



Release Notes

# AC500 CPU Firmware

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# 1 Changes CPU Firmware V2.3.3

## 1.1 Improvements

The following improvements have been included in Firmware V2.3.3.

### **File Handling**

Using `CAA_File` Library's Function Blocks under high CPU load conditions caused stucking of the application program. Fixed.

### **IEC 60870-5-104**

The Answer to General Interrogations contained values with time stamp instead of values without time stamp. Fixed.

## Changes CPU Firmware V2.3.3

Improvements

## 2 Changes CPU Firmware V2.3.2

### 2.1 Improvements

The following improvements have been included in Firmware V2.3.2.

#### Web Server

CPU PM5xx has crashed if visualizations with many polling variables have been used. Fixed.

#### Ethernet

The Function Block `ETH_MOD_MAST` has not set its outputs `DONE`, `ERR` and `ERNO` if a timeout has occurred. Fixed.

#### PROFINET

After a PM5xx Standard CPU has been stopped and restarted, the PROFINET Communication Module CM579-PNIO sends old values to PROFINET IO Modules, e. g. CI501-PNIO. As a result, the digital outputs have been activated for approximately 2 seconds. Fixed.

#### CANopen

After a PM5xx Standard CPU has been stopped and restarted, the CANopen Communication Module CM578-CN sends old values to CANopen Slave Modules, e. g. CI581-CN. As a result, the digital outputs have been activated for approximately 2 seconds. Fixed.

#### CS31

The parameter `Ignore_Module` has not worked for IO expansion modules attached to CI592-CS31 and DC551-CS31 module. It worked only for the last IO module attached to the module cluster. Fixed.

#### Serial Communication

A runtime error occurred while using the Function Block `COM_MOD_MAST` via Communication Module CM574-RS when the response time of the slave is longer than the timeout set for the Function Block. Fixed.

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#### File Handling

Function `SysFileGetTime` which is contained in library `SysLibFile` always return `FALSE` at output `SysFileGetTime`. Fixed.

## Changes CPU Firmware V2.3.2

### New Features

#### IEC 60870-5-104

If a measurement value with 16 datapoints (real) has been configured and 3 of the datapoints had a threshold, all 16 datapoints have been transmitted only if the changes became larger than the threshold. Fixed.

If sending a counter interrogation message via Function Block `IEC60870_SEND_C_CI_NA_1`, AC500 does not send the actual value, but the latest value. Fixed.

ACTCON of Function Block `IEC60870_SEND_C_CS_NA_1` sent wrong time on ACT message. Fixed.

#### Buffered Data

Interruption of the power supply voltage during boot-up of AC500-eCo CPUs PM54x and PM56x could result into losing retain and persistent data. Fixed.

## 2.2 New Features

The following new features have been fixed in Firmware V2.3.2.

#### Diagnostic System

An E2 error is generated if the Terminal Base TB5xx has an unknown ID.

#### AC500-S

Fast bulk data exchange between SM560-S Saftey and AC500 Standard CPU is possible now.

#### Function Block Libraries

Support for new Function Block `BOOTPROJECT_HASH_INFO` (contained in internal system library) introduced. This Function Block enables hash checks of all parts of a boot project.

#### Programming in C-Code

New standard libraries for for C-Code editor added.