

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:

ATtiny2313

Select

 (141 parts currently listed)

Feature configuration

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

Features

Int. RC Osc. 4 MHz; Start-up time: 14 CK + 65 ms; [CKSEL=0010 SUT=10]

☐ Clock output on PORTD2; [CKOUT=0]

☐ Divide clock by 8 internally; [CKDIV8=0]

☐ Reset Disabled (Enable PA2 as i/o pin); [RSTDISBL=0]

Brown-out detection level at VCC=2.7 V; [BODLEVEL=101]

☐ Watch-dog Timer always on; [WDTON=0]

☒ Serial program downloading (SPI) enabled; [SPIEN=0]

☐ Preserve EEPROM memory through the Chip Erase cycle; [EESAVE=0]

☐ Debug Wire enable; [DWEN=0]

☐ Self programming enable; [SELFPRGEN=0]

Apply feature settings

Manual fuse bits configuration

This table allows reviewing and direct editing of the AVR fuse bits. All changes will be applied instantly.
Note: ☐ means unprogrammed (1); ☒ means programmed (0).

| Bit | Low | High | Extended |
|-----|--|--|--|
| 7 | <input type="checkbox"/> CKDIV8 Divide clock by 8 | <input type="checkbox"/> DWEN debugWIRE Enable | |
| 6 | <input type="checkbox"/> CKOUT Clock output | <input type="checkbox"/> EESAVE EEPROM memory is preserved through chip erase | |
| 5 | <input type="checkbox"/> SUT1 Select start-up time | <input checked="" type="checkbox"/> SPIEN Enable Serial programming and Data Downloading | |
| 4 | <input checked="" type="checkbox"/> SUT0 Select start-up time | <input type="checkbox"/> WDTON Watchdog Timer Always On | |
| 3 | <input checked="" type="checkbox"/> CKSEL3 Select Clock Source | <input type="checkbox"/> BODLEVEL2 Brown-out Detector trigger level | |
| 2 | <input checked="" type="checkbox"/> CKSEL2 Select Clock Source | <input checked="" type="checkbox"/> BODLEVEL1 Brown-out Detector trigger level | |
| 1 | <input type="checkbox"/> CKSEL1 Select Clock Source | <input type="checkbox"/> BODLEVEL0 Brown-out Detector trigger level | |
| 0 | <input checked="" type="checkbox"/> CKSEL0 Select Clock Source | <input type="checkbox"/> RSTDISBL External reset disable | <input type="checkbox"/> SELFPRGEN Self Programming Enable |

Apply manual fuse bit settings

Current 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)!

| Low | High | Extended | Action | AVRDUDE arguments |
|------------------|------------------|--------------------|---|---|
| <div>0x E2</div> | <div>0x DB</div> | <div>0x FF *</div> | <div>Apply values</div> <div>Defaults</div> <div>Apply manual changes to the values on the left side, or load factory default values for the selected device.</div> | <div>-U lfuse:w:0xe2:m -U hfuse:w:0xdb:m -U efuse:w:0xff:m</div> <div>Select (try triple-click) and copy-and-paste this option string into your avrdude command line. You may specify multiple -U arguments within one call of avrdude.</div> <div>* Note that some numerical values refer to fuses containing undefined bits (set to '1' here). Depending on the target device these fuse bits will be read either as '0' or '1'. Verification errors will occur if the values are read back with undefined bits set to '0'. Everything is fine if the values read from the device are either the same as programmed, or the following values (undefined set to '0'): Extended: 0x01.</div> |

References

All information based on database **ATtiny2313.xml** build **175**.
Applied patches: **High-fuse bit order, CKSEL2:1 default values (Mark Haemmerling)**

No responsibility is taken for the correctness of the presented information.
Copyright © 2006-2021 Mark Hämmerling. This is a free service of [Engbedded](#). Use at your own risk.
User interface version: 0.9.3.

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

