Redler Loader description.

* Loader Placed in SECTOR A.
* Parameters in SECTOR B.
* Main program: SECTORS: C,D,E,F,G,H.

Main features:

1. Fast flash procedure.
2. PC waits for unit to be ready, send "A" every 100 ms.
3. Driver waits for PC to be ready, capable to restart if halted (garbage communication).
4. Power loss protection(after erase) => restart boot loader.

Communication loss (1 sec timeout) => restart boot loader.

1. After successful flash => run main program.
2. After Failed flash => restart boot loader.
3. Sector select inside txt file - Default erase C,D,E,F,G,H.
4. User can flash sector A –( without Power/ Communication protections)

Flash Checksum Protection

The flash checksum is protection, in case of power failure or Communication loss while programming new firmware, the driver will enter directly to Loader mode and wait for in this state until user will load new firmware.

**To enable flash checksum protection:**

1. Compile and burn main program into DSP.
2. Via UART Read flash checksum 62[10] in hex format
3. Under Descriptor file: **#define** PROG\_CHECKSUM 0x12345678

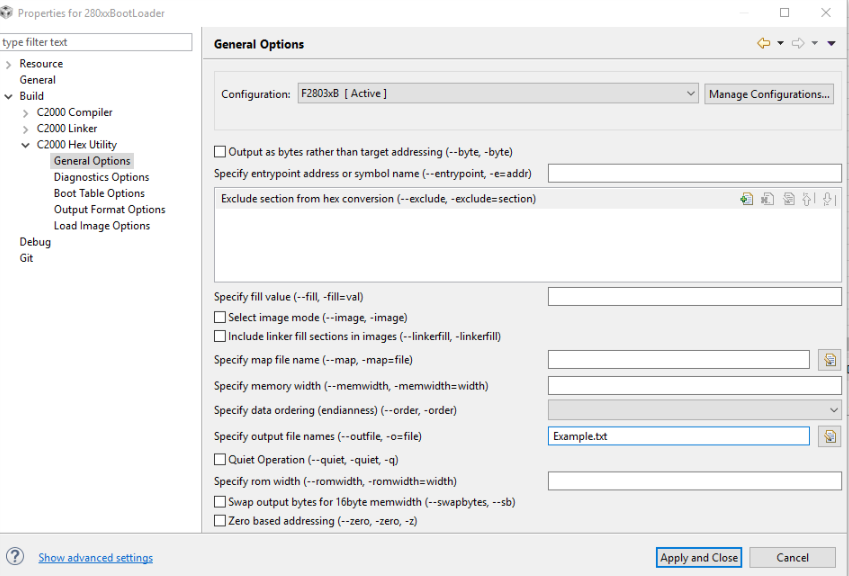
Instet 12345678 use “flash checksum” from step 2.

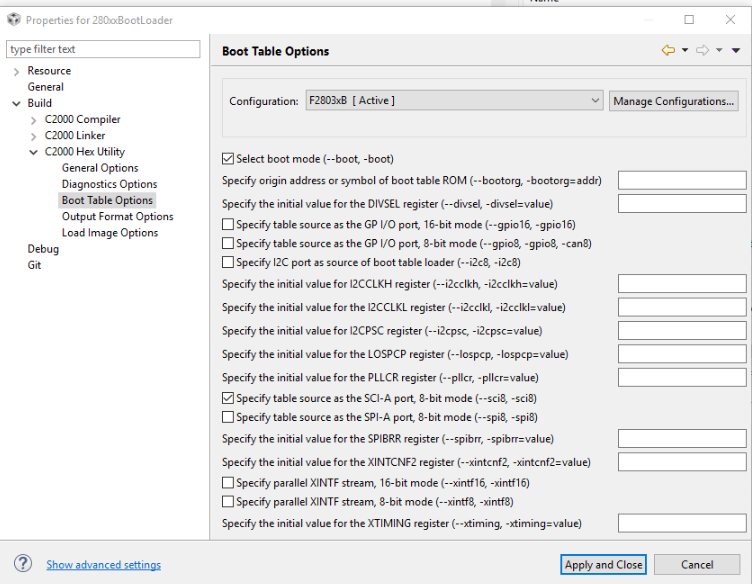
1. Burn again the new firmware verify whit UART that flash checksum 62[10], is the same.

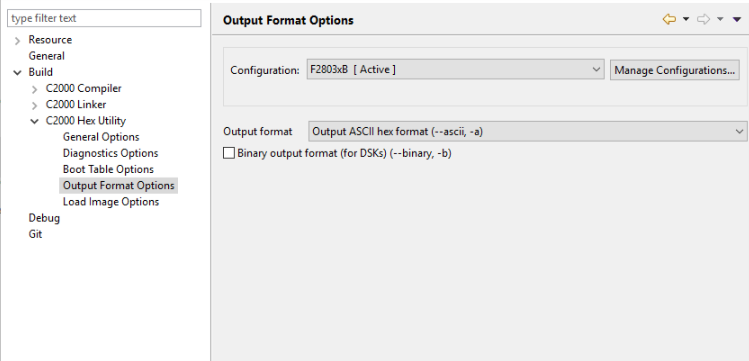
**To disable:**

For debug use 0x00000000 this will skip test completely, Just remember to Enable under SW release.

Setup of hex utility inside CCS

1. Change file name to “Name”.txt
2. Select file options



1. Select ASCII format

Sectors to Erase

Third byte Inside \*.txt file.

AA 08 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 3F 00 E5 67 02 00

00=ALL sectors without sector A and sector B, **default**.

01=sector A

02=sector B

04= Sector C

… ect

Use OR to select multiple sectors:

03 =sector A and B

Note:

A – LOADER

B – Parameters

C,D,E,F,G,H – Main program

How to create bootloader.txt file for sector A

1. Compile the programs and create \*.txt file.
2. Run: Get\_file\_flash\_kernel
3. Change Flash select byte (Third byte) to 01, for example:

AA 08 01 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 3F 00 E5 67 02 00