



User manual

ABC-CPU systems

Firmware Update

36/2017

© Copyright 2017 by ABC IT, Ahrens & Birner Company GmbH

Virchowstraße 19/19a

D-90409 Nuremberg

Fon +49 911-394 800-0

Fax +49 911-394 800-99

<mailto:mail@abcit.eu>

<http://www.abcit.eu/>

ABC IT is a registered trademark of ABC IT GmbH

Simatic is a registered trademark of Siemens AG

STEP is a registered trademark of AG

Content

1. Firmware Update.....	4
1.1 Set up SD-card under Ubuntu.....	4
1.2 Firmware Download.....	11
1.3 Firmware Update of ABC X-CPU systems.....	13
1.3.1 Offline Update (only for ABC X-CPU-6 systems)	14
1.3.2 Online Update	16

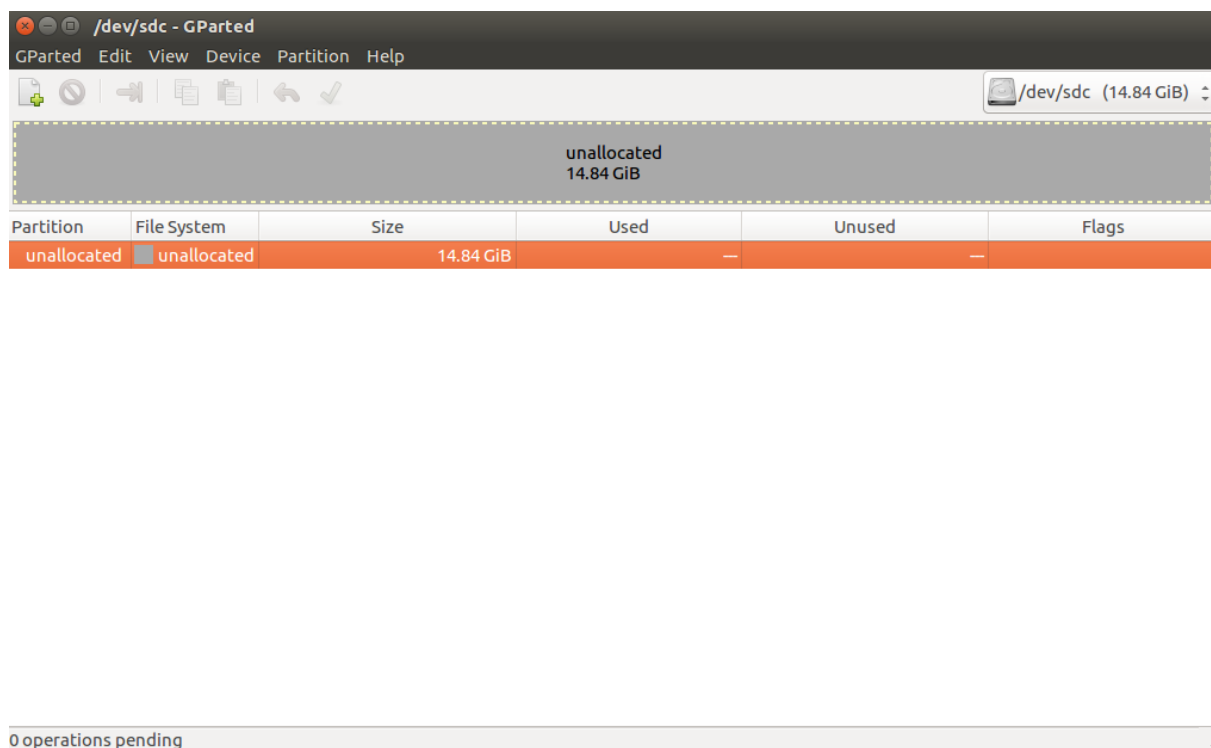
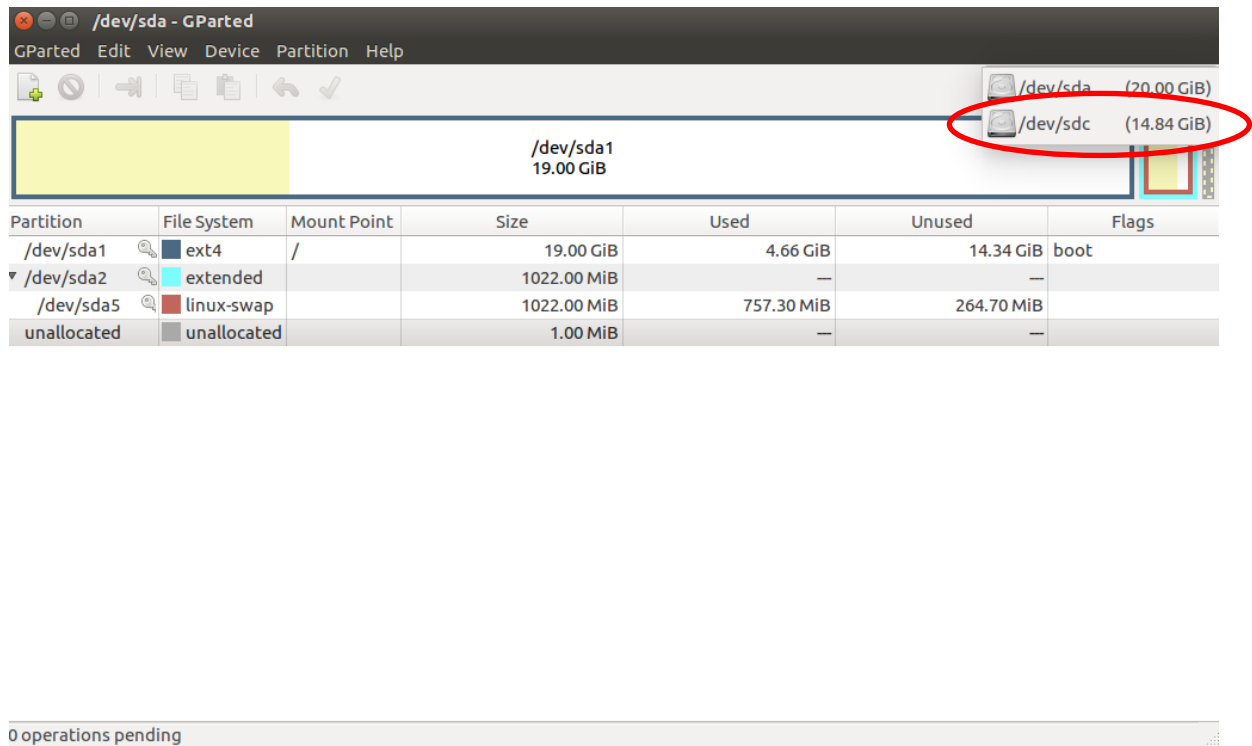
1. Firmware Update

