



Chelsio T7 ARM Unified Wire Solution for Linux

Release Notes



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Document History

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I. Chelsio T7 ARM Unified Wire Solution

1. Introduction

This document provides details on Chelsio T7 ARM Unified Wire solution for Chelsio adapters in RC mode

 **Note** ***This feature is available for early access, having undergone a restricted validation cycle.***

2. New Features

The following new drivers have been added in this release:

- LIO iSCSI PDU Offload (Target) ARM driver.
- NVMe-oF iWARP (Target) ARM driver.
- NVMe-oF RoCEv2 (Target) ARM driver.
- NVMe-oF/TCP PDU Offload (Target) ARM driver.

3. Firmware Changelog

- Firmware has been updated from 2.1.23.0 to 2.1.25.0.
- RoCEv2 Changes:
 - Fixed packet offset calculation.
 - Added timer rest in case of internal ACK.
 - Added logic to send proper msn in aeth for NAK packet.
 - Fixed VLAN issues.
- Bug #46614: Fixed setting the mod type to FW_PORT_MOD_TYPE_NA until the optical module's i2c is accessible to determine the actual optical module type.
- Bug #46655: Partial fix - Fixed an issue where the rx_los (Receive Loss of Signal) status was reported incorrectly for Port 1.
- Bug #46655: Partial fix - Improved link-down detection logic to accurately pass the failure reason to the driver, enhancing visibility into link stability issues.
- Bug #45866: Added firmware support for dynamic modulation switching (PAM4 ↔ NRZ). The system now automatically updates the optical module's Rate Select bits in the EEPROM upon speed configuration, ensuring optimal signal integrity for both signaling standards.
- Reverted AN speed to 10G.
- Bug# 46741: Enabled dynamic Tensilica core power-up based on EFUSE1 and VPD configuration, replacing static MAX_UP_CORE limits to improve platform-specific core management.
- Bug #45602: Prevented automatic link re-establishment after ifconfig down by ensuring the PHY, PCS, and MAC layers are correctly powered down/disabled upon interface shutdown.
- Bug #46723: Enabled runtime detection of active ARM cores by reading the VPD_VW_ARM_EN field from the VPD.
- Bug #46769: Added jumbo frame support for FW hairpin mode
- Bug #46781: Fixed a race condition where port readiness was signaled prematurely. The fix ensures the port status is only set to "ready" after the module is confirmed as accessible, preventing transmission failures and link drops on the peer side.

4. Known Issues

This section lists the known issues in this release of the Chelsio T7 ARM Unified Wire Solution.

- MTU 9000 is not supported in this release.