



Credo Introduces Seagull 110 and Seagull XR8 PAM4 DSPs for High-Density Datacenters

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Fully IEEE compliant products come with excellent performance and power, and address the need for low cost-per-bit and short lead times

**Credo 53G/Lane Optical DSP Family
Now Extends to 400G**

**Seagull 110
100G**
CREDO
SEAGULL 110
2x53G ↔ 2x53G
2x53G ↔ 2x53G
PAM4 Retimer DSP

**Seagull XR8
400G**
CREDO
SEAGULL XR8
8x53G ↔ 8x53G
8x53G ↔ 8x53G
PAM4 Retimer DSP with VCSEL

Shenzhen, China and San Jose, Calif., September 8, 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 [Seagull 110](#) and [Seagull XR8](#) PAM4 DSPs. The pair of products expand Credo’s SEAGULL Family and together enable high-performance 50/100/200/400Gbps applications in hyperscale data centers.

Seagull 110 is a 2x53Gbps PAM4 retimer, while Seagull XR8 is an 8x53Gbps PAM4 retimer. Both devices are backward-compatible and support legacy data rates.

Seagull 110 is ideal for 1:2 breakout AOC or transceiver links between servers with 53G PAM4 interfaces and top of rack or end-of-row switches. Seagull XR8 enables VCSEL-based 400Gbps PAM4 solutions, providing a cost-effective alternative to current single-mode fiber based fiber connectivity within the rack. In addition, with 1:2, 1:4 or 1:8 breakout options, Seagull XR8 provides flexible options for interconnect and network density.

Seagull DSPs utilize Credo’s innovative design architecture enabling low-power dissipation and excellent performance. Both devices integrate a high-performance digital signal processor (DSP) to compensate signal impairments for low optical sensitivity and BER floor. Other features include:

- Line-side transmitters with very low electrical TDECQ and high linearity
- Integrated finite impulse response (FIR) filters to equalize out-impairments associated with PCB, optics, and connectors.
- Receiver and transmitter performance optimization features for optimal settings and performance tuning Dedicated PLLs for each channel for seamless use in breakout applications
- A full suite of integrated test features
- Line and host-side loopbacks to facilitate simplified lab debug and manufacturing testing

The entire SEAGULL Family is fully IEEE 802.3 compliant with robust, repeatable performance and proven interoperability with different optical link partners and switch/ASICs.

“Next-generation data centers need continuous innovation to enhance product performance while lowering the overall cost-of-ownership and cooling requirements,” said Scott Feller, Vice President, Marketing at Credo. “Increased data traffic leads to continued data center growth accompanied by need for assurance of supply. Credo’s new DSPs address all customer requirements in one solution and perfectly suit both optical transceiver and AOC applications”,

Scott continued.

Both Seagull 110, CFD30201, and Seagull XR8, CFD60801, are available for immediate production shipments.

For more information about Credo optical DSPs, visit <https://www.credosemi.com/optical>.

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](#).