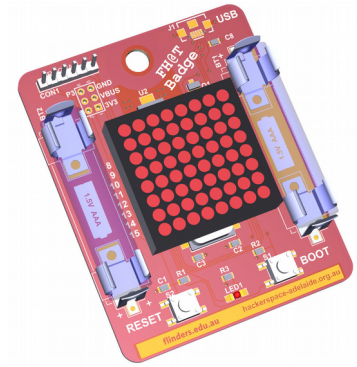


Programming the FH@T Badge



USB Drivers

The FH@T Badge requires stk500 drivers for programming and serial communications. If you need to install these drivers details can be found here:

<http://chipkit.net/forum/viewtopic.php?t=2289>

Install UECIDE

The FH@T Badge can be programmed over USB using The Universal Embedded Computing IDE (UECIDE). UECIDE can be downloaded from <http://uecide.org/>.

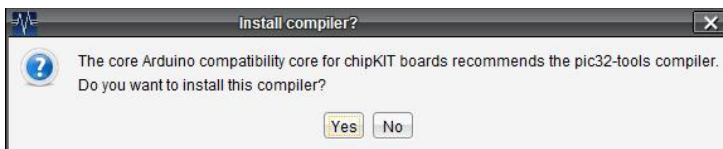
Install Plugins

To program the FH@T Badge you will need to install two plugins.

To install plugins in UECIDE navigate to **Tools → Plugin Manager**

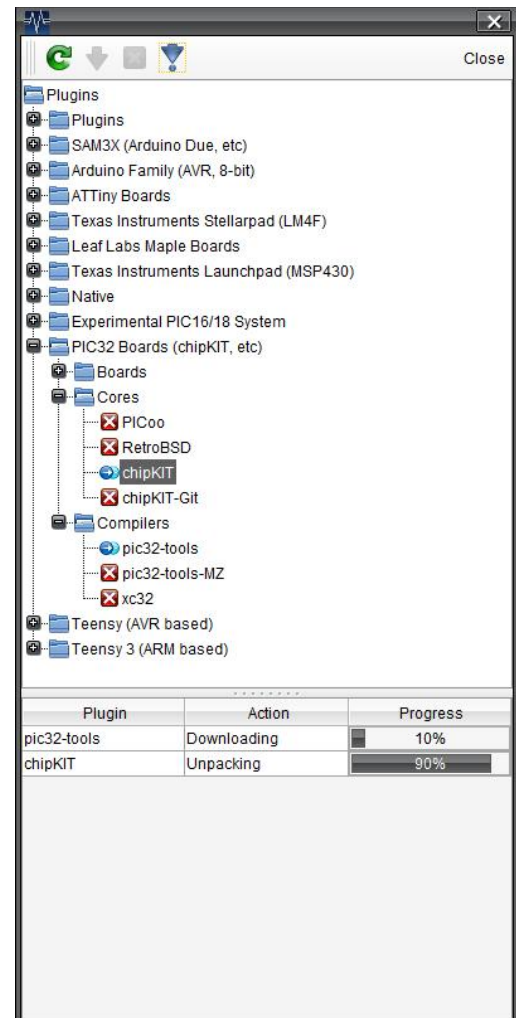
In the dialog box expand **PIC32 Boards (chipKIT, etc)** → **Cores** and select **chipKIT** and click on the ↓ button.

If prompted to install pic32-tools select yes.



Otherwise expand **PIC32 Boards (chipKIT, etc)** → **Compilers** and select **pic32-tools** and click on the ↓ button. The plugins should then be installed automatically.

