

Interfacing FlashRunner 2.0 with ELMOS_522 devices

Driver Notes

The supported protocols are:

- I2C (for device E522.48)
- UART over CAN layer (for device E522.49)

External Hardware

To communicate to a device that uses the UART over CAN protocol, an external hardware must be connected between the driver and the device. This hardware allows the driver to communicate using the CAN layer.

Parameter List

DEVICE_ADDRESS

Sets the slave-bus-address of the connected device. Use this parameter if the connected device has the COM_DEV_ADDR register already programmed.

SOURCE_FORMAT

Specifies the internal format of the flashing file. The supported formats are:

- *STD_FORMAT*: default value, for flashing files generated from a standard source.
- *ODELO_HEX_FORMAT*: for flashing files generated from a custom Odello HEX file. If this format is set, the parameters <start_addr> and <size> of every command will be read by the driver using the Odello addressing format.

UART_CONFIG

Used only for devices with the UART protocol. Specifies the value already set in the UART_CONFIG register. Use this parameter if you want to communicate to an already programmed device.

Command List

Each command supports the parameters <start_addr> and <size>, that specify to execute the command, respectively, from which address and for how many addresses. Remember that the registers of the devices "occupy" 2 bytes each, so the number of registers on which the command is executed are *size/2*. Unless you set the *SOURCE_FORMAT* parameter to *ODELO_HEX_FORMAT*

CONNECT

Powers-on the device and checks the connection.

BLANKCHECK

BLANKCHECK O, or **BLANKCHECK** O <start_addr> <size>

Checks that the memory of the device is empty.

PROGRAM

PROGRAM O, or **PROGRAM** O <start_addr> <size>

Programs the device using the data loaded into the FRB file.

VERIFY

VERIFY O R, or **VERIFY** O R <start_addr> <size>

Verifies that the data written into the device corresponds to the data of the FRB file.

READ

READ O, or **READ** O <start_addr> <size>

Reads the OTP memory of the device, printing it into the communications log of the workbench.

DUMP

DUMP O, or **DUMP** O <start_addr> <size>

Reads the OTP memory of the device, dumping it into the dumping file.

READ_REGISTERS

READ_REGISTERS <start_addr> <size>

Reads the specified registers of the device, from the selected start address memory, printing their values into the Terminal of the Workbench. This command can also read registers outside the programmable memory (addresses between 0x00 and 0x17E).

For example: *#TPCMD READ_REGISTERS 0x17E 0x02*
reads and prints the register 0x17E (PROGRAM_STATUS)

To read the same register using the Odelo addressing format, use the command *#TPCMD READ_REGISTERS 0xBF 0x01*

DISCONNECT

Powers-off the device.