FAQ C6 EMBEDDED

KEB

Firmware Update   FAQ No.0001

Part	Version	Revision	Date	Status
en	3.5.4.10	001	2019-01-01	Released

Content

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Introduction

This document describes how to update the firmware of the following KEB controls:

- C5 Compact (14.C5)

- C5 Enhanced (19.C5)

- C6 Compact

- P6V1 control unit

- P6V2 control unit

- H6 control unit

There are generally **two hardware options** possible:

a) Using the KEB flash programmer (**Art.-Nr. 00.F5.025-0060**) together with a suitable adapter cable for the respective control type

b) Using a self-mounted cable for direct link between the RS232 interface of a PC and the serial interface of the control.

ATTENTION! If your PC has no serial interface you may use a USB-to-serial converter **but do not use the KEB USB serial converter (Art.-Nr. 00.58.060-0020)!** This converter has a HSP5 output that can't be used for the firmware flash and might be damaged!

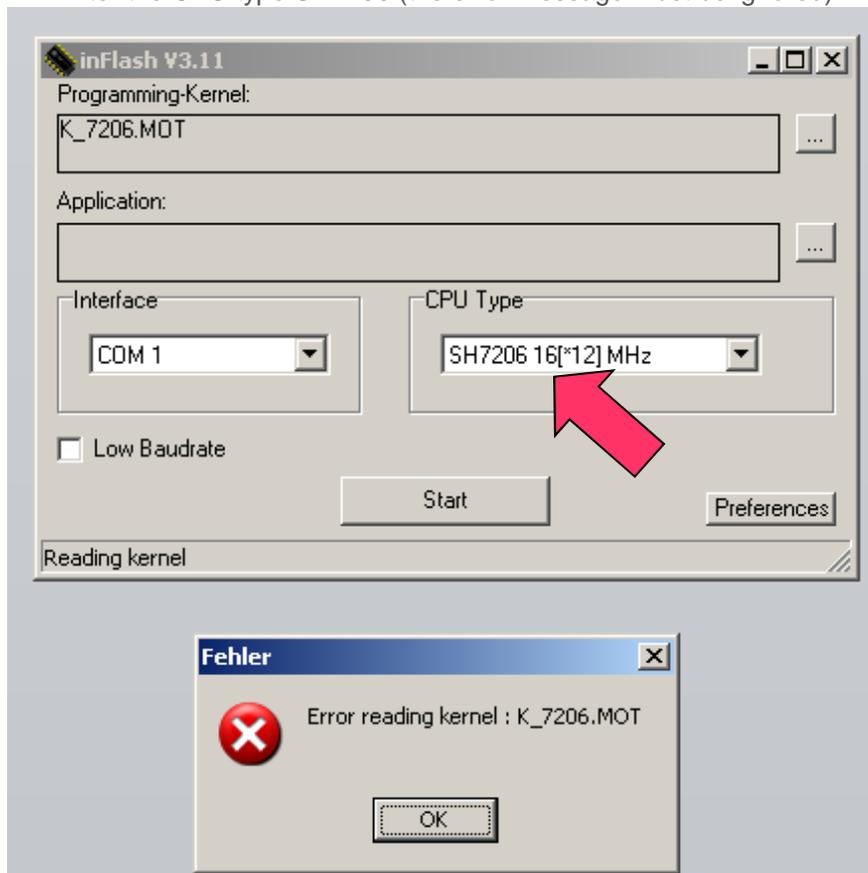Additionally you need the following **software** elements:

- KEB software tool "**inFlash.exe**" (V3.11 or younger),

- kernel software for the CPU type **SH7206**

    o **k_7206.mot** for C5 and P6V1 controls

    o **k_7206_AS.mot** for C6, H6 or P6V2 controls

- firmware file (so-called "mot-file").

