Release Notes AC500 V2 Firmware Version 2.8.4

Fixed issues	***ID***
Misalignment Error at Mixed REAL/LREAL Mode at PM595	AB-15630
Profinet module parameters are lost at the second setting if the editor is not closed meanwhile	AB-15219

Known problems	***ID***
Web Visualization: Java Applet might be blocked by your web browser The Java Applet that provides the AC500 web visualization, created in Automation Builder V2.0.4 or lower includes an intermediate certificate that expired on Saturday April 13th, 2019. After this date the validation procedure for the certificate might fail as it cannot be validated via the “OCSD” procedure. Depending on your browser and whether your computer is connected to the Internet, the Applet will be blocked after that date. Workaround: The workaround steps are described in detail in the following application note: http://search.abb.com/library/Download.aspx?DocumentID=3ADR010388&LanguageCode=en&DocumentPartId=&Action=Launch	AB-16179
After target change from any PLC to PM595, logins to the PM595 PLC via Automation Builder might be disturbed Workaround: avoid doing target change to PM595. Create new PLC object in project and copy/paste or export/import the corresponding data to new PLC	AB-16004
Automation Builder might crash when going online with node "Positioning_with_use_of_MC_MoveAbsolute" in example project "PLC_PTO_PLCopen_example" from the motion library (PS552).	AB-14638
PLCs set to DHCP will show the configured IP address instead of the one assigned by the DHCP server in Automation Builder communication settings using the scan. Workaround: use the IPConfig scan to find out the assigned IP address, then set communication settings manually	AB-18277
Buffered Data: PM595-4ETH-F: Set IP address without plugged battery leads to loss of RETAIN and PERSISTENT data. Workaround: Use RETAIN, PERSISTENT and/or RETAIN PERSISTENT data only with plugged battery.	CPUFW-7032
Online access: Additional Visu Files at PLC without Onboard Ethernet leads to error during download Workaround: Don't use Additional Visu files in PLCs without Onboard Ethernet	CPUFW-6929
C-Code: PLC crashes on download program running C-Code-lib build with newer revision of FWAPI, e.g. BACnet library created with AB 2.2.0 (FWAPI 2.8.x) used with PLC firmware V2.7.2. Workaround: Update PLC firmware to same version as FWAPI in C-code lib, e.g. PLC firmware V2.8.1	CPUFW-6916
Online access: Connecting a CP600 Panel via CODESYS protocol serial avoid creating a boot project Workaround: Disconnect panel during creating of boot project	CPUFW-6885
Working on CoDeSys 2.3 projects with administrator and non-administrator users might lead to inconsistent data Workaround: avoid working in this setup with administrator and non-administrator users	n.a.
Activating the CANopen sync mode requires to activate the "generic configuration view" (see "Tools->Options->Device editor")	AB-9768
CM574-RS: If the parameter "Enable debug" is set to "Off" and when the PLC stops the CM574-RS continues to run causing an E2 failure. Workaround: Set the parameter "Enable debug" to "On".	CPUFW-5538
When PM5xx-ETH with 4 x CM597-ETH connected on the switch, the IP-Configuration tool shows a wrong "Configured IP Address" for PM5xx-ETH. When unplugging the cable from all CM597-ETH, the "Configured IP address" shows the right value." Workaround: Unplug the CM597-ETH from the switch to check the IP address from PM5xx-ETH.	CPUFW-5537
System: DC541: Error message after firmware update also in case of correct update Workaround: Check FW version of DC541 after update	CPUFW-4659

System: DWORD_TO_LREAL and UDINT_TO_LREAL: DWORD/UDINT value cannot be proper converted to LREAL if DWORD/UDINT >16#80000000. For PM595-4ETH CODESYS compiler generates warning.
 	
Workaround: Add new function:
FUNCTION DWORD_TO_LREAL_ABB : LREAL
VAR_INPUT x: DWORD; END_VAR
VAR b: LREAL; END_VAR
b := DWORD_TO_LREAL(x);
IF b < 0.0 THEN b := 4294967296.0 + b; END_IF;
DWORD_TO_LREAL_ABB := b;
call function DWORD_TO_LREAL_ABB instead of DWORD_TO_LREAL in user program:
PROGRAM PLC_PRG
VAR a: DWORD; b: LREAL; END_VAR
b := DWORD_TO_LREAL_ABB(a);
	CPUFW-3741

POU: PM595-4ETH, LED_SET is without function in Mode=0. The POU is intended to control the additional LED's. Workaround: Use POU LED_SET to control the additional LED's.	CPUFW-3721
System: Firmware download to CM574-RS can lead to watchdog error of CM574-RS in case of using freewheeling task in CM574-RS Workaround: Don't use freewheeling task in CM574-RS	CPUFW-3675
Some Online Services lead to log out on PM595-4ETH Workaround: None	CPUFW-3465
Socket opened by IEC application via SysLibSock is not closed on PLC Reset Workaround: None	CPUFW-3443
"Run time of FB DEL_APPL is increased for about 6s. This is caused by increasing the time for delete flash." Workaround: None	CPUFW-3087
SysLibFile library: As of V2.3.x, dtLastAccess.time is always 00:00 on call of SysFileGetTime() Workaround: None	CPUFW-2833
CS31-Bus: In case of connection of AC31 modules like 07AC91, 07AI91, DC91 to CS31-Bus of COM1 and/or COM2 of CM574-RS, PM5xx-eCo, PM57x or PM58x a lot of bus errors occurs. Sometime these modules disconnect and reconnects. S500 modules don't show such effects. Workaround: Don't use these datatypes in webvisu	CPUFW-1833
WEB server: ActiveX-Element display incorrectly Workaround: Don't use Active-X element in webvisu	CPUFW-1593
WEB server: Alarm tables do not work on webvisu, if "All alarm groups" is selected. Messages are not displayed properly. Workaround: Don't select "All alarm groups"	CPUFW-1506
Telecontrol: (IEC60870-5-104) connection does not function properly after a long cable break Workaround: Restart PLC after long cable break	CPUFW-1433
WEB server: In WMF-file integrated text isn't displayed in visualization Workaround: Don't use WMF-file with integrated text	CPUFW-1310
WEB server: The following datatypes are wrongly displayed in the web browser with the mentioned formatting strings: byte with %i and %u, in both cases only the format letter (i or u) is displayed without the % sint with %s shows the two's complement when negative values should be displayed udint with %d shows a -1 if the maximum possible value of this datatype should be displayed udint with %i and %u, in both cases only the format letter (i or u) is displayed without the % dint with %i,only the format letter (i) is displayed without the % lreal with %2.9f shows the infinity sign if the maximum/minimum value of this datatype should be displayed udint with %s shows a -1 if the maximum possible value of this datatype should be displayed real and lreal with %s shows 0.0 if the minimum possible value of this datatype should be displayed lreal with %s shows the word infinity if the maximum possible value of this datatype should be displayed char with %c, only the format letter (c) is displayed without the % instead of a single letter Workaround: Don't use these datatypes in webvisu	CPUFW-1304

Online: Display of the task priority shown not the correct value for interrupt task -> It is not the shown value of the boot project! Workaround: No workaround. Interrupt task: Shown priority is the internal operating system priority	CPUFW-1072
WEB server: option "Best fit in online mode" doesn't work properly Workaround: WEB server: Option "Best fit in only mode" is not recommended for web visualization.	CPUFW-921
SD card write protection function is not available for AC500-eCo CPUs Workaround: SD-card write protection is not evaluated by AC500 CPUs. Write protected cards can be overwritten. Protect the SD card by yourself.	CPUFW-748 ECOHW-11