

About this release note

This release note contains information about the latest version of the STM32 ST-LINK utility software:

- New features
- Improvements
- Program corrections
- Known problems in current version

Note: The part number of the STM32 ST-LINK utility software is STSW-LINK004.

Contents

- 1 Version 4.0 6**
 - 1.1 New features 6
 - 1.2 Improvements 6
 - 1.3 Program corrections 6

- 2 Version 3.9 7**
 - 2.1 New features 7
 - 2.2 Improvements 7
 - 2.3 Program corrections 7

- 3 Version 3.8 8**
 - 3.1 New features 8
 - 3.2 Improvements 8
 - 3.3 Program corrections 8

- 4 Version 3.7 9**
 - 4.1 New features 9
 - 4.2 Improvements 9
 - 4.3 Program corrections 9

- 5 Version 3.6 10**
 - 5.1 New features 10
 - 5.2 Improvements 10
 - 5.3 Program corrections 10

- 6 Version 3.5 11**
 - 6.1 New features 11
 - 6.2 Improvements 11
 - 6.3 Program corrections 11

- 7 Version 3.4 12**
 - 7.1 New features 12
 - 7.2 Improvements 12



	7.3	Program corrections	12
8		Version 3.3	13
	8.1	New features	13
	8.2	Improvements	13
	8.3	Program corrections	13
9		Version 3.2.1	14
	9.1	New features	14
	9.2	Improvements	14
	9.3	Program corrections	14
10		Version 3.2	15
	10.1	New features	15
	10.2	Improvements	15
	10.3	Program corrections	15
11		Version 3.1	16
	11.1	New features	16
	11.2	Improvements	16
	11.3	Program corrections	16
12		Version 3.0	17
	12.1	New features	17
	12.2	Improvements	17
	12.3	Program corrections	17
13		Version 2.5	18
	13.1	New features	18
	13.2	Improvements	18
	13.3	Program corrections	18
14		Version 2.4	19
	14.1	New features	19
	14.2	Improvements	19

14.3	Program corrections	19
15	Version 2.3	20
15.1	New features	20
15.2	Improvements	20
15.3	Program corrections	20
16	Version 2.2	21
16.1	New features	21
16.2	Improvements	21
16.3	Program corrections	21
17	Version 2.1	22
17.1	New features	22
17.2	Improvements	22
17.3	Program corrections	22
18	Version 2.0	23
18.1	New features	23
18.2	Improvements	23
18.3	Program corrections	23
19	Version 1.3	24
19.1	New features	24
19.2	Improvements	24
19.3	Program corrections	24
20	Version 1.2	25
20.1	New features	25
20.2	Improvements	25
20.3	Program corrections	25
21	Version 1.1	26
21.1	New features	26
21.2	Improvements	26

21.3	Program corrections	26
22	Version 1.0	27
22.1	New features	27
22.2	Improvements	27
22.3	Program corrections	27
23	Known problems in current version	27
24	Customer support	28
25	Revision history	29

1 Version 4.0

1.1 New features

- Added the option bytes programming feature using binary/hex/srec file in the option bytes area address, in addition to the flash interface option bytes registers

1.2 Improvements

- Added support for Windows® 10 operating system

1.3 Program corrections

- None

2 Version 3.9

2.1 New features

Added support for:

- STM32F76x and STM32F76x Lines ARM® Cortex®-M7
- STM32L4x3 Lines ARM® Cortex®-M4
- QSPI NOR flash, FMC Nor flash, FMC SRAM and FMC SDRAM external memory programming on STM32F769I-EVAL evaluation board
- QSPI NOR flash memory programming on STM32F412G-DISCO discovery board
- Programming ITCM flash memory with STM32F7 Series
- Checksum calculation of flash memory
- Reset modes selection
- Frequency selection with JTAG connection mode

2.2 Improvements

- Added the possibility to skip sector erase during flash programming
- Added the possibility to skip flash protection verification during flash programming
- Enhanced programming speed of scattered HEX/SREC files

2.3 Program corrections

- Fixed programming issue with external memory N25Q128A for STM32L467G-EVAL evaluation board
- Fixed PCROP EEPROM BANK 2 erase in CLI mode with STM32L0 and STM32L1 Series

3 Version 3.8

3.1 New features

Added support:

- for STM32F412xx Lines ARM® Cortex® -M4
- for STM32F410xx Lines ARM® Cortex® -M4
- for STM32L02x Lines ARM® Cortex® -M0+
- of N25Q128A external flash memory programming on STM32L476-DISCO
- for checksum calculation feature
- for reset modes selection feature

3.2 Improvements

- Enhanced full chip erase with a confirmation message.
- Migrate the external loader project of the external QSPI flash memory N25Q256A of STM32L476G-EVAL to STMCube™ library.

