## **Engbedded Atmel AVR® Fuse Calculator**

#### **Device selection**

Select the AVR device type you want to configure. When changing this setting, default fuse settings will automatically be applied. Presets (hexadecimal representation of the fuse settings) can be reviewed and even be set in the last form at the bottom of this page.

AVR part name: ATmega88 Select

### Feature configuration

This allows easy configuration of your AVR device. All changes will be applied instantly.

Features				
Int. RC Osc. 8 MHz; Start-up time PWRDWN/RESET: 6 CK/14 CK + 65 ms; [CKSEL=0010 SUT=10]; default value				
	Clock output on PORTB0; [CKOUT=0]			
~	Divide clock by 8 internally; [CKDIV8=0]			
Brown-out detection level at VCC=1.8 V; [BODLEVEL=110]				
	Preserve EEPROM memory through the Chip Erase cycle; [EESAVE=0]			
	Watch-dog Timer always on; [WDTON=0]			
~	Serial program downloading (SPI) enabled; [SPIEN=0]			
	Debug Wire enable; [DWEN=0]			
	Reset Disabled (Enable PC6 as i/o pin); [RSTDISBL=0]			
	Boot Reset vector Enabled (default address=\$0000); [BOOTRST=0]			
Boot Flash section size=1024 words Boot start address=\$0C00; [BOOTSZ=00]; default value				

#### Manual fuse bits configuration

Note: means unprogrammed (1); means programmed (0).

Apply feature settings

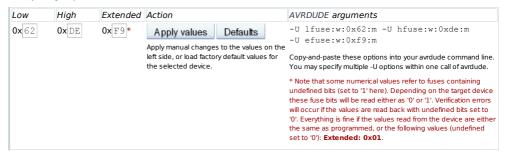
This table allows reviewing and direct editing of the AVR fuse bits. All changes will be applied instantly.

Bit	Low	High	Extended
7	CKDIV8 Divide clock by 8	RSTDISBL External reset disable	
6	CKOUT Clock output	DWEN debugWIRE Enable	
5	SUT1 Select start-up time	☑ SPIEN Enable Serial programming and Data Downloading	
4	SUT0 Select start-up time	WDTON Watchdog Timer Always On	
3	CKSEL3 Select Clock Source	■ <b>EESAVE</b> EEPROM memory is preserved through chip erase	
2	CKSEL2 Select Clock Source	BODLEVEL2 Brown-out Detector trigger level	<b>■ BOOTSZ1</b> Select boot size
1	CKSEL1 Select Clock Source	□ <b>BODLEVEL1</b> Brown-out Detector trigger level	<b>☑ BOOTSZ0</b> Select boot size
0	CKSEL0 Select Clock Source	BODLEVELO Brown-out Detector trigger level	BOOTRST Select reset vector

# Current settings

Apply manual fuse bit settings

These fields show the actual hexadecimal representation of the fuse settings from above. These are the values you have to program into your AVR device. Optionally, you may fill in the numerical values yourself to preset the configuration to these values. Changes in the value fields are applied instantly (taking away the focus)!



#### References

All information based on database ATmega88.xml build 187.

Unreviewed original XML backend database from Atmel. Probably buggy! Please report.

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If you find bugs in the user interface or the database backend(s), please report them.

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