



Where Automation Connects.



## PLX51-DF1-ENI

DF1 to EtherNet/IP  
Gateway

August 18, 2023

**RELEASE NOTES**

## Your Feedback Please

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PLX51-DF1-ENI Release Notes  
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August 18, 2023

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# 1 Start Here

This document highlights the new features, fixes, enhancements and known issues for the PLX51-DF1-ENI Gateway module.

## 1.1 About the PLX51-DF1-ENI

| Model         | Standards          |
|---------------|--------------------|
| PLX51-DF1-ENI | UL/cUL; Class1Div2 |

Wondering what you'll do now that Rockwell Automation has discontinued its legacy 1761-NET-ENI module? ProSoft Technology's DF1 Routing Module can be used in a similar way.

The PLX51-DF1-ENI module provides EtherNet/IP connectivity for SLC™ 500, CompactLogix™ and MicroLogix™ controllers, as well as many other DF1™ - enabled devices.

The module can be used for messaging between two controllers, uploading and downloading PLC programs, modernizing HMI's, or migrating legacy Honeywell systems.

## 1.2 Release Enhancements

| Release Version | Release Date | Description   |
|-----------------|--------------|---|
| 1.003.014       | 2-Aug-2023   | <ul style="list-style-type: none"> <li>Added ability to mask the Class 1 UDP indication and added <b>0x00</b> as the delimiter in the <i>Name of Service</i> in the ENIP List Services response</li> </ul>  |
| 1.003.011       | 20-Jul-2022  | <ul style="list-style-type: none"> <li>Customers with module version number prior to <b>1.003.010</b> will be able to successfully upgrade the module firmware to version <b>1.003.011 or newer</b>.</li> <li>Customers with module version number <b>1.003.011 or newer</b> will <b>not</b> be able to downgrade their firmware to 1.003.010 or older.</li> </ul>  |
| 1.003.010       | 25-Feb-2022  | <ul style="list-style-type: none"> <li>Fixed issue where module was sending ACK to other DF1 Slave responses while in Bridge mode.</li> <li>Fixed issue where module did not respond to PCCC message after a DF1 slave communication fault (No response, NAK, EOT, Incorrect TNS).</li> </ul>   |
| 1.003.009       | 2-Feb-2021   | <ul style="list-style-type: none"> <li>Fixed anomaly where a NAK received message was incorrectly handled when the module is operating as a HD Slave.</li> <li>Fixed anomaly where an online edit and/or a download to a PLC5 / SLC via the DF1 Router would fail.</li> </ul>   |
| 1.003.008       | 13-Nov-2020  | <ul style="list-style-type: none"> <li>Added DF1 Slave ENQ unloading when wrong TNS was received.</li> <li>Fixed issue where each packet coming from <i>DF1_receive_pccc</i> must use a different DST node to avoid confusion on the response.</li> <li>Fixed issue where there was no response to PCCC TCP SYN requests when PCCC enable was not set.</li> <li>Fixed issue - In HD mode, the response packets from other devices are seen as checksum errors</li> <li>Fixed Issue - Unloading HD response once the ACK has been received. If no ACK ,then resend the same response</li> <li>Fixed issue - When DF1 is in Slave mode, mapping would use the length of mapped item. For example, N100 to be mapped to N10, because it only looks at the N10 characters. In <i>DF1_get_tag_map</i> function length should match.</li> </ul> |
| 1.003.006       | 7-Jan-2020   | <ul style="list-style-type: none"> <li>Fix anomaly where module incorrectly detects the end of the packet when multiple 0x10 (DLE) are sent before the 0x03 (ETX) byte.</li> </ul>  |
| 1.003.005       | 12-Dec-2019  | <ul style="list-style-type: none"> <li>Fixed Scheduled SLC Read/Write for file numbers over 99.</li> <li>Fixed issue where when in Bridge Mode HD Master - cannot send from node 16</li> <li>Added processing and capture of EOT packet</li> </ul>  |

