



Credo Extends LP SWITCH AEC Family to 200G (4x56G) Adding PAM4 Support for Hyperscale Data Center and Telecom Service Providers

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New Low-Power AEC enables hitless failover between server and dual switches at cloud speed providing a migration path to next-generation 200G NICs and TORs

LP SWITCH 200
Low Power AEC
FOR SERVER OR NIC-TO-DUAL TOR

- Y-Split 200G HiWire™ Active Electrical Cable
- 4 x 56G PAM4 ↔ Two 4 x 56G PAM4
- Optional 56G PAM4 ↔ 28G NRZ Speed Shifting
- Hot-Swappable QSFP56

HiWire™ **CREDO**
we connect.

San Jose, Calif., November 11, 2021 –Credo, a global innovation leader in advanced connectivity solutions delivering high-performance, low-power solutions for 100G, 200G, 400G, and 800G port-enabled networks, today announced the [200G HiWire LP SWITCH Active Electrical Cable \(AEC\)](#). The low-power AEC connects a server Network Interface Card (NIC) to two Top-of-Rack (TOR) switches for hitless failover. The solution architecture was jointly announced in July 2021 by Credo and Microsoft, whose SONiC Dual TOR Management Container controls the SWITCH AEC.

Data processing and storage power can be monetized but not the power consumed for data transport. Credo's low-power LP SWITCH AECs help minimize data transport power and enable data center architectures that eliminate redundant failover server racks.

Credo

"Power is the most important and most difficult parameter to control in hyperscale networking," said Don Barnetson, Vice President of Product, AECs at Credo. "Thanks to Credo's advanced purpose-built SerDes architecture, our 200G LP SWITCH AEC has doubled its speed in the last six months while staying inside the same power envelope."

Microsoft

"As NIC speeds increase rapidly in the hyperscale datacenter, reliability must not be compromised," said Lihua Yuan, Partner Development Manager at Microsoft. "Credo's 50G and 100G HiWire LP SWITCH AECs are already proven and up-streamed in SONiC with the 200G LP SWITCH AEC creating a path for next-generation NIC speeds in 2022."

NVIDIA

"Emerging trends such as AI and 5G are driving exponential growth in the performance demands of the modern data center," said David Iles, Senior Director of Ethernet Switches at NVIDIA. "The NVIDIA Networking platform equips innovators as Credo with the network bandwidth and low latency required to supercharge the modern data center with breakthroughs such as the HiWire LP SWITCH AECs."

Arrcus

"Reliability is more critical for telecommunication service providers than for hyperscalers," said Keyur Patel, Founder and CTO, Arrcus. "Credo's HiWire LP

SWITCH AECs provide 5x9s (99.999%) rack reliability and enable us to ensure autonomous high availability (HA) from the Arrcus Connected Edge (ACE) platform with a sub-microsecond failover."

Wiwynn

"Servers are moving to mainstream 200Gb NIC speeds in 2022 to support disaggregation and RDMA use cases," said Steven Lu, Wiwynn's Senior Vice President of Product Development. "Credo's innovative 200Gb LP SWITCH cables ensure that our customers can pursue these advanced features with the highest up time server interconnect in the market."

The HiWire LP SWITCH AEC 200 has QSFP56 (Quad Small Form Factor Pluggable) connectors with integrated Credo PCS termination. The cables support 50G, 100G, and 200G with optional speed-shifting between 56G PAM4 and 28G NRZ lanes on both the NIC and TOR ends. The new 200G AECs join Credo's diverse HiWire family for 100G, 200G, 400G, and 800G systems and are easily identified by their trademark purple color.

For more information about HiWire LP SWITCH AECs, visit <https://www.credosemi.com/credo-hiwire-lp-switch-aec-active-electrical-cable>.

About Credo

Credo is a leading provider of high-performance serial connectivity solutions for the hyperscale datacenter, 5G carrier, enterprise networking, artificial intelligence, and high-performance computing markets. Credo's solutions deliver the bandwidth, scalability, and end-to-end signal integrity for next-generation platforms requiring 25G, 50G, and 100G signal lane-rate connectivity for 100G, 200G, 400G, and 800G port enabled networks.

For more information, please visit <https://www.credosemi.com>. Follow Credo on [LinkedIn](#) and [Twitter](#).