Firmware Update 4Ch-Mux, DVB-SC-Mod 2/4TS

This manual explains the firmware update process for the following boards:
- 4 Transport Stream Multiplexer
- 4 Transport Stream Modulator DVB-S/C
- 2 Transport Stream Modulator DVB-S/C

Please update the firmware of your hardware only if we explicitly ask you to do so. Do not try to update without a good reason. Make sure to only update your boards with the right firmware – you can't change the function of your hardware by updating it with firmware for another product.

☞ **Before** updating your hardware:
Please take some time to read and understand the whole manual before updating your hardware. If in doubt, check back with us and only update if we advise you to do so. Updating your hardware with the wrong firmware will render it unusable.

1. Required Hardware

- Windows-PC (Windows 2000, Windows XP, Windows Vista)
- Power supply 8–24V=/500mA
- serial Port on your PC (USB ports may not work properly)
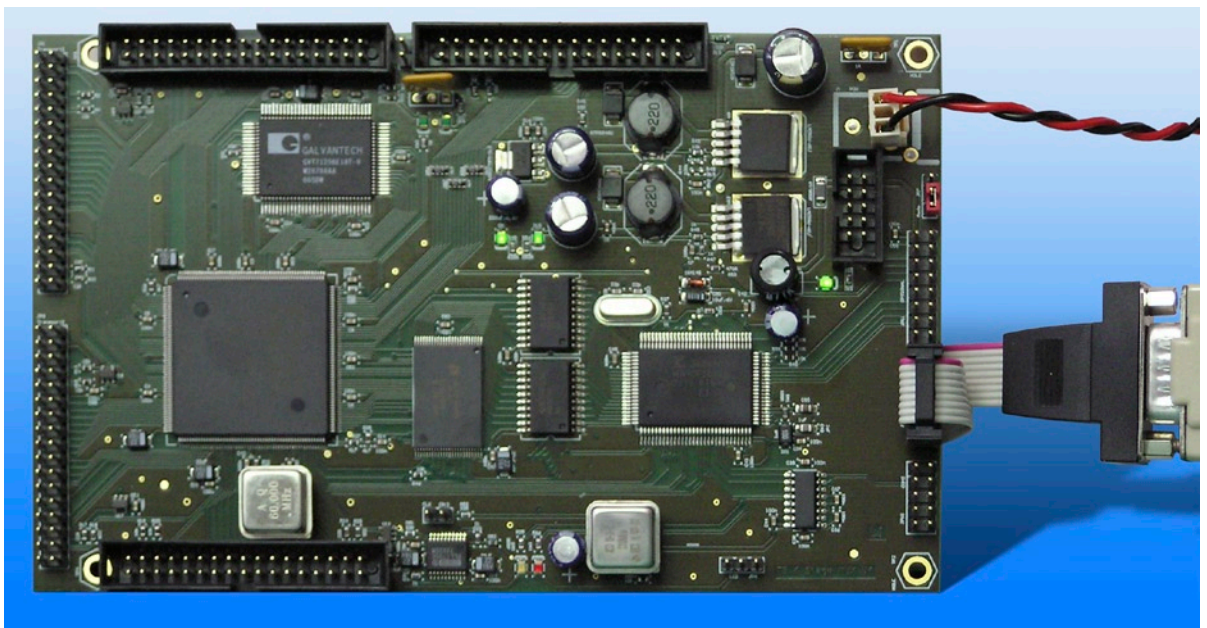- RS232 adaptor 10 pin to SUB-D

