# Download code from DSC flash to file with CodeWarrior for MCU tools

It is frequently asked how to dump application code and constant in flash to a file so that user can compare if the application code and constant are written correctly, or can verify if the application code is corrupted when the board is returned from field.

The CodeWarrior has the dedicated function to dump application code and constant to a file if the DSC is not in security mode, The doc gives the procedures step by step to dump application code and data to a file for the DSC.

The DSC is a small family with a few tools in MCU series, so it is needed that the CodeWarrior for MCU ver11.x tools is used to dump DSC flash content to a file.

Note that the CodeWarrior for MCU only supports the processor with DSP56800E and DSP56800EX cores for example MC56F83xx, MC56F8000, MC56F82xx, MC56F84xxx, MC56F83xxx, MC56F82xxx and MC56F81xxx. It does not support the old processor with DSP56800 core, for example DSP56F805···

Now, I will describes the procedures

The FRDM-56F83000 board is used to have a test with CdeWarrior for MCU ver11.1,

connect the J8 USB port of FRDM-56F83000 to PC USB port via a USB cable

1)  launch the CodeWarrior

    user has to create a project and do as following:

    add a task by clicking the "+" button and fill the Task Name
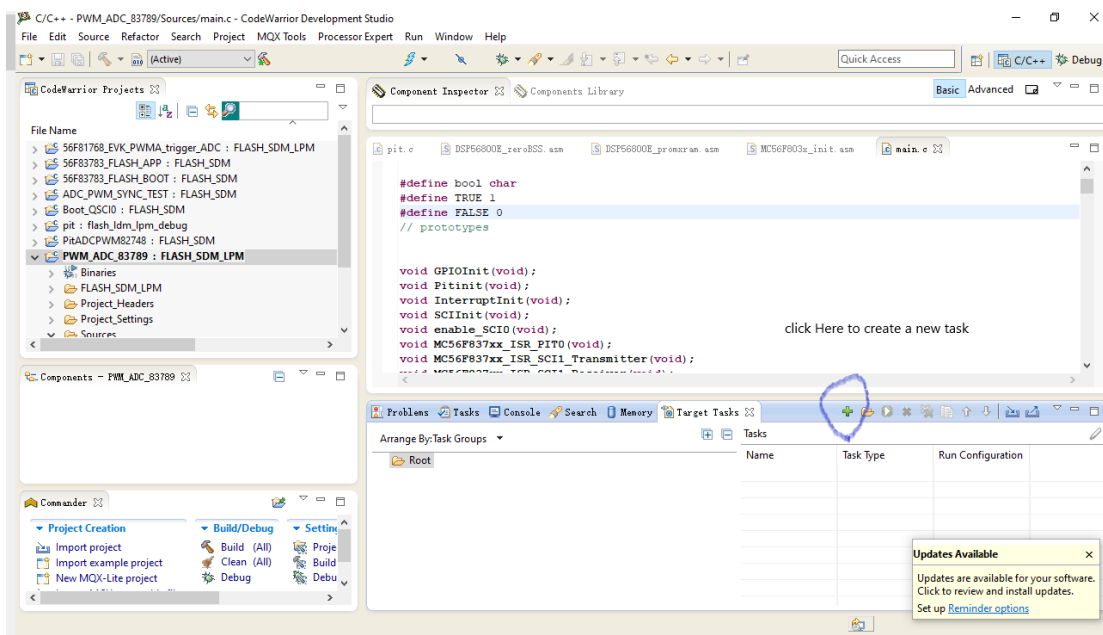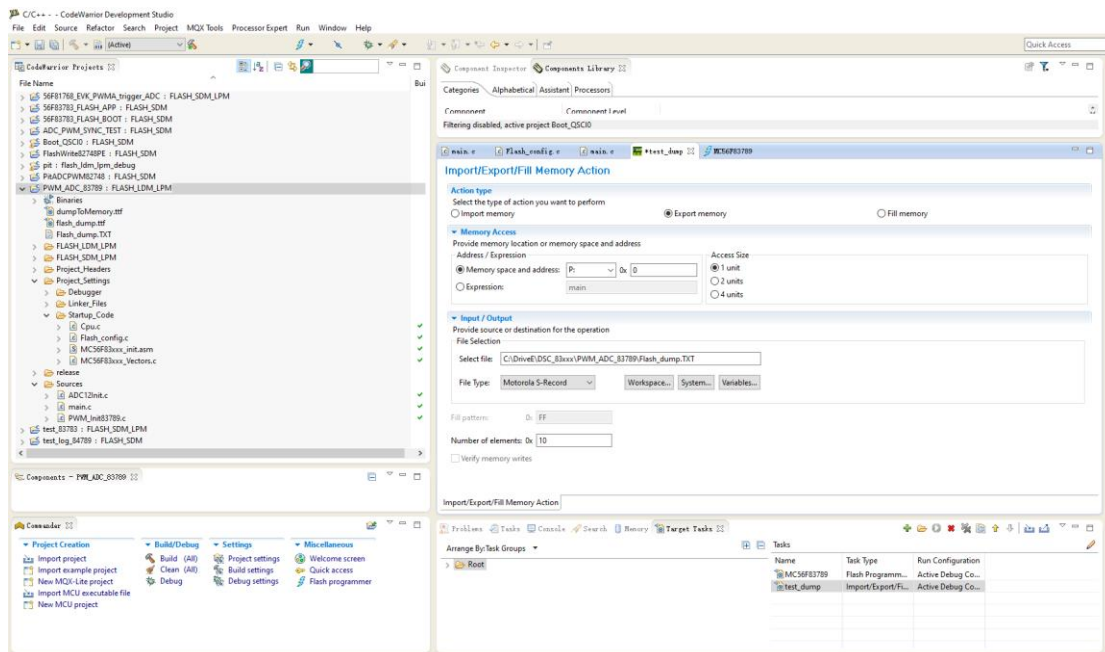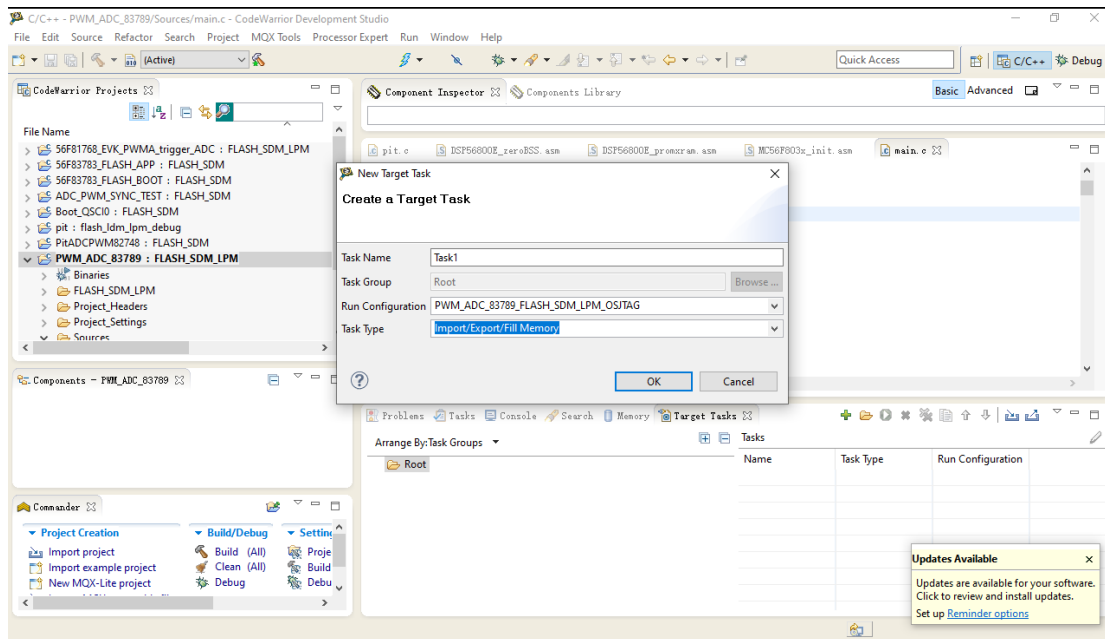
2) Selecting the project, click Run->Debug Configuration, the Debug Configuration menu will appear.

