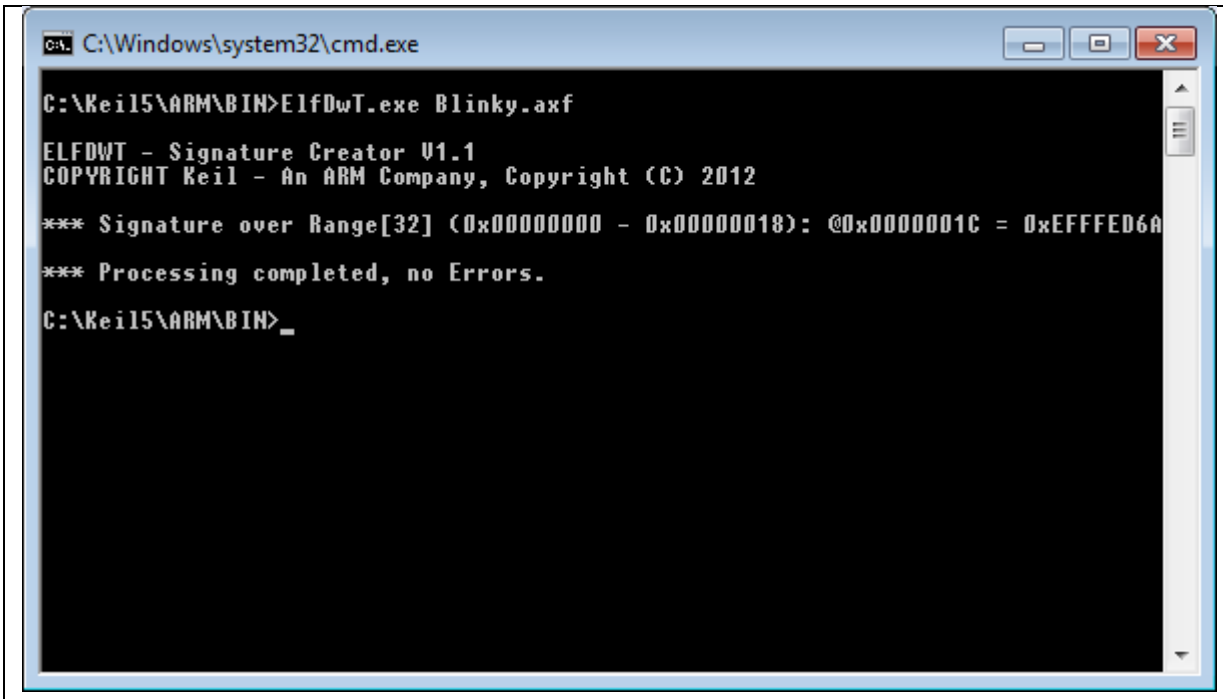
1. Method 1

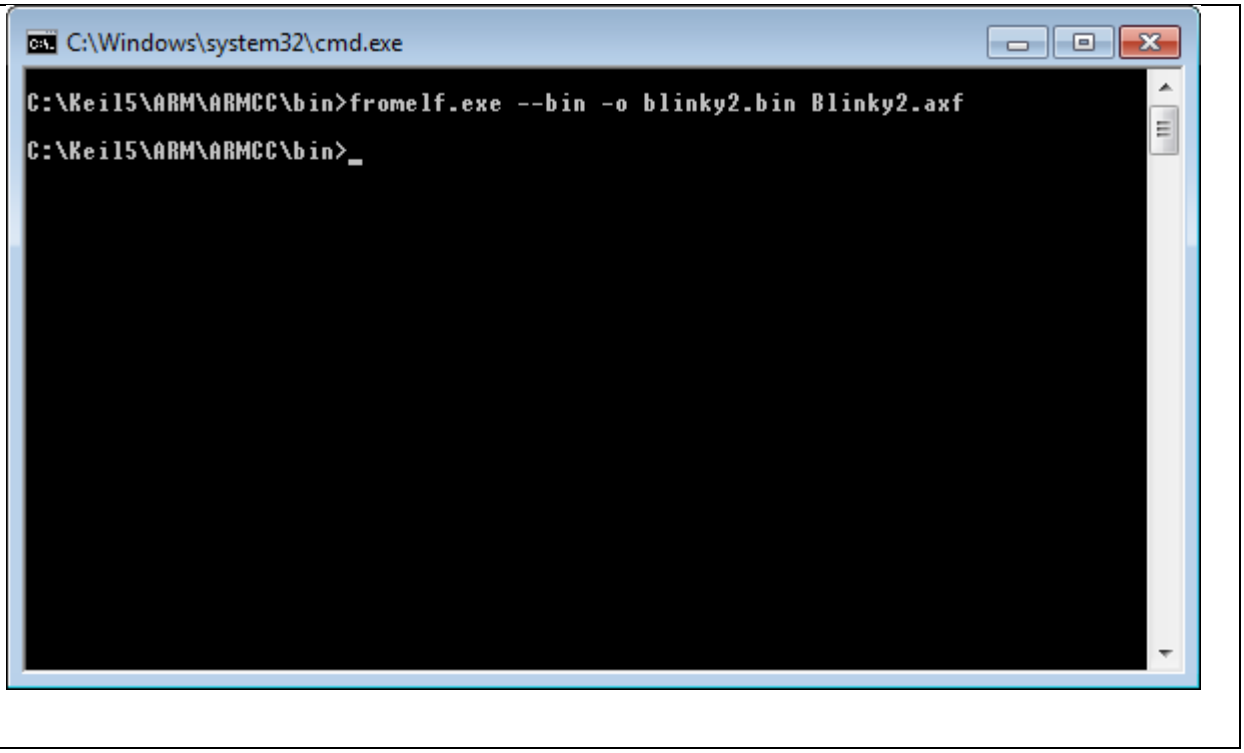
From the command line, run the **ElfDwt.exe** utility to insert the checksum into the AXF file. The tool is available from **ARM\BIN**. The command format is:

ElfDwt.exe <filename>.axf



From the command line, run the **fromelf.exe** utility to convert the AXF file to BIN. The tool is available from **ARM\ARMCC**. The command format is:

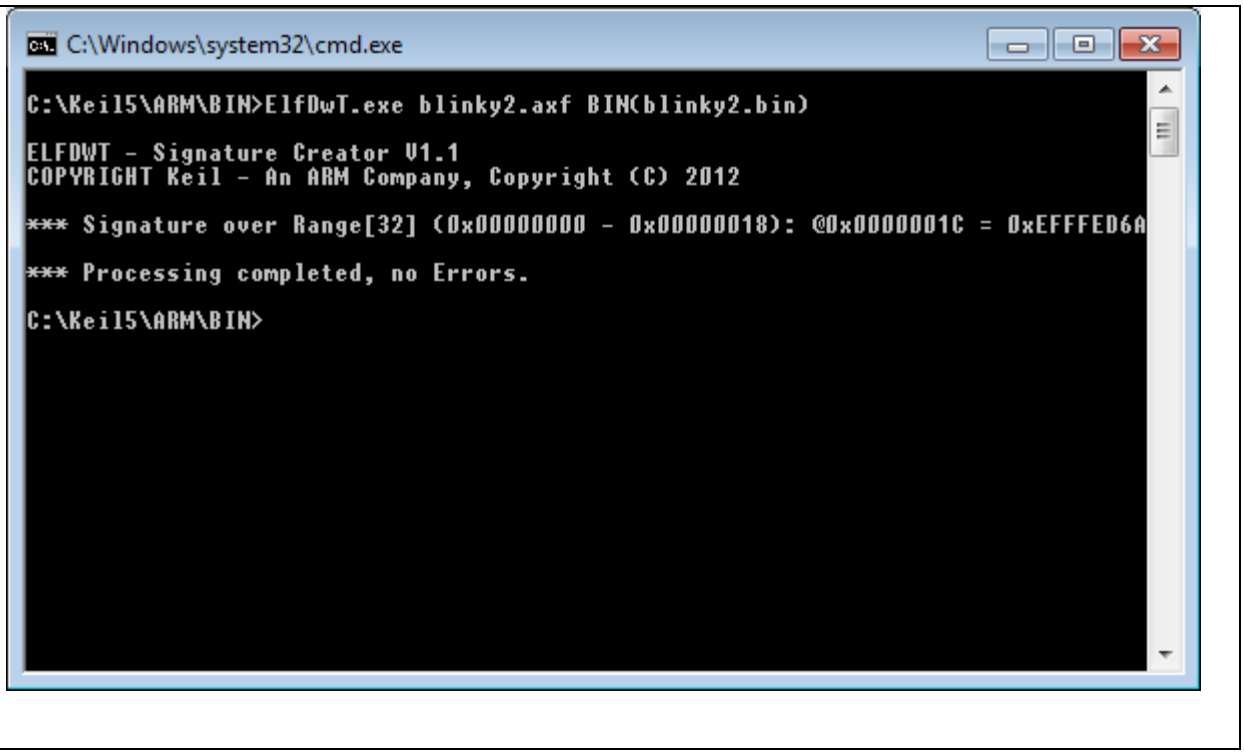
fromelf.exe –bin –o <filename>.bin <filename>.axf



