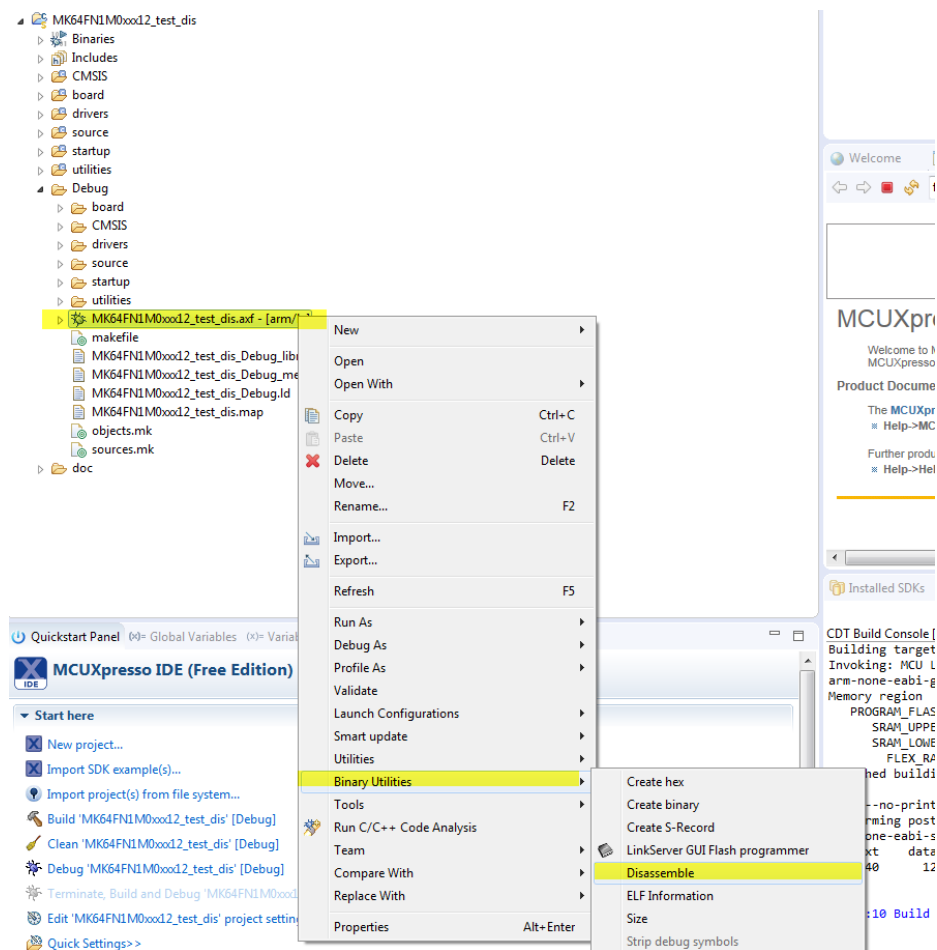# Generating Disassemble File under MCUXpresso IDE

By Jennie Zhang (TIC)

