

Interfacing FlashRunner 2.0 with ATSAM devices

Algorithm Notes

Protocol supported:

- SWD

Mem Type Table

MEM_TYPE	FLAG	IDX
FLASH	F	0
USER	U	1

Commands List

Memory types:

F → Flash

U → User Signature

MASSERASE

MASSERASE <F|U>

This function performs a Masserase for Flash or User Signature.

ERASE

ERASE <F> <start_addr> <size>

This function performs a sector erase for Flash .

BLANKCHECK

BLANKCHECK <F> or **BLANKCHECK** <F> <start_addr> <size>

Blankcheck command for Flash - Auto or Manual mode allowed.

PROGRAM

PROGRAM <F|U> or **PROGRAM** <F|U> <start_addr> <size>

Program command for Flash or User Signature - Auto or Manual mode allowed.

VERIFY

VERIFY <F|U> <R> or **VERIFY** <F|U> <R> <start_addr> <size>

Verify command for Flash or User Signature - Auto or Manual mode allowed.

R – Normal verify with Read-Out method.

LOCK

LOCK <F> <start_addr>

This command will lock the regions starting on start_addr.

UNLOCK

UNLOCK <F> <start_addr>

This command will unlock the regions starting on start_addr.

PROTECT

PROTECT <F> (only for ATSAMG/H/C/D)

This command allows the entire chip to be locked from external access for code security.

UNPROTECT

UNPROTECT <F> (only for ATSAMG/H/C/D)

This command allows to remove the protection.

SETGPNVM

SETGPNVM <BitN>

Set a single bit of GPNVM.

CLRGPVNM

CLRGPVNM <BitN>

Clear a single bit of GPNVM.

READ

READ <F|U> <start_addr> <size>

Read function for Flash or User Signature.

DUMP

DUMP <F|U> <start_addr> <size>

Dump function for Flash or User Signature.

RUN

Run in User Mode command

CONNECT

Connect function: Power on, check protections and entry.

DISCONNECT

Disconnect function: Power off and exit