

140CPU31110, 140CPU43412U and 140CPU53414U firmware history



Version #	Enhancement		
	OPR/PCR #	bFO Case #	Description
V3.51 (06/18)	PEP0438830R	43978949	140CPU43412U PV < 16: Fixes the impossible autostart of the CPU while CPU is in "mem protected" mode.
	PEP0439147R	44108698	Fixes the Quantum CPUs crashed due to HMI Vijeo Designer write to located variables.

Note : For technical reason the firmware SV3.51 is actually not available for 140CPU53414U . It will exist in SV3.52 .

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		Case #	
V3.50			Change the behavior of Quantum 434/534 models starting in Stop after Warm Start if no application present in backup
	PEP0387834R		Improve the memory data protection concerning the working area for application in CPU .
	PEP0326826R	19297386	Remove the link between stop/run function and mem protection function of the front dip switch (applicable on models using a dip switch, such as 140CPU31110)
			Avoid the halt state of CPU after a pack memory command while memory was reaching the limit already: in specific context where a pack command was executed online in run while the application memory was reaching almost the available limit, this command had an impact on the application cycle time and led to an Halt state of the CPU.
	PEP0314683R	23707243	Prevent the fact that variables used in SFC steps, stayed blocked to "0" , after SFC initialization, while using "INITCHART" function block .
	PEP0352627R	28390205	Update the behavior the initial value copy in %MW on warm start. This version allows now to get the last current value of %MW, not the initial one as it is for the previous versions.
	PEP0328304R	26789908	Avoid getting into a " EC0E" managed exception state on intended cyber attacks

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V3.40	PEP0319151R	22520641	Fixes the "EC02"error code when doing a build change online on primary CPU.
	PEP0309130R	22735165	Fixes the "EC0E"error code opening a forced bit table .

Version #	Enhancement		
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V3.31	PEP0303288R	021614056	Fixes the issue of the Run Led off while memory protect switch is on

Version #	Enhancement		
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V3.30	PEP0269861R	11856381	Fixes a Unity application fails download on version 3,2
	PEP0257780R	Internal	Fixes the issue of the CPU starting in run for a few second after power cycle while keyswitch is on stop position
	PEP0294807R	19071433	Fixes an unexpected coil behavior in LL984

- Note that this version is no more available in “Schneider Electric - Shopping Kiosk” and on “Schneider-electric.com” because of one issue regarding the memory protect function. →Setting memory protect switch to on makes Run led is switched off even if CPU is still in run, possibly leading to confusion

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Version #	Enhancement		
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V3.20	PEP0195767R		Fixes a problem of 140CPU43412 recognition by OSloader.
	PEP0057845R	00695885	Fixes the problem of PC Connection as "reserved by empty" in case of managed exception with the CPU.*
	PEP0203953R	04842069	Avoid "reserved by empty" pc connection because of a precedent Concept connection request .*

- * The root causes of those two problems are not the same, the first one can appears after a stop managed exception on a CPU , the second one appears if the user has connected his CPU to Concept software tool before to try a connection with "Unity Pro".

Version #	Enhancement		
	OPR/PCR #	Vantive Case #	Description
V3.10	20048372/PE P0047851R	Vantive 1326796	Fix DiagViewer that does not display messages and symbols for instances bigger than 254 in a single section
	PEP0068930R	bFO 01307949	Fixes the problem of the management of the four words dedicated to the MBP_MSTR function block diagnostic using the function code 9 .

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V3.00	None	-	New features and improvements for Data Dictionary.
	20047829	1295210	Fixes error code"EC0E" when build changes is done after refining a DFB.
	PEP0023023R	-	Adds new operation code 15 (Modbus request) in the use of MSTR bloc function.
	PEP0029147R	-	Improves the capacity for Modbus client messaging up to 125 registers.
	PEP0035176R	1253065	New option in Unity Pro V6.0 to reset %M after a warm start and a stop/run transition.
	PEP0036399R	-	Fixes refresh problem in data dictionary for variable names which start by a number e.g.: 1_XX.
	PEP0038276R	1250784	Fixes a CPU error following a on line modification of a DDT variables.
	PEP0038570R	1283576	Fixes flickering leds on DDO36400 configured on main rack.
	00053340	-	Firmware description is displayed in OSLoader tool.
00055304	-	DDO Fallback mode modification is correctly managed after a CCOTF modification.	