How to setup the software

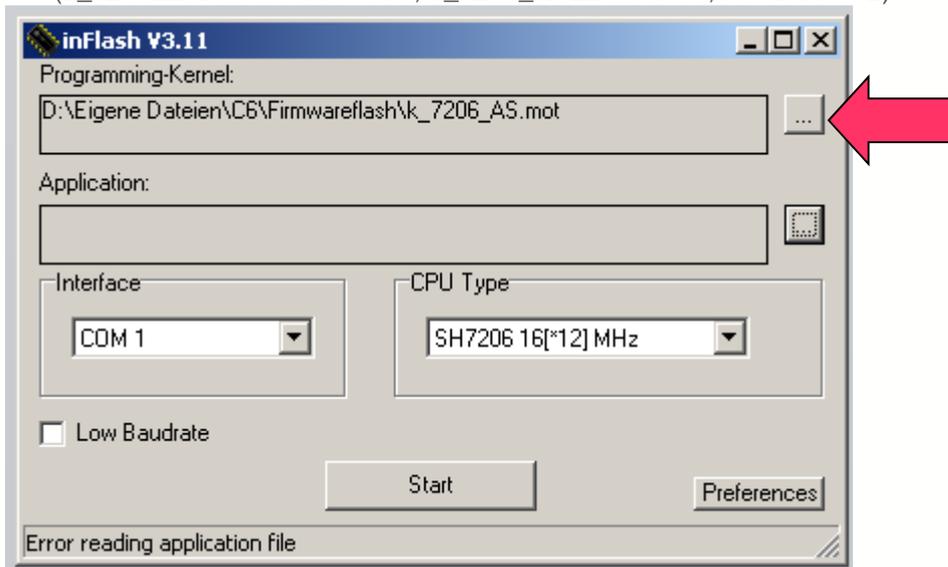1. Start the „**inFlash.exe**" software and select the serial port.
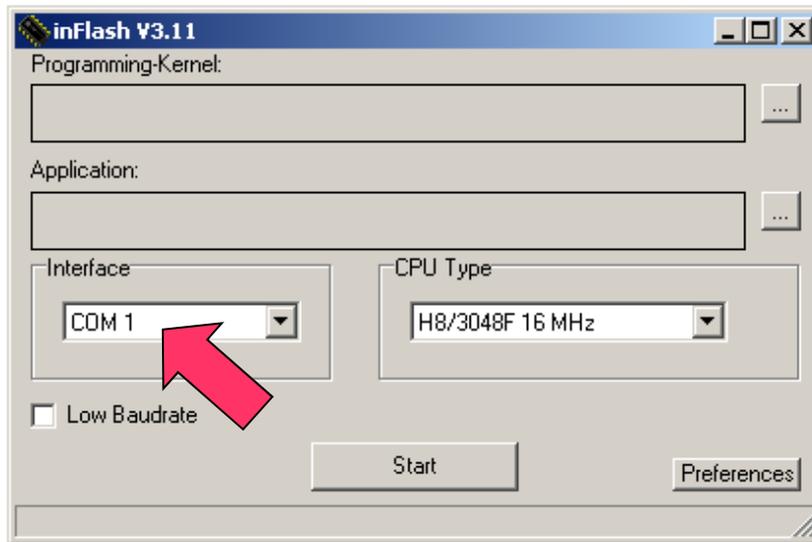
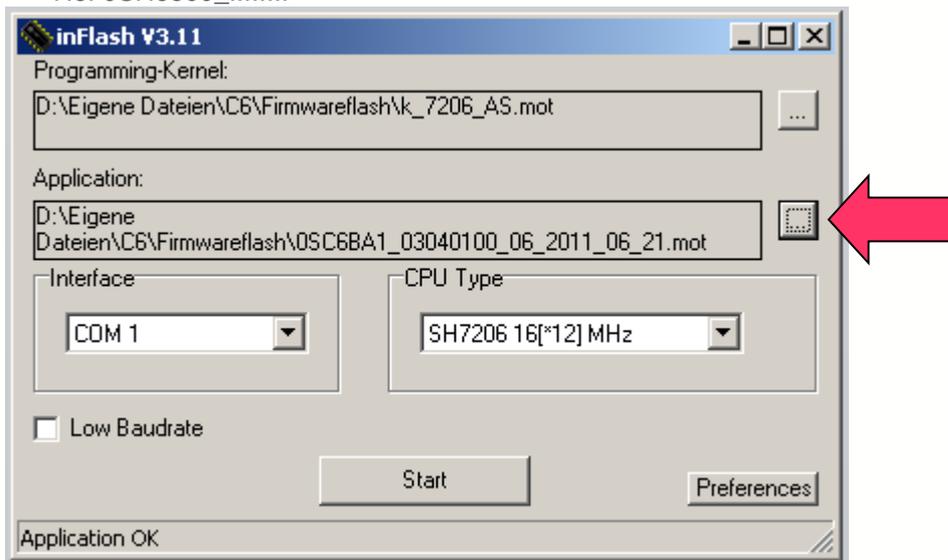2. Enter the CPU type **SH7206** (the error message must be ignored)

