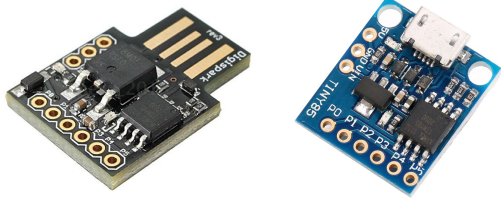




Digispark ATtiny85 USB and Micro USB Development Boards



Digispark is a tiny, Arduino compatible development board using the ATMEL ATtiny85 microcontroller. It has its own USB bootloader and built in USB capability, allowing you to program it with the Arduino SDK and also use it as native USB device. It is similar to the Arduino line, only cheaper, smaller, and a bit less powerful.

The Digispark Micro USB version is a modification to the standard Digispark board using a MicroUSB port rather than USB pins as part of the PCB. It can be connected to the PC using a standard MicroUSB cable.

Features:

- Support for the Arduino IDE 1.0+ (OSX/Win/Linux)
- Power via USB or External Source - 5V or 7-16V (12v or less recommended, automatic selection)
- On-board 500ma 5V Regulator
- Built-in USB (and serial debugging)
- 6 I/O Pins (2 are used for USB only if your program actively communicates over USB, otherwise you can use all 6 even if you are programming via USB)
- 8k Flash Memory (about 6k after bootloader)
- I2C and SPI (via USI)
- PWM on 3 pins (more possible with Software PWM)
- ADC on 4 pins
- Power LED and Test/Status LED

Support for the Digispark board must be added to the Arduino IDE before attempting to program the board with it. Here is a tutorial: <http://envistia.info/digisparkconnecting>

The Digispark programs with a different procedure than other Arduino compatible products:

1. From the Tools menu select Board→Digispark (Default - 16.5Mhz)
2. Write some code, open your code, or open a Digispark example.
3. **Do not plug in your Digispark before invoking the upload!**
4. Press the upload button. The bottom status box will now ask you to plug in your Digispark - at this point you need to plug it in - or unplug and replug it.
5. You'll see the upload progress and then it will immediately run your code on the Digispark.
6. If you unplug the Digispark and plug it back in or attach it to another power source there will be a delay of 5 seconds before the code you programmed will run. This 5 second delay is the Digispark Pro checking to see if you are trying to program it.

Resources:

Digistump Digispark Wiki: <http://envistia.info/digisparkwiki>

Digistump Arduino Releases: <http://envistia.info/digistumparduino>

Arduino IDE: <http://envistia.info/arduinoide>

ATMEL ATtiny85 datasheet: <http://envistia.info/attiny85ds>