



User manual

ABC-CPU systems

Firmware Update

36/2017

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

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STEP is a registered trademark of AG

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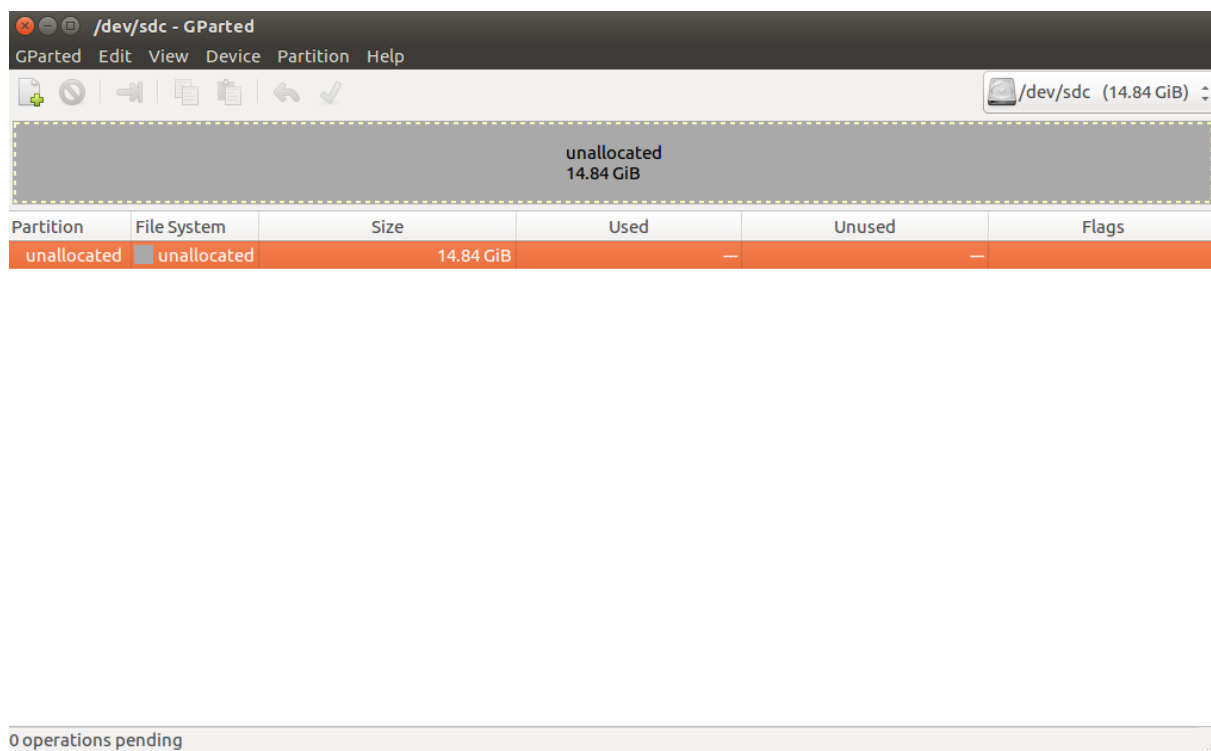
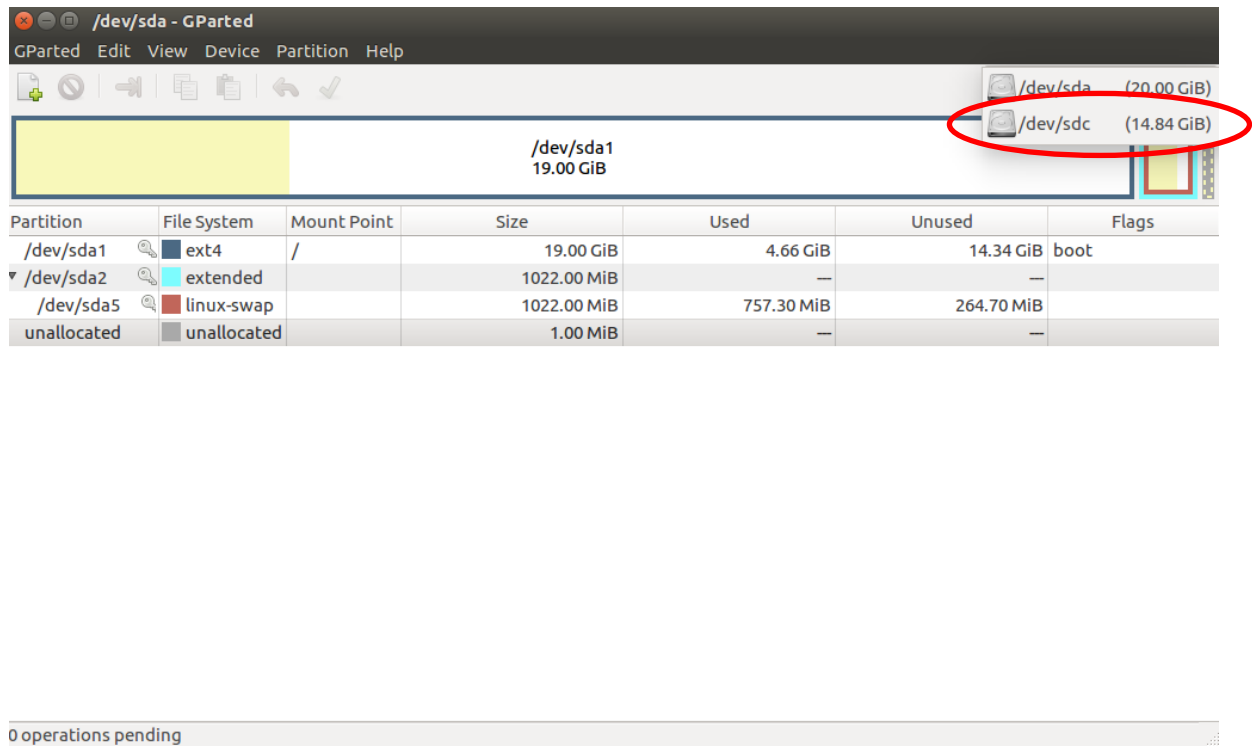
1. Firmware Update

