

Interfacing FlashRunner 2.0 with RNSS_G devices

Commands List

Memory types:

F → Flash

E → EEprom *only* for FLASH_MF2

MASSERASE

MASSERASE <F|E|C>

This function perform a Masserase for Flash or Eeprom or Chip Erase

BLOCKERASE

BLOCKERASE <F|E> <start_addr> <size>

This function perform a Block Erase

BLANKCHECK

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

Blankcheck command for Flash or Eeprom - Auto or Manual mode allowed

PROGRAM

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

Program command for Flash, Eeprom - Auto or Manual mode allowed

VERIFY

VERIFY <F|E> <R|S|> or **VERIFY** <F|E> <R|S> <start_addr> <size>

Verify command for Flash, Eeprom - Auto or Manual mode allowed.

R – Normal verify with Read-Out method

S – Normal verify with Checksum method

READ

READ <F|E> <start_addr> <size>

Read function for Flash, Eeprom – Address check - ONLY for FLASH_TECH: UC2, UX4, MF2, CZ6HSF

DUMP

DUMP <F|E> <start_addr> <size>

Dump function for Flash, Eeprom – Address check - ONLY for FLASH_TECH: UC2, UX4, MF2, CZ6HSF

PROTECT

PROTECT <F> <sec_byte[0]>

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for FLASH_TECH: MF2_78K0, CZ6HSF_78K0, CZ6HSF_78K0
PROTECT <F> <sec_byte[0]> <sec_byte[1]> <sec_byte[2]>
for FLASH_TECH: MF2_78K0R, MF2_78K0R_FC3
PROTECT <F> <sec_byte[0]> <sec_byte[1]>
for SECURITY_TYPE: A
PROTECT <F> <sec_byte[0]> <addr>
for SECURITY_TYPE: B
PROTECT <F> <sec_byte[0]>
for SECURITY_TYPE: C
PROTECT <F> <sec_byte[0]> <sec_byte[1]> <addr>
for SECURITY_TYPE: D
```

Protect command

GET_SIGNATURE

Get signature command

GET_VERSION

Get version command

RUN

Run in User Mode command

CONNECT

Connect function: Power on and entry

DISCONNECT

Disconnect function: Power off and exit

Commands List 78K0S

Supported only with OS3.xx.

Memory types:

F → Flash

CONNECT

Power on and entry.

MASSERASE

MASSERASE F or **MASSERASE** F <start_addr> <size>

Masserase command for Flash - Auto or Manual mode allowed.

In Manual Mode the address and size have to be aligned with the block size: 256B. If not, the driver aligns them automatically to the minimum area that matches the user request.

BLANKCHECK

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

Blankcheck command for Flash - Auto or Manual mode allowed.

In Manual Mode the address and size have to be aligned with the block size: 256B. If not, the driver aligns them automatically to the minimum area that matches the user request.

PROGRAM

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

Program command for Flash - Auto or Manual mode allowed.

In Manual Mode the address and size have to be aligned with the block size: 256B. If not, the driver aligns them automatically to the minimum area that matches the user request.

VERIFY

VERIFY F S or **VERIFY** F S 0x00 <size>

Verify command for Flash - Auto or Manual mode allowed:

In Manual Mode the address has to be 0x00 and the size has to be aligned with the block size: 256B. If not, the driver aligns it automatically to the minimum area that matches the user request.

S – Normal verify with Checksum method

CHECKSUM

CHECKSUM F or **CHECKSUM** F 0x00 <size>

Checksum command for Flash - Auto or Manual mode allowed:

In Manual Mode the address has to be 0x00 and the size has to be aligned with the block size: 256B. If not, the driver aligns it automatically to the minimum area that matches the user request.

SET_SECURITY

SET_SECURITY F <security_byte>

This command protects the device using the security bytes. To release the security, perform a "TPCMD MASSERASE F" command if the Chip Erase is not disabled.

security_byte:

- bit {7, 6}: set to 1.
- bit {5, 4}: one or both to 0, disable writing.
- bit {3, 2}: one or both to 0, disable chip erase. If disabled, the security can no longer be released.
- bit {1, 0}: one or both to 0, disable block erase.

DISCONNECT

Power off and exit.

Commands List 78K0_2nd

Memory types:

F → Flash

CONNECT

Power on and entry.

MASSERASE

MASSERASE F or **MASSERASE** F <start_addr> <size>

Masserase command for Flash - Auto or Manual mode allowed.

In Manual Mode the address and size have to be aligned with the block size: 0x400. If not, the driver aligns them automatically to the minimum area that matches the user request.

BLANKCHECK

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

Blankcheck command for Flash - Auto or Manual mode allowed.

In Manual Mode the address and size have to be aligned with the block size: 0x400. If not, the driver aligns them automatically to the minimum area that matches the user request.

PROGRAM

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

Program command for Flash - Auto or Manual mode allowed.

In Manual Mode the address and size have to be aligned with the program block size: 0x100. If not, the driver aligns them automatically to the minimum area that matches the user request.

VERIFY

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

Verify command for Flash - Auto or Manual mode allowed:

In Manual Mode the address and the size have to be aligned with the program block size: 0x100. If not, the driver aligns it automatically to the minimum area that matches the user request.

R – Normal verify with Read-Out method.

S – Normal verify with Checksum method

CHECKSUM

CHECKSUM F or **CHECKSUM** F <start_addr> <size>

Checksum command for Flash - Auto or Manual mode allowed:

In Manual Mode the address and the size have to be aligned with the block size: 0x100. If not, the driver aligns it automatically to the minimum area that matches the user request.

SET_SECURITY

SET_SECURITY F <security_byte>

This command protects the device using the security bytes. To release the security, perform a "TPCMD MASSERASE F" command if the Chip Erase is not disabled.

security_byte:

- bit {7, 6, 5, 3}: set to 1.
- bit {4}: set to 0 to disable Boot block cluster rewrite. The security can no longer be released.
- bit {2}: set to 0 to disable programming.
- bit {1}: set to 0 to disable block erase.
- bit {0}: set to 0 to disable chip erase. The security can no longer be released.

GET_SIGNATURE

Returns the device Signature. It must be used before the CONNECT command.

DISCONNECT

Power off and exit.