

Guide to Creating FCD Files.

Step 1 - Copying

When creating a FCD file the first step is to find an existing FCD file that is similar to your PICmicro. For example a lot of the PICmicro families are identical or similar, the 18F2550 and the 18F2553 for example. Once you have found a good enough match then you need to copy the FCD file and rename it to match the processor you are trying to create.

For example

18F2550.FCD would get copied and become 18F2553.FCD

Step 2 - Modifying

Here is a guide on how to manipulate the FCD structure to create a valid FCD for your target PICmicro.

- [device] - Important, Make sure that this information is as accurate as possible (see datasheet).
- [pins] - Edits the Chip diagram in Flowcode
- [ports] - Marks out the Port and Pin number eg RA0 = 0x0000, RC2 = 0x0202
 - X value = A = 0, B = 1, C = 2, D = 3, E = 4
 - Y value = pin
 - 0x0X0Y
- [portmasks] - Mask values for available pins. Eg a A0 – A5 = PortMask0=0x3F
- [adcpins] - List of pins with ADC function. Refers to pins marked out in [pins] section.
- [code] - Things to look out for here are:
 - Initialise (Used to convert all I/O lines to digital, Eg disable analogue pins)
 - ADCcapture (Start the conversion on channel %a)
 - ADCFull (Retrieve all 10 or 12 bits from the conversion)
- [defines] - Deals with things like Chip Name, SPI, EEPROM, I2C and PWM.
- [interrupts] - Enables compatible interrupts.

Step 3 - Testing

Run flowcode and choose your FCD file. Download your flowchart to the PICmicro and if there is a problem with an aspect of functionality then go back to the FCD and edit the corresponding section. If you wish to pass tested FCD files to us then please feel free. Note you may have to use a third party programmer to program the PICmicro if it is not supported by PPP. If you require PPP support then we cannot promise anything but please get in contact.