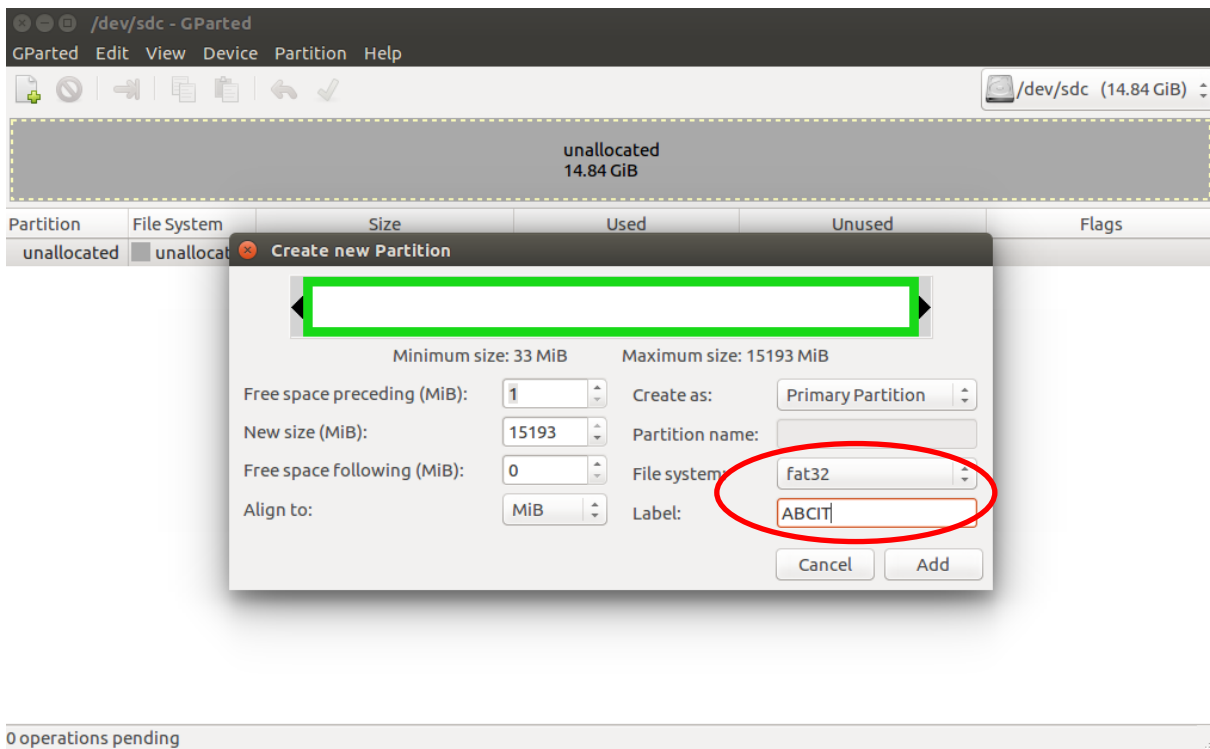
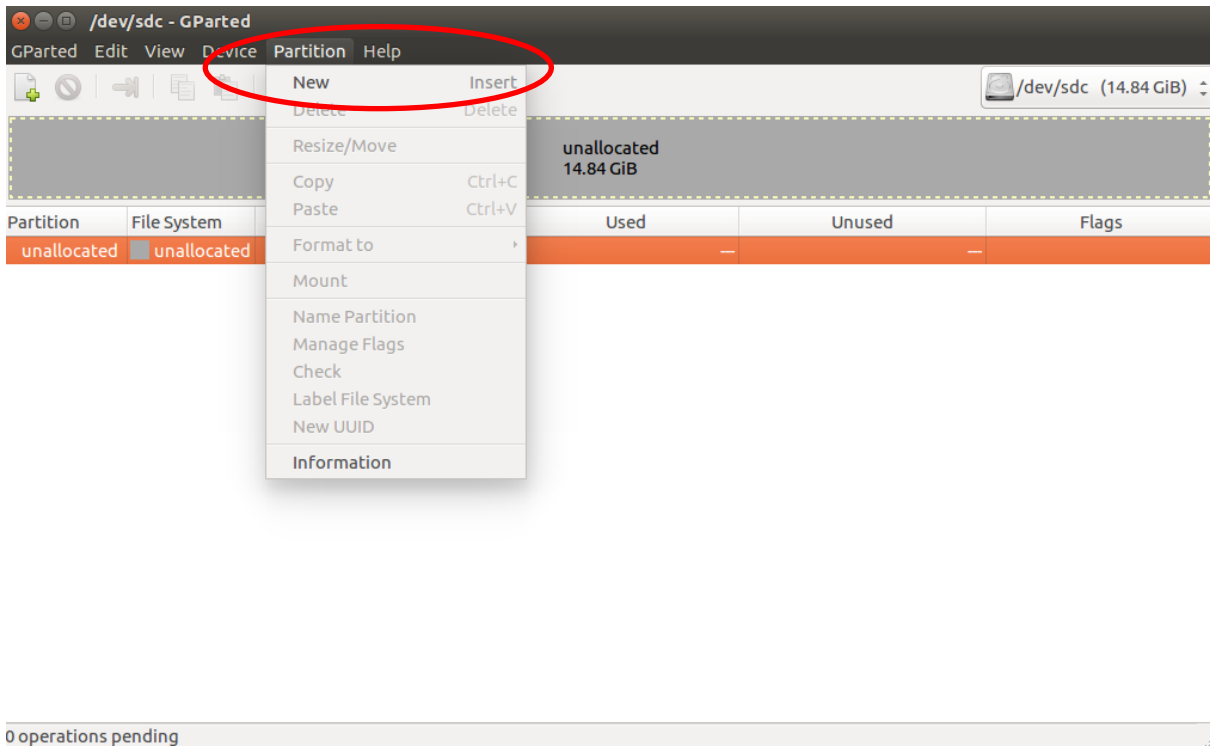
1.1 Set up SD-card under Ubuntu

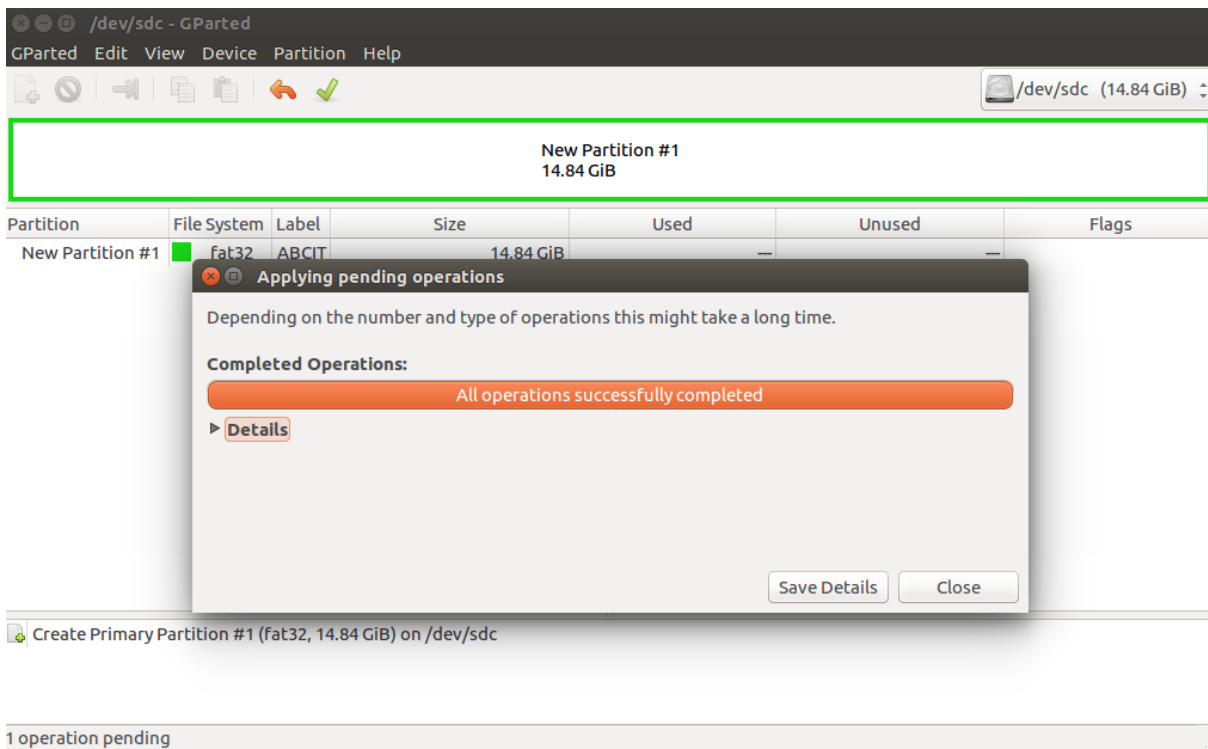
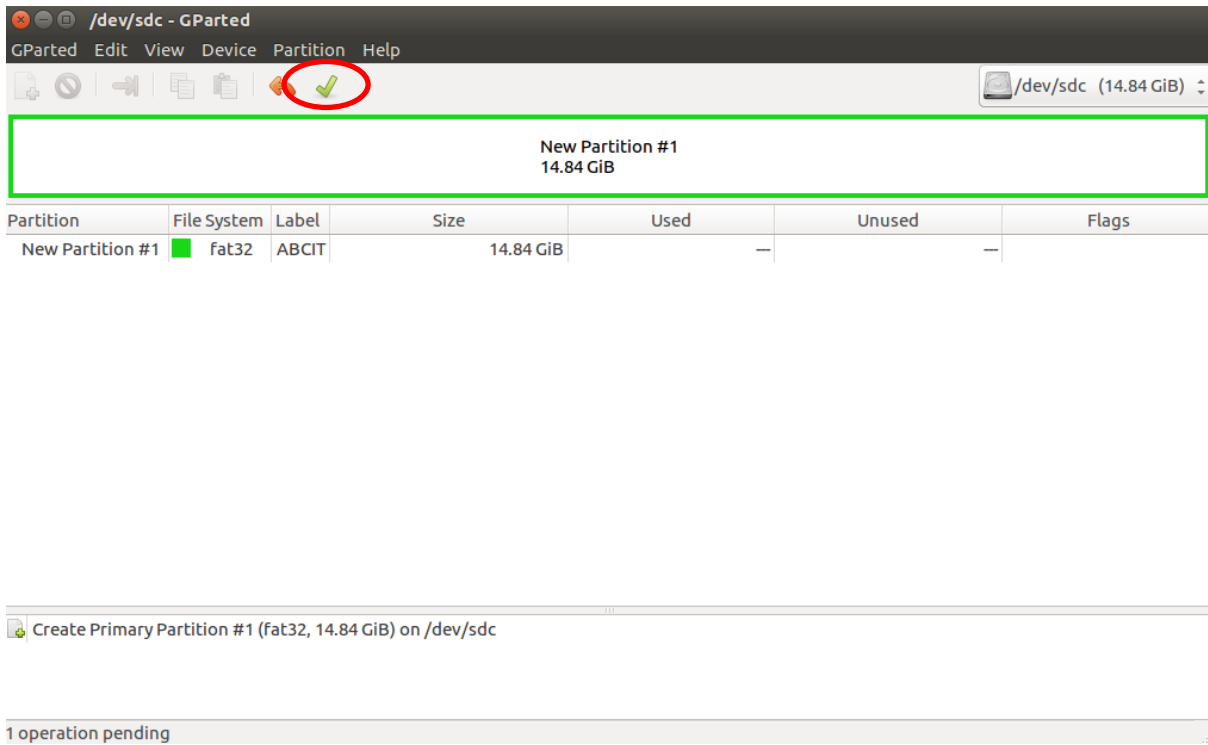


