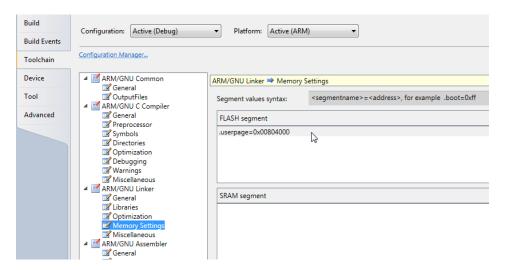
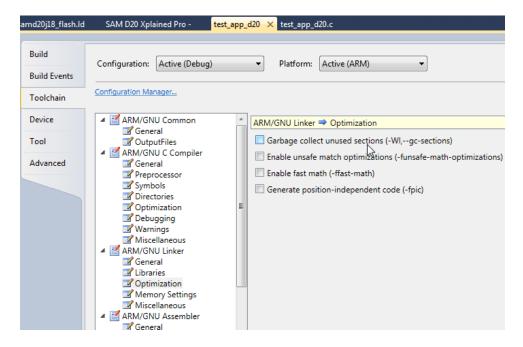
How can I generate ELF file where the application firmware and fuses are included for SAM D/L/C devices?

Follow the below procedure:

Define the user page section in project properties (Project Properties -> ARM/GNU Linker ->
 Memory Settings) as shown in the picture in the attached zip file (usersig.png)



Uncheck the option 'Garbage collect unused section' in Project Properties -> ARM/GNU Linker
 Optimization



- Modify the linker script to include two symbols __bss_start__ and __bss_end__. Attached the modified linker script file.

- Define the required fuse settings as a global array

```
uint32_t fusedata[] __attribute__ ((used)) __attribute__ ((section (".userpage"))) =
{0xD9E0C7FF, 0xFFFFFF5D};
```

- Build the project, the generated elf file will have the above fuse values and the application code

This generated ELF file can be programmed from atprogram command line,

```
atprogram.exe -t edbg -i SWD -d ATSAMD20J18 program -f test_app.elf
```

Note: If you program through Atmel Studio Device Programming, fuse bits may not be programmed properly.