

# R&S®ZN-Z84

## Release Notes

### Firmware Version 4.49

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1323.9210.02 | Version 01.20 | R&S®ZN-Z84 | **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-Z84 is abbreviated as R&SZN-Z84.



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# 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-Z84	
1.20	FPGA Application for ZN-Z84	

### 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
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- -

## 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-Z84	
1.20	FPGA Application for ZN-Z84	

### NOTICE

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

### New functionality

Version	Contents	Reference
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- -

### Modified functionality

Version	Contents	Reference
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### 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
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-

**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-Z84	
1.20	FPGA Application for ZN-Z84	

**NOTICE**

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**New functionality**

Version	Contents	Reference
4.40	<p>Firmware: Trigger Mode:</p> <ul style="list-style-type: none"> <li>-The user can add up to 2048 sequences (routes) to the device.</li> <li>-Those sequences can be switched sequentially by software with SCPI commands or by Direct Control interface.</li> <li>-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.</li> <li>-Any entry in the trigger list can also be set directly via SCPI command.</li> <li>-The user can define a subset of the trigger list.</li> </ul> <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
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- -

### Improvements

Version	Contents	Reference
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- -

### Known issues

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

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

The current documentation is up-to-date.

## 3 Firmware update

### Further information

- R&S®ZN-Z84 Switch Matrix User Manual 1319.5413.02

### 3.1 Validity information

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

Device	Order Number
R&S®ZN-Z84	1319.4500.02

### 3.2 Update information

To update FPGA and firmware on a single R&S ZN-Z8x switch box (e.g. R&S ZN-Z84) 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/znz8xswitchmatrix/>

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

<https://www.rohde-schwarz.com/firmware/znz8xswitchmatrix/>

#### NOTICE

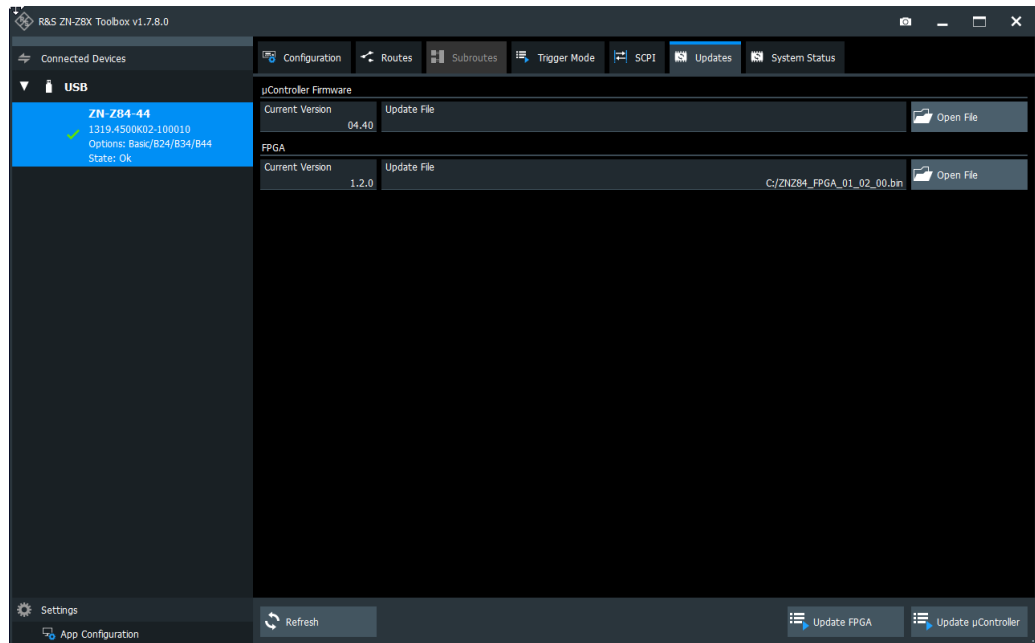
- FPGA and firmware update is only possible when the device is connected via USB with the PC.
- The FPGA needs to be updated before updating the  $\mu$ Controller Firmware. After a successful FPGA update a restart of the device is necessary and needs to be done manually.
- FPGA and Firmware work only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