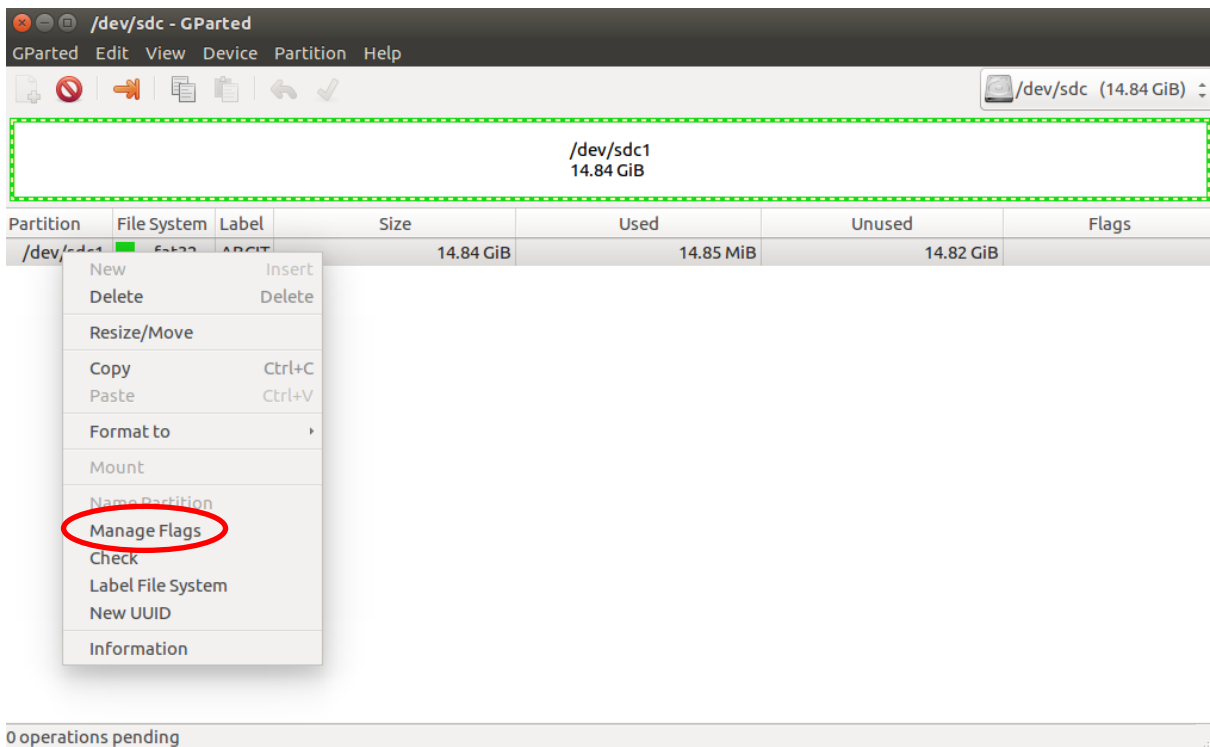
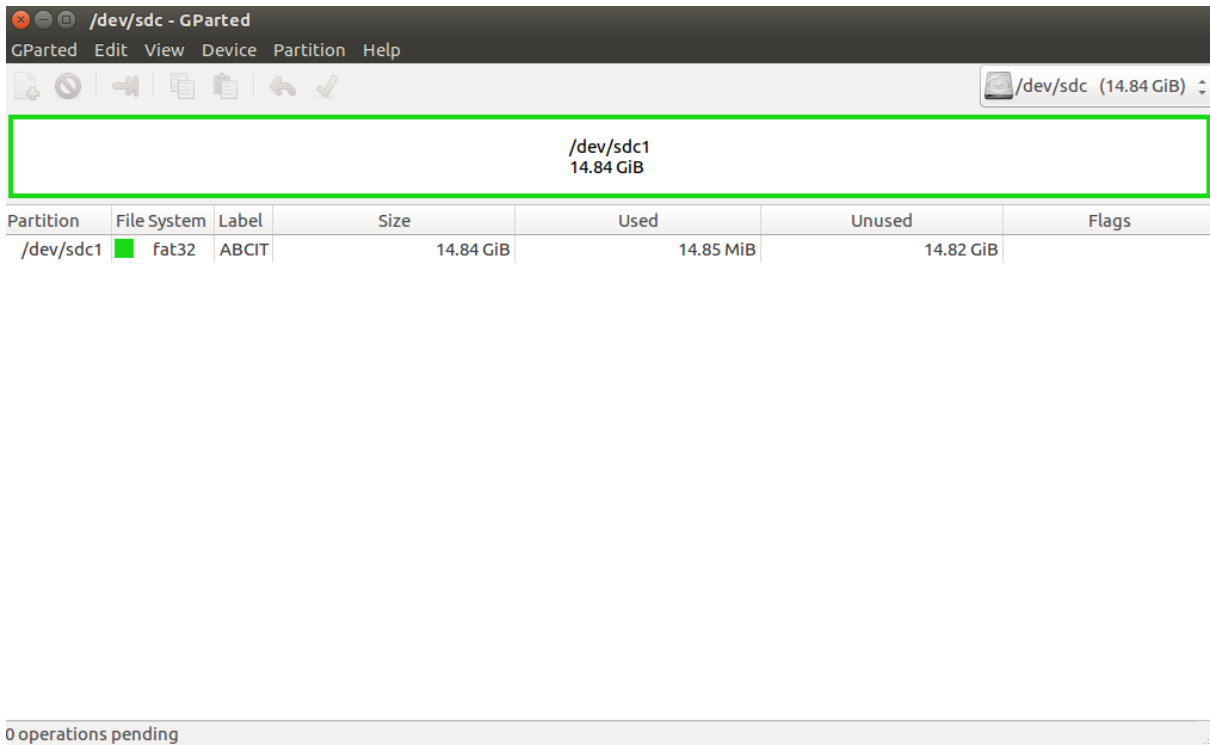
<https://wiki.ubuntuusers.de>