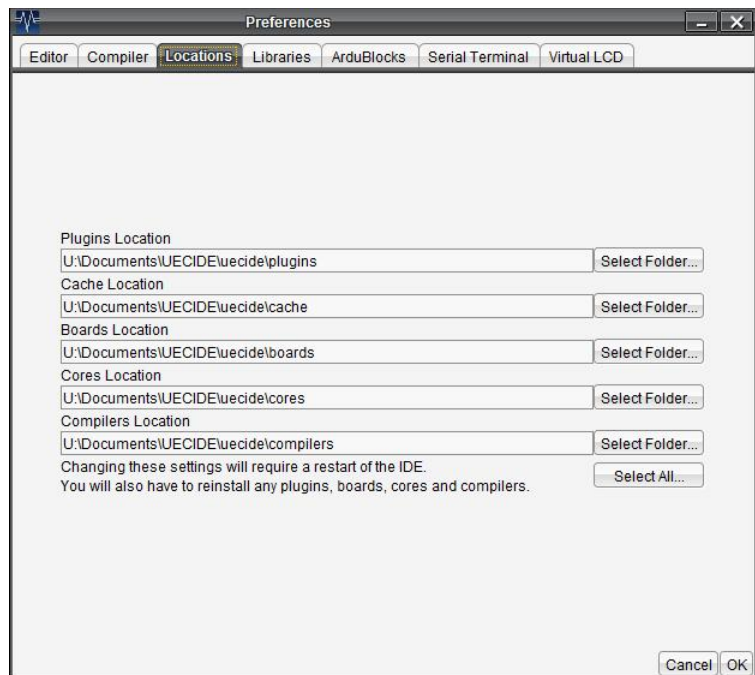
In the dialog box expand **PIC32 Boards (chipKIT, etc)** → **Boards** and select **chipKIT** → **chipKIT DP32** and click on the ↓ button.



FH@T Badge Board Files

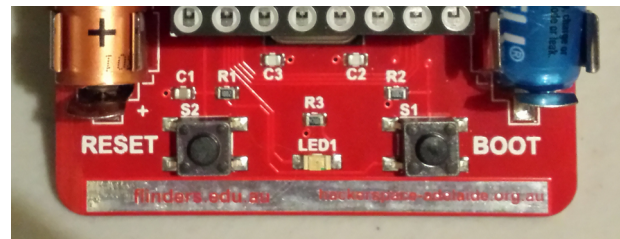
To use the FH@T Badge you will need to extract the FH@T Badge folder located within the [FH@TBadgeBoardFiles.zip](#) file and copy it to the location specified in UECIDE.

To find the location, open UECIDE and navigate to the **File** → **Preferences** → **Locations** Tab and in the Boards Location you will find the required path.



Programming Mode

The FH@T Badge uses a Bootloader which is a small preinstalled program that communicates with the computer over USB. Before programming is possible you need to put the FH@T Badge into bootloader mode.



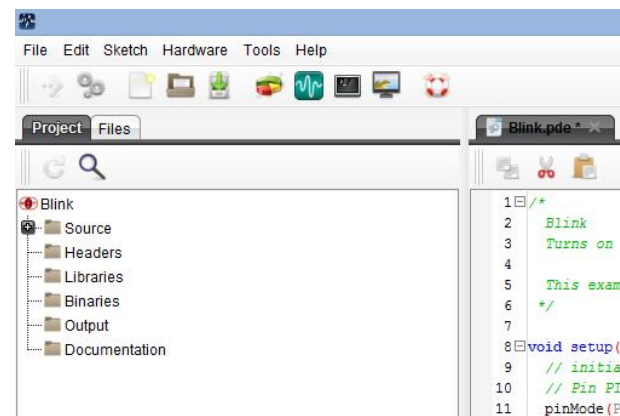
With the USB cable connected to the computer hold down the Boot switch then press and release the Reset switch once. LED 1 should now flash to indicate boot loading mode.

Programming

To program the FH@T Badge, navigate to **Hardware** → **Boards** → **FH@T** and select FH@T Badge. Then navigate to **Hardware** → **Serial Port** and select the serial port that the FH@T Badge is connected to.

Navigate to **File** → **Open** and open the file named FH@T Badge.ino

Navigate to **Sketch** and select **Compile and Program** or click the program button, which is the second button from the left at the top of the screen.



If all goes well you should see “Upload Complete” in the message box at the bottom of the screen.

```
Compiling...
• Compiling sketch...
• Compiling core...
  api
• Compiling libraries...
• Linking sketch...

Compiling done.
Memory usage
• Program size: 0 bytes
• Memory size: 0 bytes
• Compilation took 8.872 seconds

Uploading firmware...
• Resetting board...
• Uploading...
• Resetting board...
• Upload Complete
```

Board: Flinders Flindulino PCE244 Core: chipKIT Compiler: PIC32 GCC compiler version 4.5.1 Port: COM6

Which Serial Port?

If you are unsure which serial COM Port to use, you can use Device manager. Under Ports (COM & LPT) you should be able to see chipKIT USB Serial next to this is the COM port number. In the example it would be COM6.