#### 3.2.1 Updating the FPGA

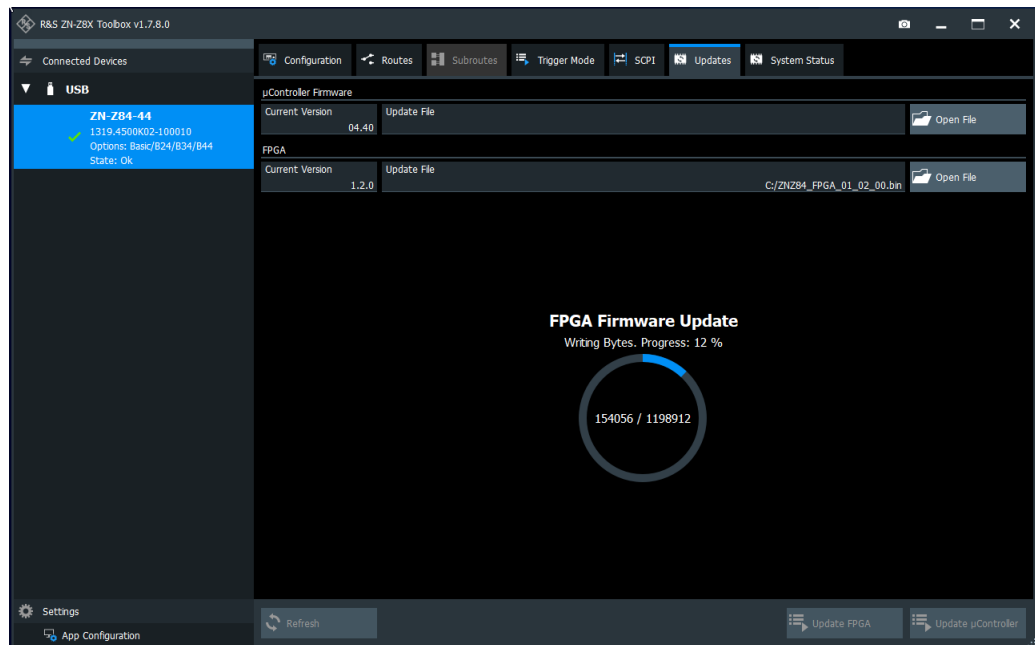
1. Download the latest FPGA ("ZNZ84\_FPGA\_xx\_xx\_xx.**bin**", where xx\_xx\_xx is the version) and firmware ("ZNZ84\_Firmware\_xx\_xx.**bin**", where xx\_xx is the version) from <https://www.rohde-schwarz.com/firmware/znz8xswitchmatrix/> to your PC. File "ZNZ84\_FPGA\_xx\_xx\_xx.**bin**" is used for updating the FPGA and file "ZNZ84\_Firmware\_xx\_xx.**bin**" is used for updating the firmware.
2. Connect the R&S ZN-Z84 device to the PC via USB and open the R&S ZN-Z8x Toolbox. In the "Connected Devices" section select the ZN-Z84 device. Go to the tab "Updates".



