

CTI 2500P-JACP
Janus Application Coprocessor
Product Revision History

NOTE: The Product Revision for the JACP module is marked on a white label affixed to the board.
It is also marked on the outside of the original shipping box.

Release: 11AUG2026
Product Revision 7 / Firmware V2.00 / ECO#934

Update firmware from V1.06 to V2.00. Update Quick Start Guide from V1 to V2.

Integrated Development Environment (IDE) Requirement: Janus Workbench V2.18 or later for full functionality.

Enhancements:

JACP-132	Optimize variable exchange process for Data Cache and Block Transfer fieldbus drivers
JACP-153	Ethernet/IP Tag Client - Improve web page statistic title text to "Last General Status" and "Last Ext Status"
JACP-156	Add Configured Items by Data Type table to the CAMP Server Statistics web page
JACP-174	Expand some 32 bit web page statistic counters to 64 bits
JACP-200	Add Online Change DataMap version compatibility check
JACP-209	Implement bitfield tag support in Online Change
JACP-210	Implement support for Unions in Online Change
JACP-232	Provide a way to reset JACP from software
JACP-259	Workbench tutorial, update OPC-UA Certs new xca tool,
JACP-267	Implement network configuration error handling for IP address and port group configuration errors in V2.0 networking
JACP-283	Release OLC_DataMap v1.20 for future PROFINET support
JACP-289	Add "Our IP Address" to Ethernet/IP Statistics web pages
JACP-305	JACP - User SD Card utilization ... calculation is %free, display is %utilized
PL2023-13	Remove reboot requirement after network configuration change
PL2023-18	Change the way that subnet mask user entry and display are handled
PL2023-59	Add gateway validity check to network configuration web page

Issues Resolved:

JACP-116	Ethernet port looks inactive as it logs "None" for 2 seconds then "Active"
JACP-120	Event log may not get cleared on "Restore Factory Defaults"
JACP-123	Modify documentation and Workbench HELP to show MQTTSTATUS, LIFO, FIFO function blocks do not work with CTI Online Change
JACP-128	Modify documentation to show JACP always goes to RUN after Online Change
JACP-130	Invalid Function Block index after Online Change causes system exception
JACP-150	Online change system exception error when disabling/deleting programs

JACP-154	Prevent Data Cache Error 490 when Host PLC goes from Program to Run mode
JACP-155	txbMANAGER function block causes error during Online Change
JACP-157	Security settings web page allows creation of Duplicate Users
JACP-158	Leading zeroes in static IP Address causes module to come up with no IP Address
JACP-160	Clearing Event Log web page takes too long
JACP-161	Online change problems with Arrays and Structures
JACP-186	Reading a REAL variable using Task Code 9D returns an incorrect response on CAMP
JACP-192	Random timers malfunctioning after Online Change
JACP-194	Online Change issues with nested structures
JACP-196	CAMP Server sometimes doesn't work after a power glitch
JACP-199	Online Change does not handle arrays of built-in function blocks that are members of structures or UDFBs
JACP-203	Online Change doesn't save Forced/Locked state of array variables, also document arrays of strings are unsupported
JACP-204	After Online Change, single variables that were locked fail to display in the locked variables section on the Application Information web page
JACP-208	Online Change does not allow for bits to be added to a bitfield
JACP-213	Module restart sometimes causes E310 when using Data Cache and/or Block Transfer
JACP-225	Change documentation to show that Arrays of STRINGS are not supported by Online Change
JACP-238	Sometimes Ethernet/IP Communications do not reconnect after power cycle
JACP-239	Block transfer shows timeout error and SFIO queue full after Online Change which changes the size of blocks
JACP-240	Problem with Janus CAMP Server when reading certain C bits
JACP-241	Flex I/O freezes after Online Change with FW V1.28 and Workbench V2.17
JACP-242	Communication Session Web Page "remove UDP Sessions" sometimes doesn't work
JACP-244	Enabling Configuration>Security Setting>Http Encryption does not force browser to use https
JACP-246	JACP takes a long time to re-establish DataCache connection when network cable is unplugged and replugged
JACP-251	Real Time Clock does not maintain time after power loss
JACP-257	OPC-UA Server with Certificates enabled, Download Refused by Target
JACP-262	CAMP Server - returning invalid task code data length in DCC (Drum Current Count)
JACP-263	Changing Modbus Client from TCP to UDP causes workbench 'invalid IP address'
JACP-265	Change label on JACP Clock Settings "Sync Time Method" to "Use Data Cache Host"
JACP-269	Operation failure when JACP importing OPCUA Public / Private keys
JACP-271	EIP Tag Client not setting Error 580 when the EIP Tag Server is intentionally disabled
JACP-272	Webpage "Configuration/Security Settings" once user name/password configured, cannot access secure pages
JACP-278	In "Display All Pages", the serial port and general settings web pages are not displayed
JACP-280	JACP with firmware V1.06 does not resume Tag Client connection to Rockwell PLC after power cycle of JACP
PL2023-36	The "Clear Error and Counts" and the "Clear Counts" buttons do not appear to work.