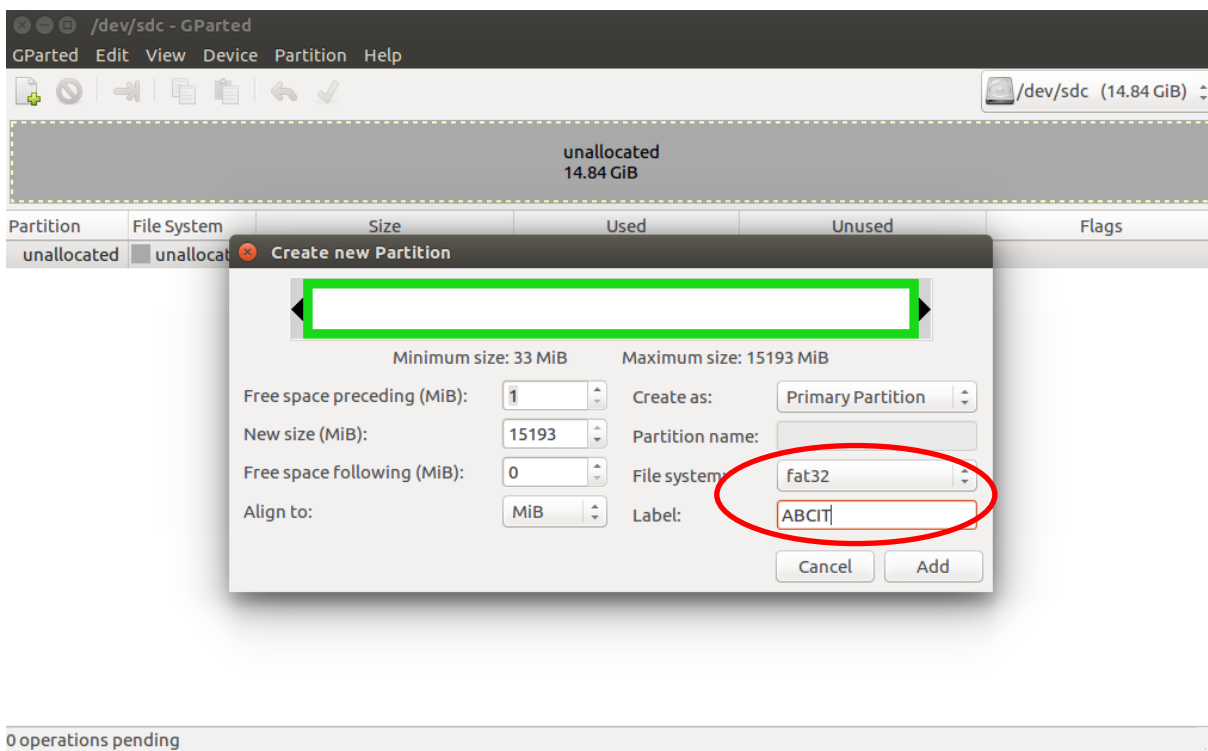
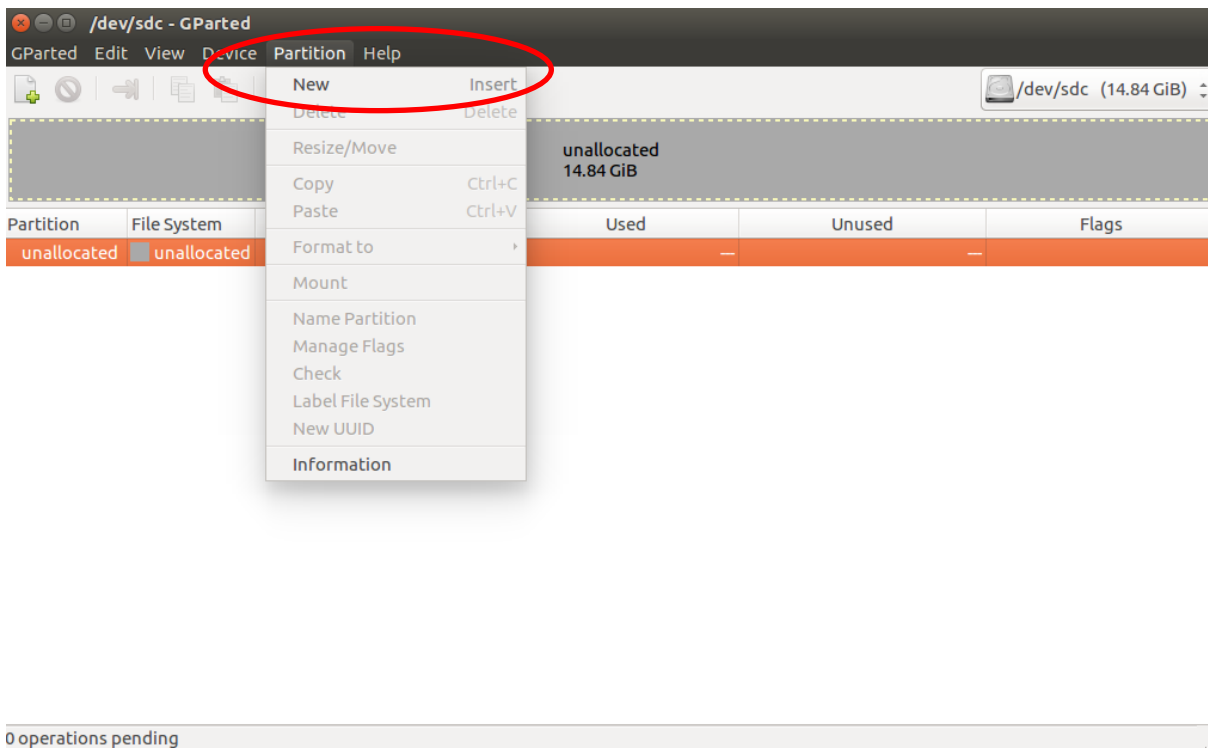
1.1 Set up SD-card under Ubuntu