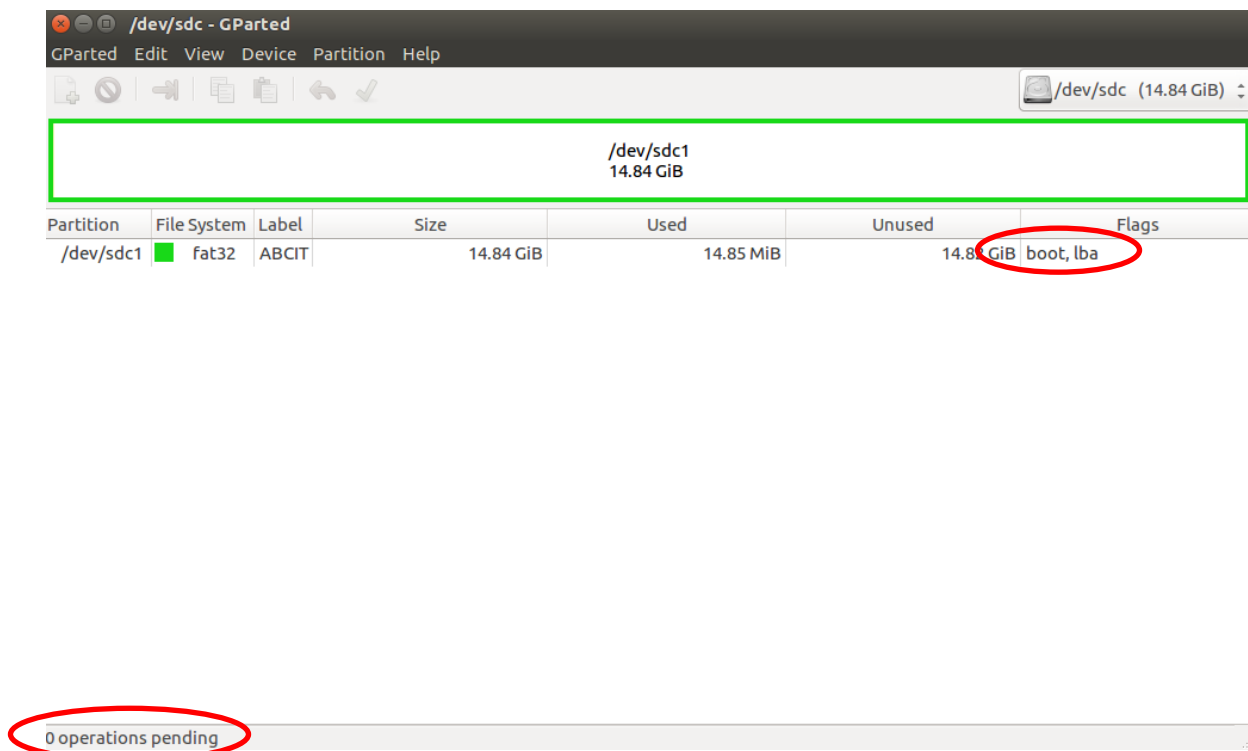
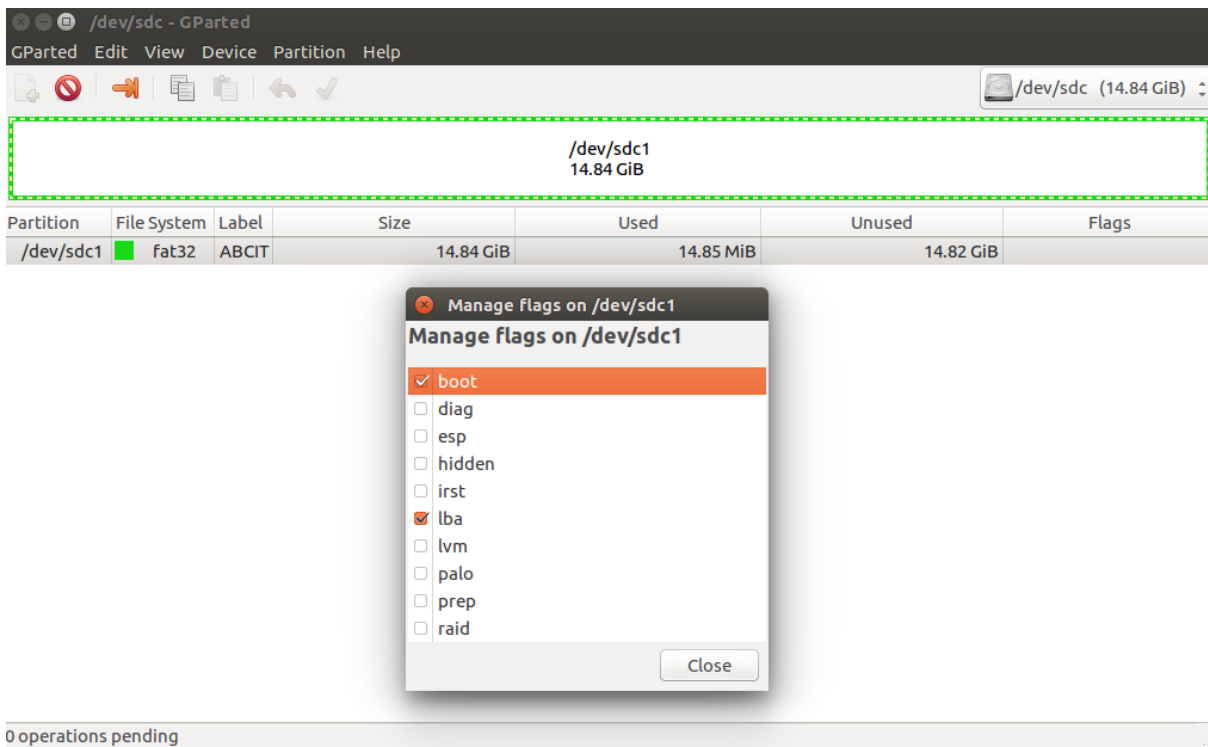
GParted