|           |             |  |
|-----------|-------------|--|
| 1.003.004 | 15-Oct-2019 | <ul style="list-style-type: none"> <li>When replying in bridge mode - HD Slave - if ACK was not received in time, it will not send ENQ</li> <li>The source address in bridge mode - HD Master - configurable using Node Address parameter in the Serial - DF1 configuration tab of PLX50CU.</li> </ul> <p><b>Known Issues:</b></p> <ul style="list-style-type: none"> <li>When the PLX1-DF1-ENI is operating as a DF1 half-Duplex Master, there is a slight probability that a single message will be ignored. Any following message will work as designed.</li> </ul>   |
| 1.003.003 | 2-Sep-2019  | <ul style="list-style-type: none"> <li>In Half duplex communication mode, ACK will not be sent if destination address is NOT in map</li> <li>Fixed – DF1 communications may become unresponsive if the link to the Logix controller was broken , while the Ethernet Link on the module is still up, and DF1 messages are received frequently without any timeout on the DF1 Master</li> </ul>  |
| 1.003.002 | 21-Jun-2019 | <ul style="list-style-type: none"> <li>Added Micro Revision</li> <li>Updated ARP behaviour to not fill up with broadcast messages</li> <li>Fixed issue where PCCC message buffer rejects messages when there are more than 3 buffered (should be 5).</li> <li>Added support for DF1 Half Duplex Master when in bridge mode.</li> <li>Support for SLC FNC 0xAB in Slave mode which is Masked write</li> <li>Support for PLC5 Typed Write with only a single element (non - array) in slave mode</li> <li>Added DIP4 forcing the module to fixed IP address 192.168.1.100</li> <li>Updated ENIP connection to use Default Gateway Address when destination IP address is out of subnet.</li> <li>Fixed webserver micro revision</li> </ul>   |
| 1.003     | 17-Aug-2018 | <ul style="list-style-type: none"> <li>Half-duplex checksum anomaly was resolved when in Scheduled mode.</li> <li>Fixed anomaly with the DF1 Router where excessively large packets (during a download PLC download) could cause the module to reset.</li> <li>Fixed anomaly with the DF1 Router where, if certain malformed PCCC packets are received, could cause the DF1 Router to reset.</li> <li>Enhancement to limit the amount of consecutive ENQ requests (this came from a customer who was interfacing the DF1 Router with an old DeltaV driver) allowing older drivers to recover once disconnected.</li> <li>Enhancement to address anomaly in SLC5/04 and SLC5/03 which could cause the SLC controller to suffer an unrecoverable fault when programming while a PanelView is connected to the SLC via the DF1 Router (this came from Melbourne Water in Australia).</li> </ul> |

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|       |             |  |
|-------|-------------|--|
|       |             | <ul style="list-style-type: none"><li>• Minor enhancements to the Ethernet stack to comply with Achilles Level 1+2.</li></ul>  |
| 1.002 | 23-Jan-2018 | <ul style="list-style-type: none"><li>• Fixed issue where certain routed PCCC messages did not send to the correct destination address.</li><li>• Fixed minor anomalies in the CIP statistics</li><li>• Resolved issue where forward open from CIP Serial connection could cause the Class 1 EtherNet/IP connection to drop.</li></ul> |
| 1.001 | 20-Dec-2017 | Initial Release  |

## 2 Support, Service & Warranty

### 2.1 Contacting Technical Support

ProSoft Technology, Inc. is committed to providing the most efficient and effective support possible. Before calling, please gather the following information to assist in expediting this process:

- 1 Product Version Number
- 2 System architecture
- 3 Network details

If the issue is hardware related, we will also need information regarding:

- 1 Module configuration and associated ladder files, if any
- 2 Module operation and any unusual behavior
- 3 Configuration/Debug status information
- 4 LED patterns
- 5 Details about the serial, Ethernet or Fieldbus devices interfaced to the module, if any.

**Note:** For technical support calls within the United States, ProSoft Technology's 24/7 after-hours phone support is available for urgent plant-down issues.

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