

R&S®ZN-Z85

Release Notes

Firmware Version 4.49

© 2023 Rohde & Schwarz GmbH & Co. KG
Muehldorfstr. 15, 81671 Munich, Germany
Phone: +49 89 41 29 - 0
E-mail: info@rohde-schwarz.com
Internet: <http://www.rohde-schwarz.com>

Subject to change – Data without tolerance limits is not binding.
R&S® is a registered trademark of Rohde & Schwarz GmbH & Co. KG.
Trade names are trademarks of the owners.

1326.4919.00 | Version 01.20 | R&S®ZN-Z85 | **COMPANY RESTRICTED**

The software makes use of several valuable open source software packages. For information, see the "Open Source Acknowledgment" provided with the product.

The following abbreviations are used throughout this document: R&S®ZN-Z85 is abbreviated as R&SZN-Z85.



Contents

1	Information on the current version and history	3
1.1	Version 4.49.....	3
1.2	Version 4.45.....	4
1.3	Version 4.40.....	5
2	Modifications to the documentation	7
3	Firmware update	8
3.1	Validity information	8
3.2	Update information	8
3.2.1	Updating the FPGA.....	8
3.2.2	Updating the Firmware	10
4	Customer support.....	12

1 Information on the current version and history

1.1 Version 4.49

Annotation: the given reference numbers refer to the appropriate change management system

Firmware package contents

Version	Contents	Reference
4.49	Firmware for ZN-Z85	
1.20	FPGA Application for ZN-Z85	

NOTICE

FPGA V1.20 and Firmware V4.49 work only together

New functionality

Version	Contents	Reference
-	-	-

Modified functionality

Version	Contents	Reference
-	-	-

Improvements

Version	Contents	Reference
4.49	Remote Control speed improvement for route switching.	

Known issues

Version	Contents	Reference
---------	----------	-----------

-

1.2 Version 4.45

Annotation: the given reference numbers refer to the appropriate change management system

Firmware package contents

Version	Contents	Reference
4.45	Firmware for ZN-Z85	
1.20	FPGA Application for ZN-Z85	

NOTICE

FPGA V1.20 and Firmware V4.45 work only together

New functionality

Version	Contents	Reference
---------	----------	-----------

-

Modified functionality

Version	Contents	Reference
---------	----------	-----------

-

Improvements

Version	Contents	Reference
4.45	Routes with path 0 do show up now in SCPI command "show:routes?"	
4.45	If the trigger source is set to Direct Control, trigger reset via SCPI is possible now	

Known issues

Version	Contents	Reference
-	-	

1.3 Version 4.40

Annotation: the given reference numbers refer to the appropriate change management system

Firmware package contents

Version	Contents	Reference
4.40	Firmware for ZN-Z85	
1.20	FPGA Application for ZN-Z85	

NOTICE

Enter optional notice heading or delete this field

New functionality

Version	Contents	Reference
4.40	<p>Firmware: Trigger Mode:</p> <ul style="list-style-type: none"> -The user can add up to 2048 sequences (routes) to the device. -Those sequences can be switched sequentially by software with SCPI commands or by Direct Control interface. -The trigger list will be rotated in a loop: After reaching the end of the trigger list, the next switched entry will be the first entry of the trigger list. -Any entry in the trigger list can also be set directly via SCPI command. -The user can define a subset of the trigger list. <p>Example: There are 10 entries in the trigger list. Now the user can define entry 3 as trigger start and entry 5 as trigger stop. Then the trigger will switch in the following order: 3, 4, 5, 3, 4, 5, 3 etc.</p>	
1.20	FPGA: Support for trigger mode	

Modified functionality

Version	Contents	Reference
-	-	

Improvements

Version	Contents	Reference
-	-	

Known issues

Version	Contents	Reference
4.40	Routes with path 0 do not show up in SCPI command "show:routes?"	
4.40	If the trigger source is set to Direct Control, trigger reset via SCPI is not possible	

2 Modifications to the documentation

The current documentation is up-to-date.

