LEO

Firmware Installation and update manual

> Version 2.0 April 2021



Indoor Environmental Quality

How to download the installation program

- 1. Download the installation program from the ST homepage. You can download the installation program after registering by linking the interned address below.
- 2. You can download the installation program after registering by connecting the following linked internet address.
- 3. If you have received a compressed file named <u>en.stm32cubeprog.zip</u>, you can decompress it and run the program.
- 4. Run the install program named <u>SetupSTM32CubeProgrammer-2.1.0.exe</u> as an administrator.
- Download link : <u>https://my.st.com/content/my_st_com/en/products/development-tools/software-development-tools/stm32-software-development-tools/stm32-programmers/stm32cubeprog.license=1563288815934.product=STM32CubeProg.version=2.1.0.html
 </u>



How to install program



01 Select the 'next' button.





02 At the Information screen, select 'Next' button.





03 On the License Agreement screen, select the I accept the and select the 'Next' button.



200	STM32CubeProgrammer Installation Wizard	×
STM32CubeProgram Step 4 of 8	nmer Installation path	STM32 CubeProgrammer
Life.augmented	Select the installation path: s\STMicroelectronics\STM32Cube\STM32CubeProgram	nmer 🔚 Browse
STM32 Cube		
STMicroelectronics	Prev 4	Next 🛛 Ouit

04 Set the Installation Path to install the program and select the 'Next' button.

It is usually installed in the default setting.



200	STM32CubeProgrammer Installation Wizard – 🗆 🗙
STM32CubeProgram	nmer Installation path STM32 CubeProgrammer
Itie.ougmented	Select the installation path: s\STMicroelectronics\STM32Cube\STM32CubeProgrammer Browse,
STM:	Message × he target directory will be created: :\#Program Files\#STMicroelectronics\#STM32Cube\#STM32CubeProgrammer 확인 Cancel
STMicroelectronics	🗣 Previ 5 🕞 Next 😢 Quit

05 Confirm which folder you would like to install the program and select the 'OK' button.



Pro	STM32CubeProgrammer Installation Wizard	×
STM32CubeProgram Step 5 of 8	nmer Components selection	STM32 CubeProgrammer
Straz Cube	Select the packs you want to install: Note: Grayed packs are required. Core Files STM32CubeProgrammer Signing Tool and Keygen STM32TrustedPackageCreator	137,62 MB 164,35 MB 32,02 MB 88,45 MB
	Description Core files Total space required: Available space:	334,2 MB 10,69 GB
STMicroelectronics	revi 6	Next 🔇 Quit

06 Select the components you want to install, and select the 'Next' button.



Prg	STM32CubeProgrammer Installation Wizard	- 🗆 🗡
STM32CubeProgram Step 7 of 8	mer Shortcuts setup	STM32 CubeProgrammer
Effe. augmented	 ✓ Create shortcuts in the Start-Menu ✓ Create additional shortcuts on the desktop Select a Program Group for the Shortcuts: (Default) Accessibility Accessories Administrative Tools AhnLab Atollic Beyond Compare 3 	create shortcut for: O current user () all users
	STMicroelectronics₩STM32CubeProgrammer	Default
STMicroelectronics	Prev 7	Next Quit

The program will be installed. Select the "Next" button.





08 The program installation is complete.

Select the 'Done' button.



	Programmer 🛞 🛛	A 🖸 🖌 🔀 🏹
	Memory & File edition	Not connected
	Device memory Open file +	ST-LINK Connect
.	Address 0x08000000 V Size 0x400 Data width 32-bit V Read V	ST-LINK configuration Serial number 30FF6E0
OB	No data to display	Port SWD * Frequency (kH2) 4000 * Mode Normal * Access port 0 * Reset mode Software reset * Shared Disabled * Target voltage 319 V * Hirmware version V2/2857 *
Ø	Log Verbosity level	Firmware upgrade Device information
) (?)	12:16:46 - Size : 10:03 Bytes 12:16:46 - After : 0x000000 12:16:46 - Rend progress: 12:16:46 - Time ad successfully 12:16:46 - Time ad successfully 12:16:16 - T	Type