2. Software Installation

Extract the supplied ZIP-File into a directory of your choice.
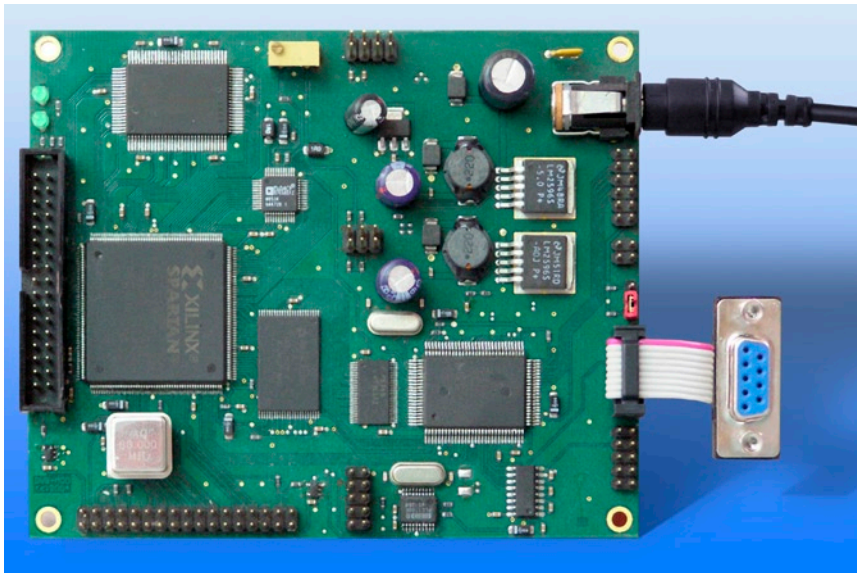
3. Hardware Setup

Connect the board you want to update (the target) to your power supply (8–24 V=/500 mA). Set the mode jumper to "programming" (see appendix for magnified picutres of the right setting for your board). Connect the target board to your PC's serial port using the 10 pin to SUB-D adaptor.
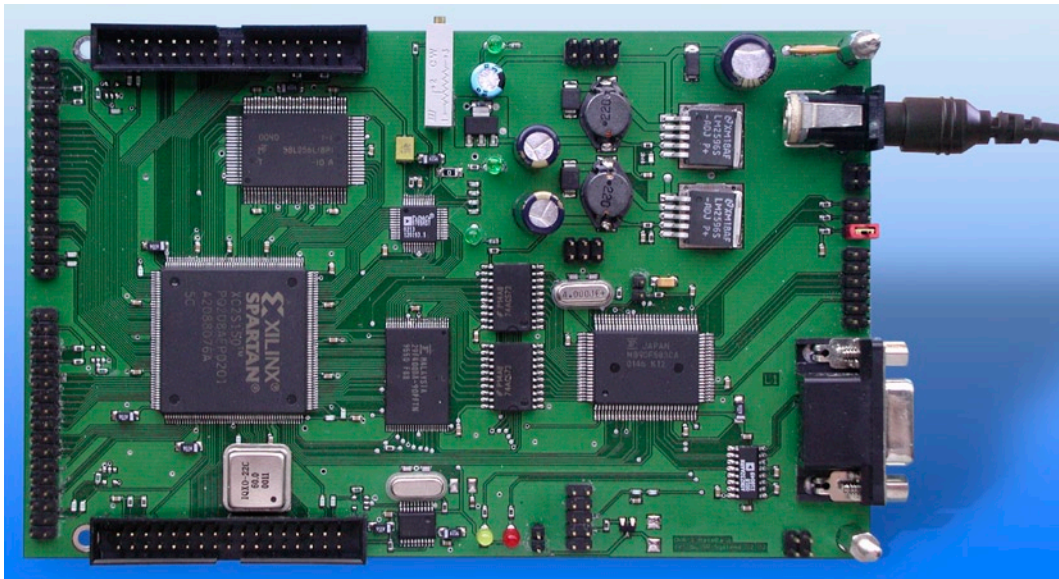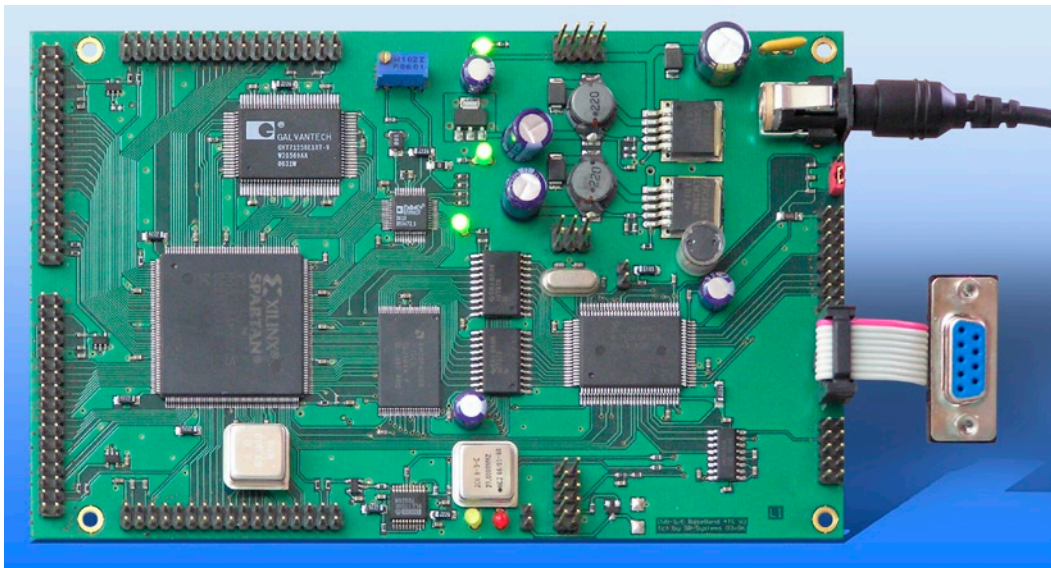
a) 4Ch Mux:

b) DVB-SC-Mod 2TS:

c) DVB-SC-Mod 4TS V2

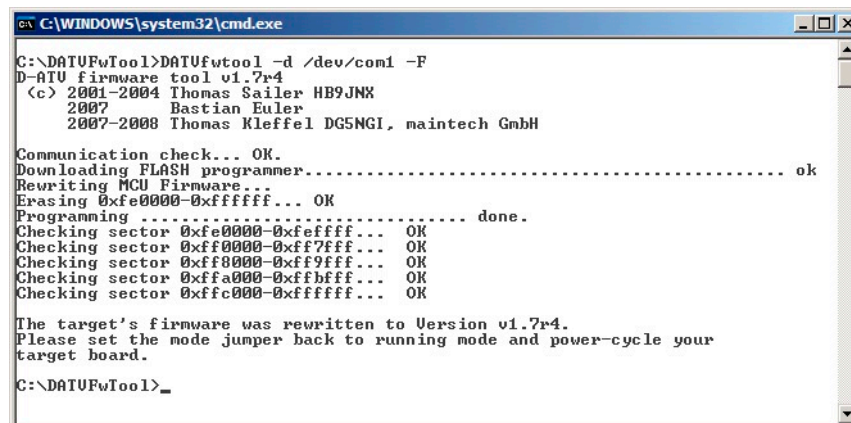
d) DVB-SC-Mod 4TS V3

4. Firmware Update Process

1. Disconnect the target board from power supply.

2. Connect the target board to yur PC's serial port.

3. Set the mode jumper to „proramming".

4. Start a command console and change to the dirctory where you have chosen to extract the ZIP file.

5. Connect the target board to power supply and wait for 10 seconds.

```
C:\WINDOWS\system32\cmd.exe

Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

C:\Dokumente und Einstellungen\Benutzername>cd C:\DATVFwTool

C:\DATVFwTool>_
```

