

MP3-Player Update

Programm installieren

- Stm32CubeProgrammer herunterladen und installieren:
- <https://www.st.com/en/development-tools/stm32cubeprog.html#get-software>

Programm starten

STM32CubeProgrammer

Memory & File edition

Device memory Open file +

Addr... S... Data wi... 32-bit Read

No data to display

Log Verbose level 1 2 3

11:54:49 : STM32CubeProgrammer API v2.2.1

ST-LINK configuration

Serial number 0669FF535... Connect

Port SWD

Frequency (kHz) 4000

Mode Normal

Access port 0

Reset mode Software reset

Shared Disabled

External loader -

Target voltage 3.25 V

Firmware version V2J33M25

Firmware upgrade

Device information

Device -

Type -

Device ID -

Flash size -

CPU -

Not connected

Wenn der MP3-Player mit dem PC per USB-Kabel verbunden ist, sollte hier eine Seriennummer stehen.

Verbindung herstellen

Memory & File edition

Device memory Open file +

Addr... S... Data wi... 32-bit Read

No data to display

Log Verboisity level 1 2 3

11:54:49 : STM32CubeProgrammer API v2.2.1

ST-LINK configuration

Serial number 0669FF535...
Port SWD
Frequency (kHz) 4000
Mode Normal
Access port 0
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Shared Disabled
External loader -
Target voltage 3.25 V
Firmware version V2J33M25

Firmware upgrade

Device information

Device -
Type -
Device ID -
Flash size -
CPU -

Not connected

**Den MP3-
Player
einschalten,
falls er es noch
nicht ist.
Dann Connect
drücken**

Einstellungen

The screenshot shows the STM32CubeProgrammer software interface. The main window is titled "External loaders" and displays a table of available external loaders. The table has columns for "Select", "Name", "Board", "Start Address", "Memory Size", "Page Size", and "Type". The row for "N25Q128A_STM32F746G..." is selected, indicated by a blue checkmark in the "Select" column.

Select	Name	Board	Start Address	Memory Size	Page Size	Type
<input type="checkbox"/>	M29W128GL_STM32H743...	STM32H743I...	0x60000000	16M	0x10	NOR_FLASH
<input type="checkbox"/>	MT25TL01G_STM32H743I...	STM32H743I...	0x90000000	128M	0x100	NOR_FLASH
<input type="checkbox"/>	MT25TL01G_STM32H745I...	STM32H745I...	0x90000000	128M	0x100	NOR_FLASH
<input type="checkbox"/>	MT25TL01G_STM32H747-...	STM32H747-...	0x90000000	128M	0x100	NOR_FLASH
<input type="checkbox"/>	MT25TL01G_STM32H747I...	STM32H747I...	0x90000000	128M	0x1000	NOR_FLASH
<input type="checkbox"/>	MT25TL01G_STM32H747L...	STM32H747L...	0x90000000	128M	0x100	NOR_FLASH
<input type="checkbox"/>	MTC4GACAJCN_STM32H...	STM32H745I...	0xA0000000	512M	0x100	NAND_FLASH
<input checked="" type="checkbox"/>	N25Q128A_STM32F746G-...	STM32F746G...	0x90000000	16M	0x10	NOR_FLASH

Below the table is a "Log" window showing the following output:

```
12:01:12 : Device ID : 0x449
12:01:12 : UPLOADING OPTION BYTES DATA ...
12:01:12 : Bank : 0x00
12:01:12 : Address : 0x40023c14
12:01:12 : Size : 8 Bytes
12:01:12 : UPLOADING ...
12:01:12 : Size : 1024 Bytes
12:01:12 : Address : 0x8000000
12:01:12 : Read progress:
12:01:12 : Data read successfully
12:01:12 : Time elapsed during the read operation is: 00:00:00.007
```

On the right side of the interface, the "ST-LINK configuration" panel is visible, showing settings for the ST-LINK interface. The "External loader" is set to "N25Q128A_STM32F746G-...". The "Device information" panel shows the device is "STM32F74x/STM32F75x", a "MCU" with "Device ID" "0x449", "Flash size" "1 MB", and "CPU" "Cortex-M7".

2. Board
STM32F746G...
aktivieren

1. EL
Drücken

Einstellungen

1. Fenster Wechseln „Erasing and Programming“

2. Update-Datei auswählen „stm32f746.elf“

3. Die 3 Haken setzen

The screenshot shows the STM32CubeProgrammer software interface. The main window is titled "Erasing & Programming". On the left sidebar, there are three icons: a pencil (Download), a download arrow (File path), and a chip with a checkmark (Automatic Mode). The "Download" section has a "File path" field set to "C:\Users\daniel\STM32Cub" and a "Browse" button. Below it are checkboxes for "Skip flash erase before programming", "Verify programming", and "Run after programming" (checked). A "Start Programming" button is at the bottom right of this section. The "Automatic Mode" section has checkboxes for "Full chip erase" (checked), "Download file" (checked), and "Option byt..." (unchecked). A "Start automatic mode" button is at the bottom right. To the right, there are tabs for "Erase flash memory" and "Erase external memory", with buttons for "Erase selected sectors" and "Full chip erase". Below these is a table of sectors:

Sel...	Index	Start Address	Size
<input type="checkbox"/>	0	0x08000000	32K
<input type="checkbox"/>	1	0x08008000	32K
<input type="checkbox"/>	2	0x08010000	32K
<input type="checkbox"/>	3	0x08018000	32K
<input type="checkbox"/>	4	0x08020000	128K
<input type="checkbox"/>	5	0x08040000	256K
<input type="checkbox"/>	6	0x08080000	256K
<input type="checkbox"/>	7	0x080C0000	256K

At the bottom, there is a "Log" window with a "Verbosity level" selector (set to 1) and a log of messages including "Device ID : 0x449", "UPLOADING OPTION BYTES DATA ...", and "Data read successfully". On the right side, there is an "ST-LINK" configuration panel with a "Disconnect" button and various settings like "Serial number", "Port", "Frequency", "Mode", "Access port", "Reset mode", "Shared", "External loader", "Target voltage", and "Firmware version". A "Firmware upgrade" button is also present. Below that is a "Device information" section showing "Device: STM32F74x/STM32F75x", "Type: MCU", "Device ID: 0x449", "Flash size: 1 MB", and "CPU: Cortex-M7".

