



## Credo Announces HiWire SWITCH AEC – Enabling Simpler, Faster and More Reliable Dual TOR Connectivity

July 15, 2021

*Credo will present the SONIC / HiWire SWITCH AEC Implementation at webinars with Microsoft on July 21/22, 2021*



**San Jose, Calif., July 15, 2021** – [Credo](#), a global innovation leader in advanced connectivity solutions delivering high performance, low power connectivity solutions for 100G, 400G, and 800G port-enabled networks, today announced the production availability of its [HiWire™ SWITCH Active Electrical Cable \(AEC\)](#). A SWITCH AEC enables a server to connect to two Top-of-Rack (TOR) switches without impacting the server or Network Interface Card (NIC).

Today's servers deployed with single TORs provide less reliability and thus must be paired with Hot Spare Servers in different racks. Credo's advanced AEC technology enables the transformation of data centers to move to dual TOR deployments, eliminating the need for Hot Spare Racks for improving single rack reliability. Hyperscale operators can retire their Hot Spare Racks or use them to expand their revenue pool.

The Network Operating system, SONIC, fully controls the SWITCH AEC. The NOS can seamlessly switch connections between an Active- and Standby-TOR in less than 1 microsecond, without any intervention from the server or Guest OS. Credo and Microsoft will present the SWITCH AEC implementation and how NOS-controlled connectivity technology is up-streamed in SONIC at a pair of webinars hosted by Alan Weckel of 650 Group:

- July 21, 2021 at 10:00 AM San Francisco time, in English

[Register Here](#)

- July 22, 2021 at 9:00 AM Shanghai time, in Mandarin

[Register Here](#)

Credo's HiWire SWITCH AEC family of 1 (NIC-side) : 2 (TOR-side) Y-split cables are available in volume production in two configurations:

- **HiWire SWITCH AEC:** 50G (2x28G QSFP28 NRZ) to Two 50G (2x28G QSFP28 NRZ)
- **HiWire LP SWITCH AEC:** 100G (4x28G QSFP28 NRZ to Two 100G (4x28G QSFP28 NRZ) or 50G (2x28G QSFP28 NRZ) to Two 50G (2x28G QSFP28 NRZ)

These plug & play HiWire AECs, recognizable in the Credo purple jacket with an LSZH flame-retardant coating, are hot-pluggable and have a low power consumption of less than 5W. A BER < 10<sup>-12</sup> (without FEC) is supported. The cables are flexible 32AWG copper in lengths from 0.5m to 2.0m.

"Credo's HiWire SWITCH AECs are accelerating the adoption of dual TOR technology by overcoming complex and slow legacy enterprise approaches and dramatically simplifying deployment at Hyperscale," said Alan Weckel, principal at the 650 Group.

“Our SWITCH AECs, coupled with SONiC’s upstreamed features, promises to open the door to Hyperscaler adoption of dual TOR architectures.” stated Don Barnetson, Vice President, Product at Credo. “AECs have proven invaluable to hyperscalers at solving a wide range of problems from cable thickness and reach to speed-shifting and now redundancy. We’re just scratching the surface of the capabilities of AECs and all they deliver – by simply adding a plug and play cable,” Barnetson continued.

“Reliability has become a key differentiator in the Hyperscale datacenter. Credo’s HiWire SWITCH AECs integrated with SONiC provides users a different choice to enable dual TOR for servers to improve reliability,” said Lihua Yuan, Partner Dev Manager, at Microsoft.

For more information about the HiWire SWITCH AECs and other Credo AEC solutions, visit [www.credosemi.com/hiwire](http://www.credosemi.com/hiwire).

#### **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](#).