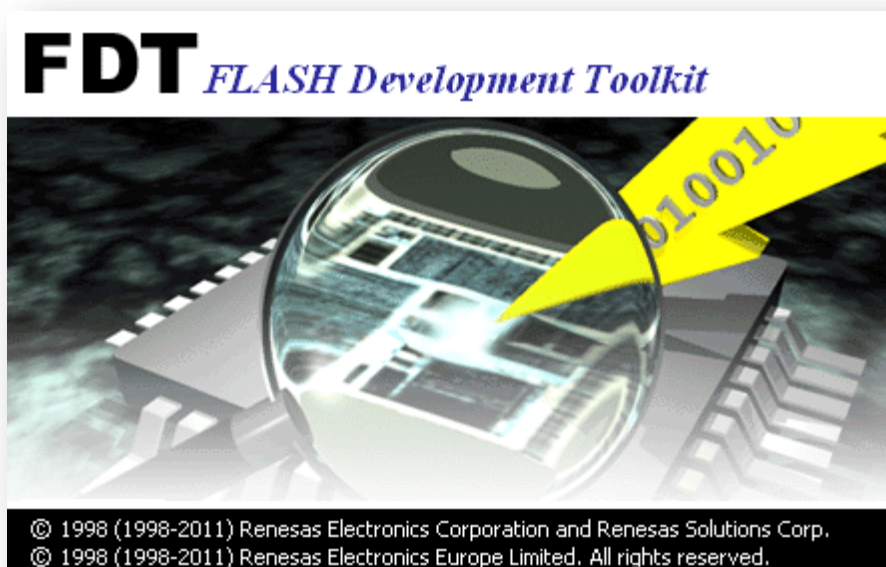


SERIES P40

Additional Description:

Quick Guide for FDT Basic Tool and Backup Tool



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1 Contents

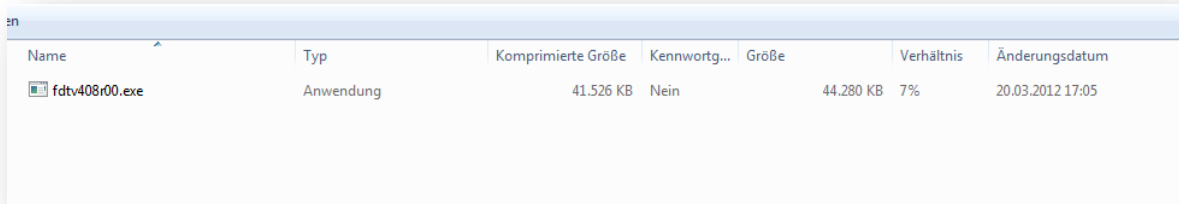
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2 How to install the FDT Software

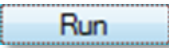
The Flash Programmer software tool as well as the corresponding documentation is available on <https://www.renesas.com>. After your registration the software is available for download.

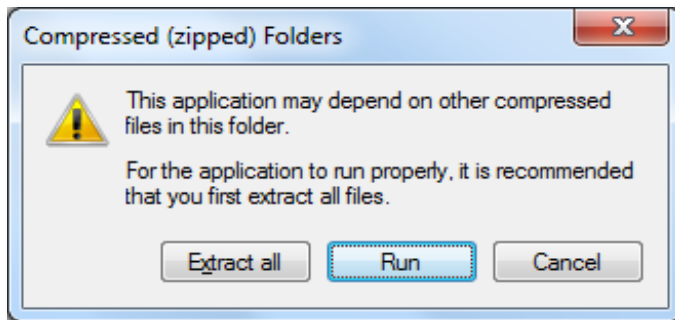
Download the [Evaluation Software] Flash Development Toolkit V.4.09 Release 03 on <https://www.renesas.com/us/en/software/D3017335.html>.

Open the corresponding download folder and you will find the .exe file:

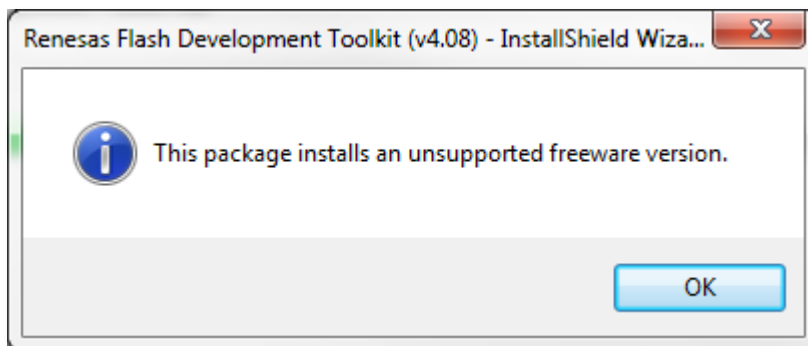


Make a double click on the .exe file.