3.3 Program corrections

- Fixed programming issue with external memory N25Q128A for STM32469I-DISCO

4 Version 3.7

4.1 New features

- Added support for STM32F469/STM32F479 lines ARM® Cortex® -M4
- Added support for STM32L4x6 lines ARM® Cortex® -M4
- Added support of M29W128GL external flash memory programming on STM32L476G-EVAL
- Added support of M29EWLA external flash memory programming on STM32469I-EVAL
- Added support of MT25QL512A external flash memory programming on STM32469I-EVAL
- Added support of N25Q128A external flash memory programming on STM32469I-DISCO
- Added support of N25Q128A external flash memory programming on STM32F746G-DISCO

4.2 Improvements

- Enhanced automatic mode
- Added feature allowing to program HEX/Srec file segments into internal and external memory in CLI mode

4.3 Program corrections

- Fixed issue related to ST-LINK /V1 connection with CLI
- Fixed programming issue of data size above 16 Mbytes on N25Q256A external Flash memory with STM32446E-EVAL and STM32756G-EVAL
- Fixed programming issue on N25Q256A external Flash memory with STM32446E-EVAL and STM32756G-EVAL, when the memory configuration is modified by the embedded firmware
- Fixed Hex/Srec parsing issue when there are holes in the hex/Srec data lines

5 Version 3.6

5.1 New features

- Added support of STM32F7xx Series ARM[®] Cortex[®] -M7
- Added support of STM32F446 Lines ARM[®] Cortex[®] -M4
- Added support of STM32L07x/STM32L03x Lines ARM[®] Cortex[®] -M0
- Added support of N25Q256A external flash memory programming on STM32446E-EVAL and STM32756G-EVAL
- Added support of M29W128GL external flash memory programming on STM32756G-EVAL
- Support programming Option Bytes within a Hex/Srec files
- Support of log file generation
- Dumping target memory into a file in ST-LINK CLI mode
- Reading target voltage in ST-LINK CLI mode
- Added command to disable user confirmation prompts in ST-LINK CLI mode
- ST-LINK/V2 firmware upgrade to V2J23S4 and V2J23M9

5.2 Improvements

- Enhanced display of target/external memory and multiple segments' Hex/Srec files
- Enhanced management of SPRMOD bit: Reset when there is no PCROP protection activated
- Enhanced display Settings dialog

5.3 Program corrections

- Fixed Latency problem of writing single data EEPROM with STM32L1xx/L0xx
- Fixed saving target memory issue with some addresses

6 Version 3.5

6.1 New features

- Added support of STM32F302xE/F303xE/F398xx Lines ARM® Cortex® -M4
- Added support of STM32F091xB-xC/F098xC Lines ARM® Cortex® -M0
- Support of multiple SWD clock frequencies
- ST-LINK/V2 firmware upgrade to V2J23S4 and V2J23M7

6.2 Improvements

Enhanced display of user option bytes.

6.3 Program corrections

- Fixed WRP4 programming for STM32L15xxE/L162xE
- Fixed external loader issue when the Hex/Srec file contains segments for both internal and external flash memory
- Fixed latency problem of the Erase Sectors dialog for STM32F42xx/F43xx for internal and external flash memory

7 Version 3.4

7.1 New features

- Added support of STM32F301x4-x6-x8/F302x4-x6-x8/F318xx Lines ARM® Cortex® -M4
- Added support of STM32F303x4-x6-x8/F328x4-x6-x8/F334xx Lines ARM® Cortex® -M4
- Added support of STM32F411xE Lines ARM® Cortex® -M4
- Added support of STM32L0 Series ARM® Cortex® -M0+
- Added support of ST-LINK probe selection when more than one is connected to the computer

7.2 Improvements

None

7.3 Program corrections

- Disable debugging in low power mode after disconnection from target device
- Fix single word flash programming for F2 and F4 series
- Fix Core registers display in Core dialog box

8 Version 3.3

8.1 New features

- Added support of STM32F401xE Lines ARM® Cortex®-M4
- Added support of STM32F04x Lines ARM® Cortex®-M0
- Added support of STM32L1xxxE MCU ARM® Cortex®-M3

8.2 Improvements

None

8.3 Program corrections

None

9 Version 3.2.1

9.1 New features

None

9.2 Improvements

None

9.3 Program corrections

Fix Firmware Update and Documents access.

10 Version 3.2

10.1 New features

- Added support of STM32F4x9 Lines ARM® Cortex® -M4
- Added support of STM32F03x Lines ARM® Cortex® -M0
- Added support of STM32L100 Lines ARM® Cortex® -M3
- Added support of STM32L1xxxA MCU ARM® Cortex® -M3
- Added choice of verification method for the Flash program operation

10.2 Improvements

Enhancement of verification method for the Flash program operation.

10.3 Program corrections

None

11 Version 3.1

11.1 New features

- Added support of STM32F052 Entry-level ARM® Cortex®-M0 microcontrollers.
- Added support of STM32F401 Lines ARM® Cortex®-M4.
- Added support of “Connect to a device in low-power mode” option.

11.2 Improvements

Enhancement of connection management

11.3 Program corrections

Fix loading Hex files with option bytes section.

12 Version 3.0

12.1 New features

- Added support of custom loader for external memory
- Displayed Printf data sent via SWO
- Added "File compare to device memory" feature in the CLI mode

12.2 Improvements

Optimization of STM32 internal Flash memory programming and verification.

12.3 Program corrections

BFB2 bit is forced to '1' on all STM32L15xxC devices when programming the option byte.

13 Version 2.5

13.1 New features

- Added support of STM32F42x/STM32F43x Lines ARM® Cortex® -M4
- Added support of drag-and-drop file opening
- Added HotPlug Connect feature (Connect to target without halt or reset)
- Added Context Menu and Edit Menu for Cut/Copy/Paste/Delete operation on file and device memory
- Added support of Memory LiveUpdate feature
- Added support of Find data feature (find in ASCII and HEX)
- Added support of Fill Memory feature (fill with Byte, Word or DoubleWord in file and device memory)

13.2 Improvements

Enhancement of device memory modification from the memory grid.

13.3 Program corrections

None

14 Version 2.4

14.1 New features

- Added support of STM32F3 Series ARM[®] Cortex[®]-M4.
- Added support of STM32L medium density plus ARM[®] Cortex[®]-M3.
- Added support of STM32F050 Entry-level ARM[®] Cortex[®]-M0 microcontrollers.
- Comparison between two files (Hex, SREC or Bin files).
- Support of "Reset after programming" option.

14.2 Improvements

Enhanced display of File/Flash comparison.

14.3 Program corrections

- Fix STM32W108CC WRP granularity.
- Fix loading Hex file adjacent segments.
- Display R0 register in Core window.

15 Version 2.3

15.1 New features

- Added support of STM32F4 Series ARM® Cortex® -M4 revision Z.
- Added support of STM32L ARM® Cortex® -M3 EEPROM data memory programming.
- Added support of STM32F0 Series Entry-level ARM® Cortex® -M0 microcontrollers.
- Save file in Intel Hex and Motorola S-record file format.
- Address TextBox replaced by a ComboBox with history saving.

15.2 Improvements

- Added Tooltip in the option bytes window.
- Enable/Disable progress bar display in ST-LINK CLI (STM32 ST-LINK utility command line interface).
- Added support of programming at unaligned addresses.
- Different error codes return for each type of problem in CLI mode.
- “Connect under reset” option is now available in JTAG mode.

15.3 Program corrections

CLI return code issue fixed.

16 Version 2.2

16.1 New features

- Added support of STM32F4 Series of high-performance microcontrollers with DSP and FPU instructions.
- Added support of STM32W 32-bit RF microcontrollers.
- Added support of “Connect under reset” option.
- Flash modification via GUI and CLI commands.
- Added support of hardware reset in CLI mode.

16.2 Improvements

- w8 and -w32 CLI commands are able to program Flash memory.
- The Flash memory can be modified from the GUI even when it is not erased.

16.3 Program corrections

None

17 Version 2.1

17.1 New features

- ST-LINK/V2 support.
- Added support for STM32F2 Series microcontroller programming modes.
- Connected MCU revision ID Display.
- ST-LINK and ST-LINK/V2 firmware upgrade to V1J12S3 and V2J14S3, respectively.

17.2 Improvements

Automatic MCU voltage check with ST-LINK/V2.

17.3 Program corrections

Binary file save issue resolved with Windows7.

18 Version 2.0

18.1 New features

- Support of Intel Hex file and Motorola S-record file format.
- Command line interface.
- Automatic Mode: Programming and configuring STM32 devices in loop.
- Flash memory Blank Check.
- Compare the contents of the Flash memory with files.
- ST-LINK firmware upgrade to V1J11S3.

18.2 Improvements

- Faster switch between device memory display and file display.
- Connection management enhancement.
- Core status displayed in the MCU Core window.

18.3 Program corrections

Flash size is ignored for STM32F2 Series 32-bit microcontroller devices.

19 Version 1.3

19.1 New features

- Added support for STM32L1 Ultra-low-power 32-bit microcontroller devices.
- Added support for STM32F2 Series microcontroller devices.

19.2 Improvements

Flash mass erase and Option bytes programming progress display

19.3 Program corrections

None

20 Version 1.2

20.1 New features

Added support of XL-density devices.

20.2 Improvements

Connection management enhancement.

20.3 Program corrections

None

21 Version 1.1

21.1 New features

Added support of Serial Wire Debug (SWD) interface.

21.2 Improvements

- Connection error management enhancement.
- Debug interface and connection status display.

21.3 Program corrections

Corrected "STM32 ST-LINK Utility user manual.pdf" name format at start menu.

22 Version 1.0

22.1 New features

Initial release.

22.2 Improvements

Initial release.

22.3 Program corrections

None

23 Known problems in current version

None.

24 Customer support

Software released previously is documented internally and available upon request.

For more information, see the STM32 ST-LINK utility user manual *STM32 ST-LINK Utility software description* (UM0892) and visit our website at www.st.com.

25 Revision history

Table 1. Document revision history

Date	Product revision	Document revision	Changes
01-Aug-2011	2.1	1	Initial release.
18-Oct-2011	2.2	2	Added Version 2.2 with support of STM32F4 and STM32W series and attributes in New features and Improvements .
11-May-2012	2.3	3	Added Table 1: Applicable tools . Added Version 2.3 with support of STM32 F0 series and attributes in New features and Improvements .
29-May-2012	2.3	4	Updated Version 2.3 , Improvements and Known problems in current version .
05-Oct-2012	2.4	5	Added information related to ST-LINK release 2.4 in Version 2.4 .
11-Jan-2013	2.5	6	Added information related to ST-LINK release 2.5 in Version 2.5 .
29-Apr-2013	3.0	7	Added information related to ST-Link release 3.0 in Version 3.0 . Updated disclaimer.
10-Jul-2013	3.1	8	Added information related to ST-Link release 3.1 in Version 3.1 . Deleted Table 1: Applicable tools . Updated part number in cover page.
04-Nov-2013	3.2	9	Added information related to ST-Link release 3.2 in Version 3.2 .
12-Dec-2013	3.2	10	Added information related to ST-Link release 3.2 in Known problems in current version .
29-Jan-2014	3.3	11	Added information related to ST-LINK release 3.3 in Version 3.3 .
29-Apr-2014	3.4	12	Added information related to ST-LINK release 3.4 in Version 3.4 .
10-Oct-2014	3.5	13	Added information related to ST-LINK release 3.5 in Version 3.5 .
11-Feb-2015	3.6	14	Added information related to ST-LINK release 3.6 in Version 3.6 .
10-Jul-2015	3.7	15	Added information related to ST-LINK release 3.7 in Version 3.7 .
23-Nov-2015	3.8	16	Added information related to ST-LINK release 3.8 in Version 3.8 .
12-Apr-2016	3.9	17	Added information related to ST-LINK release 3.9 in Version 3.9 .
08-Aug-2016	4.0	18	Added information related to ST-LINK release 4.0 in Version 4.0 .

IMPORTANT NOTICE – PLEASE READ CAREFULLY

STMicroelectronics NV and its subsidiaries ("ST") reserve the right to make changes, corrections, enhancements, modifications, and improvements to ST products and/or to this document at any time without notice. Purchasers should obtain the latest relevant information on ST products before placing orders. ST products are sold pursuant to ST's terms and conditions of sale in place at the time of order acknowledgement.

Purchasers are solely responsible for the choice, selection, and use of ST products and ST assumes no liability for application assistance or the design of Purchasers' products.

No license, express or implied, to any intellectual property right is granted by ST herein.

Resale of ST products with provisions different from the information set forth herein shall void any warranty granted by ST for such product.

ST and the ST logo are trademarks of ST. All other product or service names are the property of their respective owners.

Information in this document supersedes and replaces information previously supplied in any prior versions of this document.

© 2016 STMicroelectronics – All rights reserved