

Applications in this release are cross-compiled using Make and the GNU Toolchain for Windows. Makefiles for each application are provided in their respective directories.

The Windows toolchain package installer comes in a single executable, which is found at:

<http://sourceforge.net/projects/adi-toolchain/files/2010R1/2010R1-RC4/>

Download the installer file called **blackfin-toolchain-win32-2010R1.exe** and install this to setup your Windows development host.

The installer contains three types of tools: **bfin-elf**, **bfin-uclinux**, and **bfin-linux-uclibc**. All are cross toolchains for the Blackfin architecture. The **bfin-elf** target toolchain can be used to develop standalone applications. Both of the **bfin-uclinux** and **bfin-linux-uclibc** target toolchains are used to develop Linux applications. **bfin-uclinux** is used for the FLAT binary format while **bfin-linux-uclibc** is used for the ELF FD-PIC binary format. WISPR uses the **bfin-uclinux** toolchain.

If you don't have **Make** on your Windows system, then download and install **GNU Make** from:

<http://gnuwin32.sourceforge.net/packages/make.htm>

A direct link to the Setup program download:

<http://gnuwin32.sourceforge.net/downlinks/make.php>

The installer takes care of changing your Windows PATH environment variables, so you should not need to change your environment yourself. The installer also contains the **Eclipse** IDE. However, I don't recommend using Eclipse because the example WISPR applications are relatively small and Makefiles are provided.

Once you have installed the ADI GNU Toolchain for Windows and Make you can build your own applications or modify the examples for your specific application. Makefiles are provided in each example directory. You will need to verify/set the locations of the include and library files in the Makefiles. These are the search paths the compiler uses (-I and -L compiler flags). If you keep the same directory structure as the release, then the make files will run as is.

After you have installed/setup everything correctly, you can cross-compile your application using the **Make** command from a Windows Command Prompt. Example Makefiles are given in each example directory to get you started. To build the data logger example, for example: open a Windows Command Prompt, go to the example directory `wispr/examples/data_logger`, and type:

```
> make wispr_data_logger
```

The WISPR cross-compiled executable called **wispr_data_logger** will be created. You can then download this file to your system and execute it.