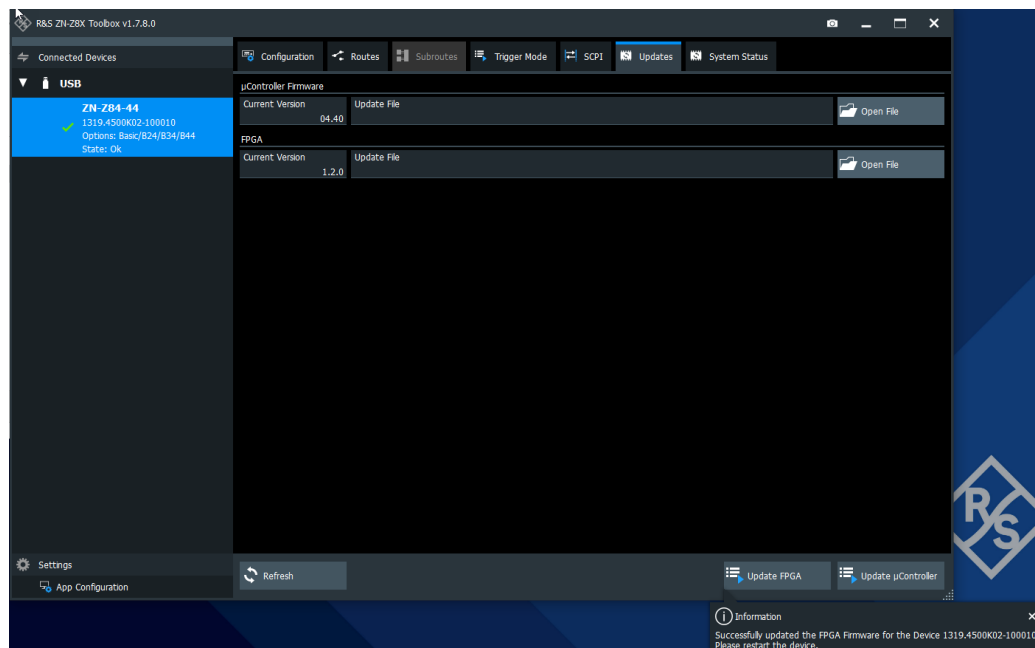
- In line FPGA click on "Open File" and select the FPGA binary file "ZNZ84\_FPGA\_XX\_XX\_XX.bin" e.g. "ZNZ84\_FPGA\_01\_02\_00.bin".



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

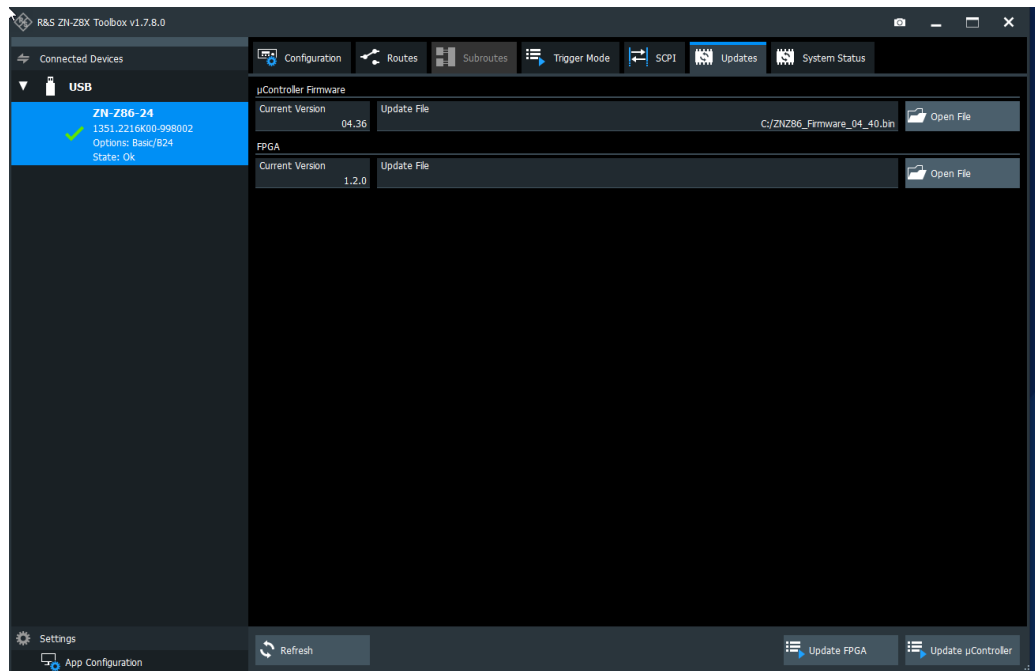


- After successful update of the FPGA, restart the R&S ZN-Z84 device manually.

