

MD5 of file does not match data in flash (fatal error)

Datum: 2025-01-15

Da sind einige defekte herum und hier

<https://www.esp32.com/viewtopic.php?t=4061>

steht am Ende ein Fix ... drei Videos die sagen es ist gefixt gibt es auch.

Firmware Update

In **'Re: MD5 of file does not match data in flash (fatal error)'** steht dass man

erstens: write flash status

TODO: Braucht es das oder ist das nur zur Kontrolle ?

```
> esptool.py write_flash_status --non-volatile 0
```

Ausgabe:

```
esptool.py v4.8.1
Found 33 serial ports
Serial port /dev/ttyUSB0
Connecting.....
Detecting chip type... Unsupported detection protocol, switching and trying again...
Connecting.....
Detecting chip type... ESP32
Chip is ESP32-D0WDQ6 (revision v1.0)
Features: WiFi, BT, Dual Core, 240MHz, VRef calibration in efuse, Coding Scheme None
Crystal is 40MHz
MAC: 3c:61:05:28:bc:40
Uploading stub...
Running stub...
Stub running...
Initial flash status: 0x4200
Setting flash status: 0x0000
After flash status: 0x0000
Hard resetting via RTS pin...
```

zweitens: firmware updaten

Download bei espressif ... abhängig von dem esp den man updaten will.

- <https://docs.espressif.com/projects/esp-faq/en/latest/development-environment/firmware-update.html>
- https://docs.espressif.com/projects/esp-at/en/latest/esp32/AT_Binary_Lists/index.html

Das factory.bin findet man im [Firmware-Download](#) unter ESP32-WROOM-32-AT-V3.4.0.0/ESP32-WROOM-32-AT-V3.4.0.0/

Die zip-Datei von [Firmware-Download](#) enthält:

```
build
+-- at_customize.bin           // Secondary partition table
|                             // user partition table, listing the start address and
|                             // size of the mfg_nvs partition and fatfs partition)
+-- bootloader
```

```

|  +-- bootloader.bin          // Bootloader
+-- customized_partitions
|  +-- mfg_nvs.bin            // Factory configuration parameters, parameter values are
|                             // listed in the mfg_nvs.csv file in the same directory
+-- esp-at.bin                // AT application firmware
+-- factory
|  +-- factory_xxx.bin        // Collection of binary files for specific functionalities.
|                             // You can burn only this file to the flash space with a
|                             // starting address of 0, or burn several binary files to
|                             // the flash space corresponding to the starting address
|                             // according to the information in the download.config file.
+-- partition_table
|  +-- partition-table.bin    // Primary partition table (system partition table)
+-- ota_data_initial.bin      // OTA data initialization file

```

TODO: was ist das bootloader.bin

```

> esptool.py --chip auto --port /dev/ttyUSB0 --baud 115200 --before default_reset
--no-stub --after hard_reset write_flash -u --flash_mode dio
--flash_freq 40m --flash_size 4MB 0x0
factory/factory_WROOM-32.bin

```

Ausgabe:

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Connecting....
Detecting chip type... ESP32
Chip is ESP32-D0WDQ6 (revision v1.0)
Features: WiFi, BT, Dual Core, 240MHz, VRef calibration in efuse, Coding Scheme None
Crystal is 40MHz
MAC: 3c:61:05:28:bc:40
Enabling default SPI flash mode...
Configuring flash size...
Flash will be erased from 0x00000000 to 0x003ffffff...
Erasing flash...
Took 8.17s to erase flash block
Wrote 4194304 bytes at 0x00000000 in 403.3 seconds (83.2 kbit/s)...
Hash of data verified.

Leaving...
Hard resetting via RTS pin...

```

HOORAY: dann funktioniert arduino-Upload wieder.

Docutils System Messages

system-message

ERROR/3 in esp32-md5.txt, line 16

Unknown target name: "re: md5 of file doas not match data in flash (fatal error)".