As the following Fig, select "Attach" and click Debug button, the PC will try to attach with the board
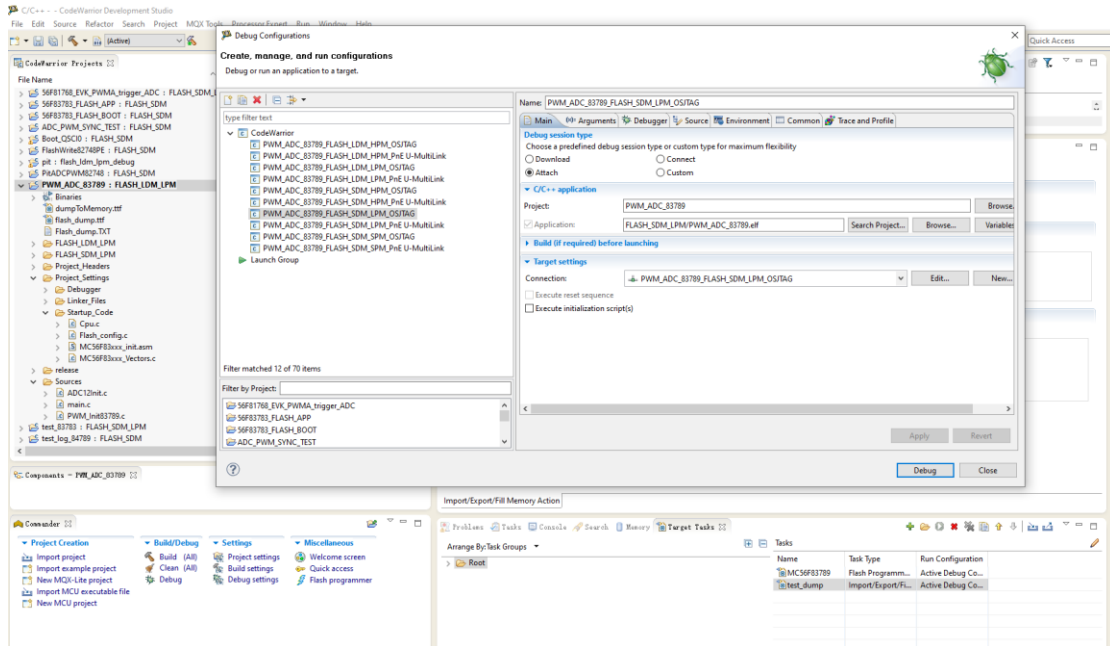
After clicking "Debug", the following menu will appear.
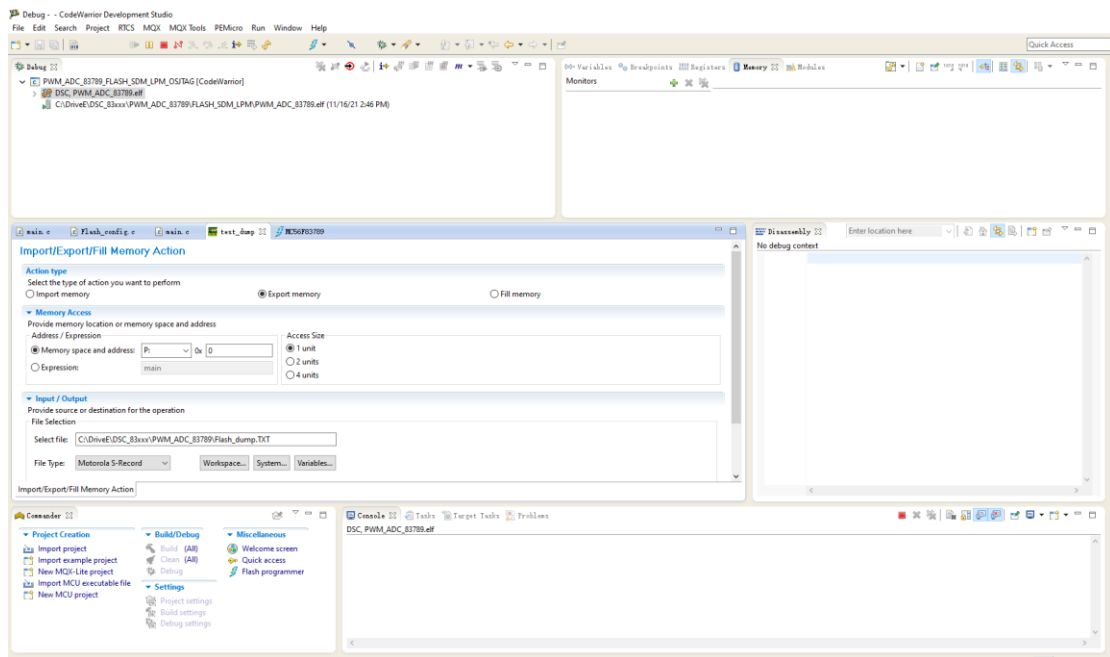