3 Firmware update

Further information

- R&S® ZN-Z85 Switch Matrix User Manual 1326.4819.02

3.1 Validity information

If necessary list here the material and model numbers the firmware is referring to

Device	Order Number
R&S® ZN-Z85	1326.4777.03

3.2 Update information

To update FPGA and firmware on a single R&S ZN-Z8x switch box (e.g. R&S ZN-Z85) the R&S ZN-Z8x Toolbox is used. For information about the latest version of R&S ZN-Z8x Toolbox, please visit:

<https://www.rohde-schwarz.com/software/znz8switchmatrix/>

For information about the latest FPGA and firmware, please visit:

<https://www.rohde-schwarz.com/firmware/znz8switchmatrix/>

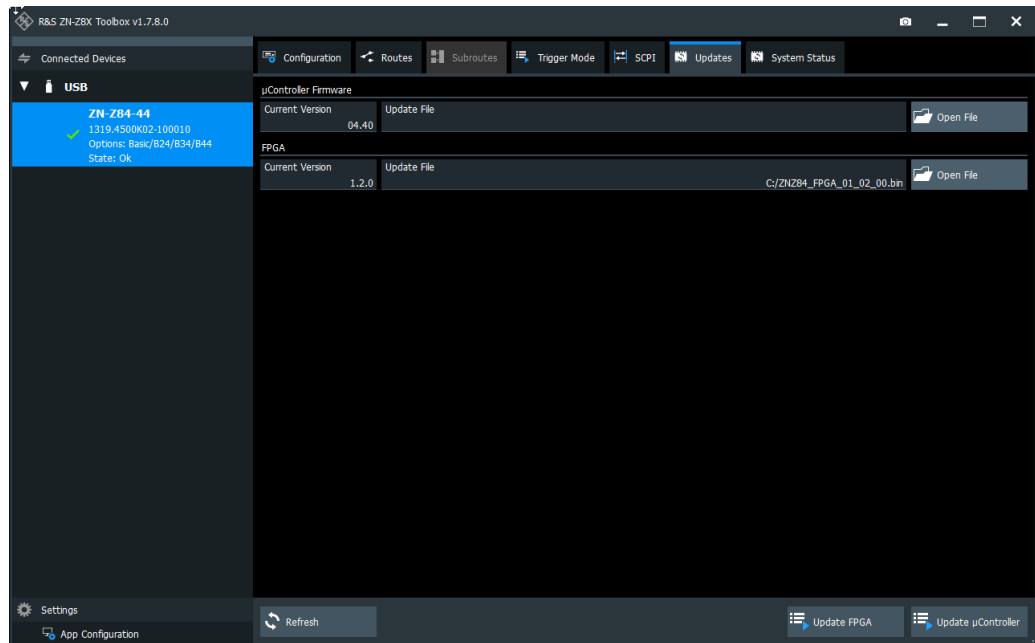
NOTICE

- FPGA and firmware update is only possible when the device is connected via USB with the PC.
- The FPGA needs to be updated before updating the μ Controller Firmware. After a successful FPGA update a restart of the device is necessary and needs to be done manually.
- FPGA and Firmware work only together as a package