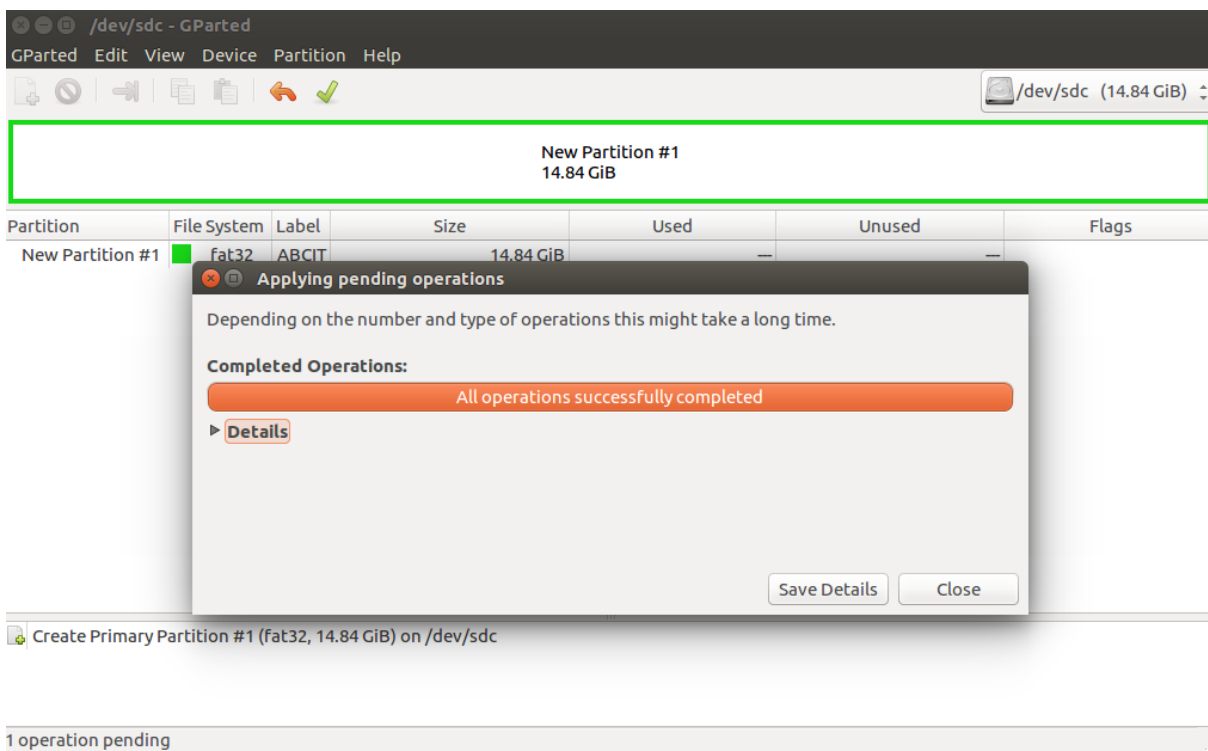
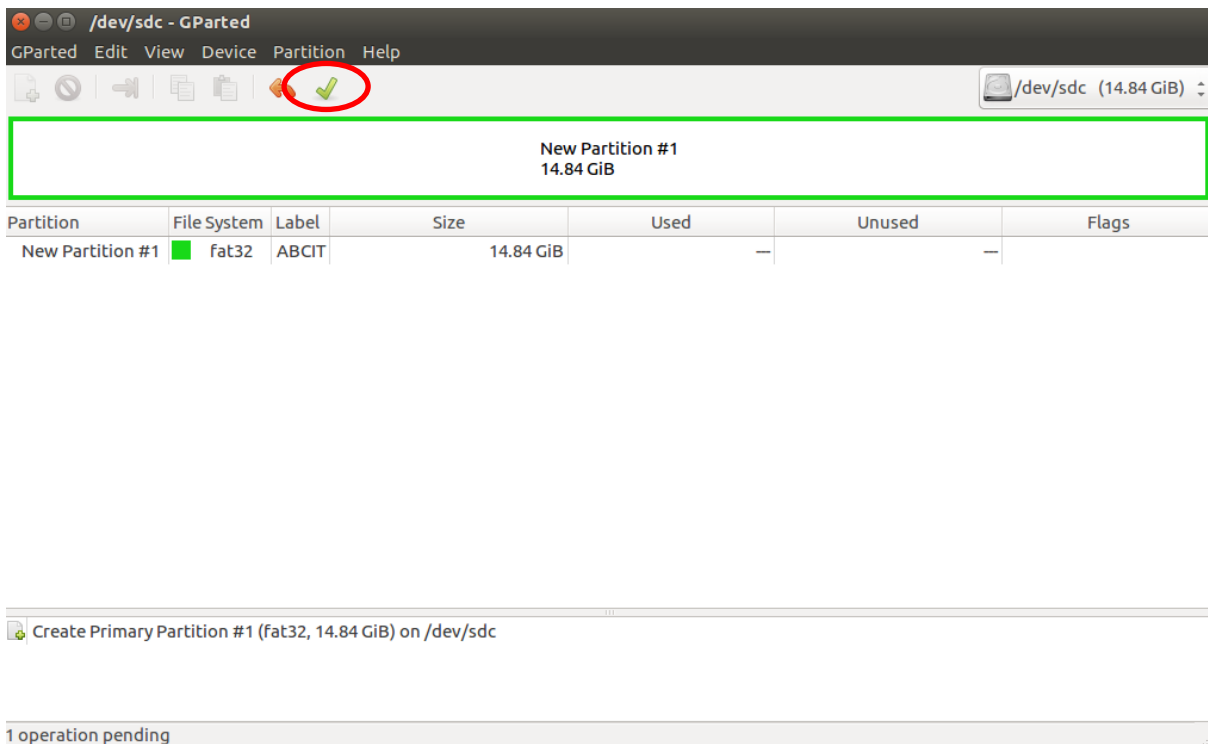


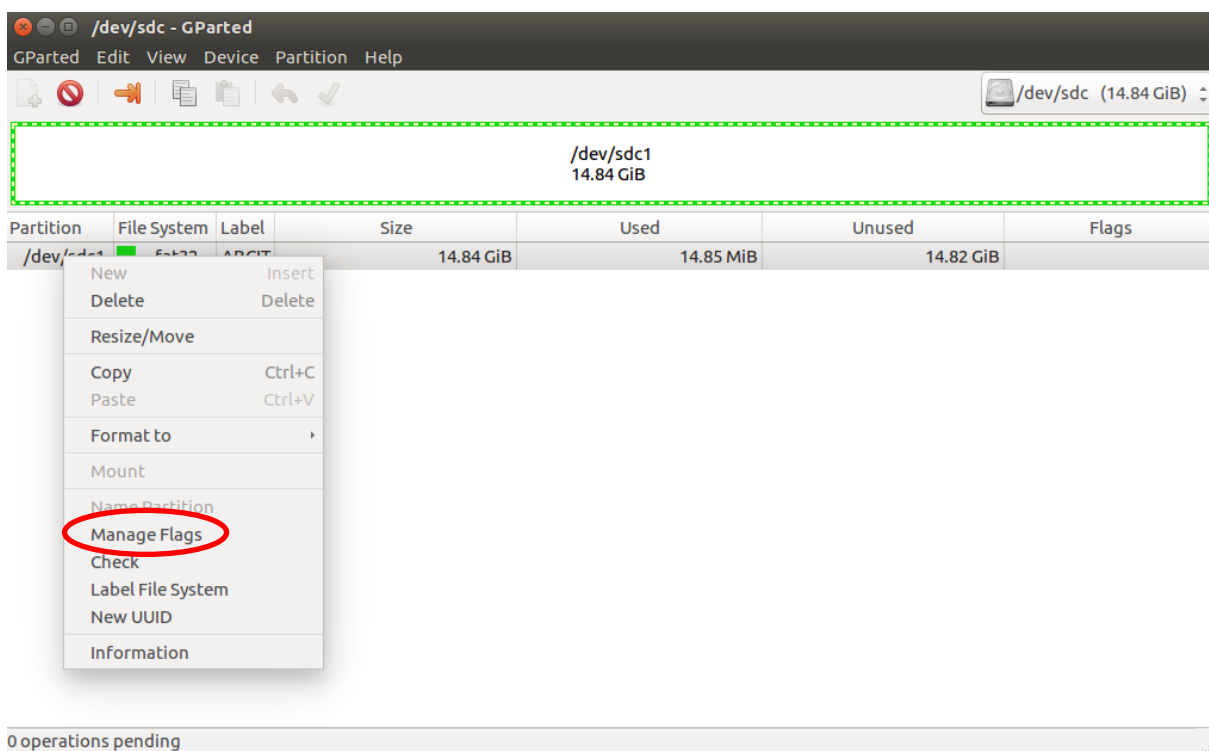
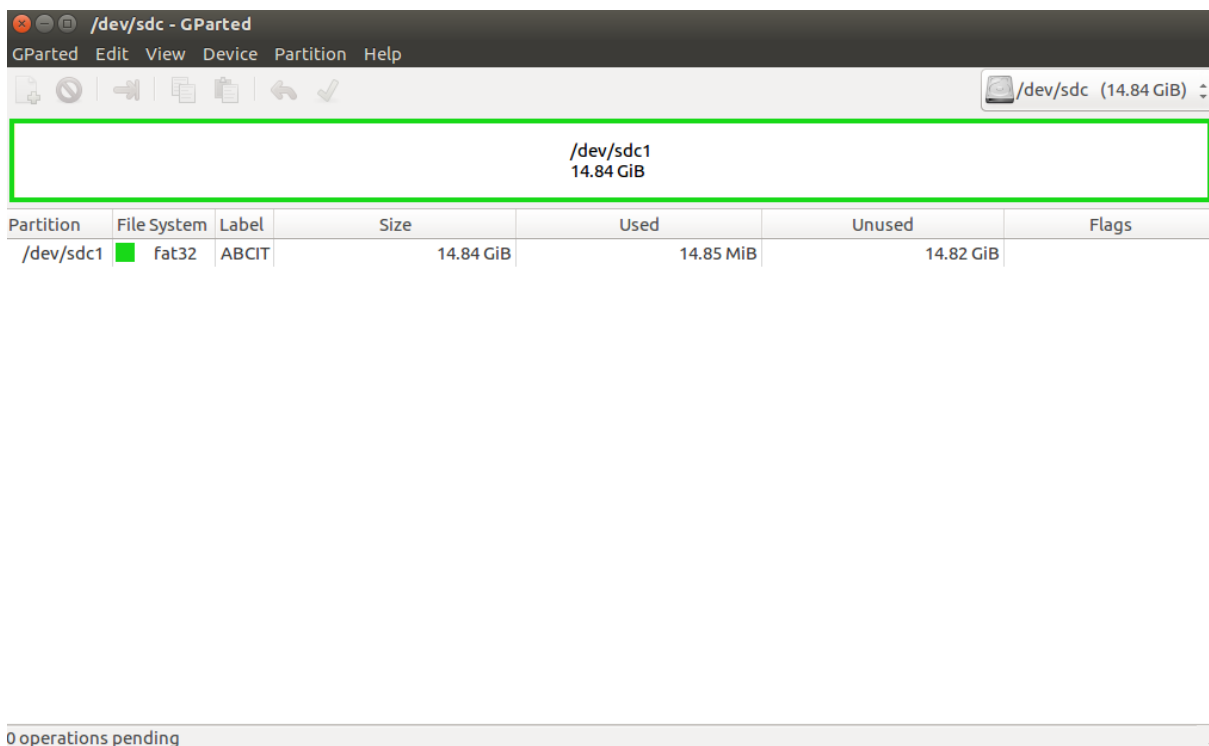
<https://wiki.ubuntuusers.de>