3) click "suspend" button as following Fig
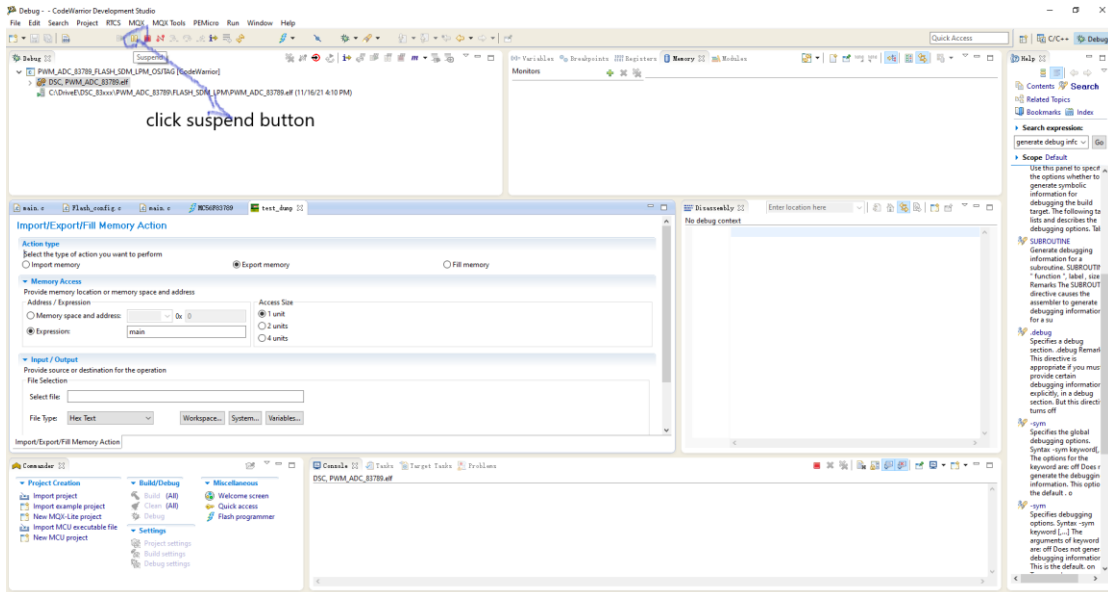
4) After clicking "Suspend" button, the PC can communicate with the DSC board now, you can show the P flash contents in the stage.

click the Export button, the "Export Memory" menu will appear.

