

## EEPROM\_WRITE command

This command writes data (from 1 to 32 bytes) to the requested EEPROM address. Afterwards, it writes USB FX2 firmware, reads back data from EEPROM and returns it in a reply packet.

Byte	Value	Description
1	0xA9	EEPROM_WRITE command ID
2	AddrHigh	High part of address (address [15:8])
3	AddrLow	Low part of address (address [7:0])
4	size	Number of bytes to write (max 32)
From 5 to size+4	data	Data to write (size bytes)
From size+5 to 64	-	Not used

**EEPROM\_WRITE Command Packet Layout.**



**EEPROM Page Size = 64 =>  $((\text{AddrHigh} + \text{AddrLow}) \% 64) < \text{size}$**

From [EEPROM 24LC128 Microchip Manual](#):

"Page write operations are limited to writing bytes within a single physical page, regardless of the number of bytes actually being written. Physical page boundaries start at addresses

that are integer multiples of the page buffer size (or 'page size') and end at addresses that are integer multiples of [page size - 1]. If a Page Write command attempts to write across a

physical page boundary, the result is that the data wraps around to the beginning of the current page (over-writing data previously stored there), instead of being written to the next page,

as might be expected. It is, therefore, necessary for the application software to prevent page write operations that would attempt to cross a page boundary."

This section imply that the following condition should be true to realize a correct write operation:  $((\text{AddrHigh} + \text{AddrLow}) \% 64) < \text{size}$ .

The  $((\text{AddrHigh} + \text{AddrLow}) \% 64)$  is the remainder of  $((\text{AddrHigh} + \text{AddrLow}) / 64)$  operation.

Reply packet contains readback data.

Byte	Description
From 1 to size	Readback result
From size to 64	Not used

**EEPROM\_WRITE Reply Packet Layout.**