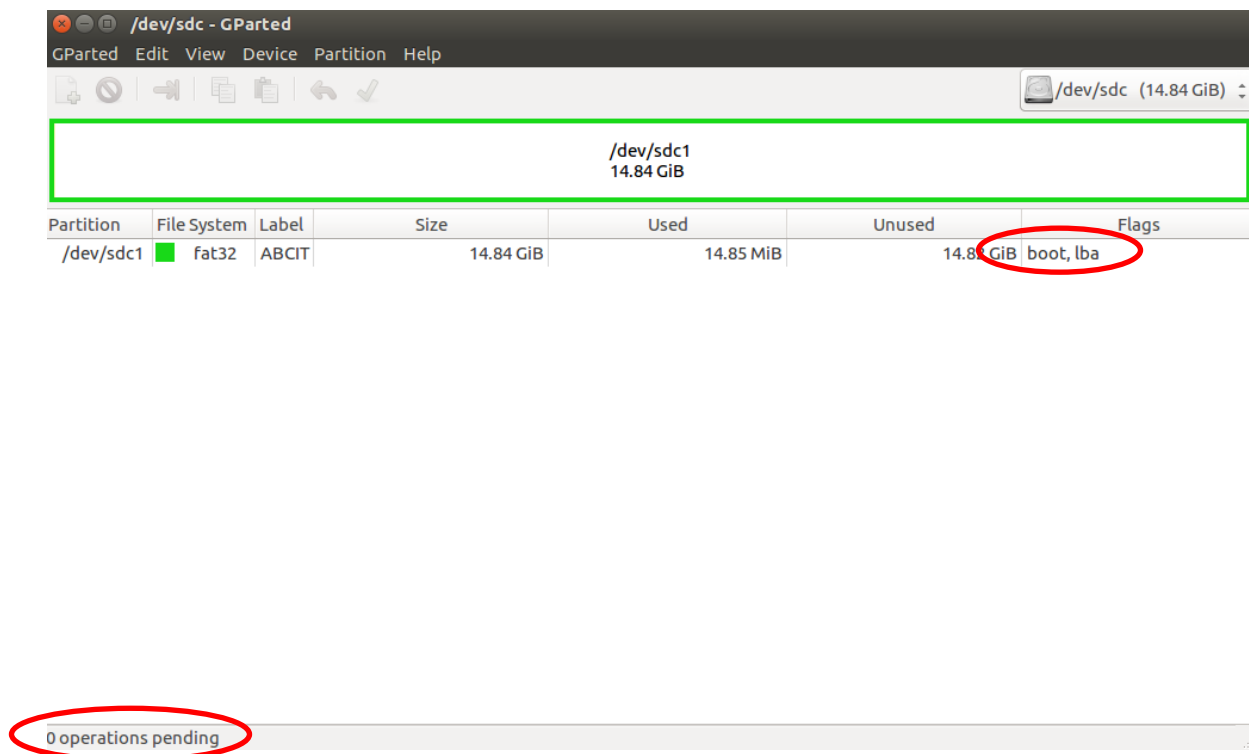
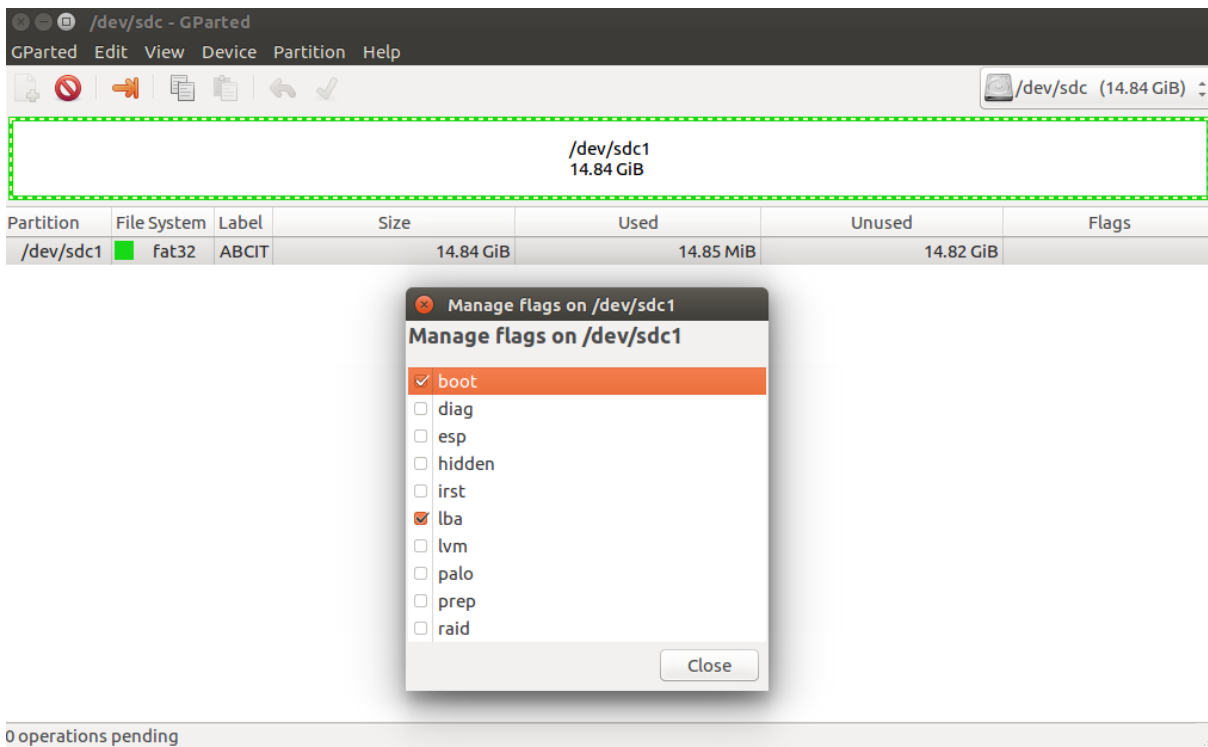
GParted