Checking disassemble code is often needed for programmers when developing a project. This article will introduce two methods of generating disassemble file under MCUXpresso IDE 10.1.0.
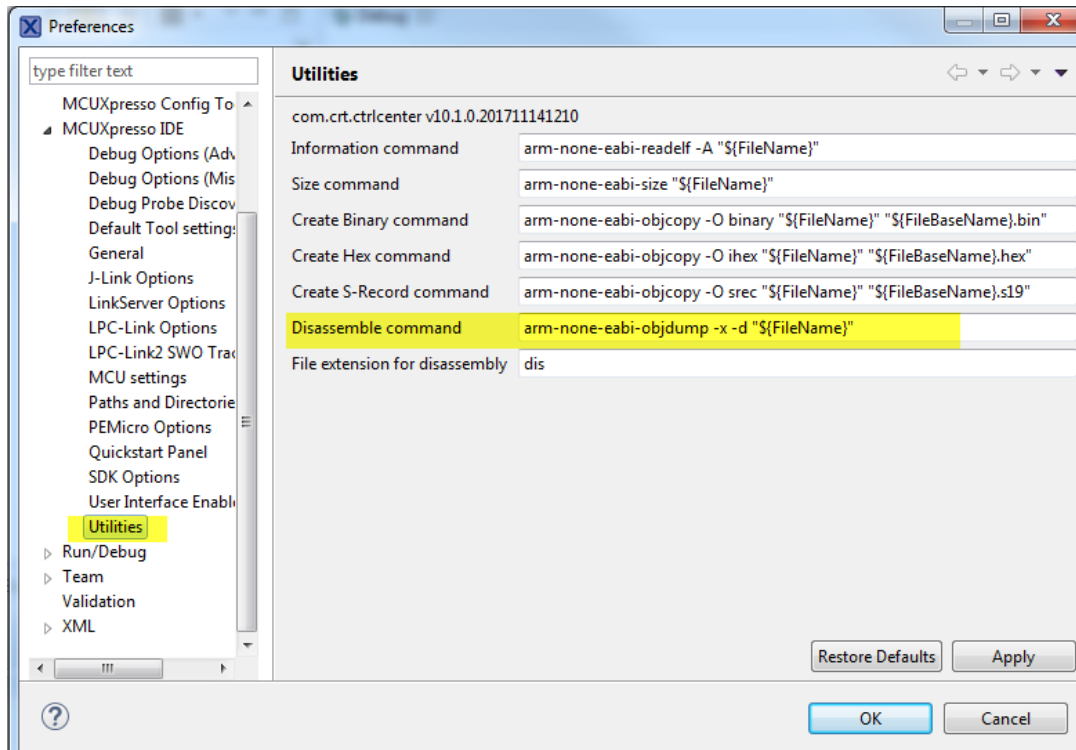
1. Method1: Generate disassemble code with Using Binary Utilities

The simplest way to create a disassemble file is to open up the Debug (or Release) folder in Project Explorer right click on the .axf file, and "Binary Utilities->disassemble

Then we can see disassemble file generated in MCUXpresso IDE.

User can also change the underlying commands and options that are called by these menu entries from the " Preferences->MCUXpresso IDE ->Utilites" preference page. This option invokes the GUN utilities disassemble command **arm-none-eabi-objdump.exe.**
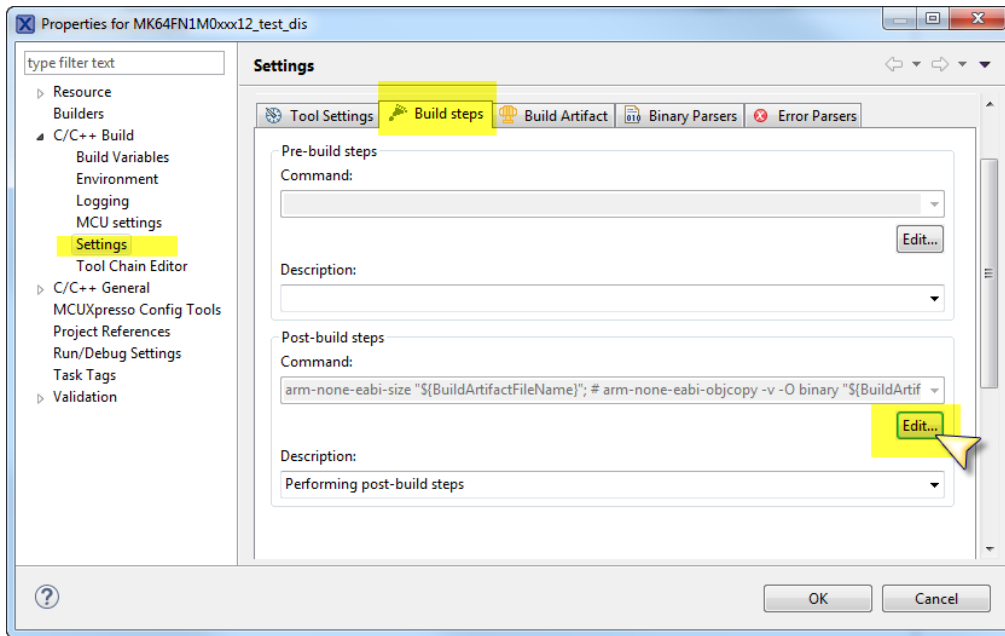

