

Interfacing FlashRunner 2.0 with SH79F devices

Algorithm Notes

Protocol supported:

- Sinowealth proprietary 4 wires protocol

Mem Type Table

MEM_TYPE	FLAG	IDX
FLASH	F	0
EEPROM	E	1
CUSTO BLOCK	S	2

Commands List

Memory types:

F → Flash

E → EEPROM

S → Custom block

MASSERASE

MASSERASE <C>

This function performs a chip erase (FLASH, EEPROM and Custom block) and unlock the device.

MASSERASE <|F|E|S>

This function performs a full erase for FLASH or EEPROM or custom block. If "MASSERASE F" is executed, the chip is automatically unlocked after.

SECTOR_ERASE

SECTOR_ERASE <F|E|S> <start address> <size>

This function performs a sector erase for FLASH or EEPROM or custom block (start addr and size must

be aligned to page erase size = 512 bytes).

BLANKCHECK

BLANKCHECK <F|E|S|> or **BLANKCHECK** <F|E|S> <start address> <size>

Blankcheck command for FLASH or EEPROM or custom block.

PROGRAM

PROGRAM <F|E>

Program command for FLASH or EEPROM. The checksum of the FLASH code is automatically written inside

Custom block address 0x1004-0x1005 after "PROGRAM F" execution.

VERIFY

VERIFY <F|E> <R>

Verify command for FLASH or EEPROM.
R - Normal verify with Read-Out method.

READ

READ <F|E|S|> or **READ** <F|E|S> <start_addr> <size>

Read function.

DUMP

DUMP <F|E|S|> or **DUMP** <F|E|S> <start_addr> <size>

Dump function.

WRITE_CUSTOM_BLOCK

WRITE_CUSTOM_BLOCK <start_address> <value>

This function writes a 32-bit WORD (value) to Custom block address (start_address) and automatically verifies it.

READ_CUSTOM_BLOCK

READ_CUSTOM_BLOCK <start_address>

This function reads a 32-bit WORD from Custom block address (start_address).

ULTRA_SECURITY_LOCK

This function sets the Ultra Security for Program Memory by writing 0x3 into Custom block address 0x1103.

CONNECT

Connect function: Power on, connects to the device and detects if the device is locked and if the EEPROM has a size.

DISCONNECT

Disconnect function: Power off and exit.