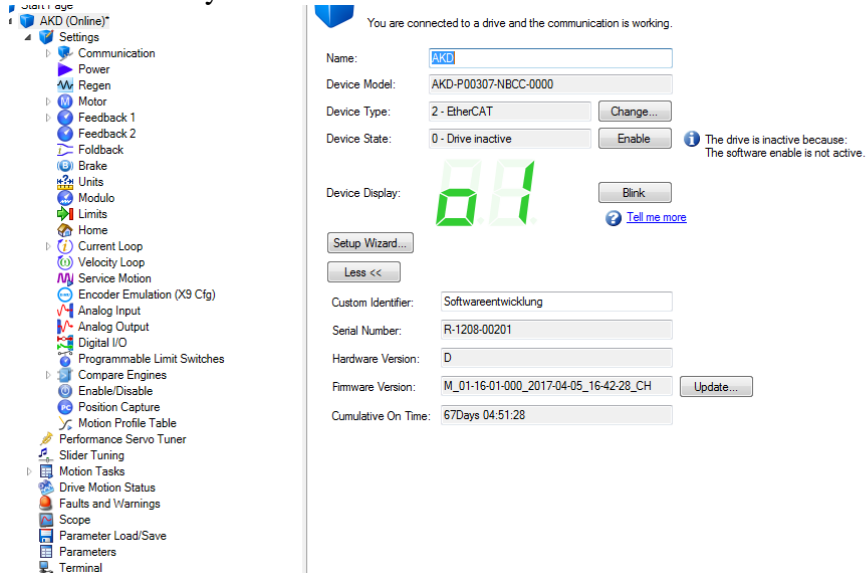


4/11/2017

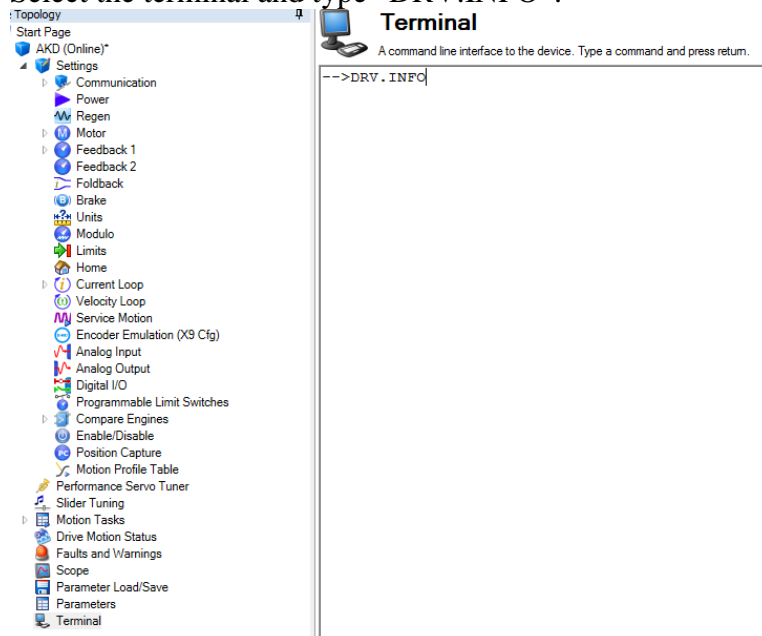
Instruction to update the backup FPGA on AKD

Steps:

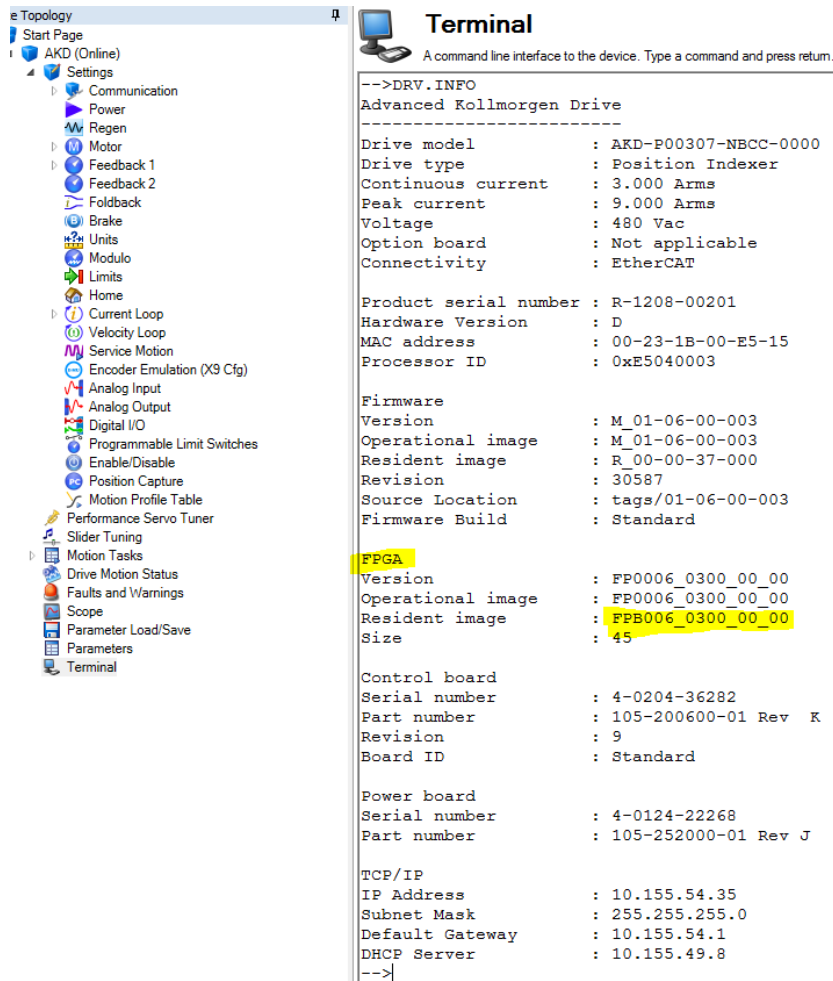
1. Connect to your drive with workbench



2. Select the terminal and type "DRV.INFO":



3. Execute command:



The screenshot shows the Kollmorgen software interface. On the left is a tree view of the configuration options, including 'Settings', 'Communication', 'Power', 'Regen', 'Motor', 'Feedback 1', 'Feedback 2', 'Foldback', 'Brake', 'Units', 'Modulo', 'Limits', 'Home', 'Current Loop', 'Velocity Loop', 'Service Motion', 'Encoder Emulation (X9 Cfg)', 'Analog Input', 'Analog Output', 'Digital I/O', 'Programmable Limit Switches', 'Enable/Disable', 'Position Capture', 'Motion Profile Table', 'Performance Servo Tuner', 'Slider Tuning', 'Motion Tasks', 'Drive Motion Status', 'Faults and Warnings', 'Scope', 'Parameter Load/Save', 'Parameters', and 'Terminal'. The 'Terminal' window is active on the right, displaying the output of the 'DRV.INFO' command. The output is divided into sections: 'Advanced Kollmorgen Drive', 'FPGA', 'Control board', and 'Power board'. The 'FPGA' section is highlighted, showing the 'Resident image' as 'FPB006_0300_00_00'.

```

-->DRV.INFO
Advanced Kollmorgen Drive
-----
Drive model       : AKD-P00307-NBCC-0000
Drive type        : Position Indexer
Continuous current : 3.000 Arms
Peak current      : 9.000 Arms
Voltage           : 480 Vac
Option board      : Not applicable
Connectivity      : EtherCAT

Product serial number : R-1208-00201
Hardware Version      : D
MAC address           : 00-23-1B-00-E5-15
Processor ID          : 0xE5040003

Firmware
Version              : M_01-06-00-003
Operational image     : M_01-06-00-003
Resident image        : R_00-00-37-000
Revision             : 30587
Source Location       : tags/01-06-00-003
Firmware Build        : Standard

FPGA
Version              : FP0006_0300_00_00
Operational image     : FP0006_0300_00_00
Resident image        : FPB006_0300_00_00
Size                  : 45

Control board
Serial number         : 4-0204-36282
Part number           : 105-200600-01 Rev K
Revision              : 9
Board ID              : Standard

Power board
Serial number         : 4-0124-22268
Part number           : 105-252000-01 Rev J

TCP/IP
IP Address            : 10.155.54.35
Subnet Mask           : 255.255.255.0
Default Gateway       : 10.155.54.1
DHCP Server           : 10.155.49.8
-->

```

In this example the backup FPGA version can be identified by looking for the “FPGA” section and “Resident image” alias backup FPGA.

The coding for the backup FPGA version is as follows: “FPB0xx_yyyy_yy_yy”, where “x” represents a certain FPGA type and “y” represents the version number. The upper number represents the most significant version number.

All versions lower than “0602_00_01” are affected.

In this example the version is “0300_00_00”, which is a backup FPGA version with the brake issue.

4. Now go to the main window and click on update.

Drive Overview
You are connected to a drive and the communication is working.

Name: AKD
Device Model: AKD-P00307-NBCC-0000
Device Type: 2 - EtherCAT [Change...](#)
Device State: 0 - Drive inactive [Enable](#)
Device Display: [Blink](#) [Tell me more](#)
[Setup Wizard...](#)
[Less <<](#)

Serial Number: R-1208-00201
Hardware Version: D
Firmware Version: M_01-06-00-003 [Update...](#)
Cumulative On Time: 67Days 05:17:13

Settings
Communication
Power
Regen
Motor
Feedback 1
Feedback 2
Foldback
Brake
Units
Modulo
Limits
Home
Current Loop
Velocity Loop
Service Motion
Encoder Emulation (X9 Cfg)
Analog Input
Analog Output
Digital I/O
Programmable Limit Switches
Enable/Disable
Position Capture
Motion Profile Table
Performance Servo Tuner
Slider Tuning
Motion Tasks
Drive Motion Status
Faults and Warnings
Scoop
Parameter Load/Save
Parameters
Terminal

The drive is inactive because:
The software enable is not active.
There is an active fault.

5. Choose the correct backup FPGA to download, which matches your drive type.

Workbench filters the correct type matching your drive type.

In this example the drive type is **AKD-P-00307-NBCC-0000**, where the bold characters need to match the file name. Workbench filters the correct file to be **AKD-P-NBCC-V0602-00-01-R-FPGA.i00**.

Name	Änderungsdatum	Typ	Größe
AKD-P-NBCC-V0602-00-01-R-FPGA.i00	04.04.2017 10:24	I00-Datei	3.425 KB

Click open.

6. Wait until workbench has finished the download procedure:



7. Verify that the upgrade of the backup FPGA was successful by repeating step 2 and 3. Check the version to be FPB0xx_0602_00_01:

```
FPGA
Version           : FP0006_0300_00_00
Operational image : FP0006_0300_00_00
Resident image    : FPB006_0602_00_01
Size              : 45
```

If the version matches, the brake issue in the backup FPGA is resolved.