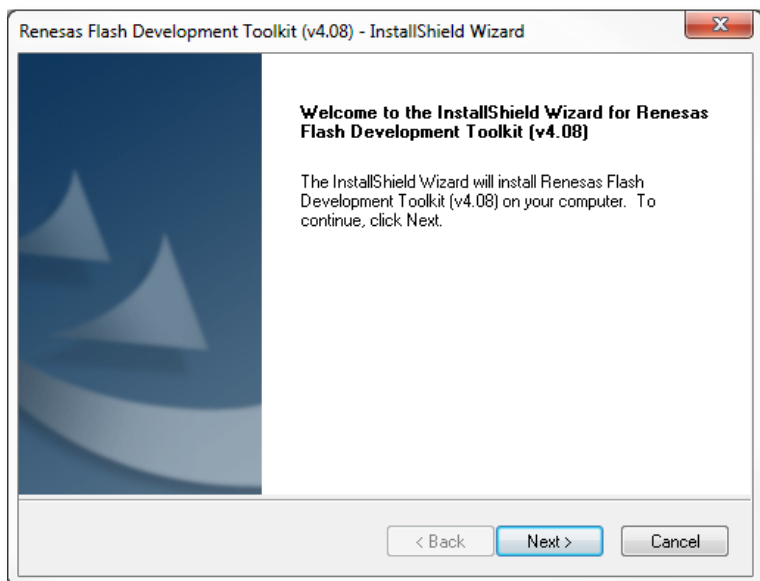
Select 



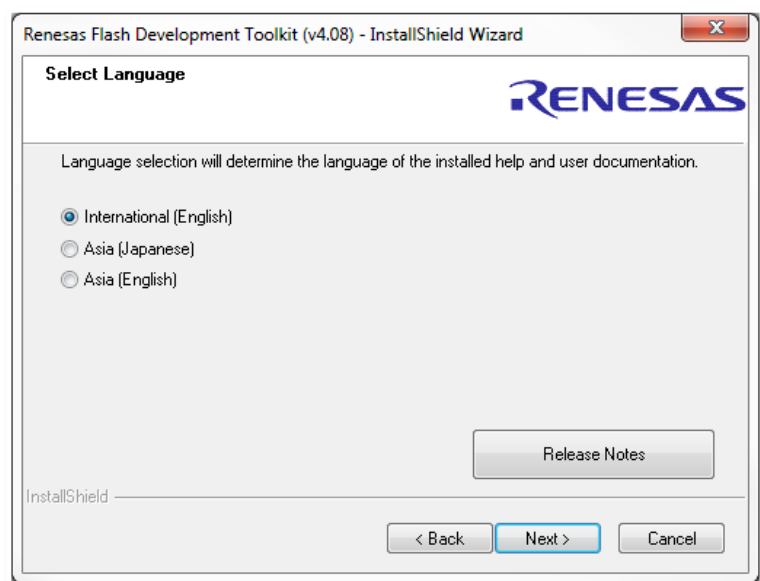
Select 



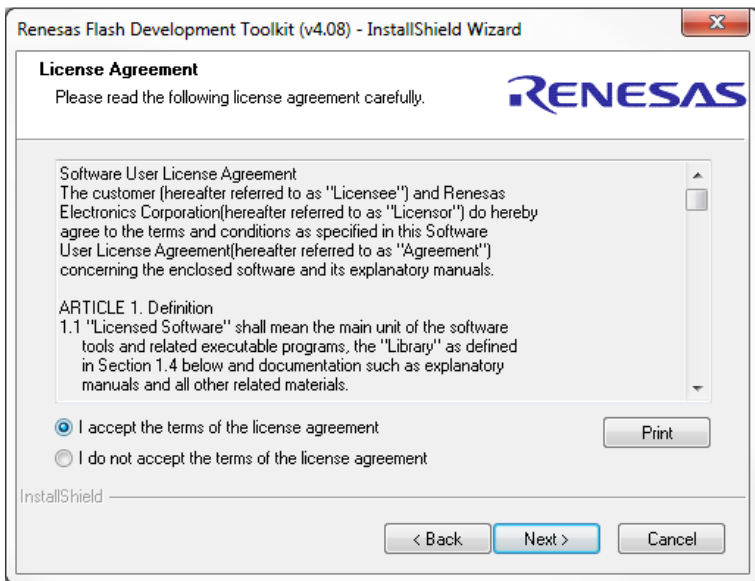
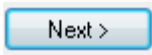
Select



Choose the language for the installation and click

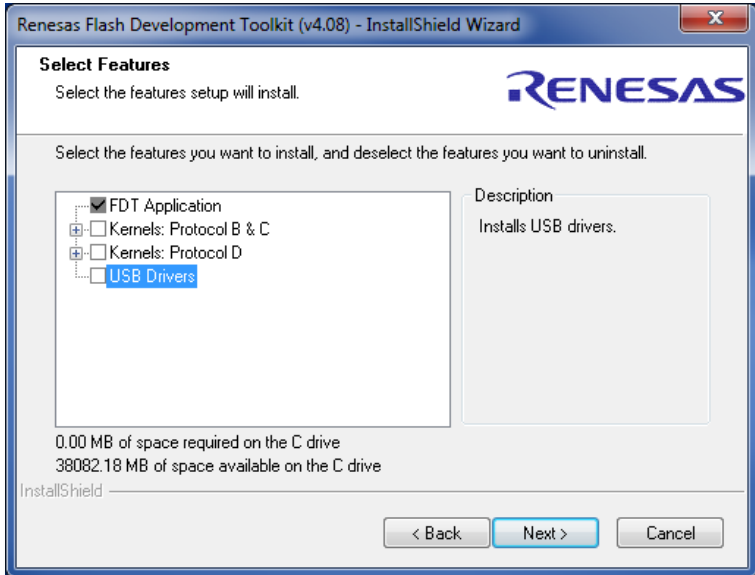
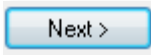



Accept the terms of license agreement and click

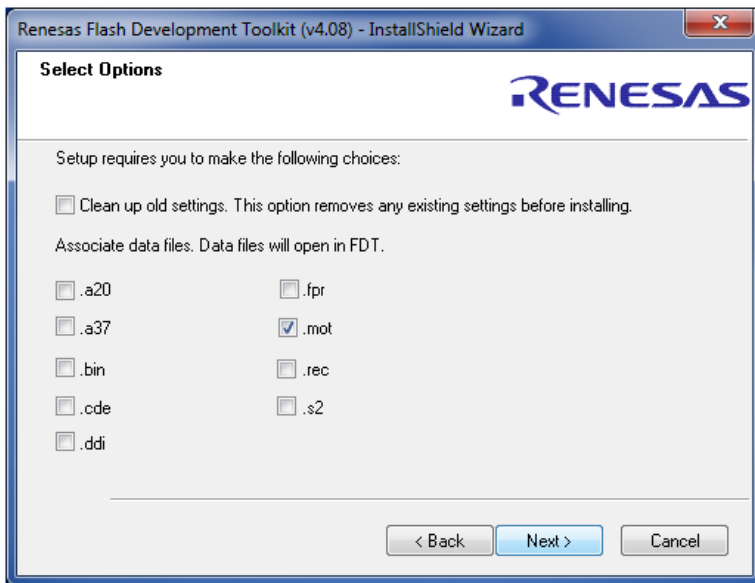


Select only the FDT Application USB Drivers as in the picture below.