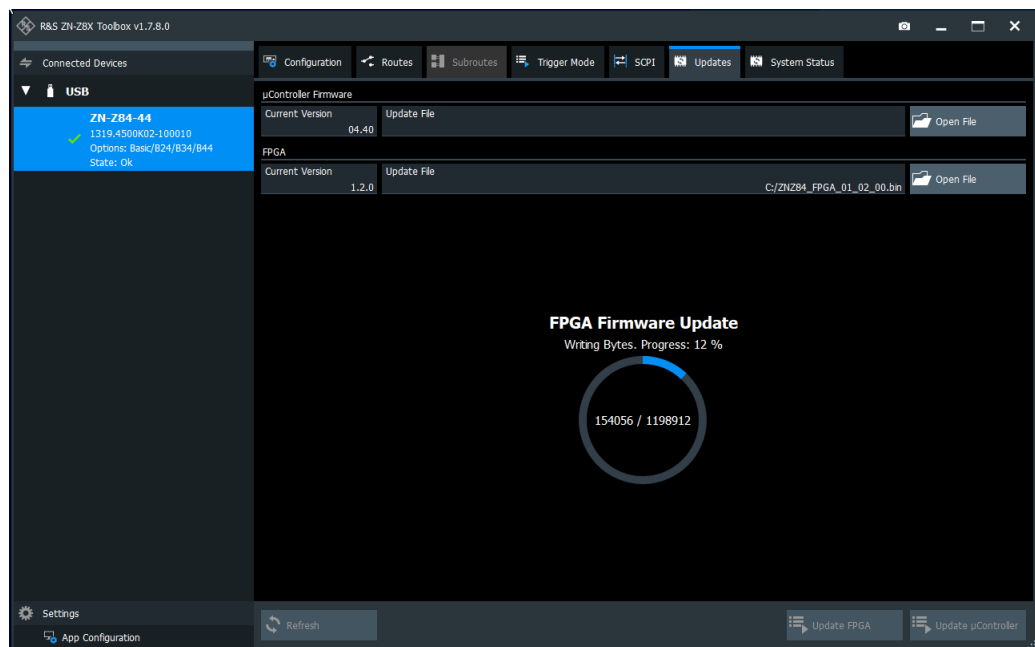
3.2.1 Updating the FPGA

1. Download the latest FPGA ("ZNZ85_FPGA_xx_xx_xx.**bin**", where xx_xx_xx is the version) and firmware ("ZNZ85_Firmware_xx_xx.**bin**", where xx_xx is the version) from <https://www.rohde-schwarz.com/firmware/znz8switchmatrix/> to your PC. File "ZNZ85_FPGA_xx_xx_xx.**bin**" is used for updating the FPGA and file "ZNZ85_Firmware_xx_xx.**bin**" is used for updating the firmware.
2. Connect the R&S ZN-Z85 device to the PC via USB and open the R&S ZN-Z8x Toolbox. In the "Connected Devices" section select the ZN-Z85 device. Go to the tab "Updates".

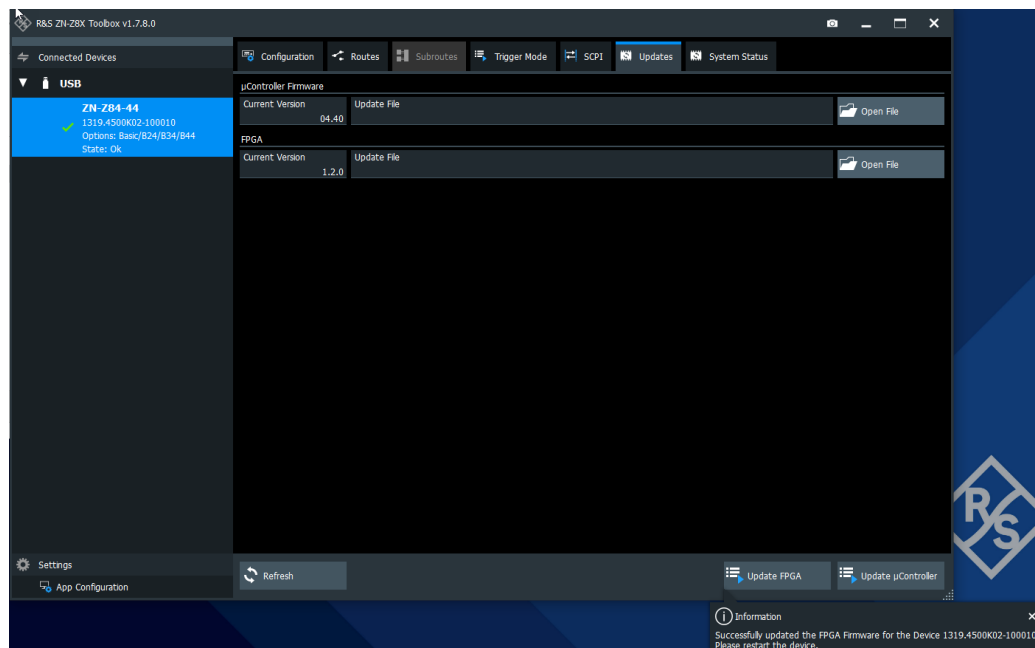
- In line FPGA click on "Open File" and select the FPGA binary file "ZNZ85_FPGA_XX_XX_XX.bin" e.g. "ZNZ85_FPGA_01_02_00.bin".



