

Co-Wave™ AW400-O 800G Coherent-lite DSP

Enables 800G-LR2 for up to 20km Reach

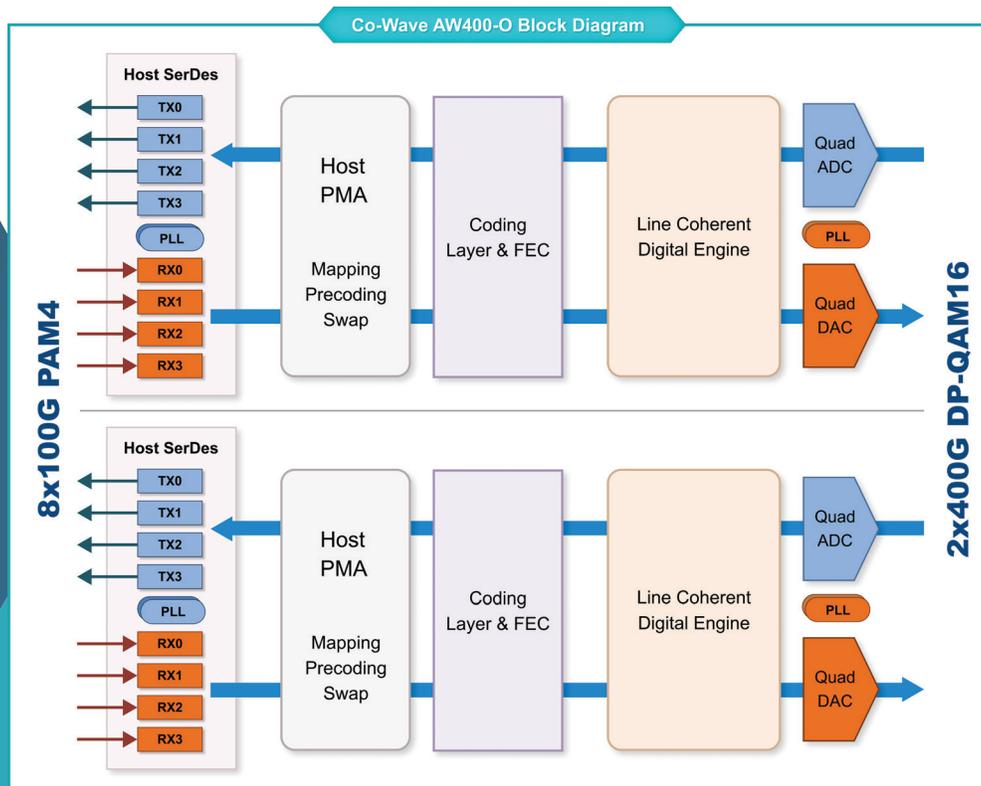
Overview

Co-Wave™ AW400-O is a latency optimized Coherent-lite DSP that utilizes DP-QAM16 modulation to meet the needs of interconnecting AI machine clusters across data center campuses spanning up to 20km. The AW400-O DSP enables the implementation of cost-effective 800G or 1.6Tb capacity O-band Coherent-lite optical modules. It is uniquely differentiated by its integrated, configurable NIST CAVP-certified security engine, which enables encryption of all links connecting one data center to neighboring data centers within the campus.

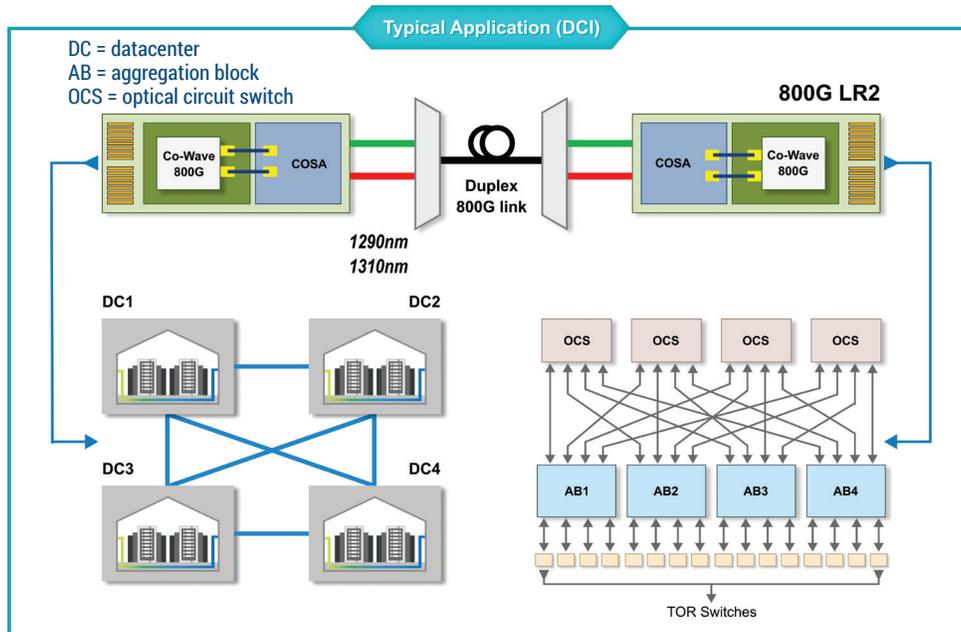
Features

- Supports DSP-controlled laser to enable low-cost lasers
- Low Latency proprietary FEC option
- Supports MACsec

Figure1: Co-Wave Functional Block Diagram



Applications



Technical Specifications

DP 16QAM 2x400G
Host Compliant to IEEE 802.3 df Standard
Up to 20km reach operation
PRBS gen/checker
EyeQ™ Diagnostics and Monitoring: FEC error, EYE, SNR, Host/Line Loopback
Available as FCBGA

For more technical details, please contact our sales at info@awavesemi.com.



Alphawave Semi™ is a global leader in high-speed connectivity for the world's technology infrastructure. Our IP and custom silicon solutions meet the needs of worldwide tier-one customers in data centers, compute, networking, AI, 5G, autonomous vehicles, and storage.

To find out more about Alphawave Semi™, visit: www.awavesemi.com