Then click

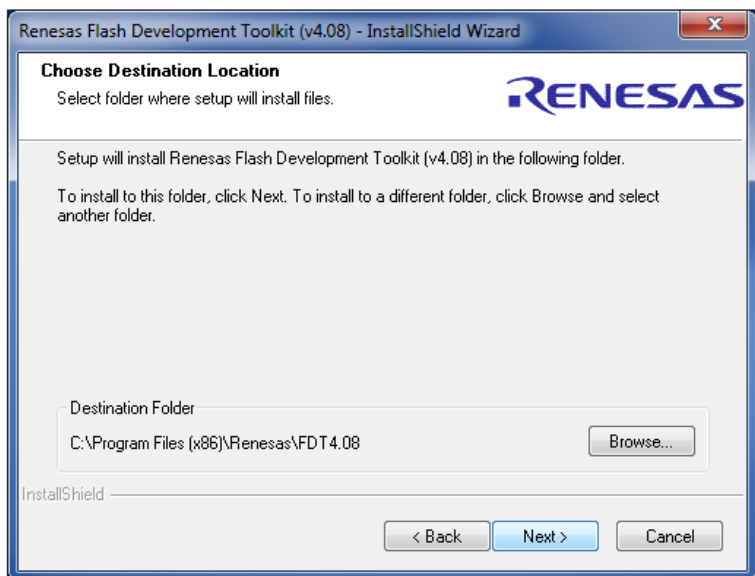


Click  again

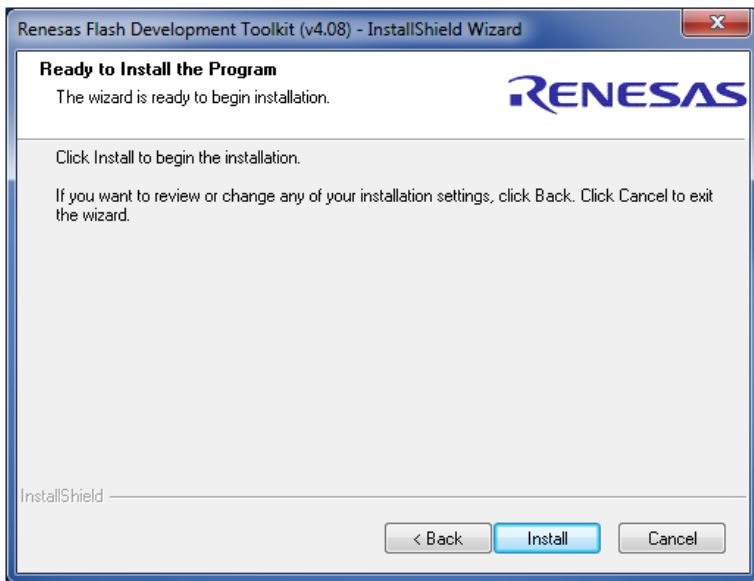


Choose the part of destination with the Browser Button.

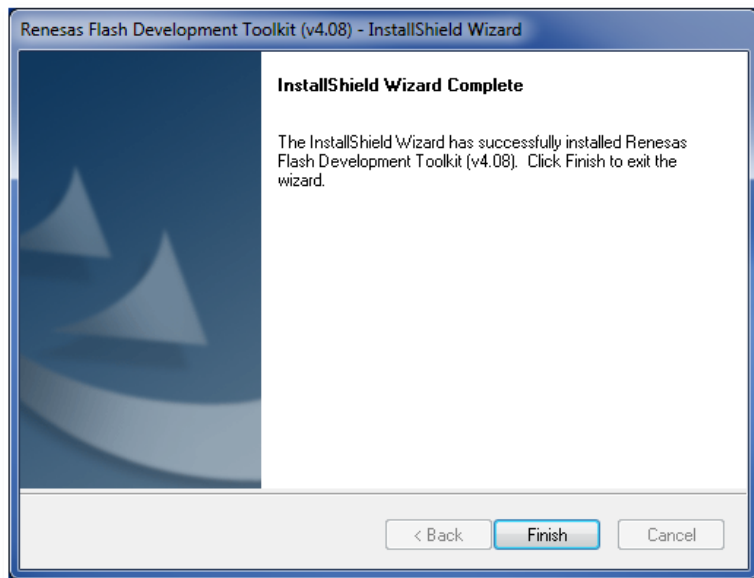
Then click 



Select 

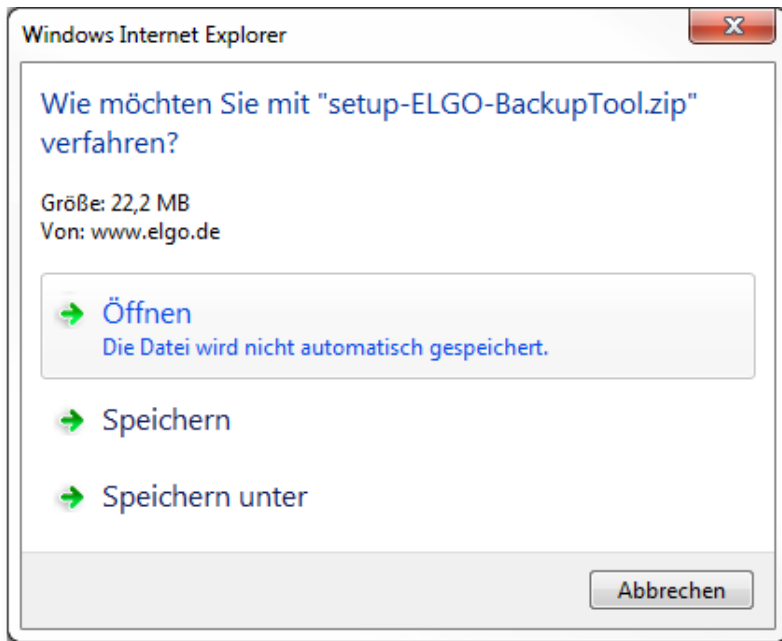


After installing click 

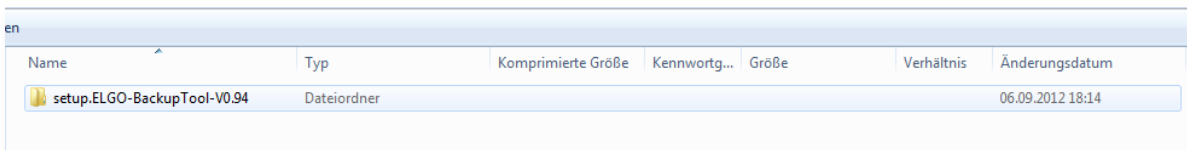


3 How to install the Backup-Tool

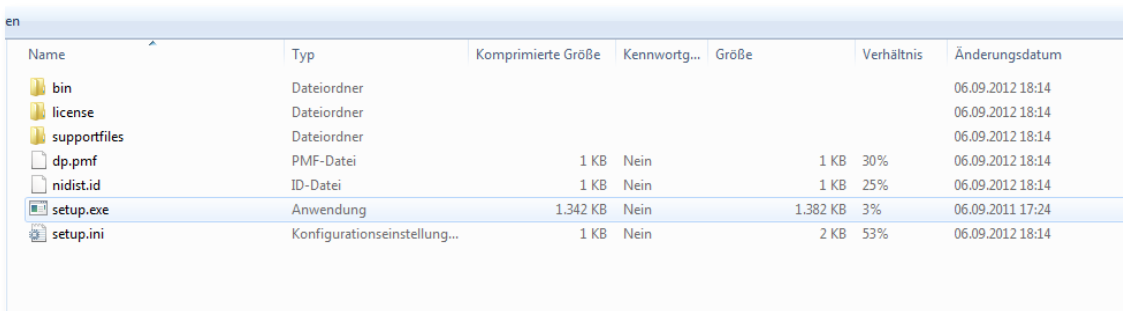
Chose "Open" → the file will be saved automatically:



The folder will be saved on your hardware:

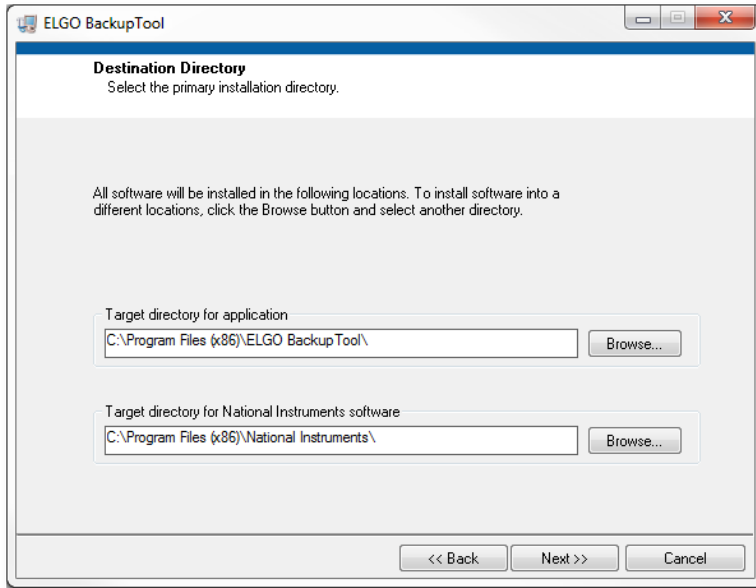
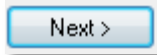


Open the folder and you will find the .exe file:



Make a double click on the .exe file.

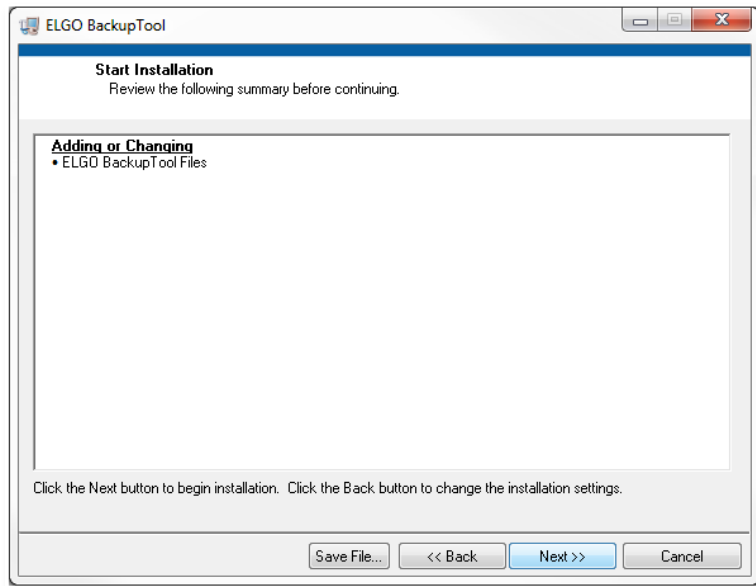
Select the locations and click



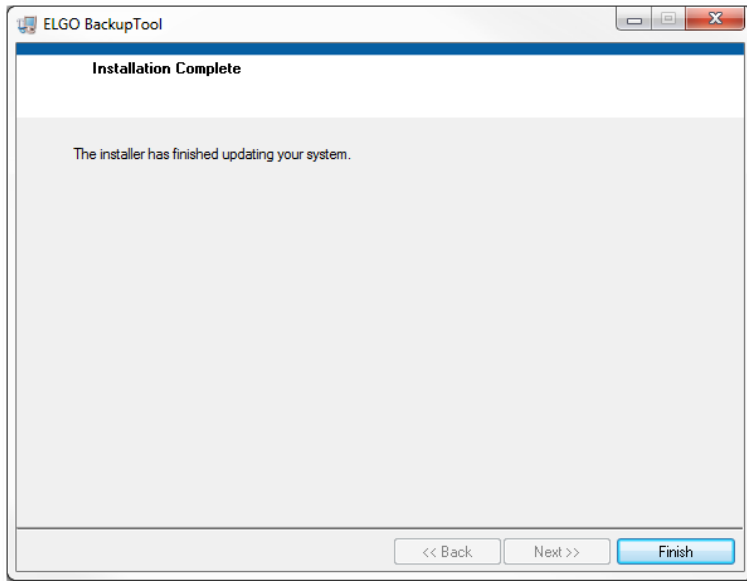
Click



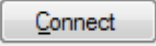
to start the installation.

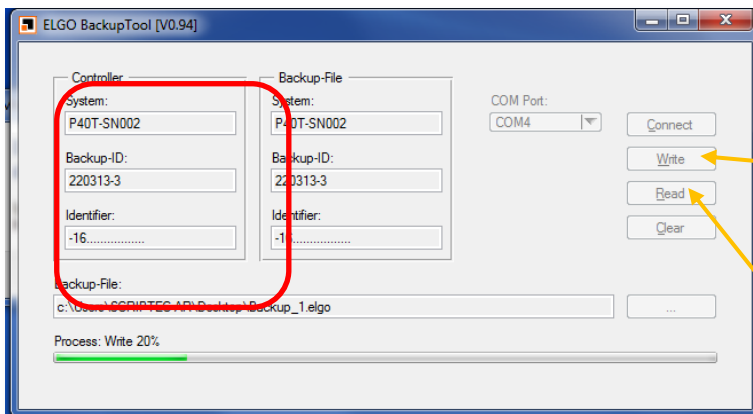


After complete installation click



4 Backup of Controller Data (P40-series)

1. Open the installed ELGO Backup Tool
2. Connect serial interface of the PC with the S12 (PC-Interface) of your controller by using the programming cable (programming cable / adapter cable see chapter 8). **Do not switch** the little slide switch next to S12 (PC-Interface) – this is only necessary if you want to download software.
3. Activate the serial PC interface in the service menu of your controller (password requested). For this use the ESC key to change into the parameter menu and enter the password 250565. Select "Version" in the submenu "Diagnosis". In the "Version" menu the installed firmware is displayed and the interface of the P40 is automatically activated for the backup function.
4. Click on . After successful connection the backup Info's are displayed in the gap of the controller.
5. Select **Read** or **Write** to save or load controller data.



PC -> Controller

Select **Write** to write Backup data from you PC into your controller. The System-Info, Backup-ID and Identifier of Controller and Backup file need to comply with each other.

Controller -> PC

Select **Read** to read and save your controller data on you PC.