3. Enter the suitable kernel file which should be saved somewhere on your hard disk

   (**k_7206.mot** for C5 and P6V1, **k_7206_AS.mot** for C6, H6 and P6V2)

4. Enter the suitable firmware file for the respective control type
   C6: 0SC6BA1_.......,
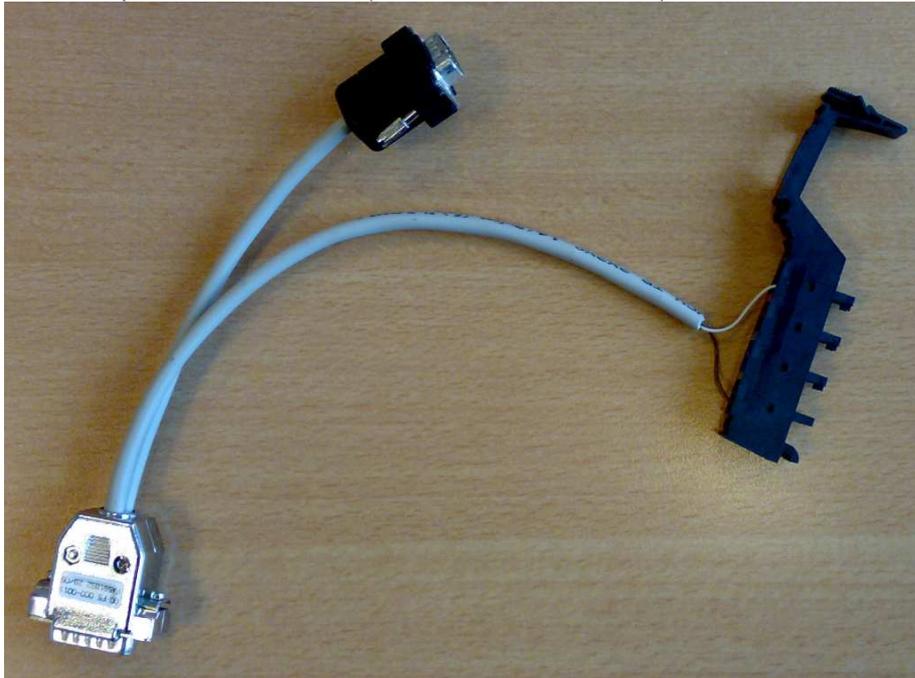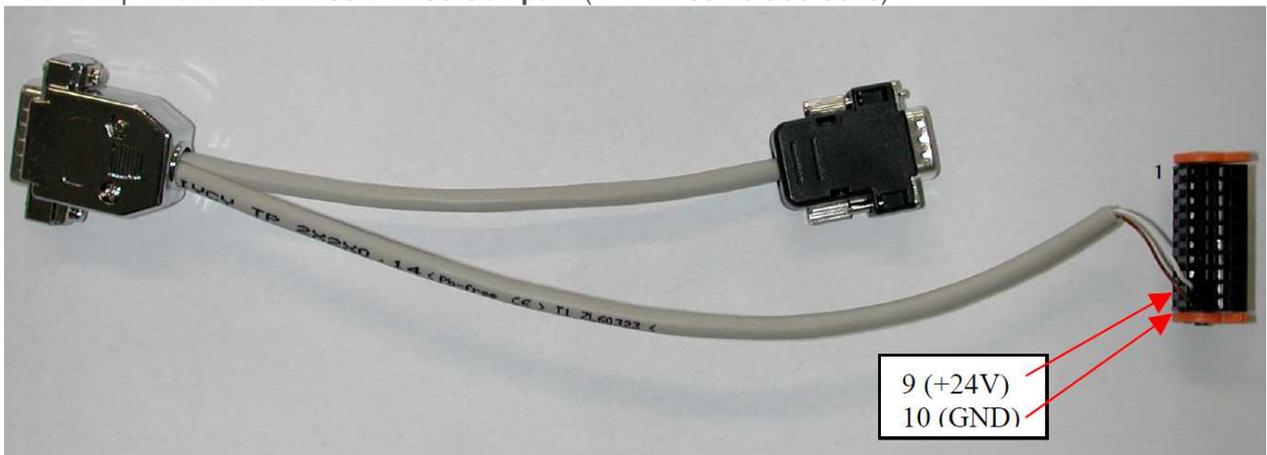   P6: 0SC6BC1_.......,
   H6: 0SH6500_........