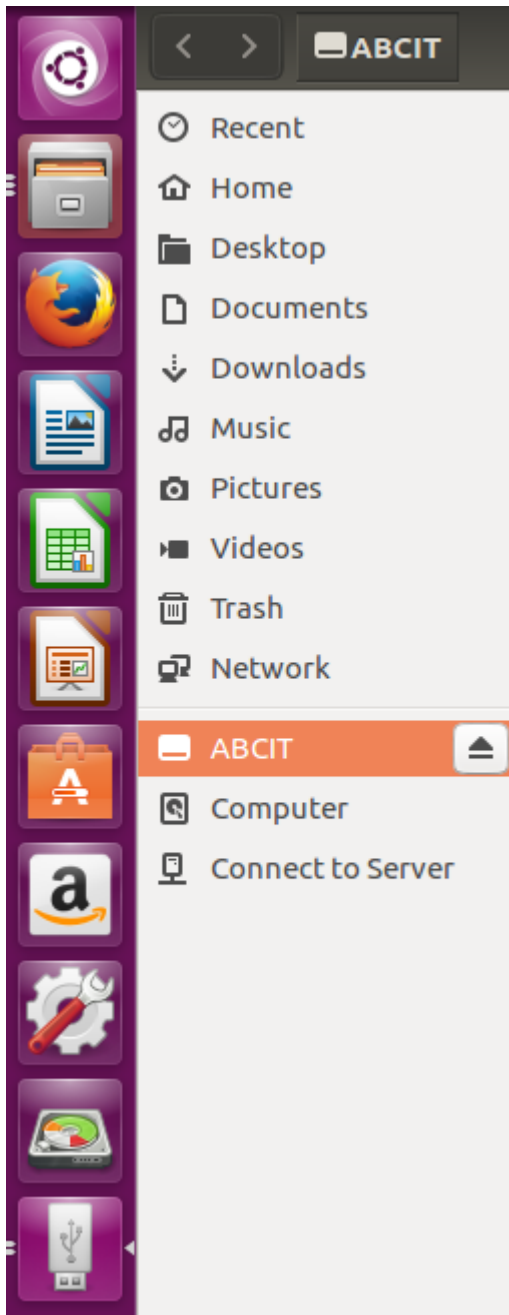












1.2 Firmware Download

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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

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S5 Retrofit
21. September 2017

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Downloads

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-EXT-2

Download für ABC X-CPU-2 m57

Produktübersicht

Zur Produktübersicht

Dokumente

Parallel Processing - 2017.18

m57 Handbuch

m57 Datenblatt

Global Data Xchange - 2017.18

e57 Datenblatt

Tools

ABCProject

Beispiele

TIA Samples.zip

STEP7 Samples.zip

ProcessTimer.zip

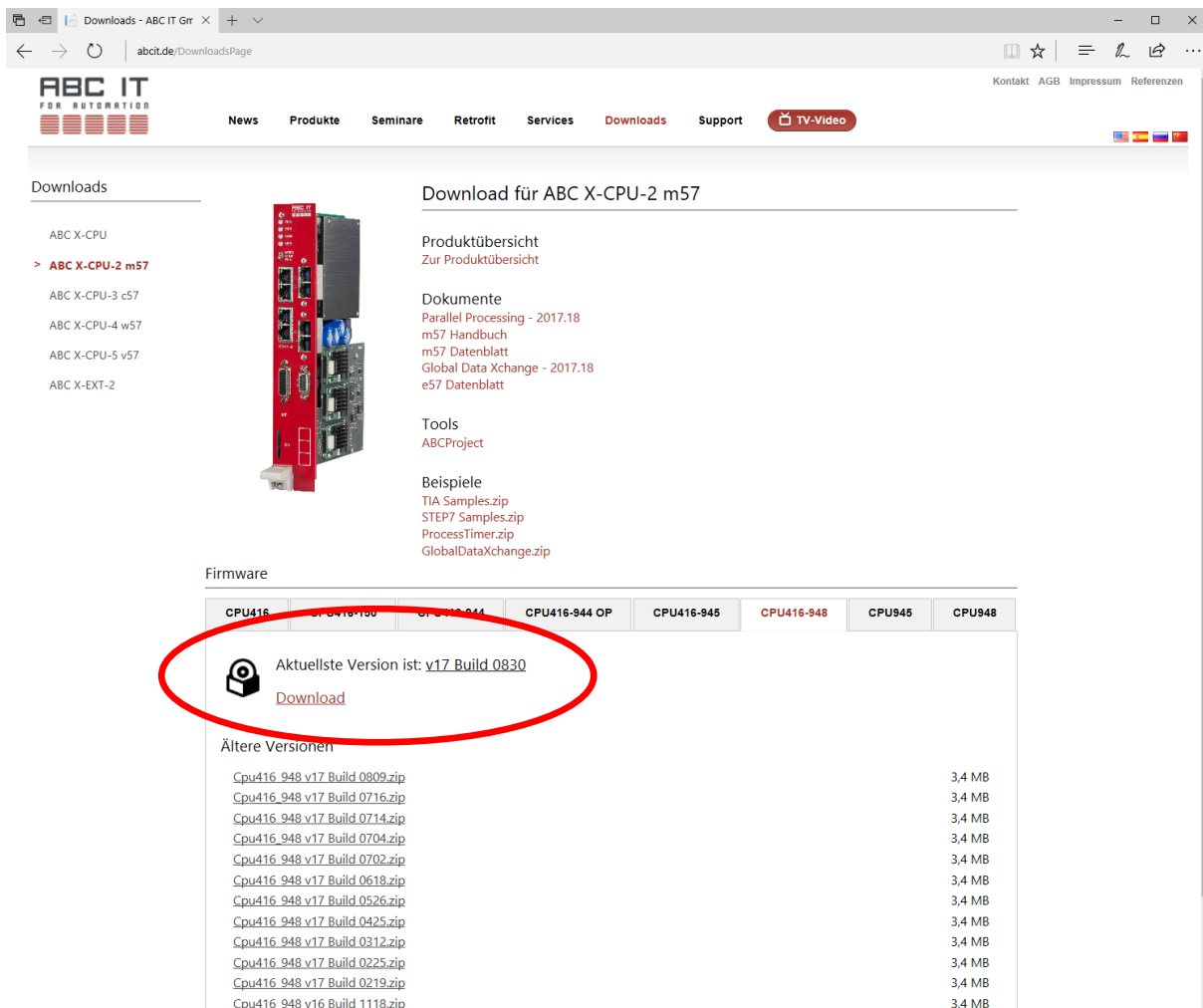
GlobalDataXchange.zip

Firmware

CPU416	CPU416-150	CPU416-944	CPU416-944 OP	CPU416-945	CPU416-948	CPU945	CPU948																				
<div> Aktuellste Version ist: v17 Build 0704 Download </div> <div> Ältere Versionen <table> <tr><td>Cpu416 v17 Build 0618.zip</td><td>3,3 MB</td></tr> <tr><td>Cpu416 v17 Build 0526.zip</td><td>3,3 MB</td></tr> <tr><td>Cpu416 v17 Build 0425.zip</td><td>3,3 MB</td></tr> <tr><td>Cpu416 v17 Build 0312.zip</td><td>3,3 MB</td></tr> <tr><td>Cpu416 v17 Build 0219.zip</td><td>3,3 MB</td></tr> <tr><td>Cpu416 v16 Build 1006.zip</td><td>3,3 MB</td></tr> <tr><td>Cpu416 v16 Build 0919.zip</td><td>3,3 MB</td></tr> <tr><td>Cpu416 v14 Build 1218.zip</td><td>2,7 MB</td></tr> <tr><td>Cpu416 v13 Build 0914.zip</td><td>2,6 MB</td></tr> <tr><td>Cpu416 v12 Build 1220.zip</td><td>1,8 MB</td></tr> </table> </div>								Cpu416 v17 Build 0618.zip	3,3 MB	Cpu416 v17 Build 0526.zip	3,3 MB	Cpu416 v17 Build 0425.zip	3,3 MB	Cpu416 v17 Build 0312.zip	3,3 MB	Cpu416 v17 Build 0219.zip	3,3 MB	Cpu416 v16 Build 1006.zip	3,3 MB	Cpu416 v16 Build 0919.zip	3,3 MB	Cpu416 v14 Build 1218.zip	2,7 MB	Cpu416 v13 Build 0914.zip	2,6 MB	Cpu416 v12 Build 1220.zip	1,8 MB
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Cpu416 v12 Build 1220.zip	1,8 MB																										