The simple syntax of objdump is:

arm-none-eabi-objdump.exe <output options> <file name>

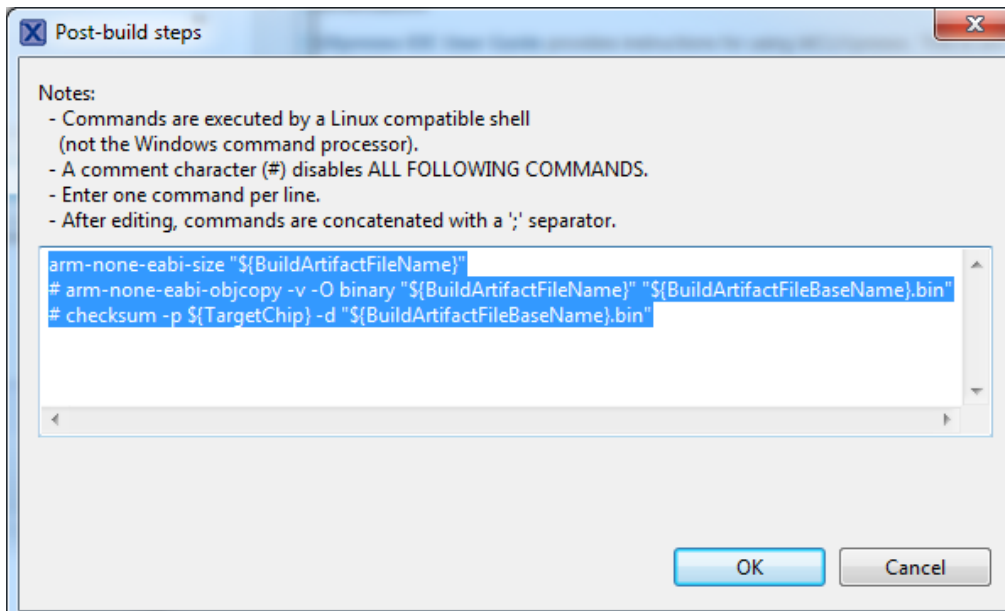All the GUN utilities included in MCUXpresso IDE can be found in its install path:

C:\nxp\MCUXpressoIDE_10.1.0_589\ide\tools\bin

2. Method 2: Generate disassemble code from Post-build Command Line

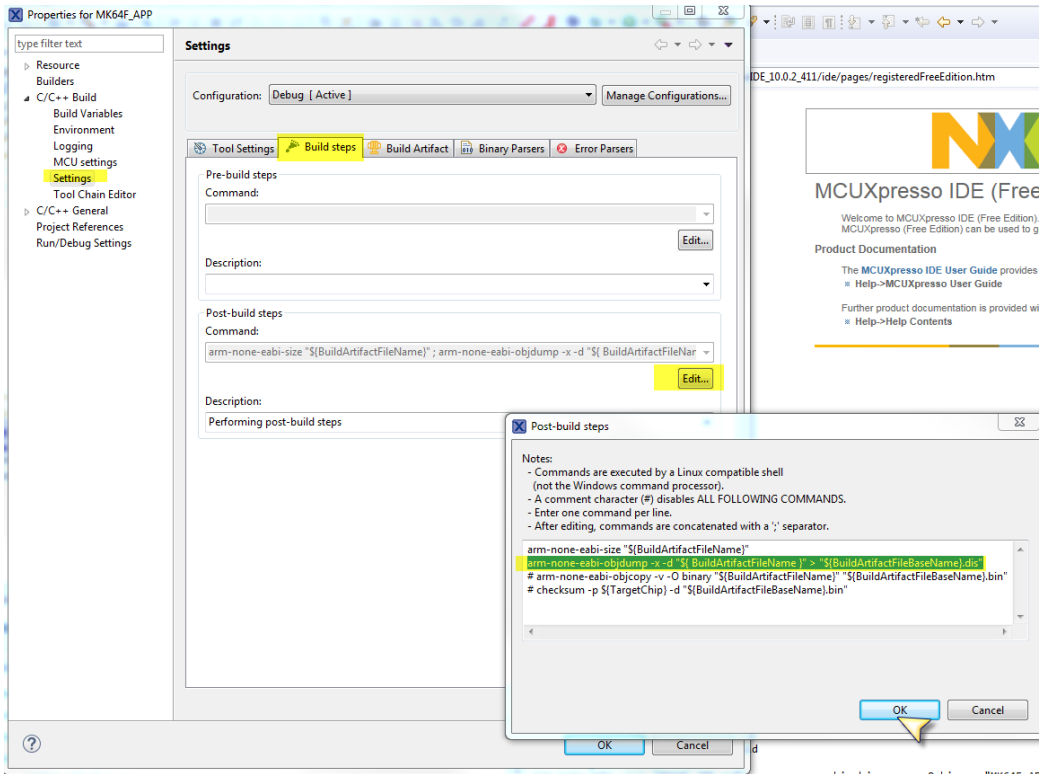The Post-build Steps can be found under "Properties->C/C++ Build->Settings-> Build Steps"