How to setup the hardware (version A with flash programmer)

Flash adapter cable for **19.C5** (Art.-Nr. 00.F5.0C0.0011)

Flash adapter cable for **14.C5 and C6 Compact** (Art.-Nr. 00.F5.0C0-0015)
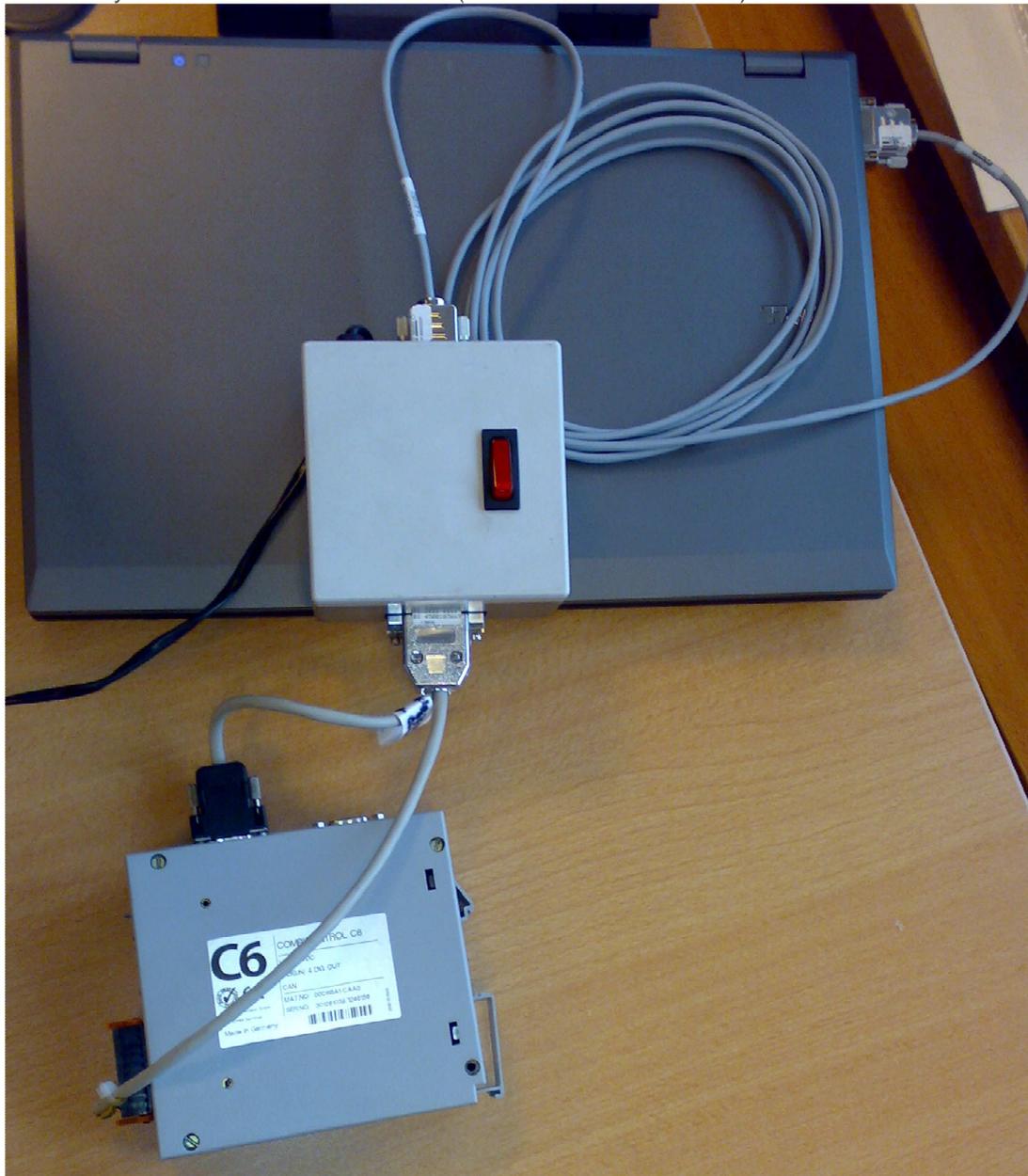

9 (+24V)
10 (GND)

For **P6 and H6** one of the adapter cables must be modified in a way that the 24V (white cable) and GND (brown cable) are connected to the 24V input and GND of the control unit or the control unit must be connected to an external 24V supply.

The following picture shows the whole flash system. The connection between PC and flash programmer is made by a standard COMBIVIS cable (**Art.-Nr. 00.58.025-001D**).
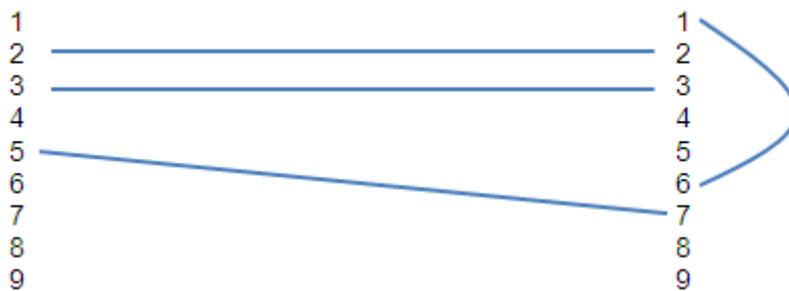
How to setup the hardware (version B without flash programmer)

In this case the only hardware you need is a **modified** RS232 combivis cable. In addition to the standard cable (Art.-Nr. 00.58.025-001D) you have to insert a **bridge between the pins 1 and 6 on the control side**.
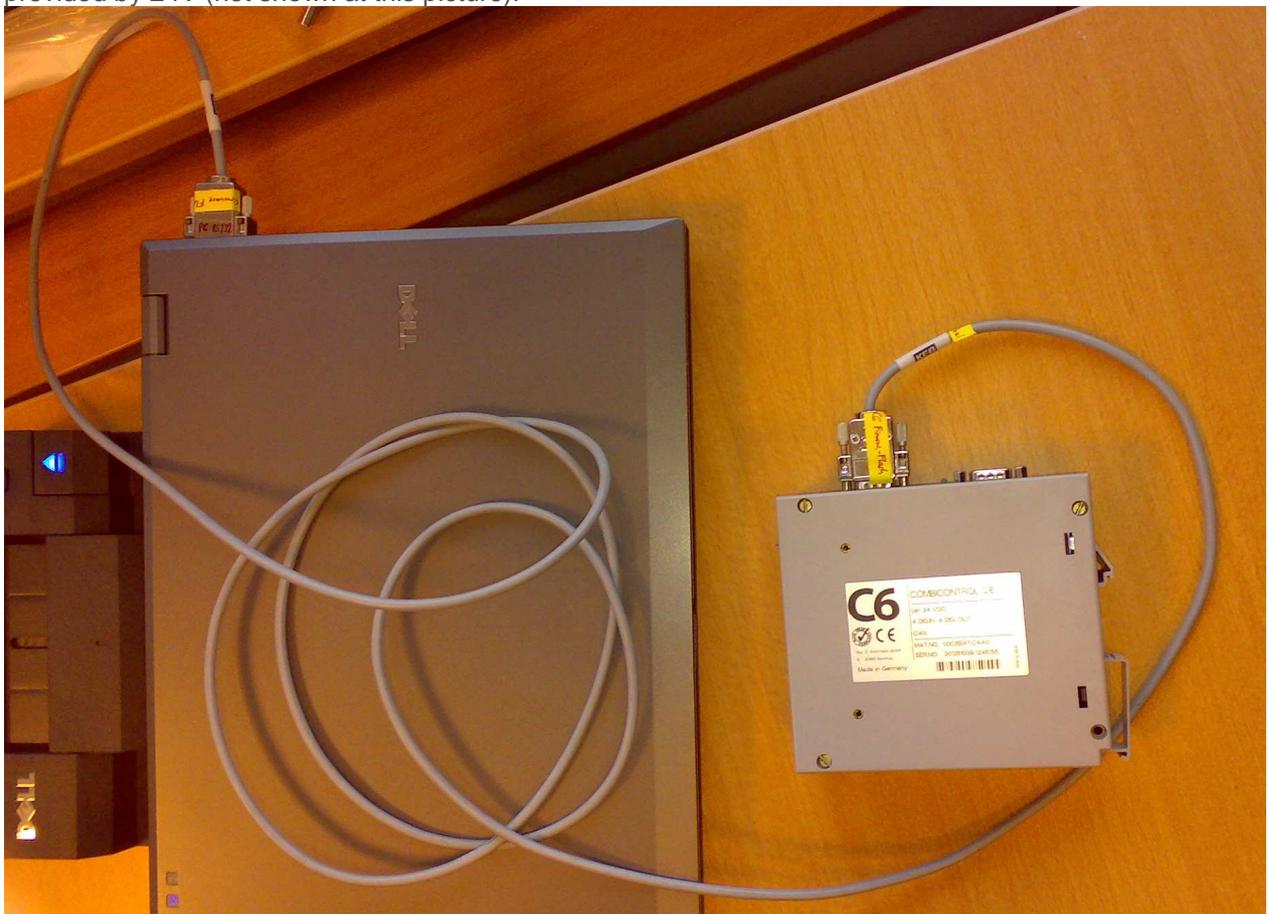
The following drawing shows the whole pin assignment.

After connecting the cable and before starting the flash procedure the control terminal strip must be provided by 24V (not shown at this picture)!

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How to execute the flash procedure

Please follow this procedure exactly step by step!

1. Configure „inFlash.exe" software as shown before according to your device

2. Connect cables as shown before

3. Supply the control by 24V - either by switching on the flash programmer if connected (red light must be glowing) or by an external 24V supply.

4. Start the flash procedure by the „Start" button of the „inFlash.exe" software. The progress is shown by the bargraph.
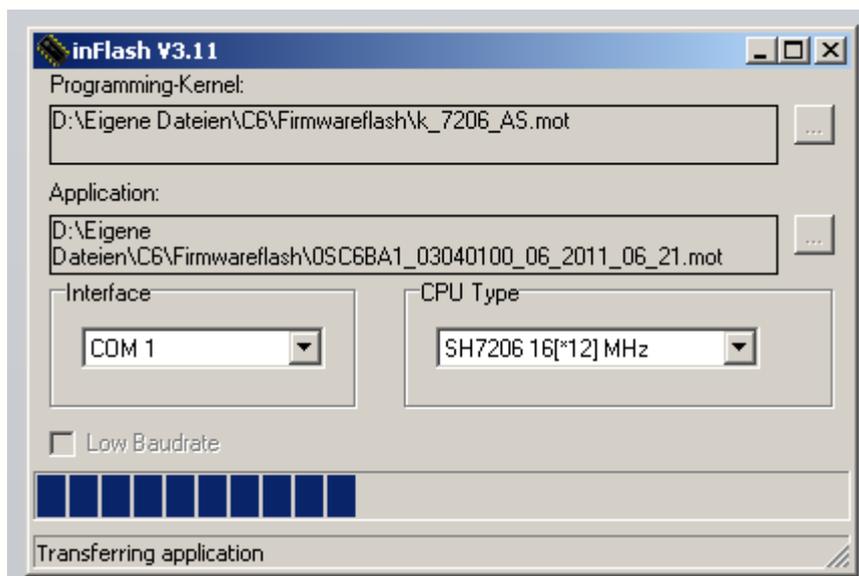
5. If the firmware update has successfully been finished you get the following message. Otherwise there will be an error message.

6. Switch off the 24V supply and disconnect all cables.

7. To check the new firmware version you should have a look into the control parameters (see screenshot).

⊞ Et: ethernet parameter	(12 Parameter)
⊞ Rc: realtime clock	(5 Parameter)
⊟ Di: device info	(5 Parameter)
Di00: serial number	0
Di02: production info	0
Di08: device identifier	8257: C6 Compact/V3.4.0
Di16: software version	3.4.1.0
Di17: software date	2011,0621
⊞ Ud: user definition para.	(7 Parameter)
⊞ Fl: flash file system	(9 Parameter)
⊞ Db: debugging	(8 Parameter)

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