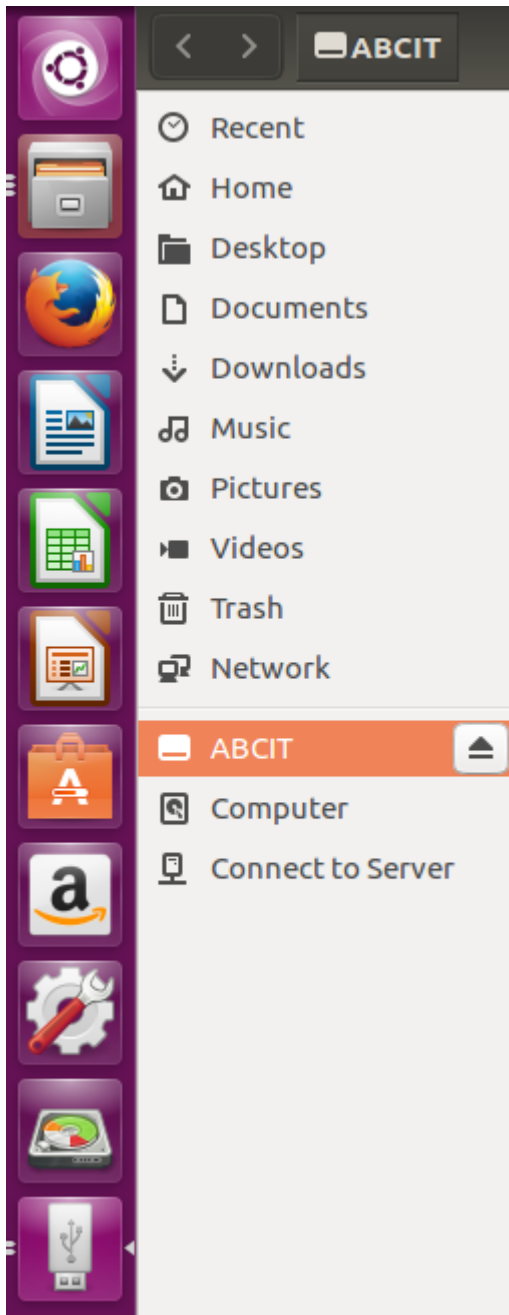












1.2 Firmware Download

Startseite - ABC IT GmbH | abcit.de

ABC IT FOR AUTOMATION

News Produkte Seminare Retrofit Services Downloads Support TV-Video

Kontakt AGB Impressum Referenzen

Besuchen Sie uns

sps ipc drives
Elektrische Automatisierung - Systeme und Komponenten

28. - 30.11.2017
Messe Nürnberg

News Mehr >

01.06 2017 >> Parallel Processing mit ABC X-CPU – Systemen

Sehr geehrte Damen und Herren,

in unregelmäßigen Abständen möchten wir Sie über Neuerungen in unseren Produkten informieren. Heute erhält das Thema *Parallel Processing* Raum und Zeit sich zu präsentieren.

„Die X-CPU – Technologie haben wir, um besonders schnelle Prozesse bearbeiten zu können, parallel zum zyklischen S7-OB1 den S7-OB2 .. S7-OB9 implementiert.“
Quelle: ABC IT GmbH

OB1 OB2 OB5

Weiterlesen >

Produkte Mehr >

ABC X-CPU-3 c57
die kompakte CPU Lösung für den Maschinen- und Anlagenbau

ABC X-CPU-2 e57
die kompakte CPU Lösung nach Ablösung des Simatic S5-Racks

ABC X-CPU-2 m57
die modulare CPU Lösung für die Simatic S5-Racks

Seminare Mehr >

S5 Retrofit
21. September 2017

<http://www.abcit.de>

https://www.abcit.de/DownloadsPage?download=X-CPU%20Systeme

DATEV Login Dashboards Vertrieb... DeepL Translator Google Übersetzer Startseite | ABC IT G... Startpage.com - Di... GMX E-Mail-Adres... iLoveIMG | Online-T... VIES Zoho CRM - Home... Zoho Campaigns Dashboard | Zoho B... SZSt: US-IdN: Best...

ABC IT
FOR INDUSTRIAL AUTOMATION

News Produkte Seminare Retrofit GD&S Services Downloads Support TV Video

Newsletter Kontakt Datenmodule AGB Impressum Referenzen

Deutsch

Downloads

X-CPU Systeme

X-CPU Systeme

- ABC X-CPU
- ABC X-CPU-2 m57
- ABC X-CPU-3 c57
- ABC X-CPU-4 w57
- ABC X-CPU-5 v57
- ABC X-CPU-6 m57

IO-Devices


- ABC IO-CMA

Industrial Panels


- ABC P-10T
- ABC P-12T
- ABC P-15T
- ABC P-18T
- ABC P-21T

Industrial Switches


- ABC S-M2080
- ABC S-U0080
- ABC S-U1040




ABC X-CPU




ABC X-CPU-2 m57
die modulare CPU Lösung für die Simatic S5-Racks




ABC X-CPU-3 c57
die kompakte CPU Lösung für den Maschinen- und Anlagenbau



ABC X-CPU-4 w57
die Software für die Anlagensimulation auf Windows Basis



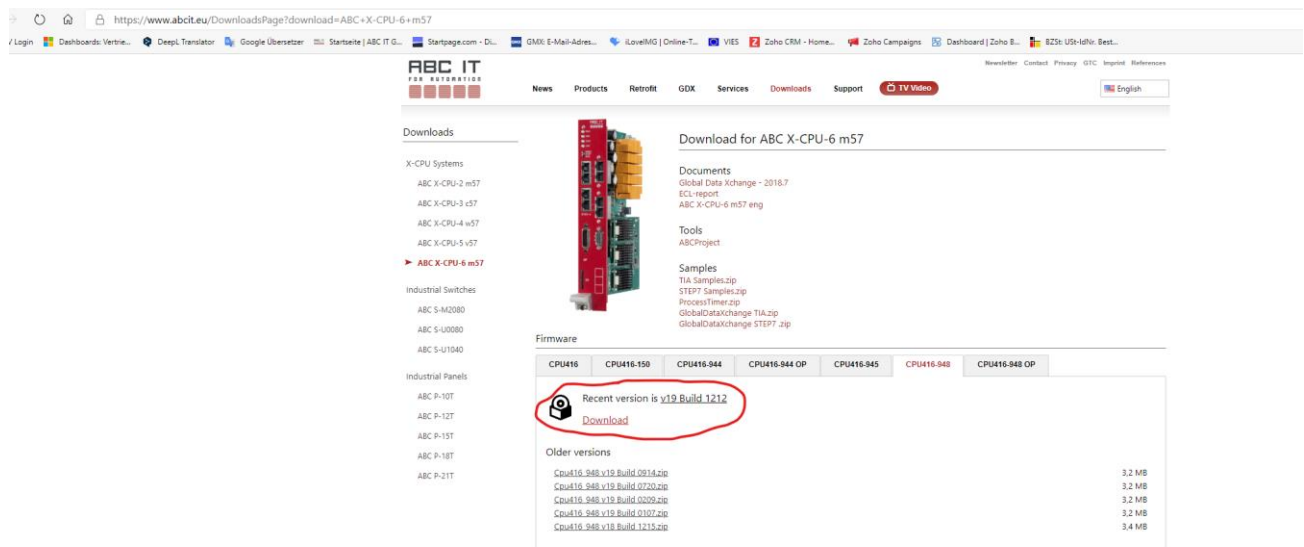
ABC X-CPU-5 v57
Panel-PC zur Steuerung und Visualisierung von Produktionsabläufen



