

Distributed, Disaggregated Chassis (DDC) CLOS

HiWire LP CLOS AEC

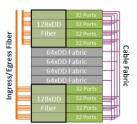
DDC: Modern Chassis Replacement

Chassis are large, expensive, proprietary solutions to high-bandwidth switching and routing applications. Modern, software-defined data centers that need greater flexibility are driving the migration to DDCs and decoupling network hardware and software in the process.





Distributed, Disaggregated Chassis



Solving the DDC CLOS Challenge

A chassis uses a backplane to build a CLOS network. A DDC uses standards-based 400G cables to build a CLOS network – but legacy interconnect solutions don't deliver. Optics power is too high and DAC gauge is too large to route at these densities resulting in broken connectors and failed rollouts.

Say Hi to HiWire LP CLOS AECs

Credo's HiWire CLOS AEC are thin, low power, deterministic Active Electrical Cables (AECs) specifically designed for DDC CLOS applications:

- Up to 75% less power consumption than optical solutions
- Up to 75% less space than DACs
- Deterministic 1e-8 pre-FEC BER performance
- 10-year service life

Using HiWire LP CLOS AECs in a DDC

- Routing densities of up to 1,000 cables per rack
- Improved reliability with MTBF >10 million hours
- Lower power consumption than chassis



Credo HiWire LP CLOS Active Electrical Cables (AEC) are specifically designed for high density in-rack or HPC rack-to-rack interconnect to support CLOS architectures.

With 75% less power than optical solutions and 75% less volume than DACs, these AECs enable CLOS cabling densities up to 1,000 cables per rack.

Key Parameters

Lengths 0.5m – 3.0m

0.5m granularity

Cu Gauge 32 AWG

Modulation PAM4 PAM4

Connectors A-Side B-Side

QSFP56-DD QSFP56-DD

Link Speeds 56G

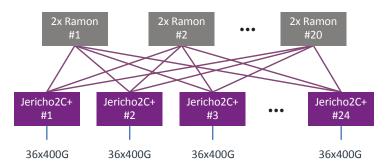
Power 4.5W per end

BER Pre-FEC BER 1e⁻⁸

Post-FEC BER < 10⁻¹⁵



345Tb Jericho2C+ / Ramon Cluster



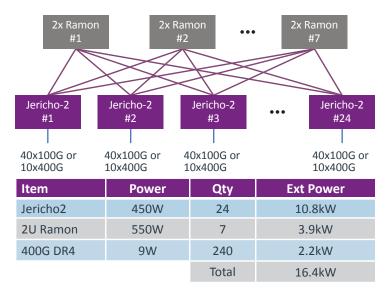
Item	Power	Qty	Total Power
Jericho2C+	900W	24	21.6kW
2U Ramon	550W	20	11kW
400G DR4	9W	864	7.8kW
		Total	40.1kW

CLOS Options

Item	Power	Qty	Ext Power
AOC	2x9W	960	17.2kW
HiWire LP CLOS AEC	2x4.5W	960	8.6kW



96Tb Jericho2 / Ramon Cluster



CLOS Options

Item	Power	Qty	Ext Power
AOC	2x11W	312	5.6kW
HiWire LP CLOS AEC	2x4.5W	312	1.7kW



For more information please visit www.credosemi.com/hiwire or email hiwire@credosemi.com.