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

1.3 Firmware Update of ABC X-CPU systems



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Downloads

- 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-EXT-2

Download für ABC X-CPU-2 m57

Produktübersicht
[Zur Produktübersicht](#)

Dokumente

- Parallel Processing - 2017.18
- m57 Handbuch
- m57 Datenblatt
- Global Data Xchange - 2017.18
- e57 Datenblatt

Tools

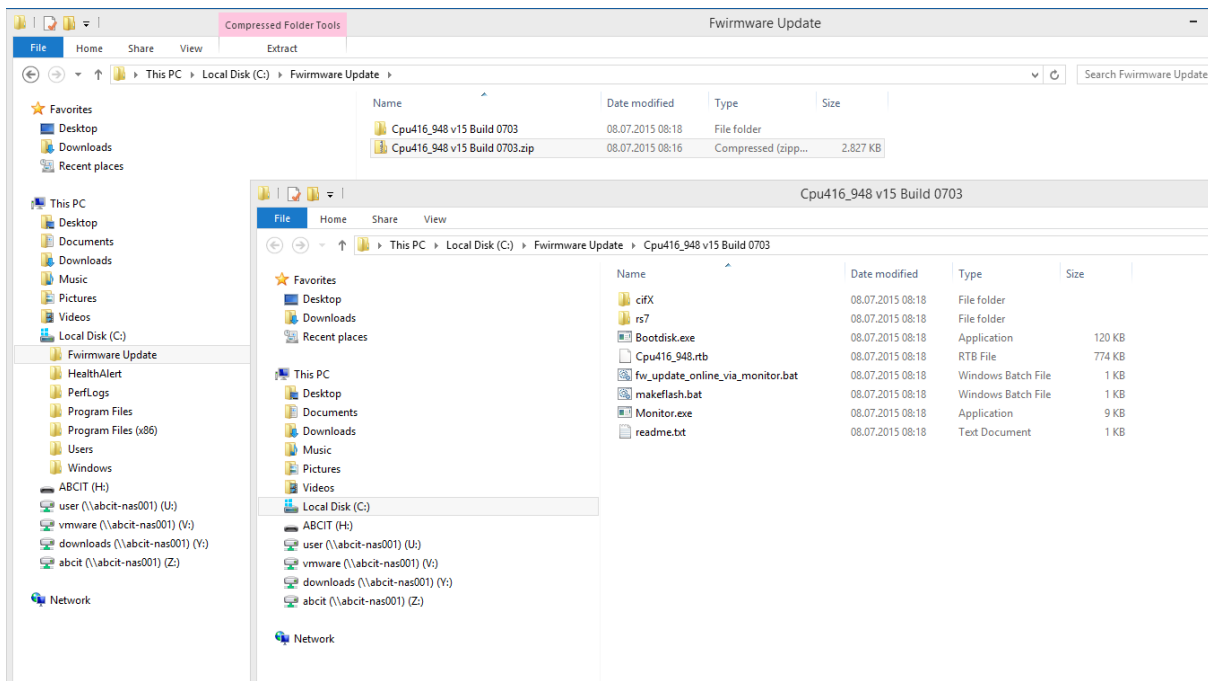
- ABCProject

Beispiele

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

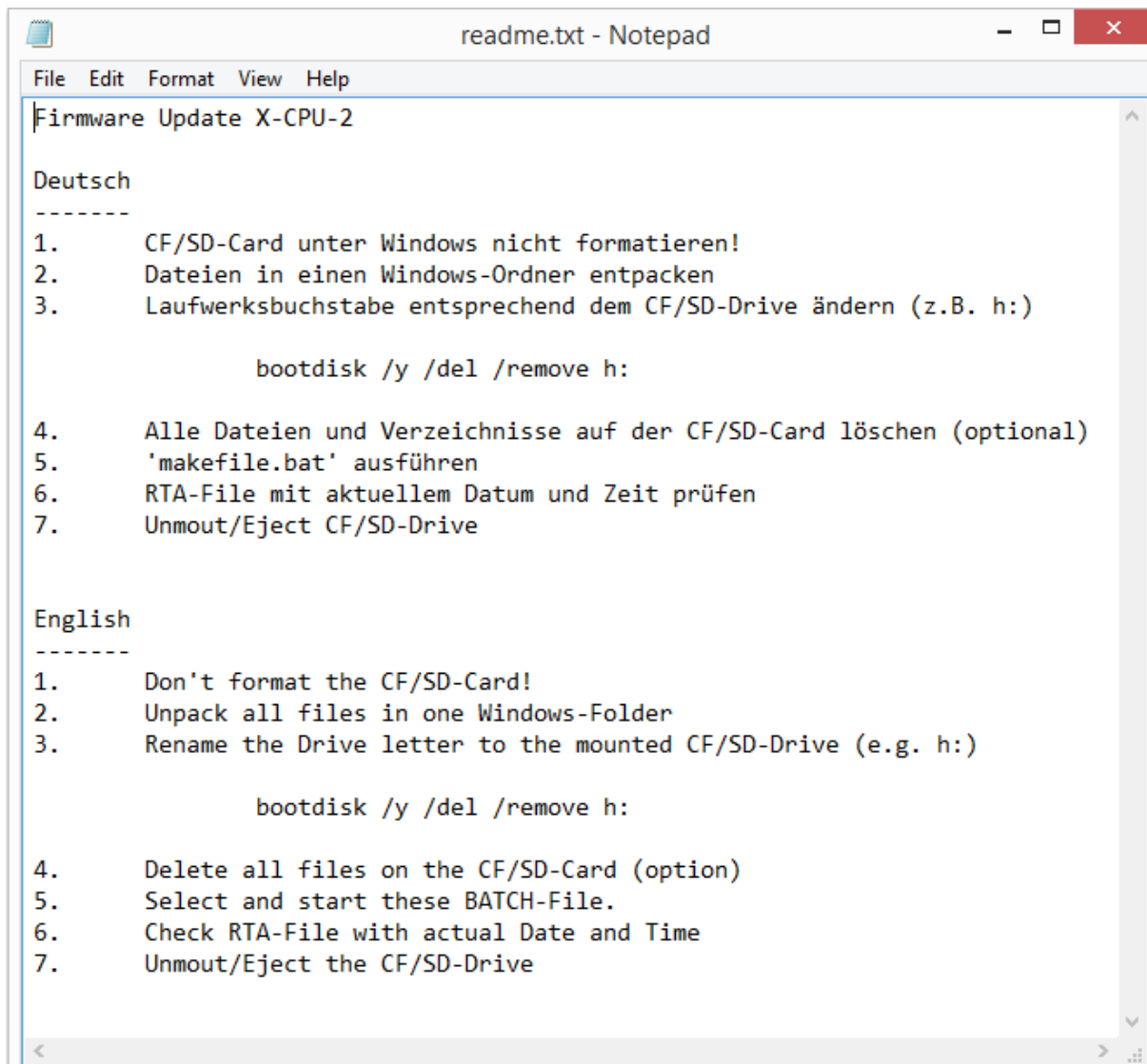
Firmware

CPU416	CPU416-948	CPU416-944	CPU416-944 OP	CPU416-945	CPU416-948	CPU945	CPU948																										
<p>Aktuellste Version ist: v17 Build 0830</p> <p>Download</p> <p>Ältere Versionen</p> <table><thead><tr><th>File Name</th><th>Size</th></tr></thead><tbody><tr><td>Cpu416_948 v17 Build 0809.zip</td><td>3,4 MB</td></tr><tr><td>Cpu416_948 v17 Build 0716.zip</td><td>3,4 MB</td></tr><tr><td>Cpu416_948 v17 Build 0714.zip</td><td>3,4 MB</td></tr><tr><td>Cpu416_948 v17 Build 0704.zip</td><td>3,4 MB</td></tr><tr><td>Cpu416_948 v17 Build 0702.zip</td><td>3,4 MB</td></tr><tr><td>Cpu416_948 v17 Build 0618.zip</td><td>3,4 MB</td></tr><tr><td>Cpu416_948 v17 Build 0526.zip</td><td>3,4 MB</td></tr><tr><td>Cpu416_948 v17 Build 0425.zip</td><td>3,4 MB</td></tr><tr><td>Cpu416_948 v17 Build 0312.zip</td><td>3,4 MB</td></tr><tr><td>Cpu416_948 v17 Build 0225.zip</td><td>3,4 MB</td></tr><tr><td>Cpu416_948 v17 Build 0219.zip</td><td>3,4 MB</td></tr><tr><td>Cpu416_948 v16 Build 1118.zip</td><td>3,4 MB</td></tr></tbody></table>								File Name	Size	Cpu416_948 v17 Build 0809.zip	3,4 MB	Cpu416_948 v17 Build 0716.zip	3,4 MB	Cpu416_948 v17 Build 0714.zip	3,4 MB	Cpu416_948 v17 Build 0704.zip	3,4 MB	Cpu416_948 v17 Build 0702.zip	3,4 MB	Cpu416_948 v17 Build 0618.zip	3,4 MB	Cpu416_948 v17 Build 0526.zip	3,4 MB	Cpu416_948 v17 Build 0425.zip	3,4 MB	Cpu416_948 v17 Build 0312.zip	3,4 MB	Cpu416_948 v17 Build 0225.zip	3,4 MB	Cpu416_948 v17 Build 0219.zip	3,4 MB	Cpu416_948 v16 Build 1118.zip	3,4 MB
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Cpu416_948 v16 Build 1118.zip	3,4 MB																																



