

Building XC16 from Source

The following instructions should guide the user on how to build XC16 from the provided source files.

The source file .zip contains:

- these instructions
- sources for GCC v4.5.1 as modified by Microchip Technology to support dsPIC(™) and PIC24(™) devices
- a 'resource file' which contains device information for use by the compiler and binary utilities; this resource file was current at the time of creation of the source archive
- build scripts(s)

A successful build will create the following artefacts:

```
install_dir/bin
    c30_device.info
    bin/
        coff-ar
        coff-as
        coff-bin2hex
        coff-ccl
        coff-cpp
        coff-gcc
        coff-ld
        coff-objdump
        elf-ranlib
        elf-strip
        elf-ar
        elf-as
        elf-bin2hex
        elf-ccl
        elf-cpp
        elf-gcc
        elf-ld
        elf-objdump
        elf-ranlib
        elf-strip
```

This corresponds to the open source constituents of XC16, and the device information required to use these binaries.

Pre-requisites for Building from Source

The build environment should include the following tools/ packages (Cygwin is recommended for building on the windows platform):

- GCC/G++ v4.10 or similar
- bison
- flex
- gdb (for debugging)
- libtool
- gettext (for msgfmt)
- zip/ unzip
- make

- bash
- sh

NB: For 'CYGWIN' builds the GCC/G++ install needs to be both a 'cygwin' install and a 'mingw' install.

Build instructions

Building should be straightforward for common environments.

- 1 unpack .zip file
- 2 change directory to top level of unzipped folder
- 3 ./src_build.sh
- 4 wait

Once step four is complete, the install_dir should contain the required executables.