Click on "Edit" button to edit commands. The default command is like this:
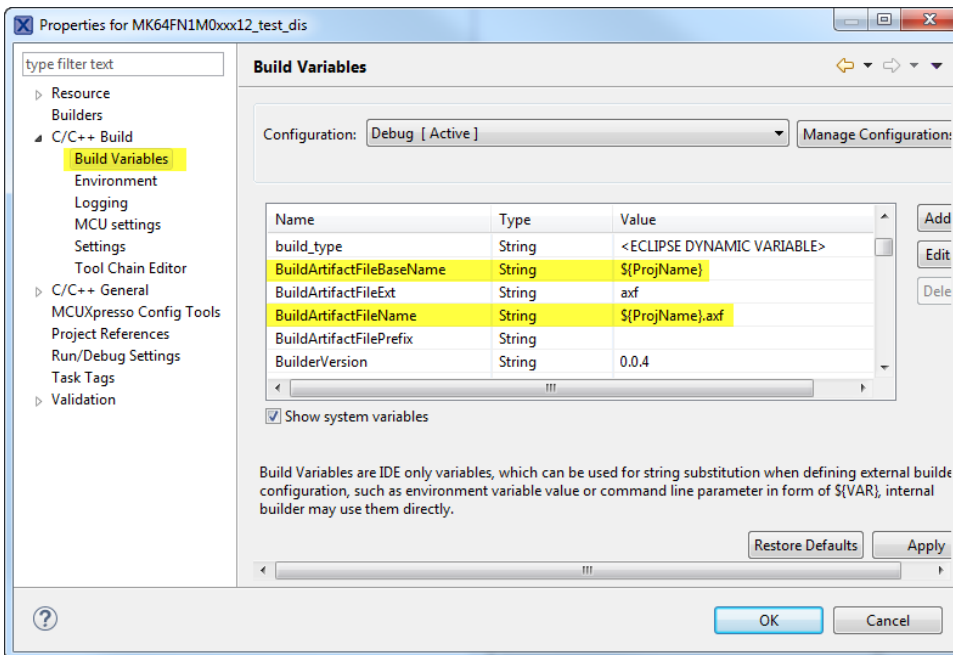

We add below command to to Post-build commandline

arm-none-eabi-objdump -x -d "${ BuildArtifactFileName }" > "${BuildArtifactFileBaseName}.dis"

Here, "BuildArtifactFileName" and "BuildArtifactFileBaseName" are system variables. We can find the definition in project properties

Description of argument "-x" and "-d"