6. Execute the command „DATVFwTool -d /dev/comX -F" where 'X' stands for the serial port you are using (COM1, COM2, ...).

```
C:\WINDOWS\system32\cmd.exe

C:\DATVFwTool>DATVfwtool -d /dev/com1 -F
D-ATV firmware tool v1.7r4
(c) 2001-2004 Thomas Sailer HB9JNX
    2007      Bastian Euler
    2007-2008 Thomas Kleffel DG5NGI, maintech GmbH

Communication check... OK.
Downloading FLASH programmer................................................ ok
Rewriting MCU Firmware...
Erasing 0xfe0000-0xffffff... OK
Programming ................................. done.
Checking sector 0xfe0000-0xfeffff...  OK
Checking sector 0xff0000-0xff7fff...  OK
Checking sector 0xff8000-0xff9fff...  OK
Checking sector 0xffa000-0xffbfff...  OK
Checking sector 0xffc000-0xffffff...  OK

The target's firmware was rewritten to Version v1.7r4.
Please set the mode jumper back to running mode and power-cycle your
target board.

C:\DATVFwTool>_
```
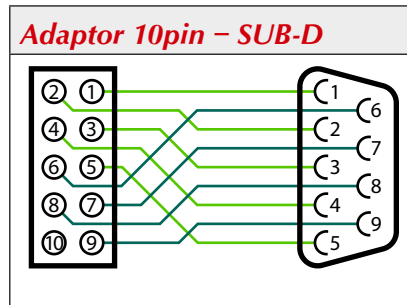
7. The update process should look like in the picture above. If you get error messages instead, please continue with step 1.

8. Wait for the success message ("The target's firmware was rewritten...") and disconnect the target board from power supply.

9. Set the mode jumper to „run".

10. Connect the target board to power supply.

11. You have successfully updated the firmware of your target board. Please do not forget to rewrite your configuration using the same DATVFwTool as you were using for the firmware update.

5. Appendix
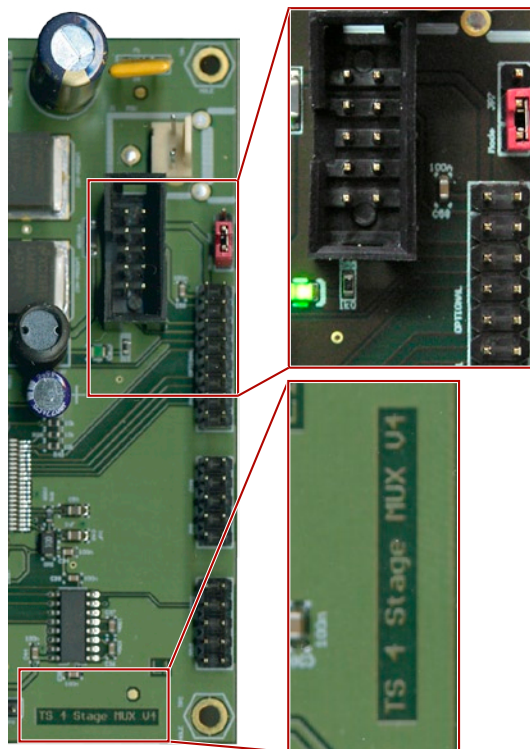
a) Connector pinouts

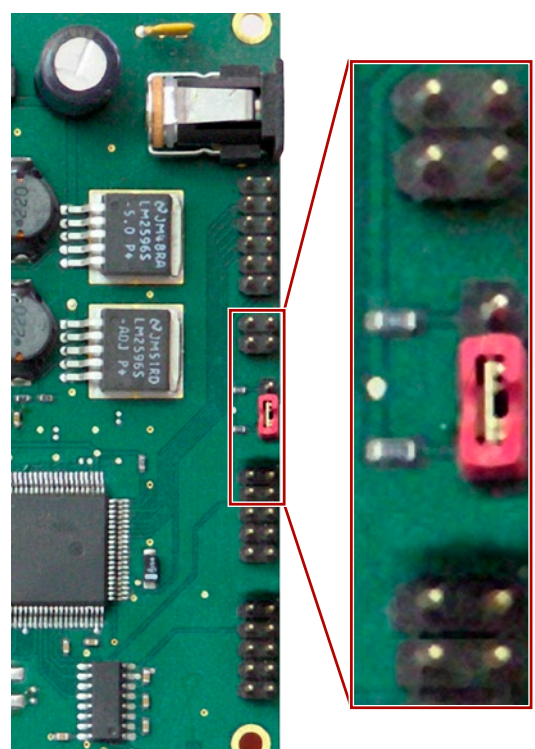| Serial Interface (Board)			
1	con. with 4+6	2	TxD
3	RxD	4	con. with 1+6
5	GND	6	con. with 1+4
7	RTS	8	CTS
9	not connected	10	GND

