Release Notes
AC500 CPU Firmware

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Improvements in Firmware V2.5.2 (additionally to the other listed hereunder for V2.5.1)

SD-Card creation with Firmware V2.5.1 and PLC browser commands (sdappl or sdclone) / Boot project load with Firmware V2.5.1 for SM560-S Safety CPU and CM574-RS from SD-Card

Previous problem, which is relevant for Firmware V2.5.1 only, is now fixed in Firmware V2.5.2.

Note: the browser commands sdappl or sdclone don't functioning with PM591-2ETH and PM595-4ETH CPU.

Improvements in Firmware V2.5.1

PROFINET
PM595-4ETH shows configuration error in case of configuration of PROFINET for internal coupler ETH3 and/or ETH4 and external coupler CM579-PNIO in slot 1 or slot 2 and SM560-S. Fixed

File handling
File handling in RUN mode of PM5xx (e.g. by CAA_File_, write Bootproject, ..) can limit the Ethernet throughput to guarantee volume. The can lead to timeout e.g. in Modbus TCP communication. Fixed

System
Online change + RESET: Project with large structures with REAL/LREAL variables can lead to fault values after Online change and followed by RESET. Fixed

"IEC conversion function LWORD_TO_STR() doesn't work for numbers > $(2^{32})-1$". Fixed

Webserver
PM595-4ETH can crash when typing a LREAL Variable in Webvisu. Fixed

Online access
Force will not be released when logged in via Ethernet and connection is broken (no logout). Fixed

Ethernet
IEC60870-5-104: Variable Broadcast Address for General Interrogation FB from AC500 (AC500 IEC60870-104 type C_IC_NA_1).

System

New CPU parameter "Task compatibility mode" with values:

> - File Handling priorized for Idle CPU time (default/same as v2.4.x)
> - Balanced Handling of Ethernet and file operations for Idle CPU time
> - Ethernet Handling priorized for Idle CPU time

Support of CM5xx firmware identification and download from Automation Builder (AB)

Support of PM5xx firmware identification and download from Automation Builder (AB)

Display firmware V2.9 - extension for EC58x (Custom specific)

PM59x: For CMS Signal Processing Lib (C-Code) memory is allocated in the HEAP. Increasing the HEAP would give more possibilities for further algorithms.

EtherCAT

Support of EtherCAT slaves with several layers of submodules (e.g. Beckhoff EK1110)

Support of sync units

EtherCAT support on PM595-4ETH, internal couplers ETH3 and ETH4 can now be used as PROFINET master or as EtherCAT master.

Support of new devices

New PROFIBUS DP communication module CM592-DP (as replacement of CM572-DP)

New AC500 CPU PM585-ETH

New AC500-eCo PLC PM566-ETH