

## HexUpload - Overview

### Call from the command line / parameter

Calling **hexupload** without parameters writes the version data and the default parameters of the comports to the output field. In this case, **hexupload** terminates without returning an error.

#### Example of calling the program from the command line:

**hexupload file.hex COM1 9600 2 1000**

**hexupload file.bin COM1 9600 1 1000 0x2000**

#### Parameter:

file.hex file name including file path of the Intel-Hex file for the upload  
COM1 Comport for transmission  
9600 baud rate for transmission (if not specified, default 19,200 baud will be used)  
2 number of stop bits, 1 or 2 possible (if not specified, default 1 stop bit is used)  
1000 timeout time for ACK / NACK, 0 to 65535 possible (if not specified, default 100 ms are used)  
0x2000 offset address only for the BIN file !

The call of **hexupload** with at least one parameter attempts to extract the data of the Intel hex file and output it via the selected comport with the corresponding parameters. If an error occurs, it is output to the output field and **hexupload** is terminated with the return of an error. The parameters file name and comport must be available for a transfer and must also be valid. Additional parameters are replaced by their default values if these are not available. Existing parameters must always be at the corresponding positions.

### Overview of commands:

**#0123** Startaddress of Data  
**S0123** Size of Data (Number of following data 0x0123 = 291 Bytes)  
**:** Data (subsequent ASCII-HEX characters represent a binary byte in pairs)  
**&0123** CRC-16 of Data (CRC-16 of sent data = 0x0123)  
**J0123** Jump (jump to address 0x0123)

#### Example 14.624 transfer bytes from address 0x1000 and start the program from address 0x1000:

**# 1000** Start address of the following data = 0x1000  
**S3920** Number of following data = 14.624 bytes (14.624 = 0x3920)  
**:** subsequent ASCII-HEX characters represent a binary byte in pairs

**4F** first data byte for address 0x1000  
**26**  
**5A**  
**...**  
**17** last data byte for address 0x4919

**&8AF1** CRC-16 of sent data = 0x8AF1

**J1000** jump to address 0x1000

### Command and data transfer:

After each transmitted character (command or ASCII-HEX character) an ACK (0x06) or NACK (0x15) is expected within a certain timeout time. Only if an ACK has been received within this timeout period will the next character be sent. Otherwise, a corresponding error message is output to the output field and **hexupload** is terminated with the return of an error.