2. Method 2

From the command line, run the **ElfDwt.exe** utility to insert the checksum into the AXF file and generate the BIN file. The tool is available from **ARM\BIN**. The command format is:

ElfDwt.exe <filename>.axf BIN(<filename>.bin)

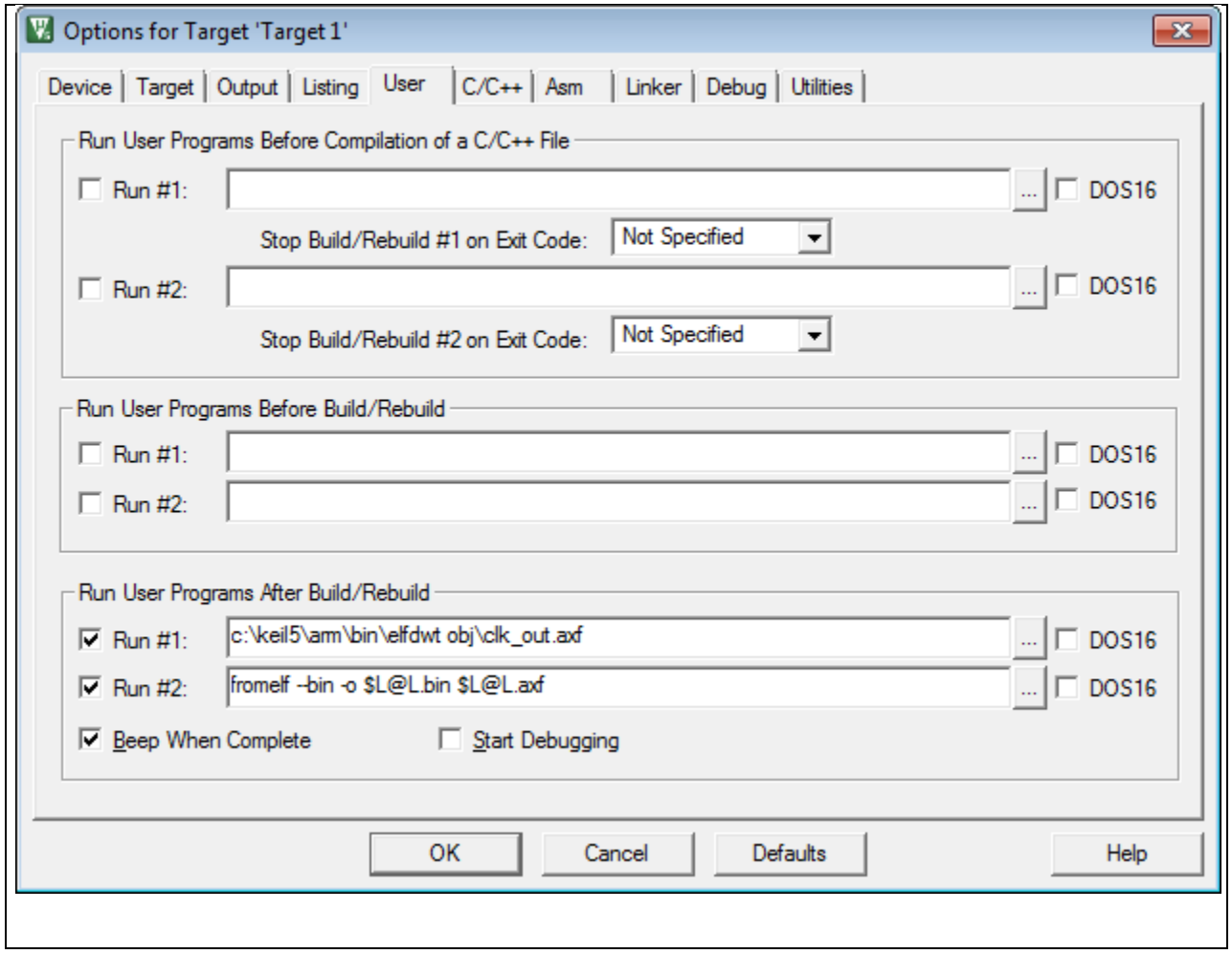


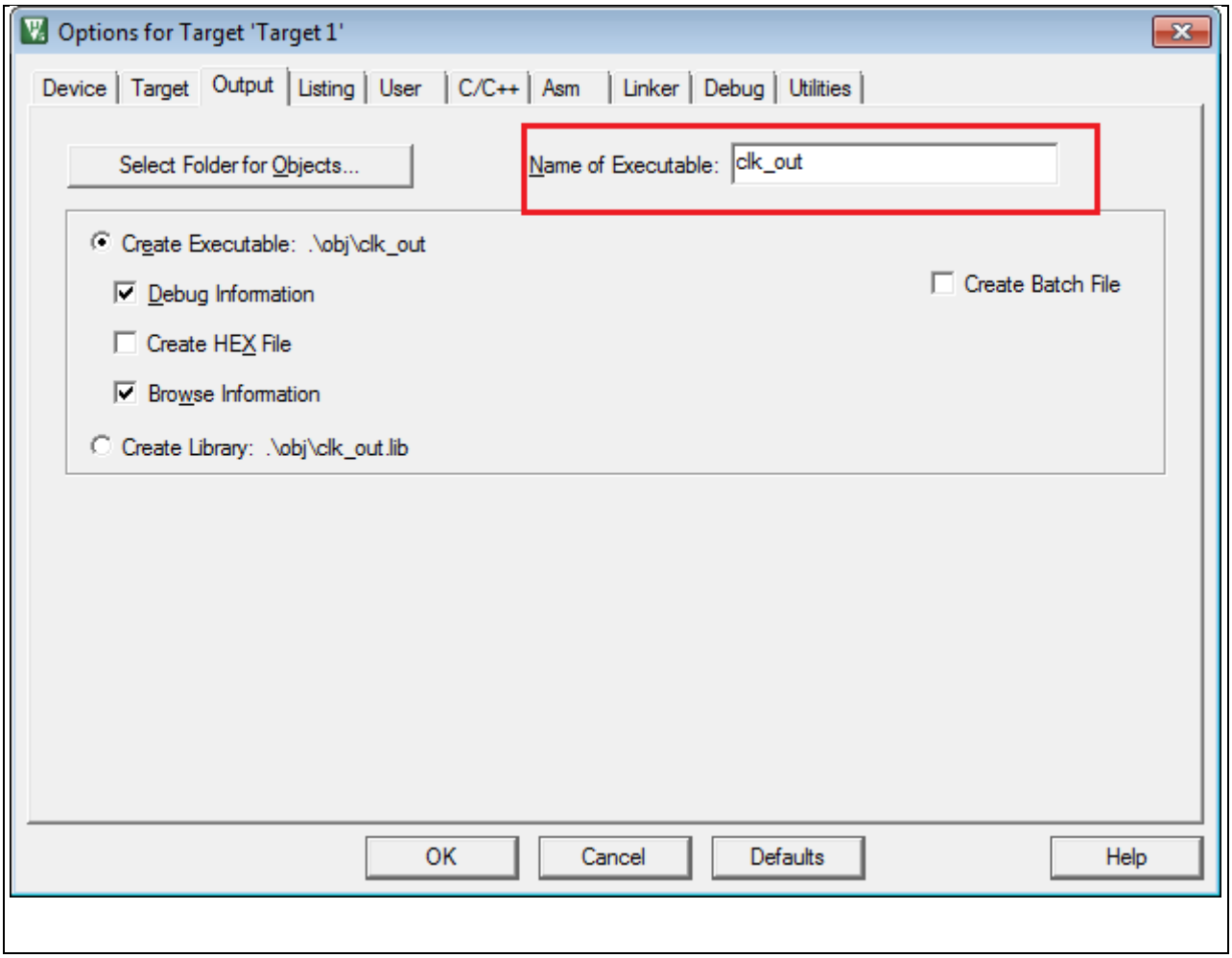
3. Method 3

From within the project settings, set the **Run User Programs After Build/Rebuild** to run the **elfdwt.exe** and **fromelf.exe**.