1.3.1 Offline Update (only ABC X-CPU-2 systems)

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



The image shows a Notepad window with the title 'readme.txt - Notepad'. The menu bar includes 'File', 'Edit', 'Format', 'View', and 'Help'. The text content is as follows:

```
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:)

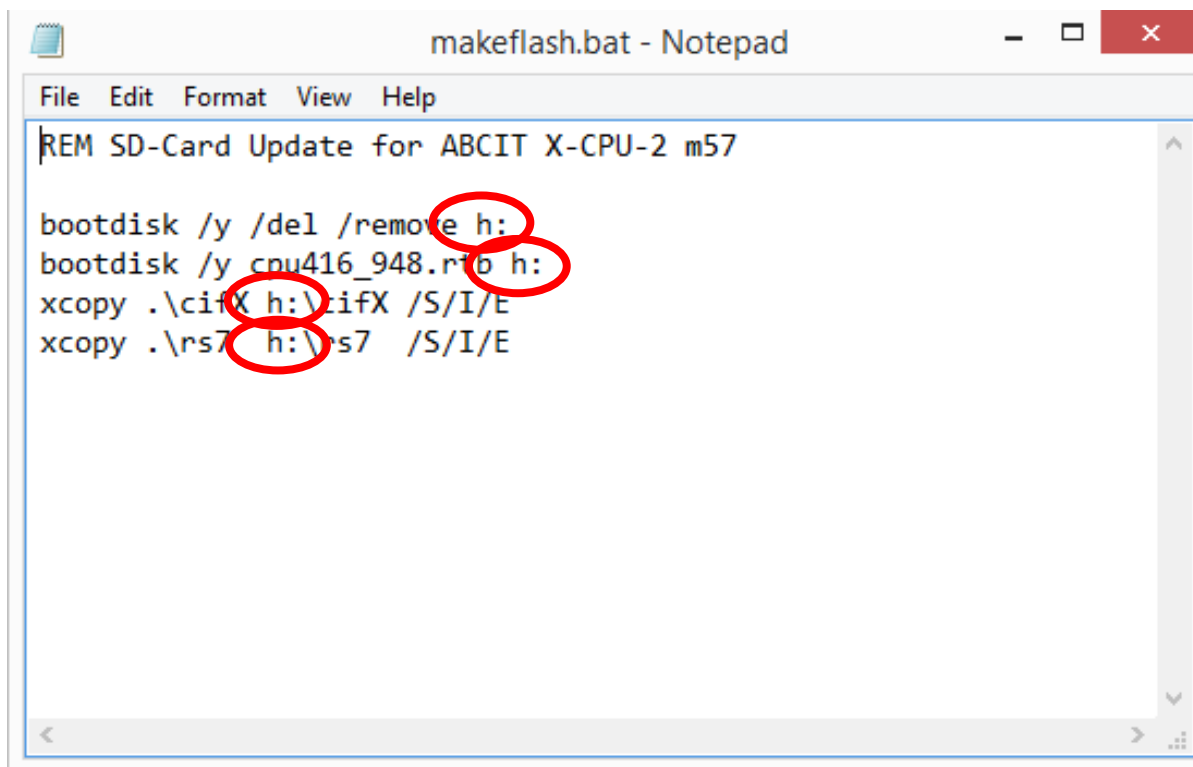
        bootdisk /y /del /remove h:

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:)

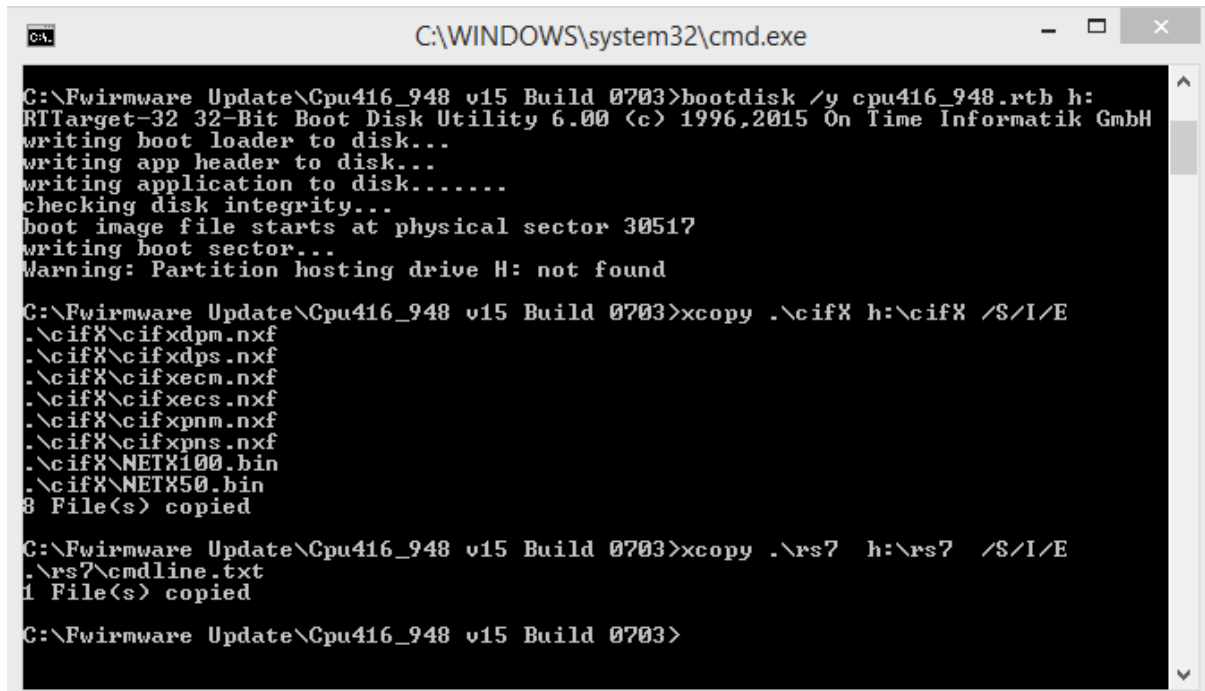
        bootdisk /y /del /remove h:

