

FX22MB_REG0_GETVERSION command

FX22MB_REG0_GETVERSION = 0x01

This command is used to request to the MicroBlaze the return of 4 bytes representing FPGA firmware version.

This command alone is not able to return directly 4 bytes representing the FPGA firmware version. This command should be inserted in the following procedure:

1. SET_INTERRUPT on MB_I2C_ADDRESS requesting I2C_BYTES
2. I2C_WRITE with MB_Command FX22MB_REG0_GETVERSION at byte 7
3. GET_INTERRUPT

This command sets address and number of bytes to read from the I2C bus when an interrupt request is received.

1) SET_INTERRUPT on MB_I2C_ADDRESS requesting I2C_BYTES

Byte	Value	Description
1	0xB0	SET_INTERRUPT FX2 API command ID
2	0x3F	I2C Address MB_I2C_ADRESS=0x3F
3	0x0C	Number of bytes to write (max 32)
From 4 to 64	-	Not used

SET_INTERRUPT Command Packet Layout.

Reply packet doesn't contain any usable information.

This command writes data (12 bytes) to requested I2C address.

2) I2C_WRITE with MB_Command FX22MB_REG0_GETVERSION at byte 7

Byte	Value	Description
1	0xAD	I2C_WRITE FX2 API command ID
2	0x3F	I2C Address MB_I2C_ADRESS=0x3F
3	0x0C (12)	FX2_Parameters.I2C_BYTES=0x0C Number of bytes to write (max 32)
4	0x00	-
5	0x00	-
6	0x00	-
7	0x01	MB_Commands.FX22MB_REG0_GETVERSION It request to the MicroBlaze the return of 4 bytes representing FPGA firmware version
From 8 to 64	-	Not used

FX22MB_REG0_GETVERSION MicroBlaze command.

Reply packet doesn't contain any usable information.

This command pulls the number of received interrupts and received data (number o bytes set by SET_INTERRUPT command) from USB FX2.

3) GET_INTERRUPT

Byte	Value	Description
1	0xB1	GET_INTERRUPT FX2 API command ID

From 2 to 64	-	Not used
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GET_INTERRUPT Command Packet Layout.

3) Reply packet with desired information

Byte	Description
1, reply[0]	Interrupt number. If zero means that GET_INTERRUPT has not been able to retry data because the interrupt created by SET_INTERRUPT has not yet been serviced.
2, reply[1]	Interrupt data [0] : Major Version
3, reply[2]	Interrupt data [1] : Minor Version
4, reply[3]	Interrupt data [2] : Release Version
5, reply[4]	Interrupt data [3] : Build Version
From 6 to 64	Not used

GET_INTERRUPT Reply Packet Layout.