5 Flash controller software of P40-series

Preconditions:

- Backup of controller data (Parameters and software) must be done first because depending on used Update controller data and software may become overwritten!
- Flash Tool Software must be downloaded.

**NOTE!**

Do never switch the little slide switch (flash switch) next to S12 (PC-Interface) during operation (under tension).

1. Disconnect P40-series from supply voltage.
2. Switch little slide switch next to S12 (PC-Interface).
3. Connect serial interface of the PC with the S12 (PC-Interface) of the P40-series controller by using the programming cable (programming cable / adapter cable see chapter 8).

**NOTE!**

Depending on P40-series-variation do not confuse **S12** with **MCC1/MCC2**!

4. Connect P40-series with supply voltage.
5. Start FDT (Flash Tool).
6. If you use the FDT for the first time make the configuration according to chapter 6 "First use of FTP" of this documentation.
7. Flash controller software.
8. After flashing: Disconnect P40-series from FTP by using the Button "Disconnection" and choose in the popup window "do nothing" and "OK".
9. Disconnect P40-series from supply voltage.
10. Remove the programming cable.
11. Switch back little slide switch next to S12 (PC-Interface).

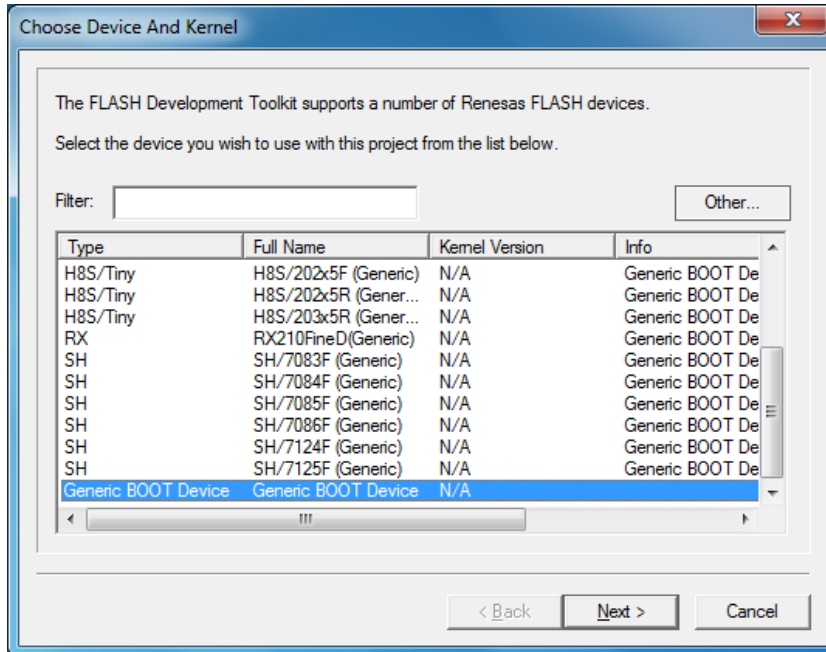
6 First use of the FDT tool (configuration)

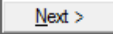
There are two versions of FDT in the "Renesas-Folder".

Use the FDT Basic version!

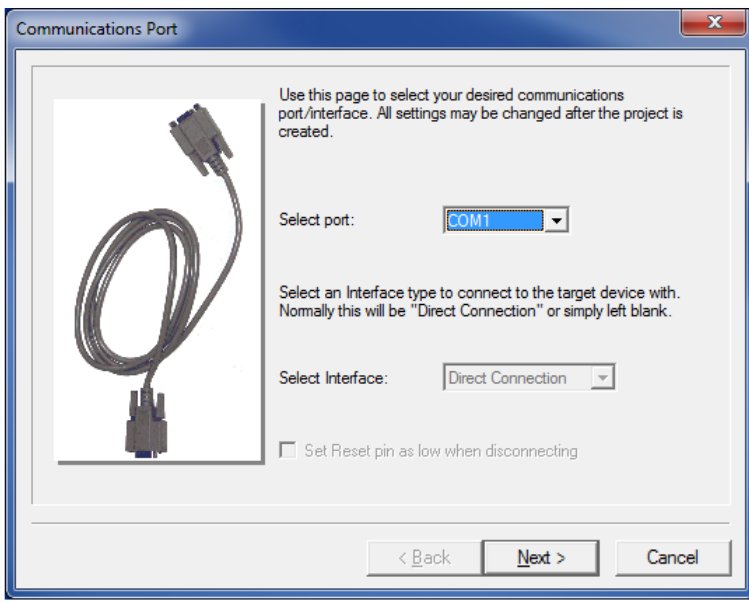
In the first dialog choose **Generic BOOT Device**

Then click



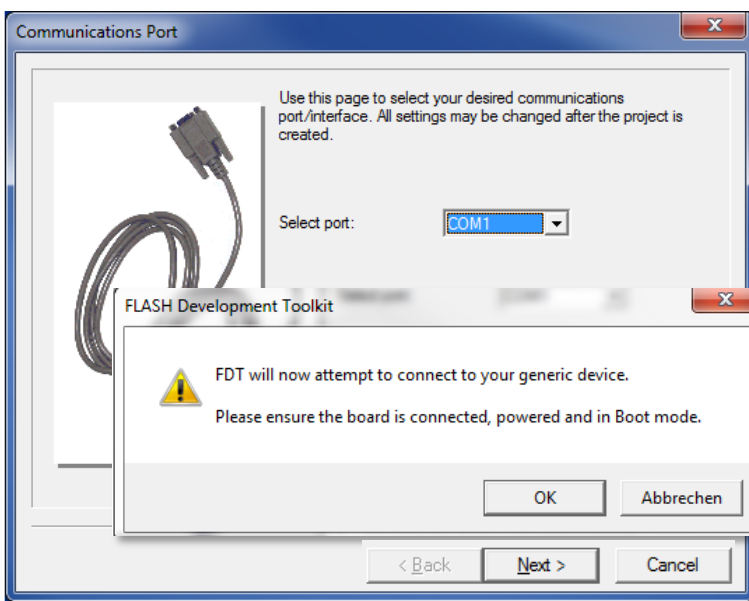
Choose the COM-PORT of your serial interface and click 

NOTE: The COM port must be set to a maximum COM9. Otherwise, the connection is not established to the controller, and it appears no error message.