Adaptor 10pin − SUB-D

b) Jumper Settings for the different Board Versions

The images below show the mode jumper in the „program" setting for all different board versions:
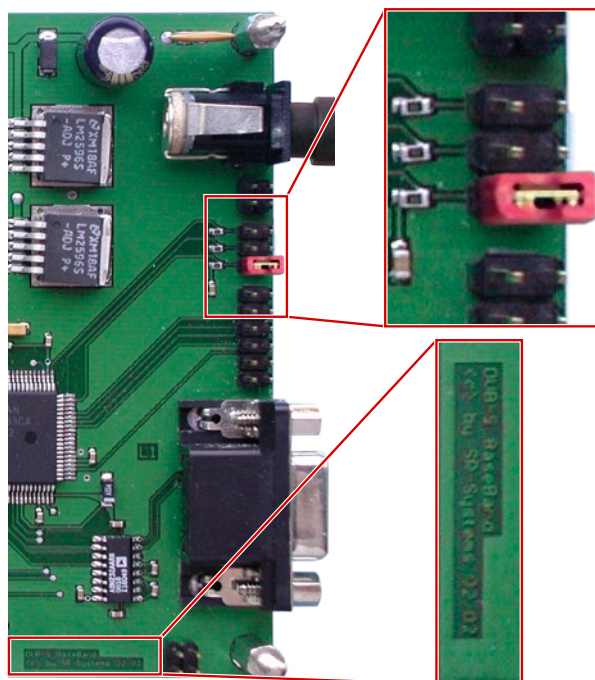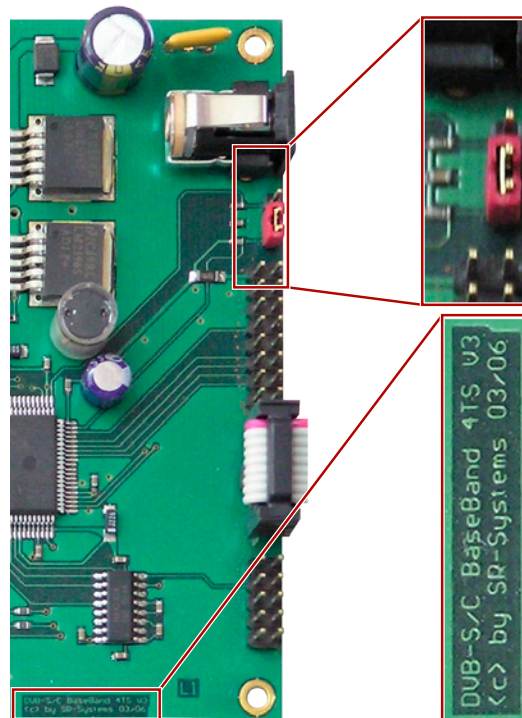
4Ch-Mux

DVB-SC-Mod 2TS

DVB-SC-Mod 4TS V2

DVB-SC-Mod 4TS V3

Errata/corrections:

24.06.2008 Release v1.0 en

25.06.2008 Pics of DVB-SC-Mod 4TS V2 added

The information in this manual was compiled with high care and to our best knowledge; nevertheless there might be some errors left in this document. We do not take legal or any other responsibility for the correctness of any information.

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We are happy to receive your comments and questions:

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