

Interfacing FlashRunner 2.0 with ESPRESSIF devices

Parameter List

SPI_CLOCK

Set the clock frequency to communicate with the External Flash. Allowed values: 10 MHz, 20 MHz and 40 MHz. For some devices maximum 20 MHz can be set. ESP8266 ignores this parameter.

QSPI_ENABLED

Enable or not the QSPI communication with the External Flash. Allowed values: YES or NO.

Command List

Memory types:

X → External Memory

E → eFuses(check table above for supported families)

CONNECT

Power on and entry.

MASSERASE

MASSERASE <X> or **MASSERASE** <X> <start_addr> <size>

Erase command for External Memory - Auto and Manual mode allowed.

In Manual Mode the address and size have to be aligned with the block size: 0x1000. If not, the driver aligns them automatically to the minimum area that matches the user request.

BLANKCHECK

BLANKCHECK <X> or **BLANKCHECK** <X> <start_addr> <size>

Blankcheck command for External Memory- Auto or Manual mode allowed.

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

PROGRAM

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

Program command for External Memory - Auto or Manual mode allowed.

In Manual Mode the address and size have to be aligned to 0x100 for X and 0x04 for E. If not, the driver aligns them automatically to the minimum area that matches the user request.

VERIFY

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

Verify command for External Memory- Auto or Manual mode allowed.

In Manual Mode the address and size have to be aligned to 0x100 for X and 0x04 for E. If not, the driver aligns them automatically to the minimum area that matches the user request.

R – Normal verify with Read-Out method.

S - CRC32 verify. Not available for eFuses.

READ

READ <X|E> <start_addr> <size>

Read command for External Memory - Manual mode allowed.

The address and size for X have to be aligned to 0x40, but only if bigger than 0x40. If not, the driver aligns them automatically to the minimum area that matches the user request. For E the alignment is to 0x04.

DUMP

DUMP <X|E> or **DUMP** <X|E> <start_addr> <size>

Dump command for External Memory - Auto or Manual mode allowed.

In Manual Mode for X the address and size have to be aligned to 0x40, but only if bigger than 0x40. If not, the driver aligns them automatically to the minimum area that matches the user request. For E the alignment is to 0x04.

READ_MEM_32

READ_MEM_32 <start_addr> <num_read>

Read the Espressif memory content at the address given.

WRITE_MEM_32

WRITE_MEM_32 <address> <value>

Write the Espressif memory content at the address given.

DISCONNECT

Power off and exit.

Command List eFuses

EFUSE_WRITE

EFUSE_WRITE <address> <value>

Write the Efuse at the address specified. *Address* has to be aligned to 0x04.

EFUSE_COMPARE

EFUSE_COMPARE <address> <value> <mask>

Compare the Efuse at the address specified. *Address* has to be aligned to 0x04. *Mask* is optional, the default value is 0xFFFFFFFF and it is used to mask the read value from the device.

EFUSE_OVERVIEW

Prints on the log an overview of all the Efuse inside the device.