Internal Changes Only:

JACP-118	Continuous run regression test is requires the use of the correct JACP model number
JACP-126	Re-enable realtime patch in Petalinux OS
JACP-134	Verify internal ethernet switch errata are resolved in new switch driver
JACP-140	Fix memory errors when certain objects are deleted
JACP-159	Improve EIP Tag Client diagnostic web page data presentation
JACP-163	Firmware upgrade succeeds but does not reboot JPLC/JACP
JACP-175	Internal Ethernet Switch Configuration in Network Settings web page not coinciding with cti.ini file setting
JACP-191	Segmentation Fault during download of Application Program
JACP-193	Cycle time integer overflow in CCycleStats.cpp
JACP-206	Improve Network Settings web page display
JACP-207	Improvements and corrections when clearing the errors on the Error Description and Status web page
JACP-212	Fix coding errors that occur in v12.2 ARM compiler
JACP-222	Remove Xilinx example apps from Petalinux OS
JACP-223	Remove unused FastCGI recipes from OS
JACP-226	Disable SFTP in shipping products
JACP-237	Move event logging storage from the SQLite Database to MRAM to improve reliability on power loss
JACP-245	Re-test to confirm that SQLite database change does not prevent a firmware downgrade
JACP-249	When Profinet Activation Bit = FALSE, improve clarity of the Network Settings webserver page for the switch diagram
JACP-255	Issues saving general settings web page (refer to issue PL2023-52)
JACP-261	Release Candidate build: Disable Profinet for the JACP V2.0 release
JACP-264	Correction to the event logging for network configuration error handler
JACP-266	Evaluate deletion of CHistoricalData web page
JACP-276	Workbench project downloads cause JACP to reset
JACP-279	Can't change Port Group on web server after upgrade from V1.06 to PetaBeta20
JACP-288	Product reset after change to Network Settings web page
JACP-292	Network Setting web page changes not ending cleanly, restarting properly (initially notice when going from DHCP back to a static IP1)
JACP-296	Camp Client configured with any other driver that fails on open causes inability to connect to Workbench (originally detected via Flex IO invalid Our IP Address)
JACP-297	Network Settings web page not allowing empty default gateway
JACP-300	Remove Network Settings web page, IP2, Default Gateway data entry field
JACP-301	Remove custom DNS feature from JACP
JACP-303	Can't communicate with Data Cache on IP Address 2, must use IP Address 1
JACP-311	EIP Tag Server will respond to EIP Tag Client regardless of Port Group Setting
PL2023-7	Overhaul AbramsFalls so it supports up to 4 MAC addresses
PL2023-8	Evaluate MAC address usage in EIP DDK
PL2023-10	Overhaul Profinet networking setup
PL2023-11	Overhaul and fix networking-related webpages