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

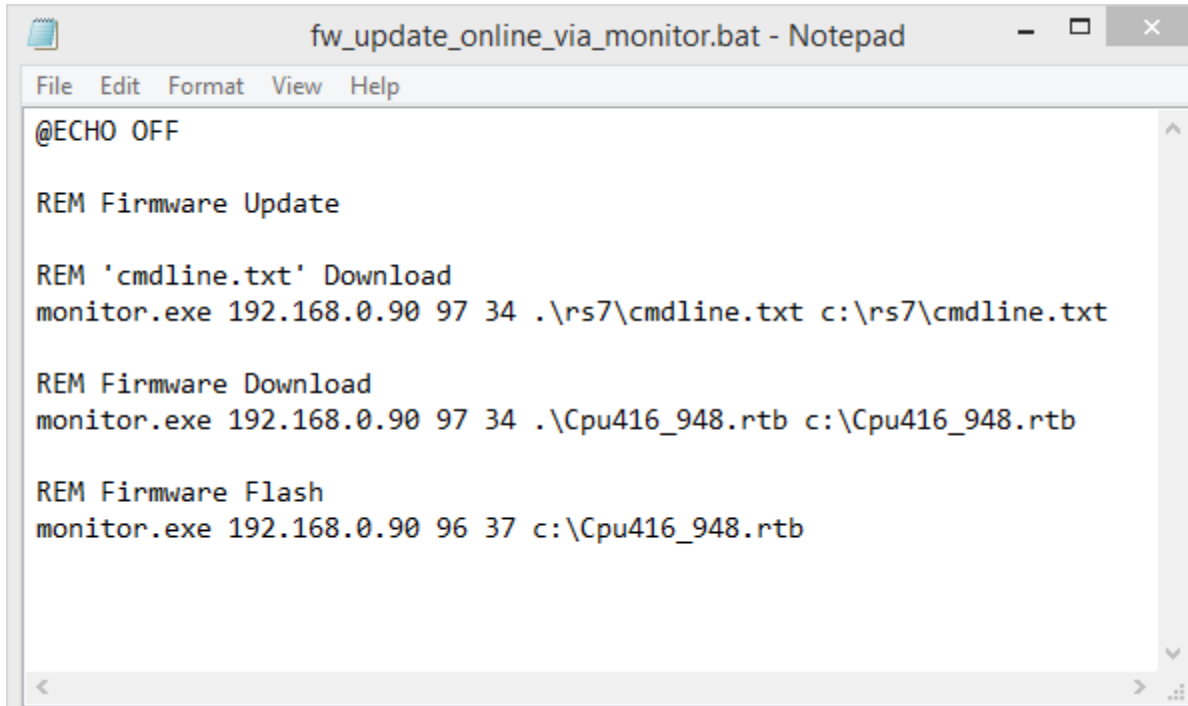
C:\Firmware Update\Cpu416_948 v15 Build 0703>xcopy .\cifX h:\cifX /S/I/E
.\cifX\cifxdpm.nxf
.\cifX\cifxdps.nxf
.\cifX\cifxecm.nxf
.\cifX\cifxecs.nxf
.\cifX\cifxpmn.nxf
.\cifX\cifxpns.nxf
.\cifX\NETX100.bin
.\cifX\NETX50.bin
8 File(s) copied

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:

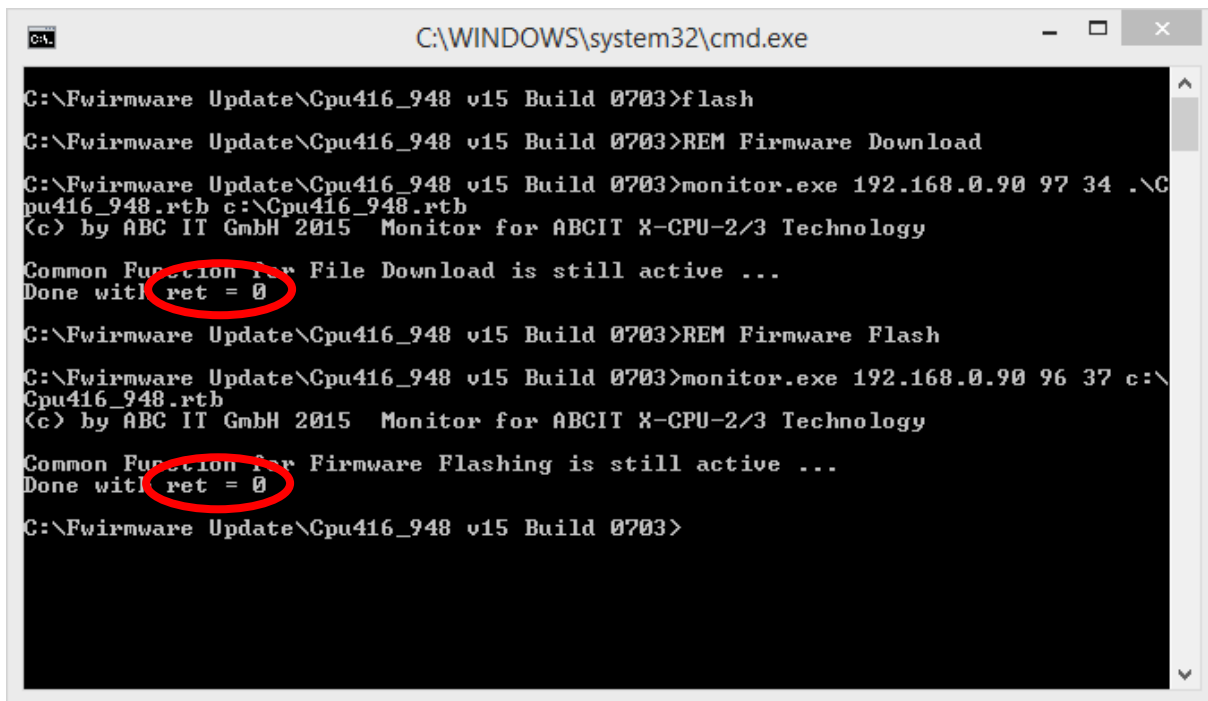
- Monitor <TCP/IP Address> 97 34 <Source> <Destination>

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