Then input the file name which you want to save the data which is read from flash, the coping from flash to file is in progress.
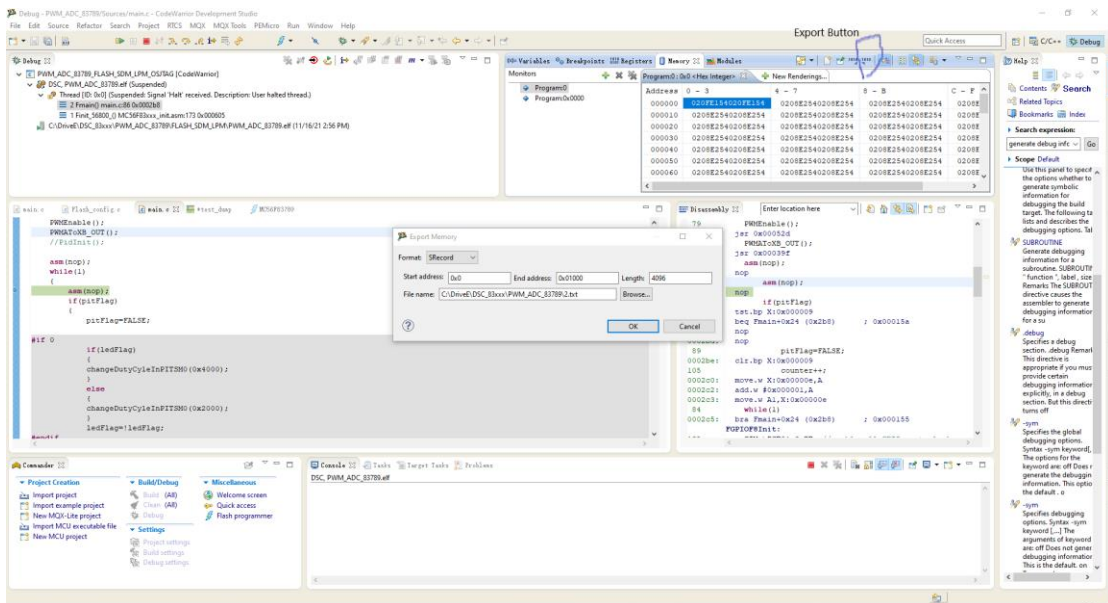


Result:

As you can see that the 2.txt file includes the S-Record format data

```
S3250000000054E10F0254E10F0254E2080254E2080254E2080254E2080254E2080254E20802CE
S3250000001054E2080254E2080254E2080254E2080254E2080254E2080254E2080254E20802CA
S3250000002054E2080254E2080254E2080254E2080254E2080254E2080254E2080254E20802BA
S3250000003054E2080254E2080254E2080254E2080254E2080254E2080254E24D0354E2080264
S3250000004054E2080254E2080254E2080254E2080254E2080254E2080254E2080254E208029A
S3250000005054E2080254E2080254E2080254E2080254E2080254E2080254E2080254E208028A
S3250000006054E2080254E2080254E2080254E2080254E2080254E2080254E2080254E208027A
S3250000007054E2080254E2080254E2080254E2080254E2080254E2080254E2080254E208026A
S3250000008054E2080254E2080254E2080254E2080254E2080254E2080254E2080254E208025A
S3250000009054E2080254E2080254E2080254E2080254E2080254E2080254E2080254E208024A
S325000000A054E2080254E2080254E2080254E2080254E2080254E2080254E2080254E208023A
S325000000B054E2080254E2080254E2080254E2080254E2080254E2080254E2080254E22D0304
S325000000C054E2080254E2080254E2080254E2080254E2080254E2080254E2080254E208021A
S325000000D054E2080254E2080254E2080254E2080254E2080254E2080254E2080254E208020A
S325000000E0FFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFF1A
S325000000F0FFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFF0A
S3250000010FFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFF9
S3250000011FFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFE9
S3250000012FFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFD9
S3250000013FFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFC9
S3250000014FFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFB9
S3250000015FFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFA9
S3250000016FFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFF99
S3250000017FFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFF89
S3250000018FFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFF79
S3250000019FFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFF69
S325000001A0FFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFF59
S325000001B0FFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFF49
S325000001C0FFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFF39
S325000001D0FFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFF29
S325000001E06B636667FFFFFFFFFFFFFFFFFFFFFFFFFFFF7017FFFFFFFFFFFFFFFFFFFFFFFFFFF1
S325000001F0FFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFF09
S3250000020FFFFFFFFFFFFFFFFFFFFFFFFFFFF7EFFFFFF04E701E77E9F18E500E700E709E718E4C2
S3250000021020E30000408002005D83000318E4B5E200004080FF0119E4B5E2000015F518E433
S325000002203CE4000014F14087FF011878597815D018E4A0E20000408000F019E4A0E20000D9
S3250000023015F518E43CE4000014F1408700F01878597815D018E4B0E2000040800C0018E42A
S32500000240B0E2000014F000E700E700E700E700E700E718E4B1E200004086312018E4B0E264
S3250000025000004080100018E4B0E200004082800018E4B2E2000014F05089200079A100E75A
S3250000026000E718E4B2E2000014F05089400077A100E700E718E4B0E200004082010018E4B1
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