

UPDATING FIRMWARE

PS360+

Pre-Update Procedure (Mac Version)

NOTE: It is sometimes hard to get the dfu-programmer working without some tweaking but on the majority of setups it works right away.

Before you can update anything on the PS360+ with the Mac you need to install a few things first.

1. Download XCode from here (you need to register but it is free):

<http://developer.apple.com/technologies/xcode.html>

When you have registered:

1. Log in to **developer.apple.com**
2. Click the **Resources** link at the top of the page.
3. Under Mac OS X, click **Mac OS X Downloads**.
4. Uncheck all categories except **Developer Tools** on the left side of the page. All versions of XCode will be listed so find the correct one for you.

XCode on different OS X versions:

OS X Lion: 4.1 to 4.3.

OS X Snow Leopard: 3.2 to 4.2

OSX Leopard: 3.1 to 3.1.x.

OSX Tiger: 2.0 to 2.x

2. Download MacPorts:

<http://www.macports.org/install.php>

3. Install XCode.

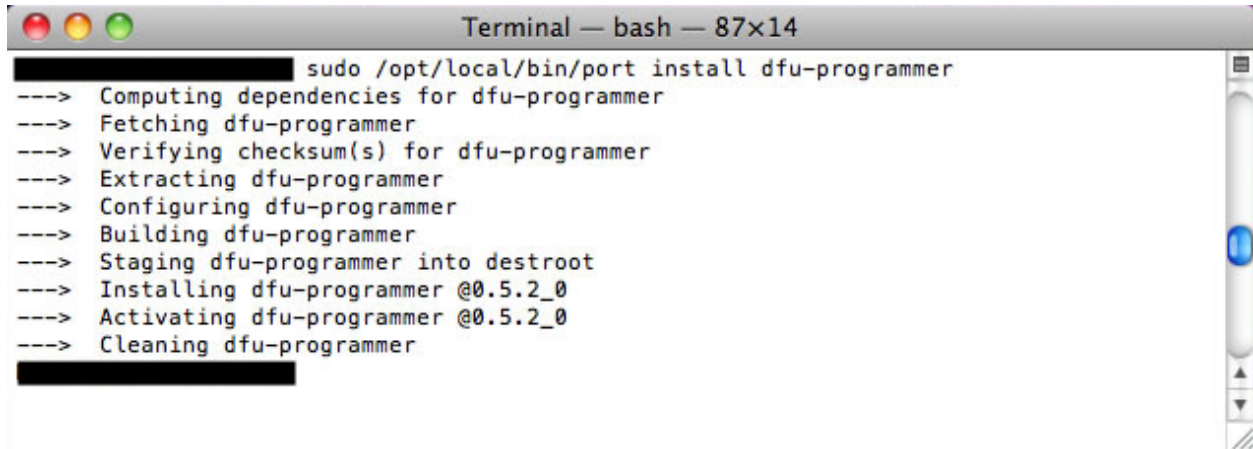
4. Install MacPorts.

Updating your PS360+ Firmware (Mac Version)

1. Go to the Terminal and write (and afterwards hit enter):

```
sudo /opt/local/bin/port install dfu-programmer
```

Now the programmer should get installed and you should see around 10 rows with text.

A screenshot of a macOS Terminal window titled "Terminal — bash — 87x14". The window shows the command `sudo /opt/local/bin/port install dfu-programmer` being executed. The output consists of ten lines of status messages, each preceded by "---->". The messages are: "Computing dependencies for dfu-programmer", "Fetching dfu-programmer", "Verifying checksum(s) for dfu-programmer", "Extracting dfu-programmer", "Configuring dfu-programmer", "Building dfu-programmer", "Staging dfu-programmer into destroot", "Installing dfu-programmer @0.5.2_0", "Activating dfu-programmer @0.5.2_0", and "Cleaning dfu-programmer". The terminal has a standard macOS window title bar with red, yellow, and green buttons on the left and a vertical scrollbar on the right.

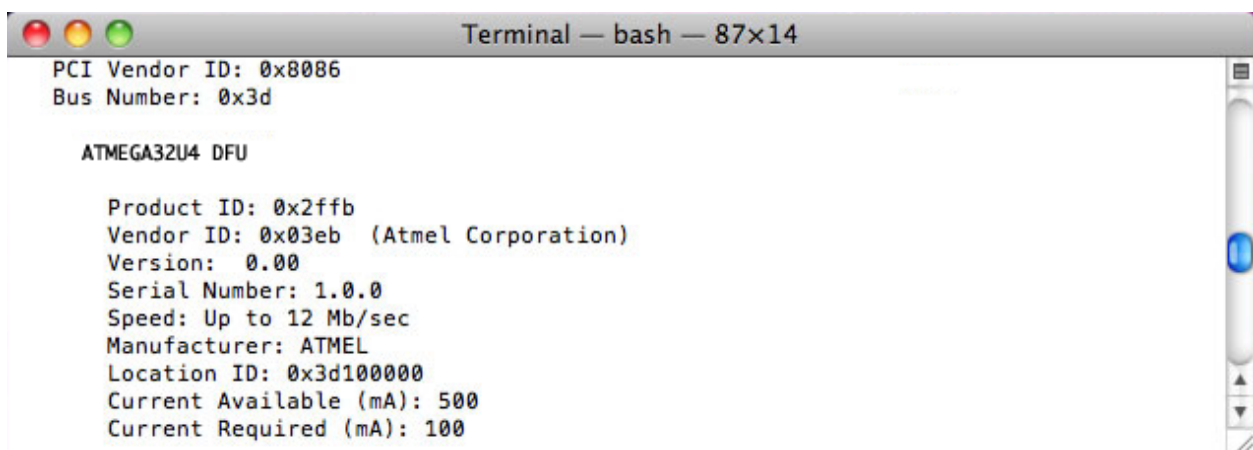
```
Terminal — bash — 87x14
----> sudo /opt/local/bin/port install dfu-programmer
----> Computing dependencies for dfu-programmer
----> Fetching dfu-programmer
----> Verifying checksum(s) for dfu-programmer
----> Extracting dfu-programmer
----> Configuring dfu-programmer
----> Building dfu-programmer
----> Staging dfu-programmer into destroot
----> Installing dfu-programmer @0.5.2_0
----> Activating dfu-programmer @0.5.2_0
----> Cleaning dfu-programmer
```