PL2023-12	Review and fix manufacturing test code
PL2023-14	Make cti.ini error handling more robust
PL2023-15	Allow for multiple IP addresses to be assigned to a single port group
PL2023-16	Overhaul the 7-segment display code so it supports the new port group paradigm
PL2023-17	Do something about AutoIP's handling by ifupdown
PL2023-21	Fix data management in CProductInfo
PL2023-26	Re-test daisy-chained JACP configurations that do not use Profinet
PL2023-32	Fix mutex deadlock in CFirmwareUpdater when update is triggered via DIP Switch 2
PL2023-40	JACP Configuration > Clock Setting dialog generates SSI error
PL2023-46	Deal with unhandled runtime exceptions in CNetScan and CDisplay
PL2023-48	Verify that existing ctipc folders work with new OS
PL2023-52	JACP - Configuration>General Setting>Operation following module reset ... ignored on module reset
PL2023-54	CRLF causes apply_cti_ini_configs.sh to break
PL2023-66	JACP Network Settings web page CIDR edit seems to mess up the network settings web page
PL2023-68	IP1/IP2 overlapping subnet configuration error not detected
PL2023-69	Replace JACP switch configuration diagrams on Network Configuration web page
PL2023-72	Network Settings web page issue after selecting Internal Ethernet Switch Configuration
PL2023-78	Firmware update from JACP V1.06 to >= PetaBeta11 Network Settings/Subnet Mask/IP Range values not displayed correctly
PL2023-79	JACP Product Requirements - improve Network Settings requirements
PL2023-83	JACP "Product Information" web page refers to "port A" instead of "PORT 1"
PL2023-86	EIP uses the first IP address on its interface
PL2023-87	Upgrade web pages to use Asynchronous JavaScript and XML (AJAX) services
PL2023-88	After firmware download from JACP 1.6 to PetaBeta14, issues found
PL2023-96	CPortParamsUpdater (DIP Switch 4) doesn't work with new cti.ini setup
PL2023-99	"Network" column in the table in "Product Information" Webserver page confusing
PL2023-101	TCP Issue when switching Data Cache from Group 2 to Group 1 in Network Settings
PL2023-103	Failure to save JACP Module Identifier and invoke Profinet IP to the display
PL2023-104	MRAM doesn't always open which leads to a segmentation fault
PL2023-105	Product Information web page DNS Address Method, and all DNS info not updated correctly
PL2023-106	Product Information web page does not display "Default Gateway Address" for in Port Group 2 table
PL2023-107	Network Settings web page select "Internal Switch Mode to from "All" to "NONE" creates error condition
PL2023-108	Replace ifupdown-based network configuration with more robust solution
PL2023-111	EIP fatal error due to failed bind() socket call if network is reconfigured
PL2023-112	Pages utilizing ErrorHandler JavaScript class throw unhandled exceptions
PL2023-115	Numerous benign network settings web page changes erroneously caused E024
PL2023-116	Add PAUSE frame support to network interfaces
PL2023-117	Get JACP serial ports working with new OS

Release: 02FEB2026
Product Revision 6 / Firmware V1.06 / ECO#913

Change PCB assemblies from rev D to rev E to change SD cardholder. Change resistor on real time clock circuit to improve holdup time.

For Rev C boards, the real time clock improvement can be added as rework and labeled Rev 003A.

For Rev D boards, the real time clock improvement can be added as rework and labeled Rev 005A.

2500P-JACP changed to Revision 6

Release: 08OCT2025
Product Revision 5 / Firmware V1.06 / ECO#910

Functional labels "A-F" added to pcb silkscreen at J1. This change is to improve useability but there is no operational impact.

2500P-JACP changed to Revision 5

Release: 16DEC2024
Product Revision 4 / Firmware V1.06 / ECO#894

Change PCB from Rev C to Rev D. This change is to eliminate the rework of ECO886. Which was due to a floating input pin (U90.3) on the +2.5V power supply. This change enables us to use p/n 006-00877 at U90 & U91.

Release: 19AUG2024
Product Revision 3 / Firmware V1.06 / ECO#889

Change to alternate 2.5V power supply at U96 to eliminate rework.

Release: 5AUG2024
Product Revision 2 / Firmware V1.06 / ECO#887

Update firmware from V1.05 to V1.06.

Integrated Development Environment (IDE) Requirement: Janus Workbench V1.91 or later for full functionality.

Enhancements:

- JACP-141 Improve runtime messages and error checking during online change
- JACP-142 Add ability to get a list of forced variables to a SCADA
- JACP-144 Expand some 32bit web statistic counters to 64bits

Issues Resolved:

- JACP-129 Communications with CAMP server cause LONG scan times
- JACP-135 Display of locked values not working properly in Workbench V1.91 when data source is a fieldbus
- JACP-137 Serial Receive Problem – inserts NULL character in received string if it is more than 16 characters
- JACP-151 CAMP Server stops working after power loss and restart
- JACP-152 Block transfer WRITE sometimes fails to write changed values to the host PLC
- JACP-201 Web page "Application Information" "Locked Variables" table format needs larger horizontal space
- JACP-202 Forced/Locked _CTI_xxx Reserved variables not functioning properly after adding variables to Program
- JACP-205 Application Information Web Page Does Not Show All Locked Variables

Release: 30JUL2024

Product Revision 1 / Firmware V1.05 / ECO#886

PCB rework to correct 2.5V power supply floating input. Affects all 2500P-AFM2 Rev C boards with U90 populated.

Release: 22MAR2023

Product Revision 0 / Firmware V1.05 / ECO#754

Initial Release to Production

2500P-JACP released at 901C-2500P-JACP Revision 0 with Firmware V1.05.

Integrated Development Environment (IDE) Requirement: Janus Workbench V1.89 or later.