Keil does not know the location of the **elfdwt.exe** utility. It is necessary to specify the absolute path to the utility. When the elfdwt.exe utility is run, it will try to locate the AXF file within the root directory of the project. If the AXF file is in another directory other than the root, then the path must be defined.

Keil knows the location of the **fromelf.exe** utility, so the absolute path does not need to be defined. The **$L@L** string tells Keil to use the AXF filename created under the **Output** tab.

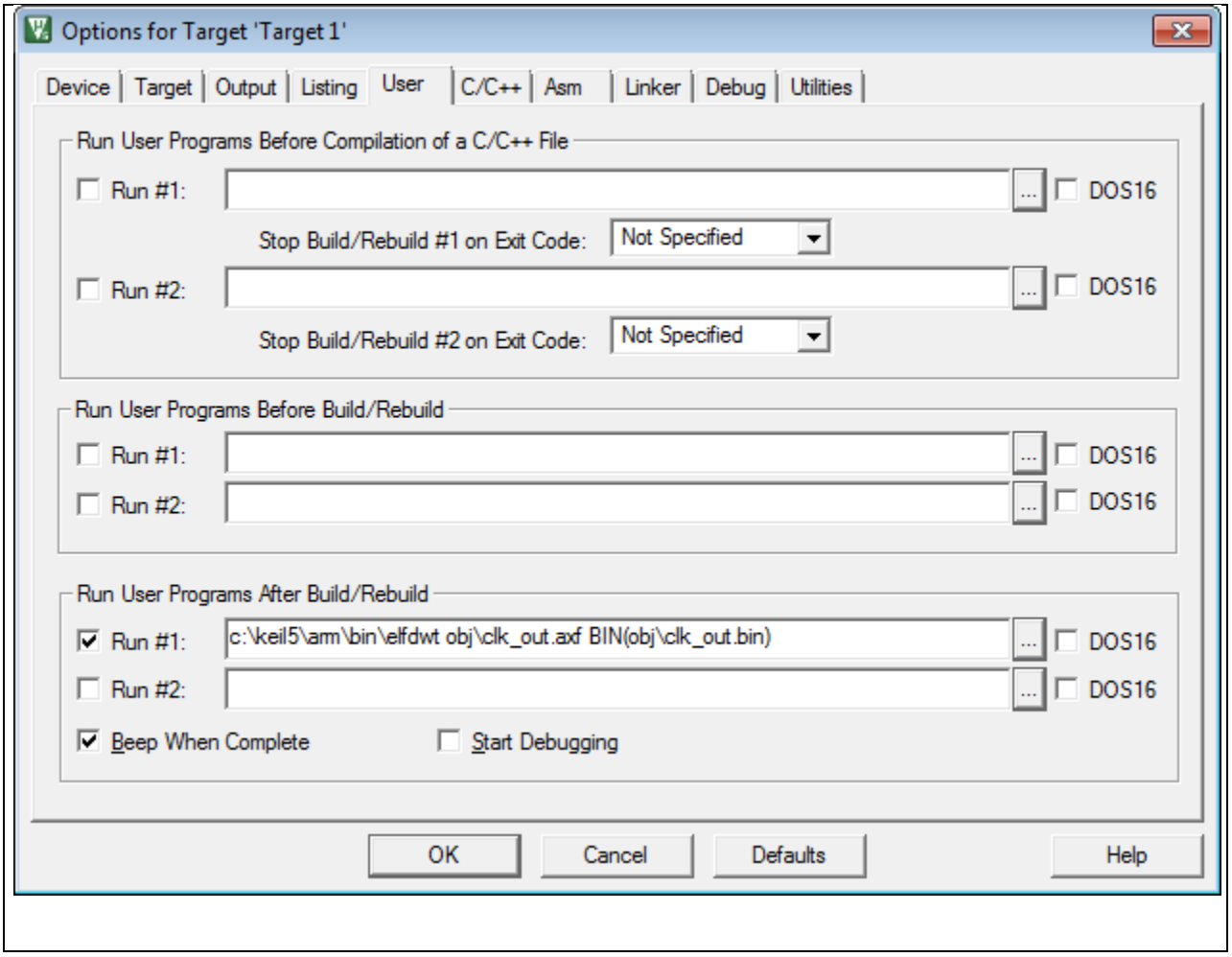



Options for Target 'Target 1'
Device
Target
Output
Listing
User
C/C++
Asm
Linker
Debug
Utilities
Select Folder for Objects...
Name of Executable:
clk_out
Create Executable: .\obj\clk_out
Debug Information
Create HEX File
Browse Information
Create Library: .\obj\clk_out.lib
Create Batch File
OK
Cancel
Defaults
Help

4. Method 4

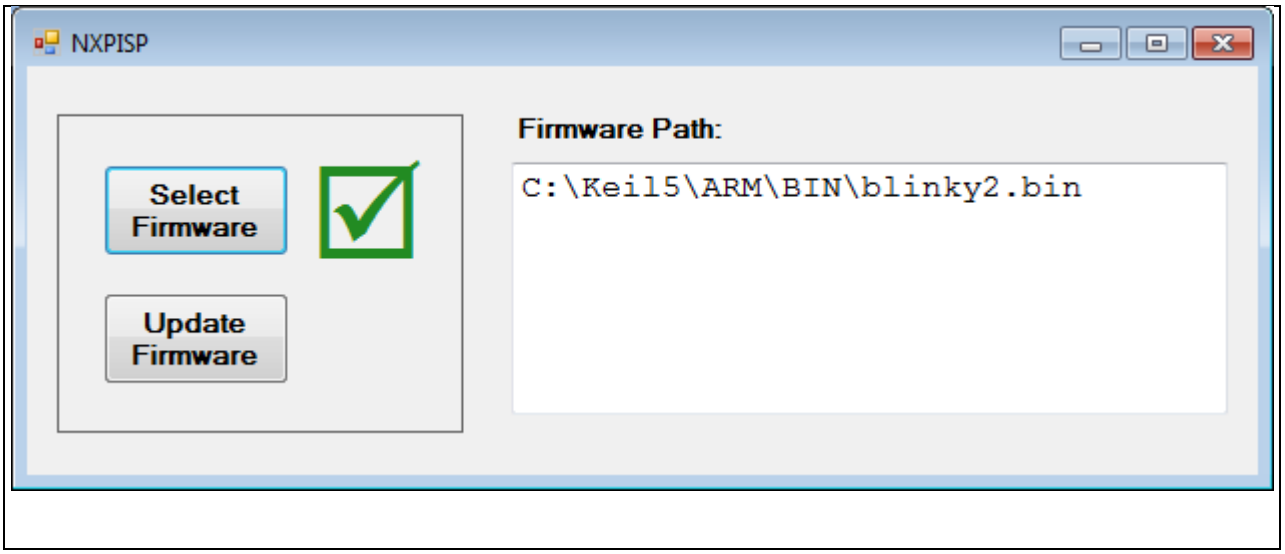
From within the project settings, set the **Run User Programs After Build/Rebuild** to run the **elfdwt.exe**.

Keil does not know the location of the **elfdwt.exe** utility. It is necessary to specify the absolute path to the utility. When the elfdwt.exe utility is run, it will try to locate the AXF file within the root directory of the project. If the AXF file is in another directory other than the root, then the path must be defined. Similarly, unless the path for the BIN file is specified, the **elfdwt.exe** utility will create the BIN file in the project root directory.



5. Testing the BIN file

The BIN file can be tested to ensure the checksum has been properly inserted into it by using the NXPISP utility. The utility is part of the AN11305 and can be downloaded from LPCWare.com

http://www.lpcware.com/content/nxpfile/an11305-usb-system-programming-lpc11u3xlpc11u2x

The NXPISP utility will check any BIN file loaded to ensure the checksum is valid.