



Credo Introduces the Seagull 452 family of High-Performance Optical DSPs

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New Octal, Quad and Dual Devices Optimized for Power, Performance and Cost to Address Growing AI Demands

SAN JOSE, Calif. & SHENZHEN, China--(BUSINESS WIRE)--Sep. 5, 2023-- Credo Technology Group Holding Ltd (NASDAQ: CRDO), an innovator in secure, high-speed connectivity solutions that deliver the necessary energy efficiency and data rates to address the constantly growing bandwidth requirements of the data infrastructure market, today announced the availability of Seagull 452 family of high-performance, low-power optical Digital Signal Processors (DSPs). The family consists of the octal channel Seagull 452, the quad channel Seagull 252 and the dual channel Seagull 152 DSPs. All devices come with integrated VCSEL, EML and SiPho drivers.

"With the massive growth of AI as predicted by the market forecasters, we see a tremendous opportunity to grow our footprint with customers, including hyperscalers, as the number of optical interfaces required to meet the AI workload flow will only continue to increase," said Michael Girvan Lampe, Vice President of Worldwide Sales and Marketing at Credo. "Hyperscalers supporting AI applications will need to balance this growth demand for new levels of performance with capex and energy concerns. The Seagull 452 family of DSPs aims to help our customers balance these concerns while also benefitting from this growing market opportunity."

The Seagull 452 family incorporates Credo's fourth generation DSP technology on the electrical host interface and the optical interface. This allows for extended host side reach supporting seamless operation over short and long PCB channels beyond the VSR specifications without having to modify the device settings. On the optical side, the latest performance enhancements allow customers to relax the optical component specifications, thereby increasing manufacturing yields and lowering costs.

The new Seagull 452 boasts exceptionally low-power consumption and is targeted at the burgeoning 400G Active Optical Cable (AOC) market for AI networks. This breakthrough is achieved while maintaining superior link performance, compact size and optimized cost that makes this product line a superior choice for all 400G, 200G and 100G AOC and transceiver applications.

- [Seagull 452](#) is a versatile full-duplex device that can be used in next generation 8x50Gbps QSFP-DD optical transceivers or AOCs for 400Gbps SR8/DR8/FR8/LR8 applications using PAM4 modulation.
- [Seagull 252](#) can be used in next generation 4x50Gbps QSFP56 optical transceivers or AOCs in 200Gbps SR4/DR4/LR4 applications using PAM4 modulation.
- [Seagull 152](#) can be used in 2x50Gbps QSFP28, SFP-DD or DSFP optical transceivers or AOCs and supports 100Gbps SR2/DR2/LR2 applications.

All members of the Seagull 452 family support 25 Gbps NRZ operation for backwards compatibility.

Key Features of the Seagull 452 DSP Family

- Fourth generation DSPs on host and line side
- Line side Rx performance-enhancing features specific to optical link and component impairments
- Integrated VCSEL drivers with programmable bias and modulation currents
- Integrated EML and SiPho drivers with programmable output swing and equalization
- Host side supports extended PCB reach
- Use with Teal 200 4x50G TIA for a complete optical chipset solution

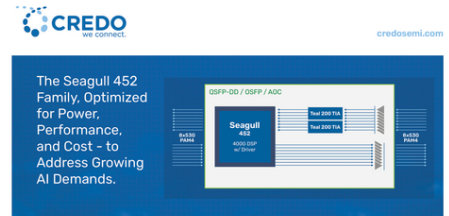
Availability

Samples of the Seagull 452 family are all available now. Interested customers should contact sales@credosemi.com. All Credo product offerings are supported by evaluation boards, simulation models, characterization reports, reliability reports, design libraries and a full set of supporting documentation.

To learn more about the Credo Optical products, go [here](#).

About Credo

Our mission is to deliver high-speed solutions to break bandwidth barriers on every wired connection in the data infrastructure market. Credo is an innovator in providing secure, high-speed connectivity solutions that deliver improved power and cost efficiency as data rates and corresponding bandwidth requirements increase exponentially throughout the data infrastructure market. Our innovations ease system bandwidth bottlenecks while simultaneously improving on power, security, and reliability. Our connectivity solutions are optimized for optical and electrical Ethernet applications, including the emerging 100G (or Gigabits per second), 200G, 400G, 800G and the emerging 1.6T (Terabits per second) port markets. Credo products are based on our proprietary Serializer/Deserializer (SerDes) and Digital Signal Processor (DSP) technologies. Our product families include Integrated



Introducing the Credo Seagull 452 Family of Optical DSPs at CIOE China (Graphic: Business Wire)

Circuits (ICs) for the optical and linecard markets, Active Electrical Cables (AECs) and SerDes Chiplets. Our intellectual property (IP) solutions consist primarily of SerDes IP licensing.

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

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