ABC X-CPU-6 m57
die modulare CPU Lösung für die Simatic S5-Racks

<http://www.abcit.de/DownloadsPage>

1.3 Firmware Update of ABC X-CPU systems



Download for ABC X-CPU-6 m57

Documents

- Global Data Xchange - 2018.7
- ECL report
- ABC X-CPU-6 m57 eng

Tools

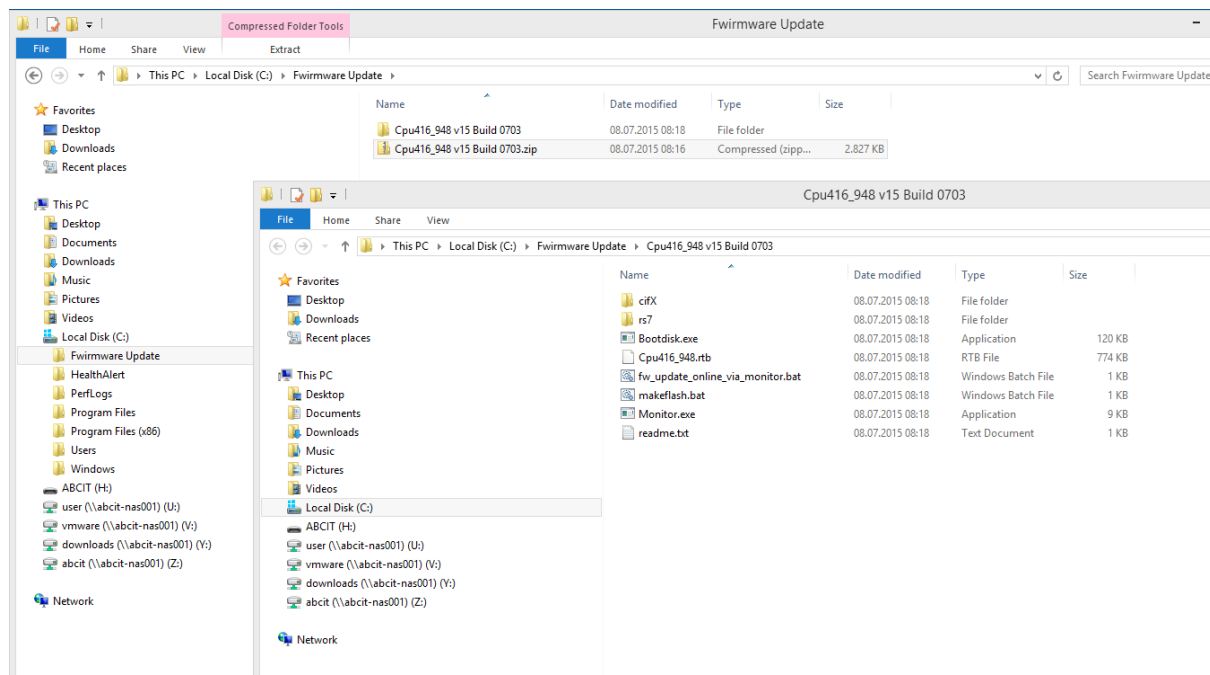
- ABCProject

Samples

- TIA Samples.zip
- STEP7 Samples.zip
- ProcessTimer.zip
- GlobalDataXchange TIA.zip
- GlobalDataXchange STEP7 .zip

Firmware

CPU416	CPU416-150	CPU416-944	CPU416-944 OP	CPU416-945	CPU416-948	CPU416-948 OP
Recent version is v19 Build 1212						
Download						
Older versions						
Cpu416_948 v19 Build 0918.zip 3.2 MB						
Cpu416_948 v19 Build 0720.zip 3.2 MB						
Cpu416_948 v19 Build 0209.zip 3.2 MB						
Cpu416_948 v19 Build 0102.zip 3.2 MB						
Cpu416_948 v18 Build 1215.zip 3.4 MB						



File Explorer - Compressed Folder Tools - Firmware Update

Path: This PC > Local Disk (C:) > Firmware Update

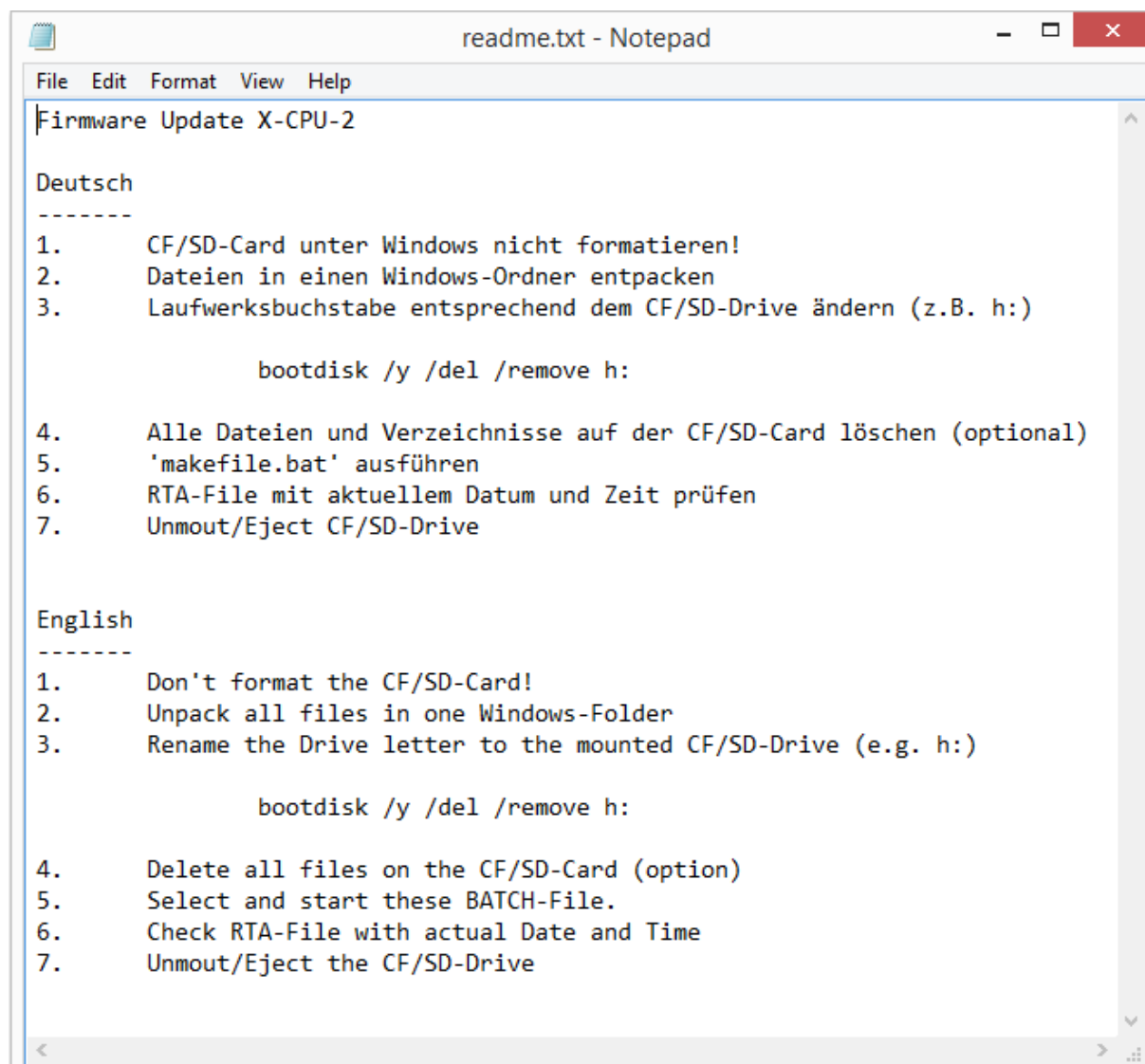
Name	Date modified	Type	Size
Cpu416_948 v15 Build 0703	08.07.2015 08:18	File folder	
Cpu416_948 v15 Build 0703.zip	08.07.2015 08:16	Compressed (zipp...)	2.827 KB