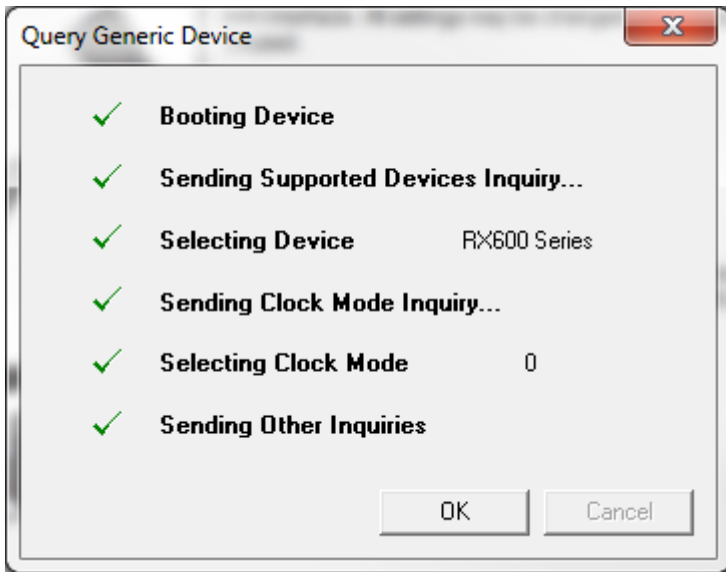


Be sure that the control is switched ON and connected to your serial port as described in **chapter 5 step 1 ... 4** of this manual.

Click 

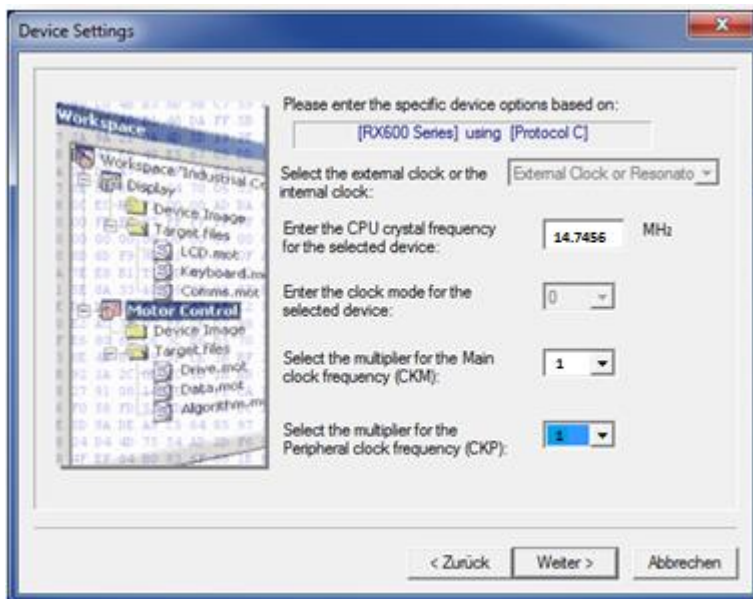



If you have done everything correct it should look like this. Press

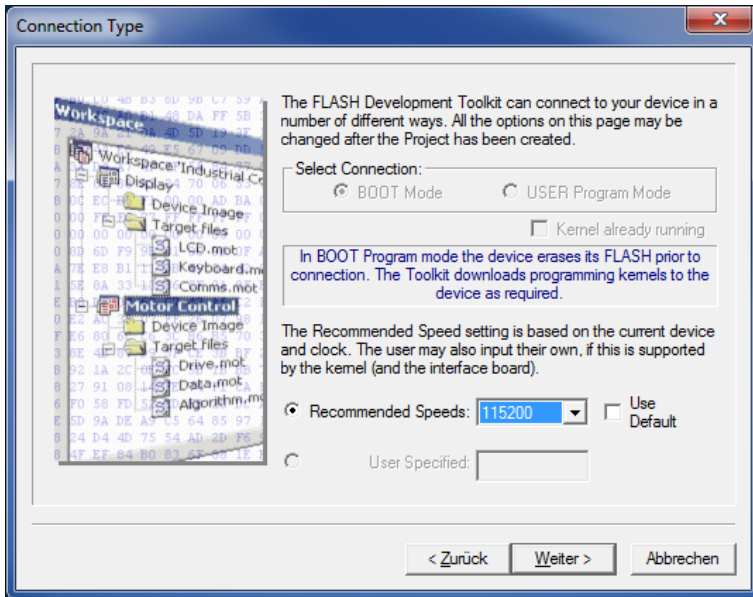


In this dialog please enter the values for P40-series as shown below:

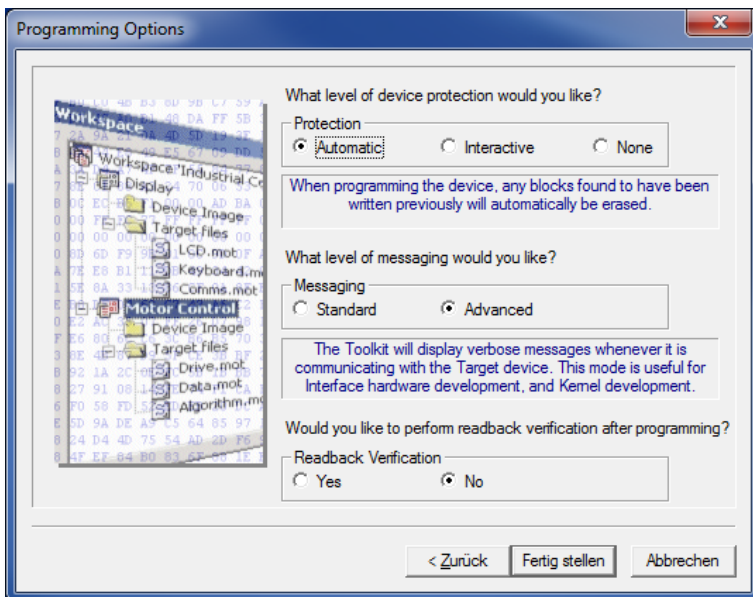
	P40
Processor frequency [MHz]	14.7456
Multiplier for the main clock	1
Multiplier for the Peripheral clock	1