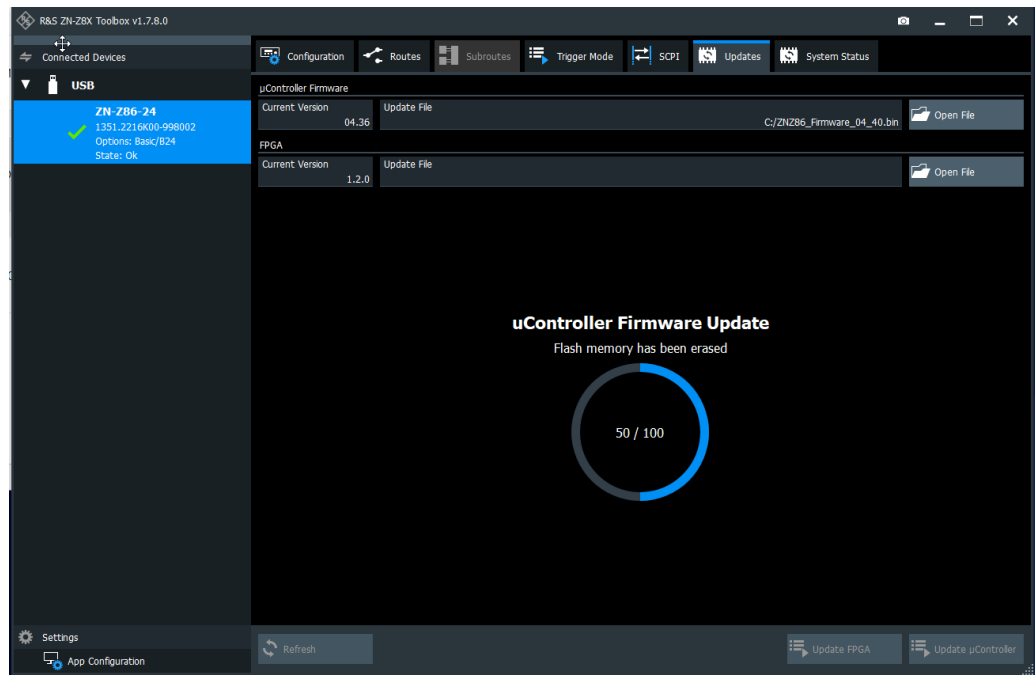


### 3.2.2 Updating the Firmware

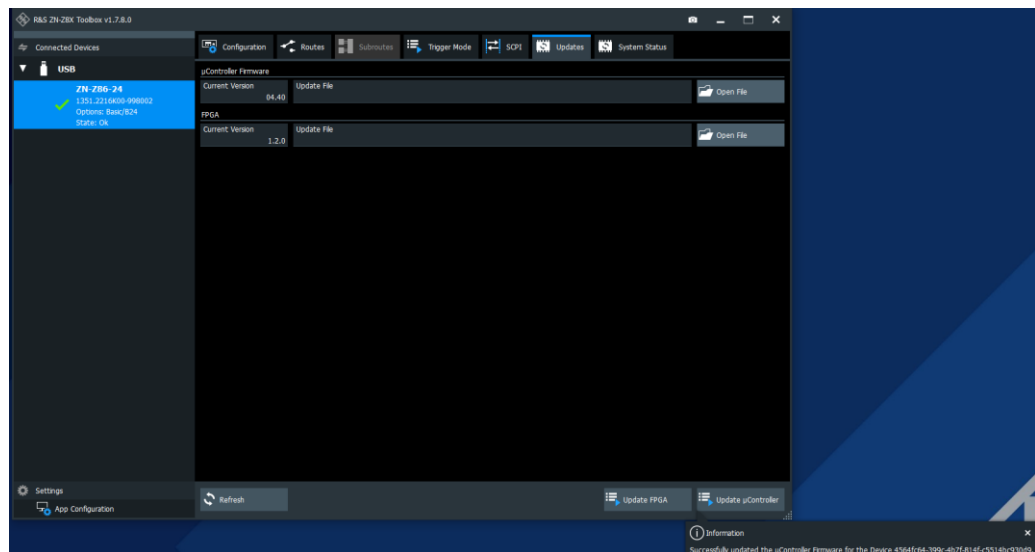
- In line "μController Firmware" click on "Open File" and select the firmware binary file "ZNZ84\_Firmware\_xx\_xx.bin" e.g. "ZNZ84\_Firmware\_04\_40.bin".



- 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](http://www.rohde-schwarz.com/support) or follow this QR code:



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