2. Restart the Terminal

3. Put PS360+ in Bootloader Mode by inserting the USB cable with Start held down.

You can check so it is correct by writing in the Terminal (and afterwards hit enter):

```
system_profiler SPUSBDataType
```

A screenshot of a macOS Terminal window titled "Terminal — bash — 87x14". The window shows the command `system_profiler SPUSBDataType` being executed. The output displays USB device information. It starts with "PCI Vendor ID: 0x8086" and "Bus Number: 0x3d". Then, it lists "ATMEGA32U4 DFU" with a yellow warning icon. Below this, it shows details for the DFU device: "Product ID: 0x2fffb", "Vendor ID: 0x03eb (Atmel Corporation)", "Version: 0.00", "Serial Number: 1.0.0", "Speed: Up to 12 Mb/sec", "Manufacturer: ATMEL", "Location ID: 0x3d100000", "Current Available (mA): 500", and "Current Required (mA): 100". The terminal has a standard macOS window title bar with red, yellow, and green buttons on the left and a vertical scrollbar on the right.

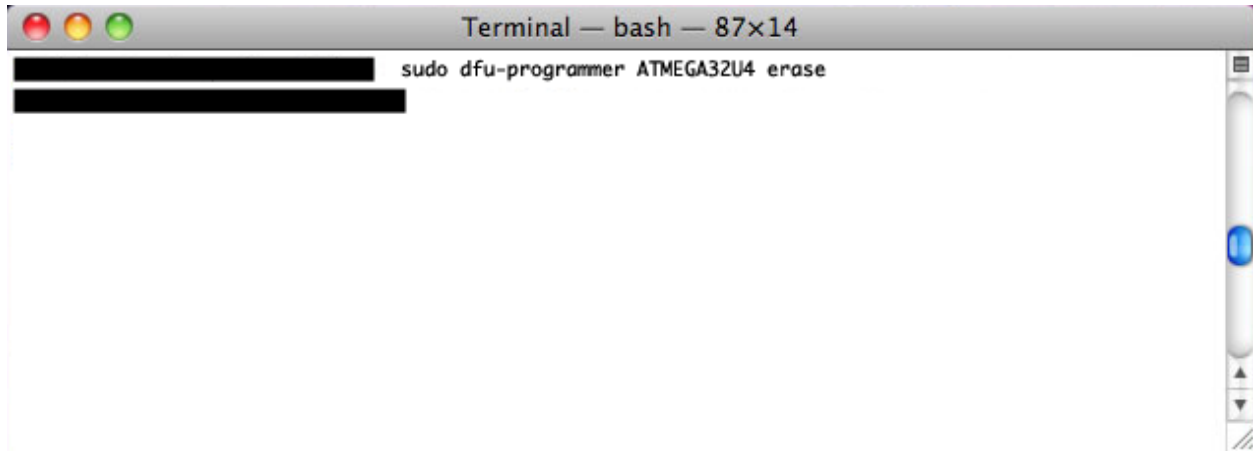
```
Terminal — bash — 87x14
PCI Vendor ID: 0x8086
Bus Number: 0x3d

  ATMEGA32U4 DFU
  Product ID: 0x2fffb
  Vendor ID: 0x03eb (Atmel Corporation)
  Version: 0.00
  Serial Number: 1.0.0
  Speed: Up to 12 Mb/sec
  Manufacturer: ATMEL
  Location ID: 0x3d100000
  Current Available (mA): 500
  Current Required (mA): 100
```

4. Erase the PS360+:

Write in the Terminal (and afterwards hit enter):

sudo dfu-programmer atmega32u4 erase


A screenshot of a macOS Terminal window titled "Terminal — bash — 87x14". The window has a grey title bar with three colored window control buttons (red, yellow, green) on the left. The main area is white and shows the command `sudo dfu-programmer ATMEGA32U4 erase` entered on a single line. The command is preceded by a black rectangular redaction box. The right side of the terminal window features a vertical scrollbar with a blue slider and arrow buttons at the top and bottom.

5. Flash the PS360+:

Write in the Terminal (and afterwards hit enter):

sudo dfu-programmer atmega32u4 flash "name of file".hex

(Do not include the quotation marks when you write the name of your file)

A screenshot of a macOS Terminal window titled "Terminal — bash — 87x14". The window has a grey title bar with three colored window control buttons (red, yellow, green) on the left. The main area is white and shows the command `sudo dfu-programmer ATMEGA32U4 flash PS360.hex` entered on a single line, preceded by a black rectangular redaction box. Below the command, the output "Validating..." and "17702 bytes used (14.41%)" is displayed. The right side of the terminal window features a vertical scrollbar with a blue slider and arrow buttons at the top and bottom.

6. Done.