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V2.80	PEP0023524R	-	Allows configuration changes on the fly (CCOTF) on Unity Quantum PLC (needs synchronization with Unity Pro V 5.0, CRP firmware version 2.0 and CRA firmware version 2.0)
	20045638	-	Improves NOE's performances with OFS Server (up to 4 messages of 1024 bytes per PLC scan) (needs synchronization with Unity Pro V 5.0 and NOE V4.60)
	PEP0026068R	1181411	Improves the CPU robustness in case of wrong OFS requests (bad size of the requests)
	PEP0024446R	1164695	Improves the CPU robustness in case of a corrupted Unity Application
V2.70	PEP0014985R	1097690	Enables MBP_MSTR with Function Code 23 for TCP/IP on NOE modules
	PEP0015477R	1046800	Fixes a CPU issue due to the use of a memory size of structured type instances higher than 1Mbytes
	PEP0015392R	1093941	Solves an animation issue of variables inside a DFB (programmed in FBD)
	20044842	1072807	Improves signal management (RTS/CTS) when XXMIT is used with modems
	20044469	-	Fixes an unexpected disconnection of Unity Pro when a lot of sections are open (in synchronization with Unity Pro 4.1)
	20043798	-	Solves an issue where after a cold start, warm starts behave as cold starts, when the "automatic start in Run" option is checked
	20043797	1081706 1055139	Improves the robustness of the CPU against Scada wrong requests through OFS.
	20043371	-	Fixes a bad display of the data in the PLC Screen under Unity Pro after the creation of a Fast or Aux task in online mode
	00045319	-	Fixes a bug in the display of the alarm time and date in the diagnostic viewer of Unity Pro
	00046537	-	Fixes a bug of erasing the forced bits table when user unforces an input
	00045413	-	Fixes a bug in the change of a 140HLI34000 configuration parameter after a Build Changes in stop mode
	00045268	-	Switches off the Modbus LED when there is no Modbus communication on the port and the PLC is stopped

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V2.61	PEP0015470R	-	140CPU53414B : Enables again Warm Start
V2.60	20043002	-	140CPU53414B : the average scan time is 12% faster than OS V2.50
	20043567	1020502	Improvement in the accuracy of the internal timer of the CPU
	20043400	1050503	Improves the behaviour of the %S16 bit to detect a failure of an IO Module
	20043384	1049610	Improves the forcing of 140DDI35300 inputs
	20043359 00041070	1048039	Improvement in the calculation of the week of the day (%SW49) and week number (%SW70)
	00039401	-	Improves the fallback management when "Maintain Value" is chosen in a MB+ Peercop configuration
	20040961	1002625	Improves the behaviour of the CPU if drop address above 65 is used on the 140NOG11100
	20041914	1019715	Improvement of the behaviour of the CPU after a cold start
V2.50	20041806	-	Implementation of Data Management (requires also synchronisation with Unity Pro V4.0 and application level 2.6)
	20037920	960780	New %S79 system bit: enables/disables to change value of forced bits through Modbus SCADA requests
	00039336	-	Memory management improvement when duplication of instance of EFB during change on line
	20040552	996429	Avoids PLC to HALT in case of particular combination of SFC steps (MSTEP, Pjoint, OutStep)
	20039885	984839	Stabilizes application when executing imbrication of XOR logic
	20036685	939744	RTS/CTS control available by setting bit 5 in XXMIT command word using new RTS/CTS cables
	20036805	942893	Corrects the functioning of %SW59 following a modification of the date
20037896	957563	Allows to start (also when back up memory is not cleared) in RUN after a power cycle in RUN mode	

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V2.40	20034798	9110764 935452	%SW50 updated every 200ms rather than every 1s
	00034773	-	Corrects Force/Unforce behaviour in Unity Pro monitoring application mode
	20036312	925187	Avoid double alarm display in the Magelis alarm viewer
	20034622	926593 906907	Synchronize NTP time and PLC RTC clock
	20032373	941265 851738	Modbus function codes 05 and 15 guarantee responses and avoid communication issues
	00032767	-	%SW48 counts the events generated by counting modules
	20037348	958360 952198	Allows the refreshment of Unity Pro animation table when deploy ComNS DDT
	00033354	-	RUN/STOP input is checked even when a RUN command is issued from Unity Pro PLC Screen
	20036432	-	%S21 set to 1 after power restart when Autostart option is configured
V2.31	20036980	945578	Increase robustness if on line modification is intensively used
	20036868	943932	DFB / EFB diagnostic messages enhancement for special logic in edges
V2.30	20024362	-	Xmit function available on Quantum Unity CPU
	20026019 20033593 20033607	894657 906522	Stabilize CPU during the first scan cycle after PLC is powered on.
	20030123	939780 878810	Avoid PLC to HALT in case of use of SFC when MACRO combining parallel branch and simultaneous conditions is used (stop code SW125 = 0x93F4).
	20030402	881604	Temperature value provided by 140ARI03010 in a RIO rack is expressed according to the selected resolution.
	20031058	-	The MAC address returned by MBP_MSTR with code request 3 (read local statistic) is the right one.
	20032027	893240	Avoid untimely loss of I/O Interrupts when using 140HLI34000 module
	20033358	904997	Allows to insert modules in a random order in the backplane
	20033647	903545	'Update Init Values with Current Values' reduces the scan time increase.

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Version #	Enhancement		
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V2.11	20029657	885109 874027	CPU Modbus plus port accepts more than 12 modules in a DIO drop
	20028322	860089	Improve initialization of a Concept converted application to Unity Pro (application containing more than 250 Global or Specific inputs on Peer Cop)
	20028903	859925	Improves CPU behaviour during an incorrect application backup save operation (program size higher than flash memory size).
V2.10	20026477 20026358	824365 841041 841075	Corrects Modbus communication that was stopped after a moment of use
V2.03	20026957	847627	Corrects Health status for 140CPS12420 redundant power supply (that was staying in state 1 when the module was unpowered or has failed).
V2.02	20024778 20026220	825272 839282	When "Mem Prt" switch is Off and CPU doesn't use battery, CPU restarts correctly according to "Automatic start in Run" option.
	20026602	844139	Corrects Modbus write function (code 05d)
V2.01	None	None	No change
V2.0			Launch version