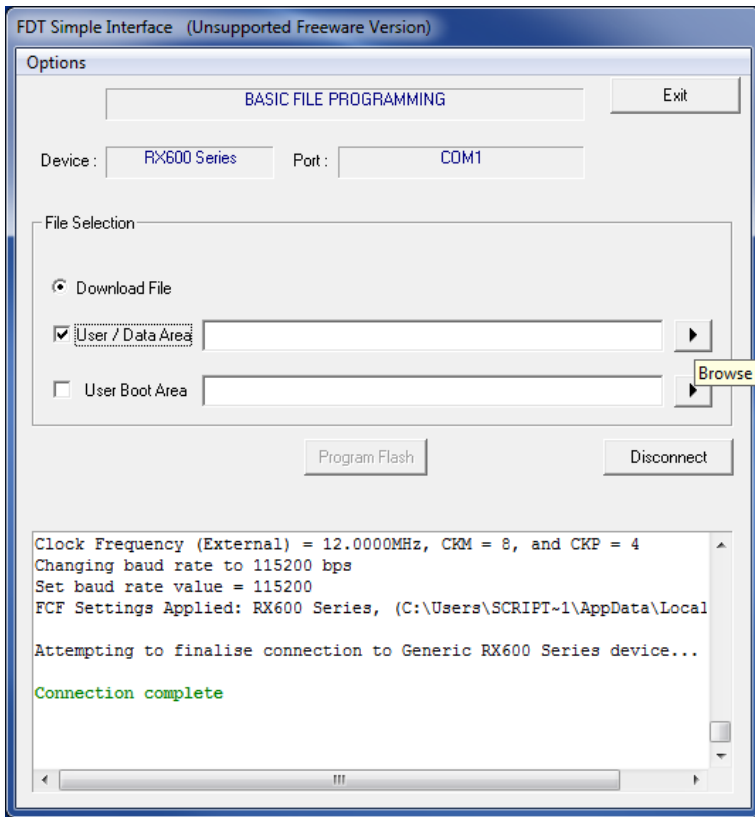
Change the Baud rate to 115200 and click (Next) 



Do not change anything in this dialog and click (Finish) 

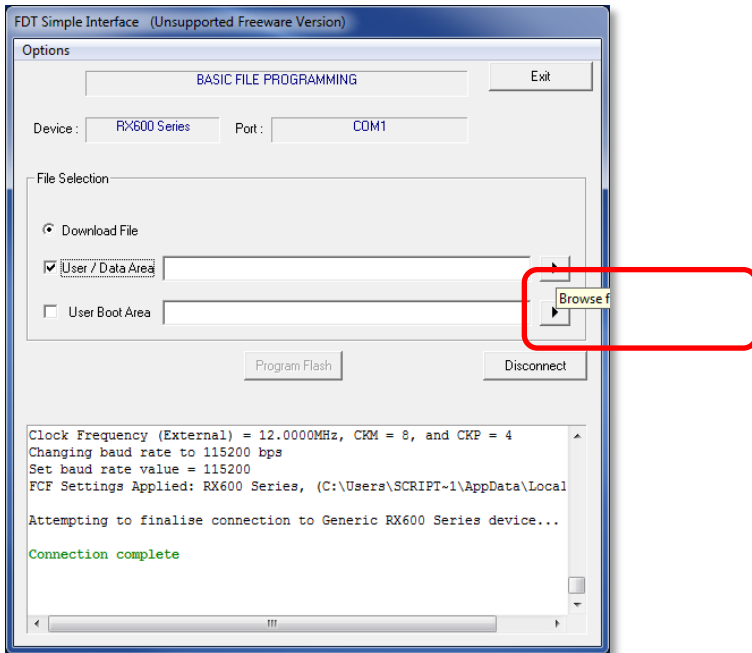


Now you should see the FDT Dialog like in the picture below.
The installation is complete.

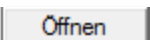


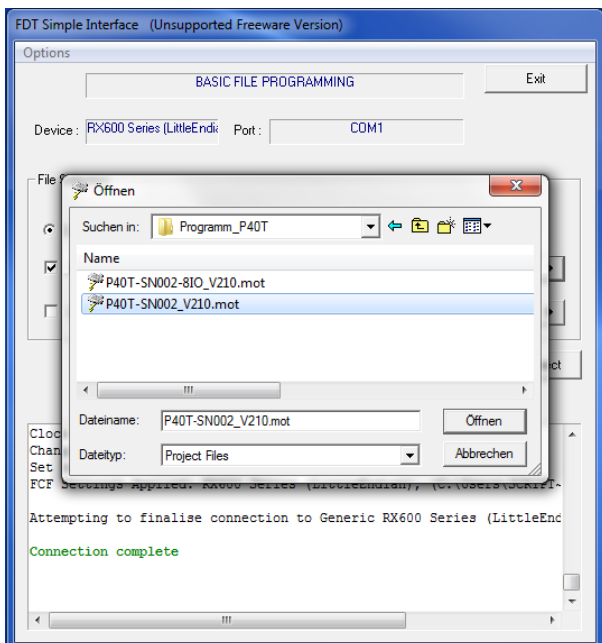
7 Download a ".mot- File"

Click on Browser for choosing a file.

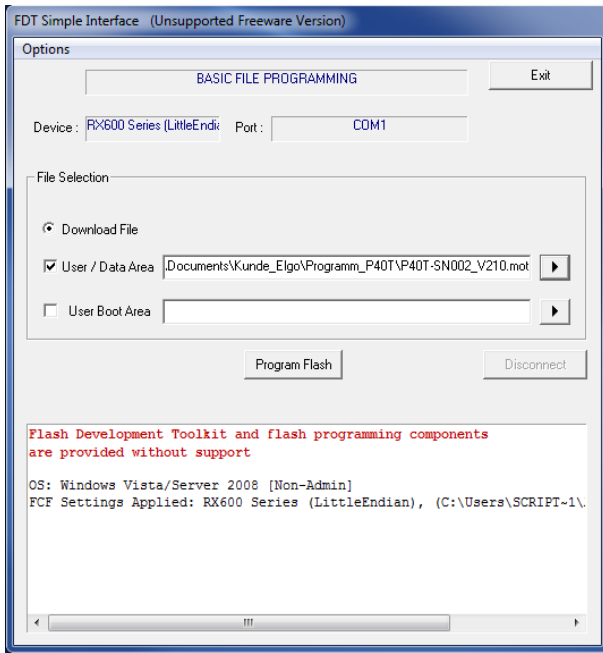


Choose the latest version. Probably you will get the ".mot-file" from our service department by Email. In this case you have to choose the directory in which you have saved the file.