01 Run the installed <u>STM32CubeProgrammer.</u>



How to update the program



02 Connect the devices to be updated, as shown in the image.





03 ST-Link USB device recognition screen.

PC -> Control Panel -> Device Manager screen



How to update the program

STM33	Programmer	10	9 🖪 🖸 🎽 🛧 🖅	
	Memory & File edition		Not connected	
	Device memory Open file +		ST-LINK Configuratio	h
2	Address 0x08000000 v Size 0x400 Data width 32-bit v Read	*	Serial number 30FF6E0	- C
OB			Port SWD Port SWD	-
			Mode Normal Frequency (kHz) 4000	-
	No data to display		Reset mode Software reset - Mode Normal	-
			Shared Disabled Access port	-
			Target voltage 3.19 V Firmware version V2/2857 Reset mode Software res	et 🔻
	Log Verbosity level 1 2 Lines (UNUMEND OFTION BY LES DATA	3	3 Shared Disabled	•
٢	121666 / Mohene ChelOD2046 1221666 / Sile - Alphan 1221666 / UFLOADING 1221666 / UFLOADING		Device information	
Ø	12:1-64: Addms: 0:000000 12:1-64: Red propress: 12:1-64: The read successfully 12:1-64: The read successfully 12:1-64: The read dramg the sub-genetion is: 00:00:00107		Type Device ID Extent rise	
?			CPU	

04 In installed program, Set the red part in the figure below and select the 'Connect' button.



	STM32Cul	beProgramm	ver				-	• ×
STM32	rogrammer				1	f 🕒 🕴	• × /	57
	Erasing & Programming						🔵 Conne	cted
	Download	Erase flash	memory	Erase external memo	y	ST-LINK	• Disco	nnect
H	CAller View ODDesition Atlaser, hinery				ST-LINK configuration			
	5 Star-codress 0x08000000					Serial number	SOFFGEOG	- 0
OB		Select	Index	Start Address	Size	Port	SWD	
	Skip flash erase before programming		0	0x05000000	16K	Frequency (kHz)	4000	
	Verify programming	U	1	0x88004000	16K	Mode	Name	
	Run after programming	<u> </u>	2	0x08008000	16K		Remis	
	O Start Programming	<u> </u>	3	0x0800C000	16K	Access port	0	•
			4	0x08010000	64K	Reset mode	Software reset	*
	Automatic Mode		5	0x08020000	128K	Shared	Disabled	
	Full chip erase		0	0x05040000	128K	Colored Incolor		-
	Download file		7	0.05060000	128K	Tasset voltage		
		U U	8	0.00000000	1285	Firmure version		
	Option bytes commands -ob		9	0.0000000	1286	rittiware version		
	Start automatic mode		10	0.08050000	1205			upgrade
			11	000000000	1205			ľ
	Log		Verbosi	ity level 💿 1 💮 z	<u></u> 3			
	11:20:40 : monory frog during 11:20:46 : Opening and parsing file: Atlasen.binary 11:20:46 : File Atlasen.binary				14			
	11:28:46 : 5ize : 98200 Bytes 11:28:46 : Address : 0x0000000				ň	Devi	ce information	
(\mathbf{O})	11:28:46 : Erasing nemory corresponding to segment 0: 11:28:46 : Erasing internal memory sectors [0 4]					Device STM3	2F405xxx/F407xxx/	F415xx/F
	11:28:47 : Download in Progress: 11:28:49 : File download complete					Туре		
(11:28:49 : Time elapsed during download operation: 00:00:02.983 11:28:49 : RUNNING Program				-	Device ID		0x413
	11:28:49 : Address: : 0x08000000 11:28:49 : Application is running				~	Flash size		
(?)						CPU		Cortex-M4
					E (×)			

05 The Program and ST-Link are connected to each other through the above process.

Select the Erasing & programming button.

- **06** Select the 'Browse' button to select the program to update *Atlasen.binary*
- **07** Check the Verify programming and Run after programming items.
- **08** Select the "Start Programming" button to update the program.







hello@atlasen.com

