

# G8 Re-Flashing Instructions

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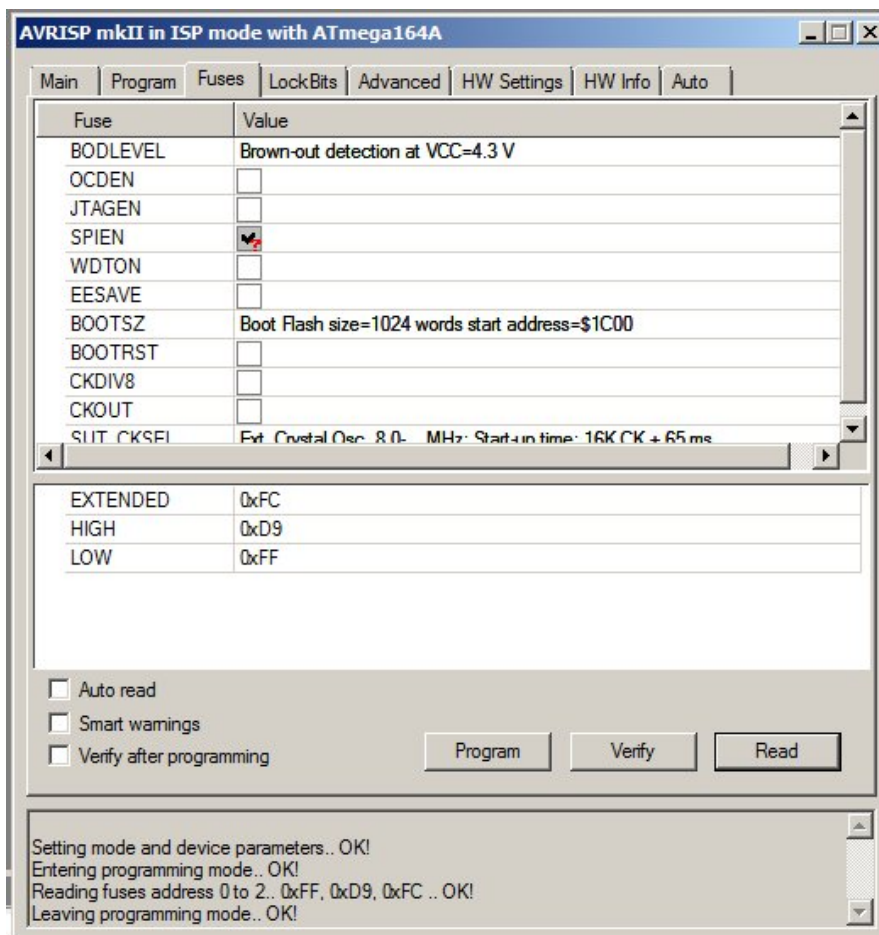
The G8 Clock divider uses an embedded processor running a program stored in its internal memory called 'flash'. Updating this program is hence called 're-flashing'. To perform re-flashing you will need:

- The .HEX file to re-flash with
- A programmer compatible with AVRISPII
- A program to drive the programmer

For the program we use AVR Studio 4, mostly because we are used to it. You can use a newer version of AVR Studio, or a different program such as AVR Dude. The programming port is called 'ISP'. Make sure your programmer can handle ISP. It is characterized by a 6-pin ribbon cable.

Fuse bits:

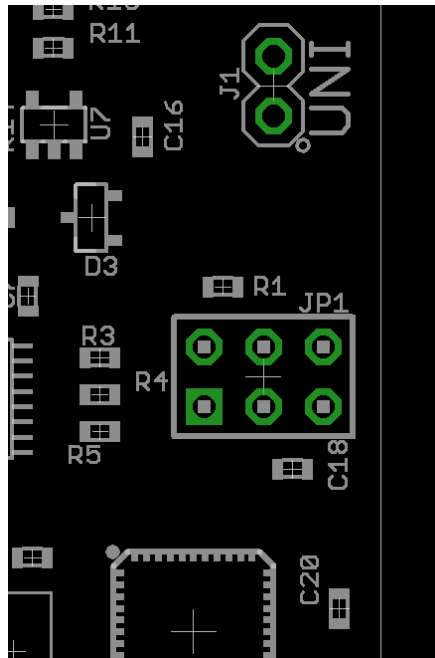
The fuse bits set processor parameters at program time. Here is a screen capture of AVR Studio 4:



The fuse bits are very important to get right. Incorrect fuse bit will result in unit malfunction.

Procedure:

Attach the programmer to the G8 using the 6 pin ribbon cable. Pin 1 (red stripe) is denoted by the square pad on the left of the 6-pin header.



Power up the G8. If using an AVRISPii programmer there will be a green light indicating the programmer is happy.

Select the processor type: ATMEGA164A

Program and verify the flash memory

Program the fuse bits.

Power off the G8, disconnect the programmer, and re-power the G8. Check for operation.