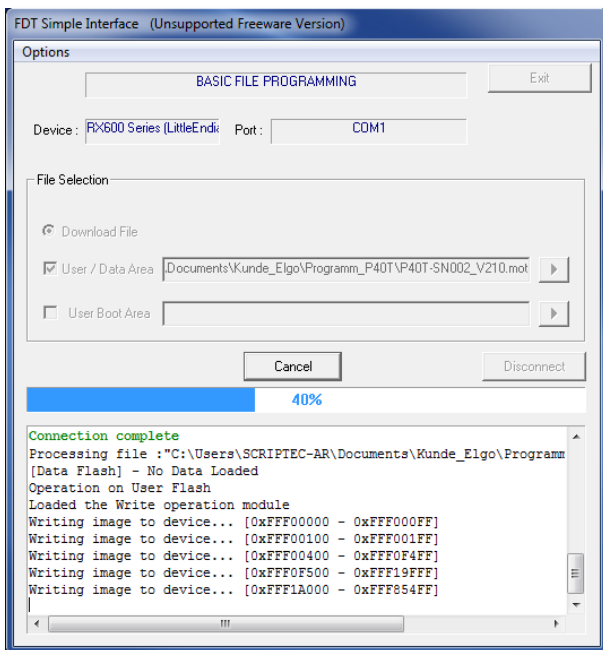
After that click (open) 



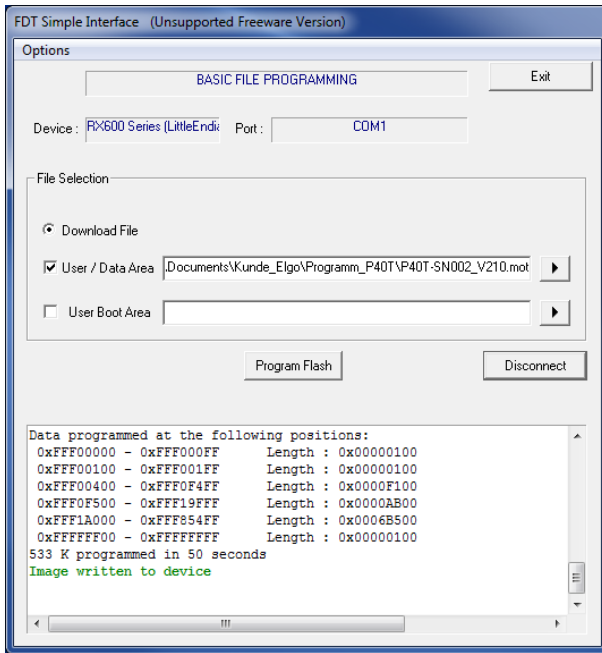
After choosing the file click on



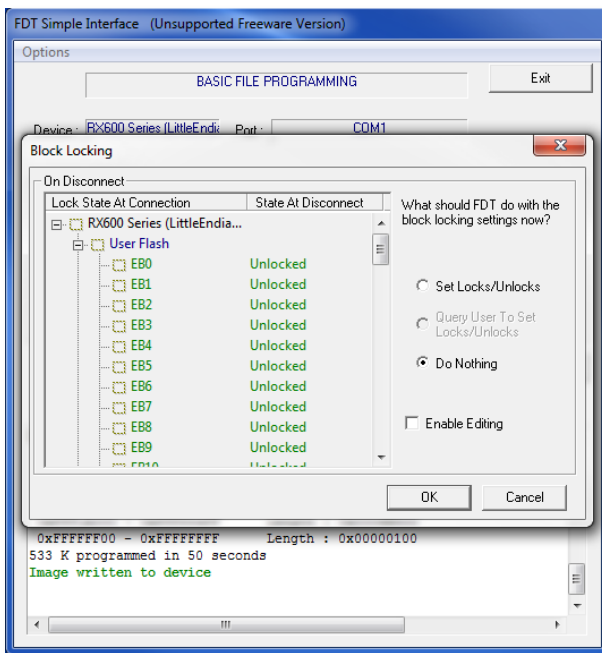
The program will be flashed.



Now you have flashed the program! Press



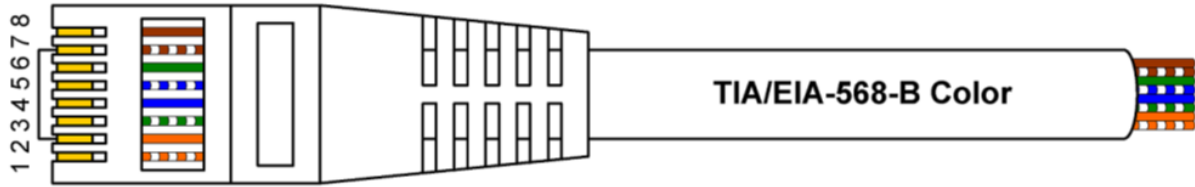
Choose "Do nothing" and "OK" in the popup window



- Disconnect P40-series from supply voltage.
- Remove the programming cable.
- Switch back the little slide switch next to S12 (PC-Interface).

8 Programming Cable / Adapter Cable

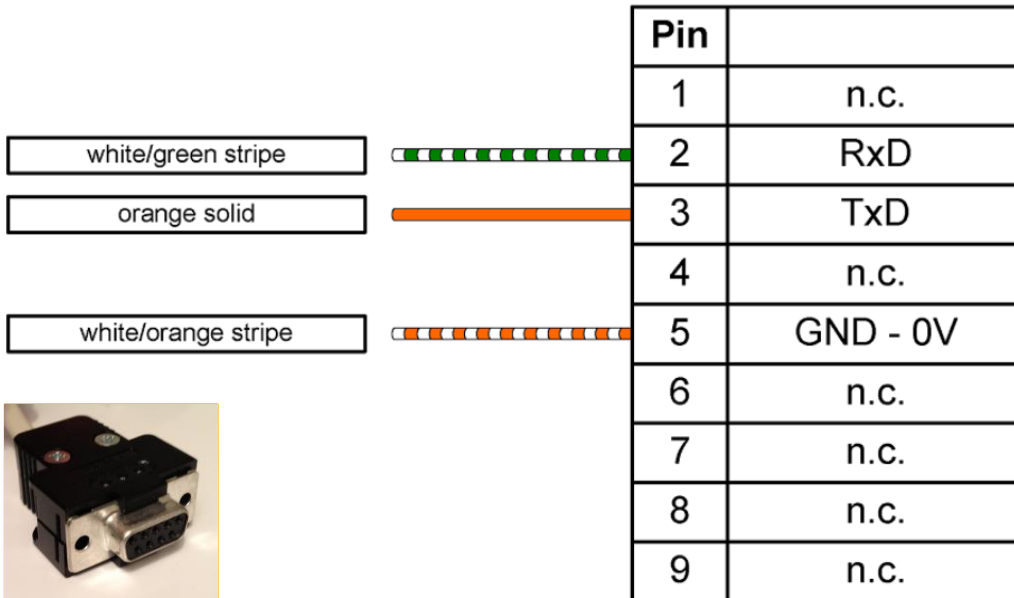
P40-series



1 2 3 4 5 6 7 8	Pin	TIA/EIA-568-B Color	
	1	white/orange stripe	GND - 0V
	2	orange solid	RxD
	3	white/green stripe	TxD
	4	blue solid	n.c.
	5	white/blue stripe	n.c.
	6	green/solid	n.c.
	7	white/brown stripe	n.c.
	8	brown solid	n.c.

PC (extern)

D-SUB 9 polig (female)



Notes:

Notes:

