion connectors unprotected from mechanical stress.



Console Block Installed

We have a nice Hardware Pack available that gives enough hardware to secure three blocks and an Edison.

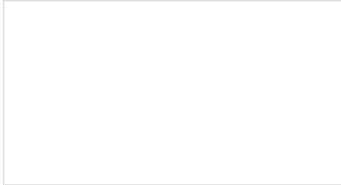
Edison General Topics:

- General Guide to Sparkfun Blocks for Intel Edison
- Edison Getting Started Guide - Programming with Arduino
- Loading Debian (Ubinix) on the Edison

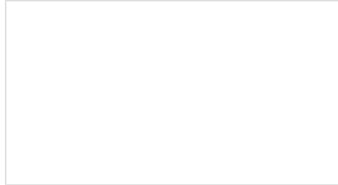
Block Specific Topics:

- How to Install FTDI Drivers
- Console Block Github Repo

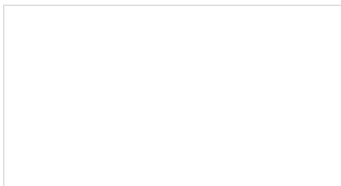
Check out these other Edison related tutorials from SparkFun:



SparkFun Blocks for Intel® Edison - Arduino Block
A quick overview of the features of the Arduino Block.



SparkFun Blocks for Intel® Edison - UART Block
A quick overview of the features of the UART Block.



SparkFun Blocks for Intel® Edison - Base Block
A quick overview of the features of the Base Block.



SparkFun Blocks for Intel® Edison - ADC V20
A quick overview of the features of the ADC Block.