-x, ---- Display the contents of all headers

-d, ---- Display assembler contents of executable sections

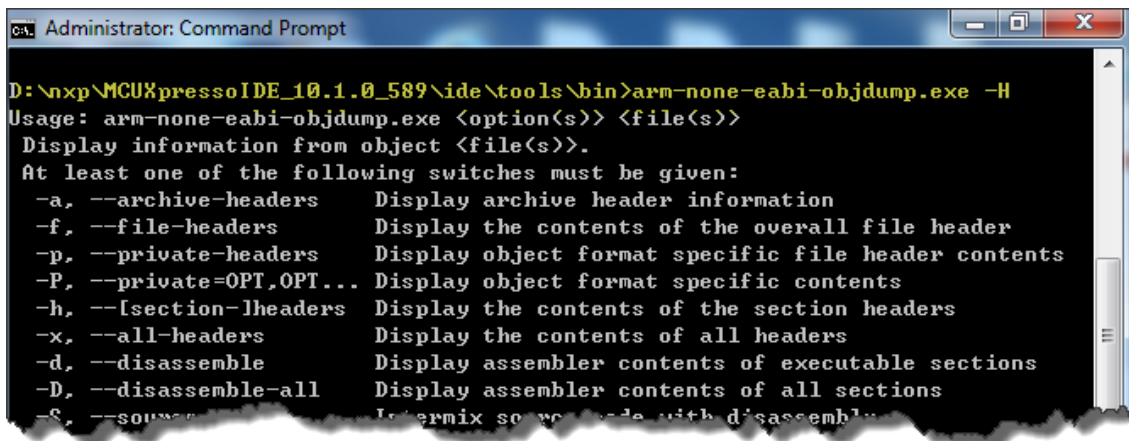Direction operator ">" , ---- Redirect the output content to a file.

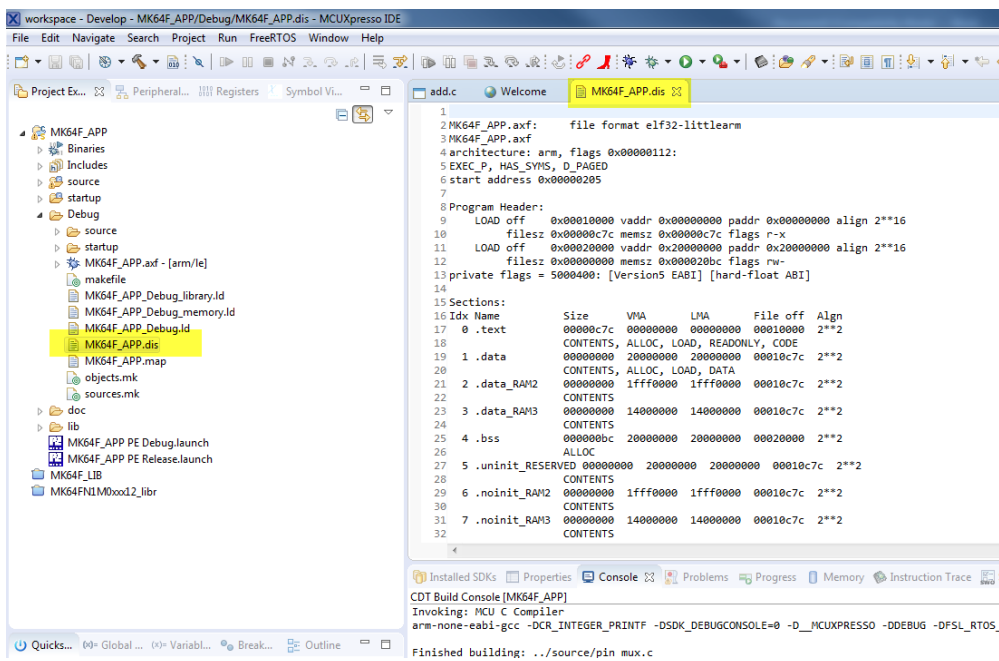The command line arguments to GNU objdump utility are described here:

https://sourceware.org/binutils/docs/binutils/objdump.html

or

check help with command prompt:

arm-none-eabi-objdump.exe -H

Build project, we will see disassemble file generated

Reference:

{MCUXpressoIDE_10.1.0_589 install folder}\MCUXpresso_IDE_User_Guide.pdf

https://mcuoneclipse.com/2017/03/29/mcuxpresso-ide-s-record-intel-hex-and-binary-files/

https://sourceware.org/binutils/docs/binutils/objdump.html