- Click on "Update FPGA". The update of FPGA will last about 5 minutes.

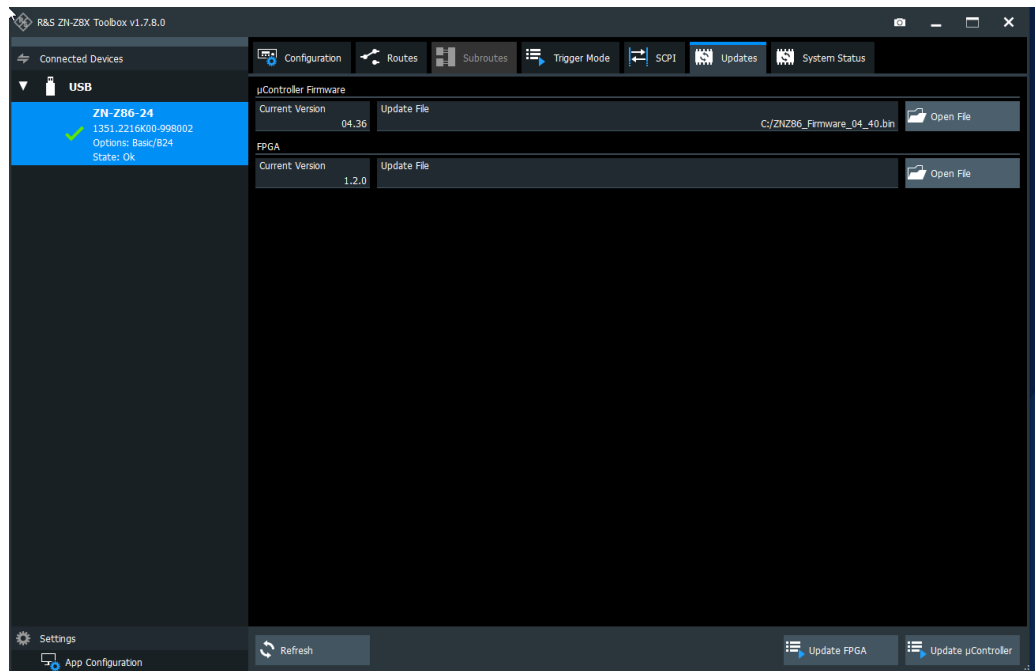


- After successful update of the FPGA, restart the R&S ZN-Z85 device manually.

