

# Interfacing FlashRunner 2.0 with ATXMEGA devices

## Driver Notes

The supported protocols are:

- PDI
- JTAG

## DevData List

- FUSE\_MASK

specifies which bits of each fuse register are used.

## Command List

The letter after the command names specifies on which memory region the command is to be executed:

- F: Flash
- E: EEPROM
- S: Fuses and Lock bits
- U: User Signature
- P: Production Signature
- C: chip (used only for the command MASSERASE)

Almost each command supports the optional parameters <start\_addr> and <size>, that specify to execute the command, respectively, from which address and for how many addresses.

## CONNECT

Powers-on the device and checks the connection.

## MASSERASE

**MASSERASE** <C|F|E|U>, or **BLANKCHECK** <C|F|E|U> <start\_addr> <size>

Erases the selected memory. If a Chip erase is initiated (MASSERASE C), the Flash and EEPROM memories will be erased. Moreover, if the device is locked, it will be unlocked.

## BLANKCHECK

**BLANKCHECK** <F|E|U>, or **BLANKCHECK** <F|E|U> <start\_addr> <size>

Checks that the selected memory is clear.

## PROGRAM

**PROGRAM** <F|E|U|L>, or **PROGRAM** <F|E|U|L> <start\_addr> <size>

Programs the selected memory using the data loaded into the FRB file.

## VERIFY

**VERIFY** <F|E|U|L> R, or **VERIFY** <F|E|U|L> R <start\_addr> <size>

Verifies that the data written into the selected memory corresponds to the data of the FRB file.

**VERIFY F S**

Verifies the data written in the Flash memory using the CRC check function of the device. This verification method is faster than the Readout method.

**READ**

**READ** <F|E|U|P|L>, or **READ** <F|E|U|P|L> <start\_addr> <size>

Reads the selected memory, printing it into the communications log of the workbench.

**DUMP**

**DUMP** <F|E|U|P|L>, or **DUMP** <F|E|U|P|L> <start\_addr> <size>

Reads the selected memory, dumping it into the dumping file.

**DISCONNECT**

Powers-off the device.