

CTI 2572-B and 2500C-2572-B Firmware Revision History

Firmware Version 2.06 (10/8/2020)

Issues Resolved:

DT-1328 and CTI-2: Updated Ethernet IP stack to latest version. Upgraded the interface software to the Ethernet IP stack. Added support for Multiple Service Code service and Fragmented Read and Write requests (0x52 and 0x53). Added support for 10 EIP connections (from 8 EIP connections). Improved EIP data type error checking for the CTI supported tag types (VS, VU, VF, VL, and VE) to eliminate ambiguous requests where the EIP client tag type does not match the CIP data type. Improved the EIP web diagnostics. These updates eliminate an occasional reset of the module and an occasional corruption of the firmware in flash memory.

DT-1385: Corrected timing problem between Module Status (MOD STS in WX1) and Network Configured (NET CFG in WX1) bits on startup, which could cause module startup PLC logic to fail for some customers using tightly timed PLC logic.

DT-1223: When the Ethernet link was down (for example, no Ethernet cable connected), module startup was delayed by approximately 40 seconds after power was applied or the reset button was depressed. During this delay Module Status and Network Status LEDs were off and Multi Segment Display was blank while the FDX and "100" LED were on, causing this to appear as a module problem. Startup time was reduced to approximately 18 seconds in this case.

DT-1312: Web page Event Log tertiary text was missing or incorrect in numerous event log messages.

DT-1449: Resetting the module using PLC logic caused the module to continually reset if the Module Control word (WY4) was not cleared. Added latch on command register, which ensures only one reset will occur because the firmware is looking for a transition of the module reset bits.

DT-1276: After the multicast address was cleared, the web server Module Configuration page continued to display the old multicast address if the module was started with PLC logic.

CTI-6: Improved descriptions in the TCP/IP statistics web page.

CTI-7: Corrected a CAMP server lock-up issue for system configurations that have heavy client communications. On an infrequent basis, due to timing, the CAMP server would fail to respond. This issue was identified in system configurations with the maximum number of connections to the CAMP server.

CTI-12: Improved event logging for the Memory Manager events by adding the "current outstanding" count and the "high water" count for memory overruns. This improvement provides useful debug data when reviewing previous module power cycles.

CTI-20: The time to release a dropped TCP connection was approximately 600 seconds, potentially creating problems when network issues arise. The TCP keep-alive interval was reduced to 10 seconds with 6 retries, resulting in approximately 60 seconds until the connection is released by the server.

New Features and Improvements:

DT-1448: Incorporated security updates for the module operating system and TCP/IP stack.

Firmware Version 1.30 (11/5/2018)

Issues Resolved: Product data, such as the Serial number and MACID, and IP address parameters could occasionally become corrupted, causing the module to fail the next time it was restarted. The firmware was modified to detect and correct this problem.

Firmware Version 1.27 (10/1/2018)

Issues Resolved:

1374: Obsolescence required replacing the old Altera FPGA with a new part. The firmware was modified to recognize the presence the new (Lattice) FPGA.

Firmware Version 1.25 (5/24/2018)

Issues Resolved:

1258: Module WX1 bit 7 was erroneously being set when backplane voltage exceeded the high voltage threshold. Bit 7 should have been set only when the backplane voltage drops *below* the low voltage threshold. Note: Bit 8 will now be used to indicate the high voltage condition.

1293: The Configuration Lock switch did not prevent a user from restarting the module via the product web page as intended.

1337: When the product was configured for PLC Start, the CAMP Server statistics presented by the product web server contained random information while waiting for the PLC to initiate startup. The firmware was changed to zero out all statistics until the Camp Server was started.

1339: The module IP address verification routine erroneously disallowed a valid IP address subnet combination (192.168.1.8 with a subnet mask of 255.255.252.0).

1234: The section of flash memory that contains the network configuration can become corrupted during an IP address change when power is lost at the same time the flash sector is being written. This version contains improvements that mitigate the impact of this anomaly.

New Features and Improvements

1322/1323: Added support for Rev E hardware, which uses a Lattice FPGA for the backplane interface.

1343: Updated the board support package for the processor to the latest version.

Firmware Version 1.13 (9/20/2016)

Issues Resolved:

1218: The module would delay several seconds before sending a reply to an invalid NITP command.

- 1220:** Using the PLC start option, when the PLC Start Network Services changed the IP address stored in flash to an IP address that was a duplicate of another host on the network, the Multi-Segment Display continued to display the previously stored IP address.
- 1229:** The module Multi-Segment Display (MSD) would occasionally stop displaying data.
- 1230:** The user was able to enter an IP Address/ Subnet Mask combination for the module that erroneously resulted in a host address of 0 or a broadcast address.
- 1231:** Initiating a reset to factory default values, by holding down the reset button for 10 seconds or more, erroneously set the serial number and manufacturing date to default values.
- 1242:** Web page navigation would sometimes stop working.
- 1249:** Due to timing problem, erroneous bit values were occasionally written to module WX1 and WX2 words.

New Features and Improvements:

- 1219:** Added a logging event to indicate when the MAC address obtained from module flash memory is invalid (not a CTI MAC address).
- 1225:** Added a Power Statistics Web Page to assist in detecting base power supply problems.
- 1237:** Revised Web Page headings to accommodate both Classic (2572-B) and Compact (2500C-2572-B) products.
- 1240:** On the PLC Interface web page, revised the “Current number max allowed TC messages” statistic to indicate the source that set task codes per scan parameter (PLC or SW11 on the module).
- 1241:** Modified the text color of event log entries so that only system startup events were displayed in green text.

Firmware Version 1.03 (7/20/2016)

Original Production Release (2572-B)