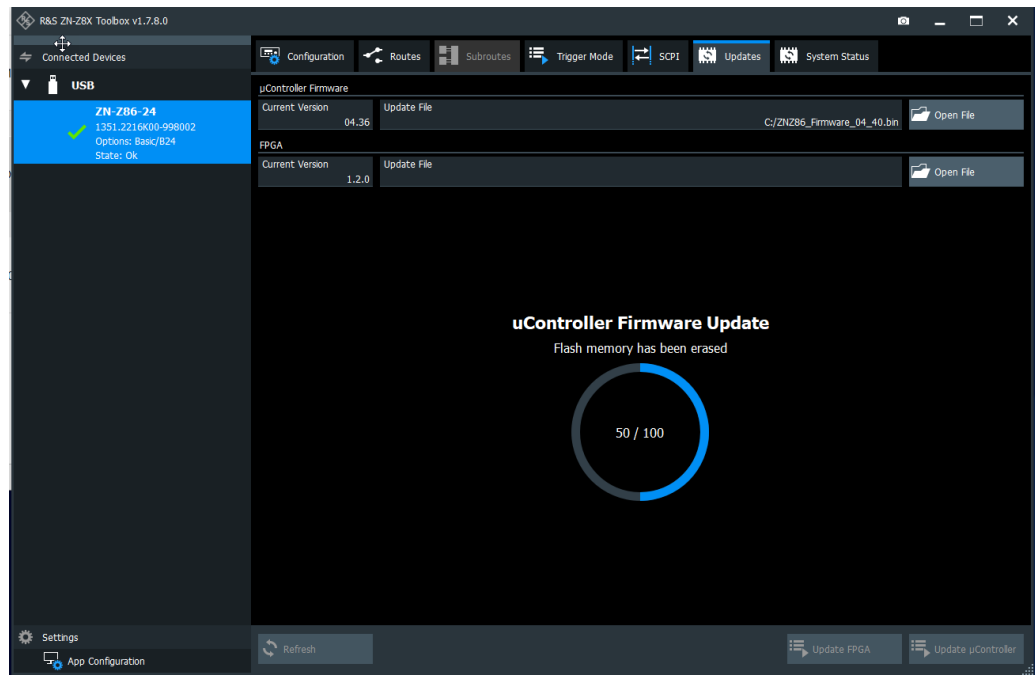


3.2.2 Updating the Firmware

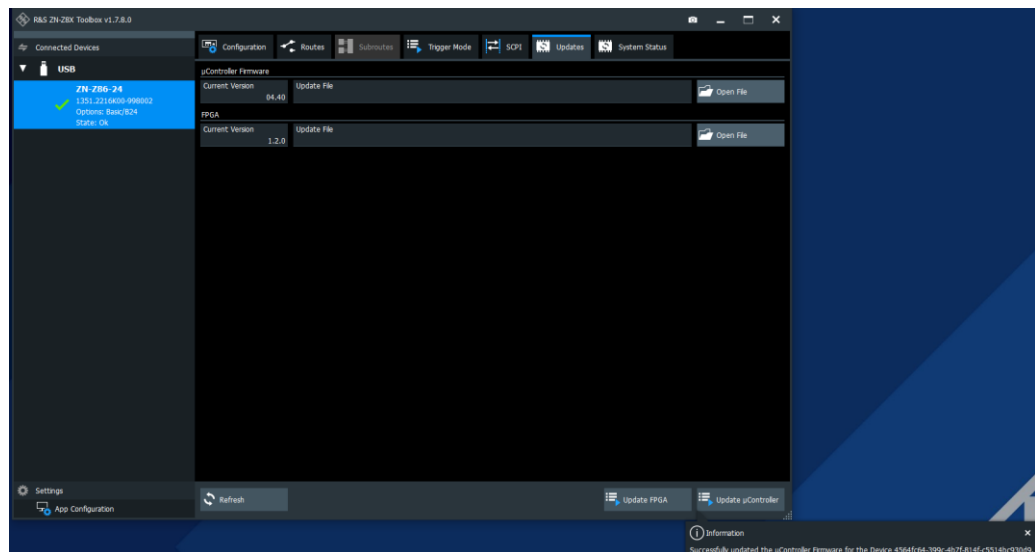
- In line "μController Firmware" click on "Open File" and select the firmware binary file "ZNZ85_Firmware_xx_xx.bin" e.g. "ZNZ85_Firmware_04_40.bin".



- Click on "Update μController"



8. After successful update of the firmware the device will restart itself.



4 Customer support

Technical support – where and when you need it

For quick, expert help with any Rohde & Schwarz product, contact our customer support center. A team of highly qualified engineers provides support and works with you to find a solution to your query on any aspect of the operation, programming or applications of Rohde & Schwarz products.

Contact information

Contact our customer support center at www.rohde-schwarz.com/support or follow this QR code:



Figure 4-1: QR code to the Rohde & Schwarz support page