Subfolder: Cpu416_948 v15 Build 0703

Name	Date modified	Type	Size
cifX	08.07.2015 08:18	File folder	
rs7	08.07.2015 08:18	File folder	
Bootdisk.exe	08.07.2015 08:18	Application	120 KB
Cpu416_948.rtb	08.07.2015 08:18	RTB File	774 KB
fw_update_online_via_monitor.bat	08.07.2015 08:18	Windows Batch File	1 KB
makeflash.bat	08.07.2015 08:18	Windows Batch File	1 KB
Monitor.exe	08.07.2015 08:18	Application	9 KB
readme.txt	08.07.2015 08:18	Text Document	1 KB

1.3.1 Offline Update (only ABC X-CPU-6 systems)

Before you perform a firmware update, save your S5 and S7 online statuses!



```
readme.txt - Notepad
File Edit Format View Help
Firmware Update X-CPU-2

Deutsch
-----
1.      CF/SD-Card unter Windows nicht formatieren!
2.      Dateien in einen Windows-Ordner entpacken
3.      Laufwerksbuchstabe entsprechend dem CF/SD-Drive ändern (z.B. h:)

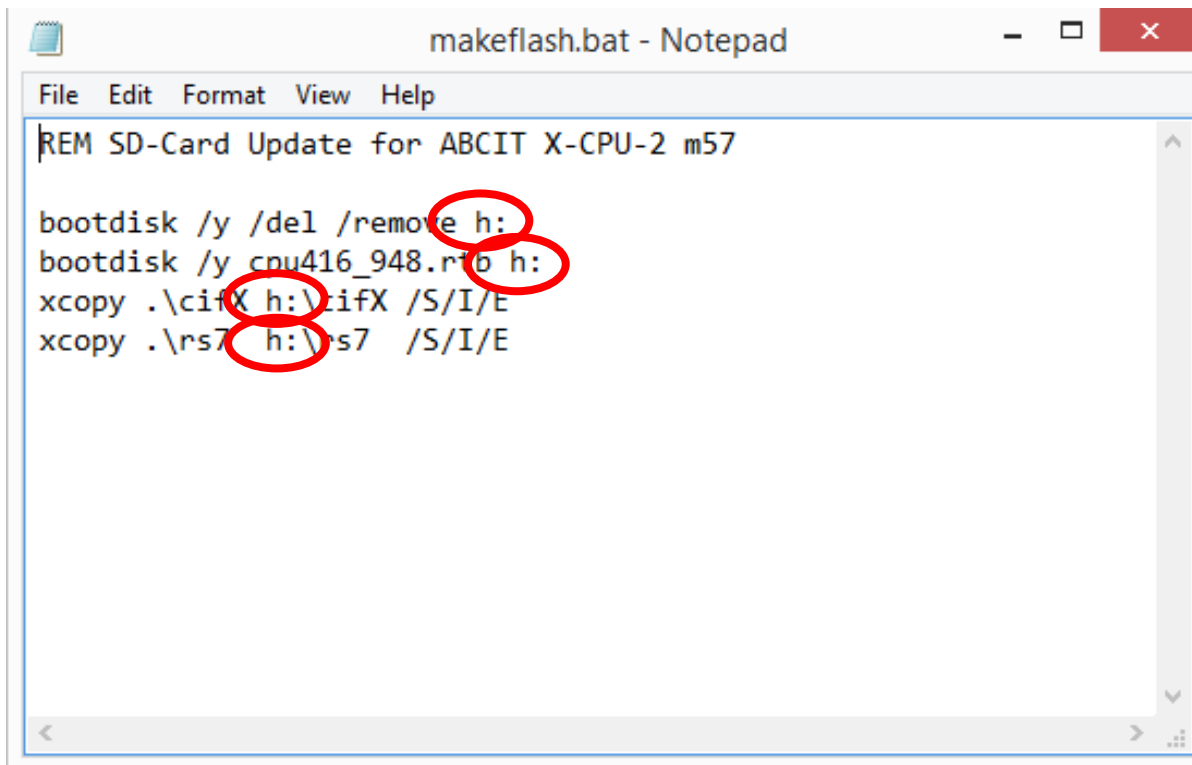
        bootdisk /y /del /remove h:

4.      Alle Dateien und Verzeichnisse auf der CF/SD-Card löschen (optional)
5.      'makefile.bat' ausführen
6.      RTA-File mit aktuellem Datum und Zeit prüfen
7.      Unmount/Eject CF/SD-Drive

English
-----
1.      Don't format the CF/SD-Card!
2.      Unpack all files in one Windows-Folder
3.      Rename the Drive letter to the mounted CF/SD-Drive (e.g. h:)

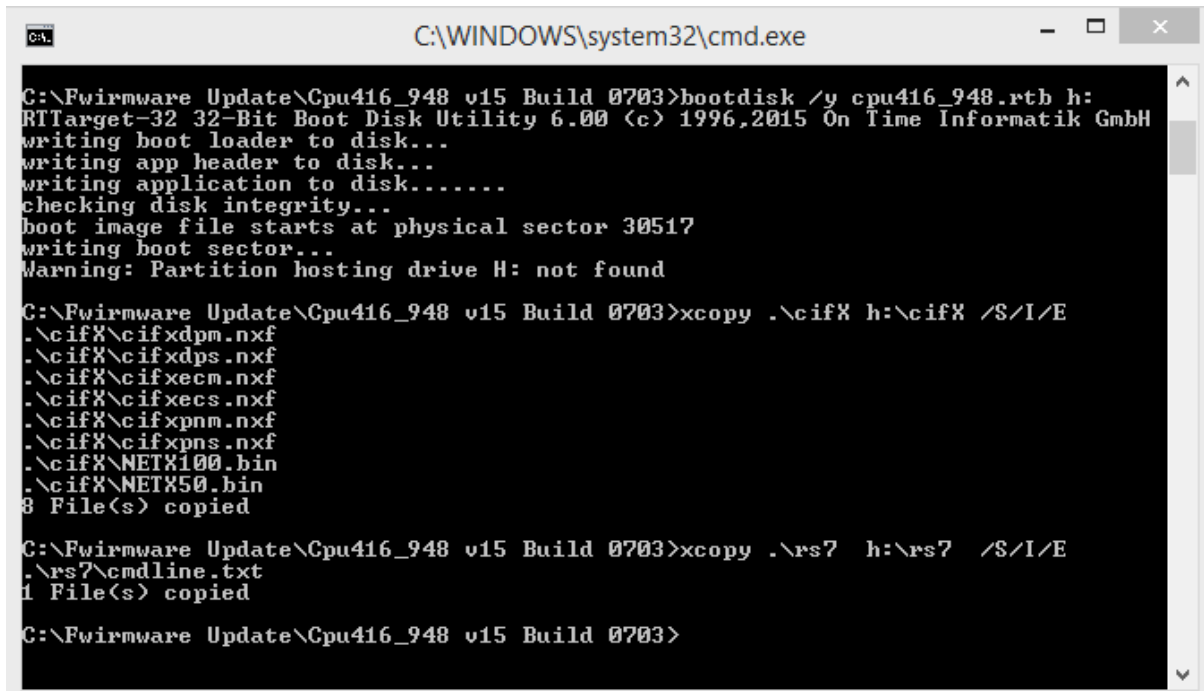
        bootdisk /y /del /remove h:

4.      Delete all files on the CF/SD-Card (option)
5.      Select and start these BATCH-File.
6.      Check RTA-File with actual Date and Time
7.      Unmount/Eject the CF/SD-Drive
```



```
makeflash.bat - Notepad
File Edit Format View Help
REM SD-Card Update for ABCIT X-CPU-2 m57

bootdisk /y /del /remove h:
bootdisk /y cpu416_948.rtb h:
xcopy .\cifX h:\cifX /S/I/E
xcopy .\rs7 h:\rs7 /S/I/E
```



```
C:\WINDOWS\system32\cmd.exe
C:\Firmware Update\Cpu416_948 v15 Build 0703>bootdisk /y cpu416_948.rtb h:
RTTarget-32 32-Bit Boot Disk Utility 6.00 (c) 1996,2015 On Time Informatik GmbH
writing boot loader to disk...
writing app header to disk...
writing application to disk.....
checking disk integrity...
boot image file starts at physical sector 30517
writing boot sector...
Warning: Partition hosting drive H: not found

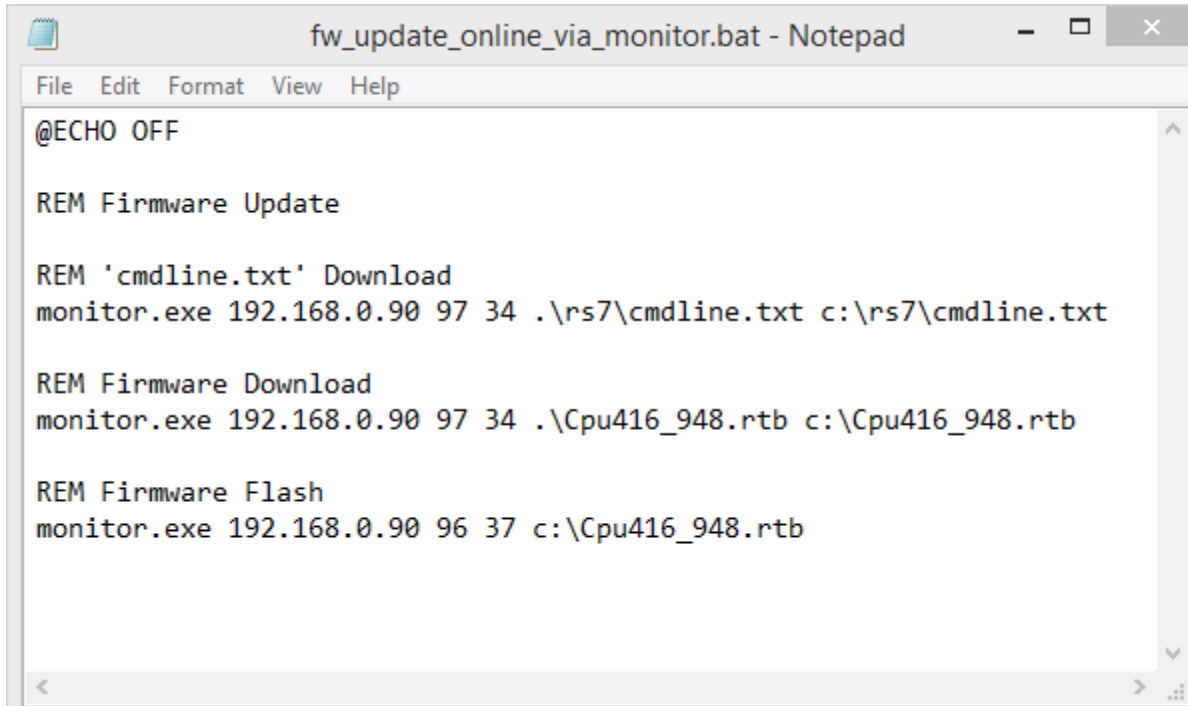
C:\Firmware Update\Cpu416_948 v15 Build 0703>xcopy .\cifX h:\cifX /S/I/E
.\cifX\cifxdpm.nxf
.\cifX\cifxdps.nxf
.\cifX\cifxecm.nxf
.\cifX\cifxecs.nxf
.\cifX\cifxpmn.nxf
.\cifX\cifxpns.nxf
.\cifX\NETX100.bin
.\cifX\NETX50.bin
8 File(s) copied

C:\Firmware Update\Cpu416_948 v15 Build 0703>xcopy .\rs7 h:\rs7 /S/I/E
.\rs7\cmdline.txt
1 File(s) copied

C:\Firmware Update\Cpu416_948 v15 Build 0703>
```