Update durchführen

The screenshot shows the STM32CubeProgrammer software interface. The main window is titled "Erasing & Programming". On the left, there are icons for "Download", "OB", and "Log". The "Download" section includes a file path field with the value "!\f746\Debug\stm32f746.elf" and a "Browse" button. Below this are checkboxes for "Skip flash erase before programming", "Verify programming", and "Run after programming" (which is checked). A "Start Programming" button is highlighted with an arrow pointing to the text "Update Starten".

The "Automatic Mode" section includes checkboxes for "Full chip erase" (checked), "Download file" (checked), and "Option byt..." (unchecked). A "Start automatic mode" button is located below these options.

The "Erase flash memory" and "Erase external memory" tabs are visible. The "Erase flash memory" tab is active, showing a table of sectors to be erased:

Sel...	Index	Start Address	Size
<input type="checkbox"/>	0	0x08000000	32K
<input type="checkbox"/>	1	0x08008000	32K
<input type="checkbox"/>	2	0x08010000	32K
<input type="checkbox"/>	3	0x08018000	32K
<input type="checkbox"/>	4	0x08020000	128K
<input type="checkbox"/>	5	0x08040000	256K
<input type="checkbox"/>	6	0x08080000	256K
<input type="checkbox"/>	7	0x080C0000	256K

The "Log" section at the bottom shows the following output:

```
12:01:12 : Device ID : 0x449
12:01:12 : UPLOADING OPTION BYTES DATA ...
12:01:12 : Bank : 0x00
12:01:12 : Address : 0x40023c14
12:01:12 : Size : 8 Bytes
12:01:12 : UPLOADING ...
12:01:12 : Size : 1024 Bytes
12:01:12 : Address : 0x8000000
12:01:12 : Read progress:
12:01:12 : Data read successfully
12:01:12 : Time elapsed during the read operation is: 00:00:00.007
```

The right sidebar shows the "ST-LINK" configuration panel, which is currently "Connected". It includes a "Disconnect" button and various configuration options for the ST-LINK, such as "Serial number", "Port", "Frequency (kHz)", "Mode", "Access port", "Reset mode", "Shared", "External loader", "Target voltage", and "Firmware version". A "Firmware upgrade" button is also present.

The "Device information" section at the bottom right of the sidebar shows the following details:

Device information	
Device	STM32F74x/STM32F75x
Type	MCU
Device ID	0x449
Flash size	1 MB
CPU	Cortex-M7

Update Starten

Warten

STM32CubeProgrammer

Erasing & Programming

Download

File path: CAUsers\daniel\STM32Cub... Browse

Start address: []

Skip flash erase before programming

Verify programming

Run after programming

Start Programming

Automatic Mode

Full chip erase

Download file

Option byt... []

Start automatic mode

Erase flash memory | Erase external memory

Erase selected sectors | Full chip erase

Sel...	Index	Start Address	Size
<input type="checkbox"/>	0	0x08000000	32K
<input type="checkbox"/>	1	0x08008000	32K
<input type="checkbox"/>	2	0x08010000	32K
<input type="checkbox"/>	3	0x08018000	32K
<input type="checkbox"/>	4	0x08020000	128K
<input type="checkbox"/>	5	0x08040000	256K
<input type="checkbox"/>	6	0x08080000	256K
<input type="checkbox"/>	7	0x080C0000	256K

Log

Verbosity level: 1 2 3

```
12:01:12 : Data read successfully
12:01:12 : Time elapsed during the read operation is: 00:00:00.007
12:09:08 : Memory Programming ...
12:09:08 : Opening and parsing file: stm32f746.elf
12:09:08 : File : stm32f746.elf
12:09:08 : Size : 2701768 Bytes
12:09:08 : Address : 0x08000000
12:09:08 : Erasing memory corresponding to segment 0:
12:09:09 : Erasing internal memory sectors [0 5]
12:09:11 : Erasing memory corresponding to segment 3:
12:09:12 : Erasing external memory sectors [0 33]
12:09:30 : Download in Progress...
```

ST-LINK configuration

Serial number: 0669FF535... [refresh]

Port: SWD

Frequency (kHz): 4000

Mode: Normal

Access port: 0

Reset mode: Software reset

Shared: Disabled [info]

External loader: N25Q128A_STM32F746G-...

Target voltage: 3.25 V

Firmware version: V2J33M25

Firmware upgrade

Device information

Device: STM32F74x/STM32F75x

Type: MCU

Device ID: 0x449

Flash size: 1 MB

CPU: Cortex-M7

Im Fortschrittsbalken und Fenster tut sich was

Fertig

Wenn diese Meldung erscheint, war alles erfolgreich.
Die nächsten Dialoge einfach wegclicken und Programm beenden.