1.3.2 Online Update

Before you perform a firmware update, save your S5 and S7 online statuses!



```
fw_update_online_via_monitor.bat - Notepad
File Edit Format View Help
@ECHO OFF

REM Firmware Update

REM 'cmdline.txt' Download
monitor.exe 192.168.0.90 97 34 .\rs7\cmdline.txt c:\rs7\cmdline.txt

REM Firmware Download
monitor.exe 192.168.0.90 97 34 .\Cpu416_948.rtb c:\Cpu416_948.rtb

REM Firmware Flash
monitor.exe 192.168.0.90 96 37 c:\Cpu416_948.rtb
```

If necessary, change 'fw_update_online_via_monitor.bat' according to your settings and requirements.

The monitor program can be used to copy any file to the internal data store:

- Monitor <TCP/IP Address> 97 34 <Source> <Destination>

The command for firmware update:

- Monitor <TCP/IP Address> 96 37 <Destination>

Please turn the module off after a firmware update!

If necessary you must retransmit the S5/S7-Programs.

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

C:\Firmware Update\Cpu416_948 v15 Build 0703>flash
C:\Firmware Update\Cpu416_948 v15 Build 0703>REM Firmware Download
C:\Firmware Update\Cpu416_948 v15 Build 0703>monitor.exe 192.168.0.90 97 34 .\C
pu416_948.rtb c:\Cpu416_948.rtb
(c) by ABC IT GmbH 2015 Monitor for ABCIT X-CPU-2/3 Technology

Common Function for File Download is still active ...
Done with ret = 0

C:\Firmware Update\Cpu416_948 v15 Build 0703>REM Firmware Flash
C:\Firmware Update\Cpu416_948 v15 Build 0703>monitor.exe 192.168.0.90 96 37 c:\
Cpu416_948.rtb
(c) by ABC IT GmbH 2015 Monitor for ABCIT X-CPU-2/3 Technology

Common Function for Firmware Flashing is still active ...
Done with ret = 0

C:\Firmware Update\Cpu416_948 v15 Build 0703>
```

Firmware Download – and Flash – Process