

O-Wave™ AW200-G PAM4 Optical DSP for 800G Optical Transceiver Applications

8x100G<->4x200G PAM4 Optical Gearbox DSP

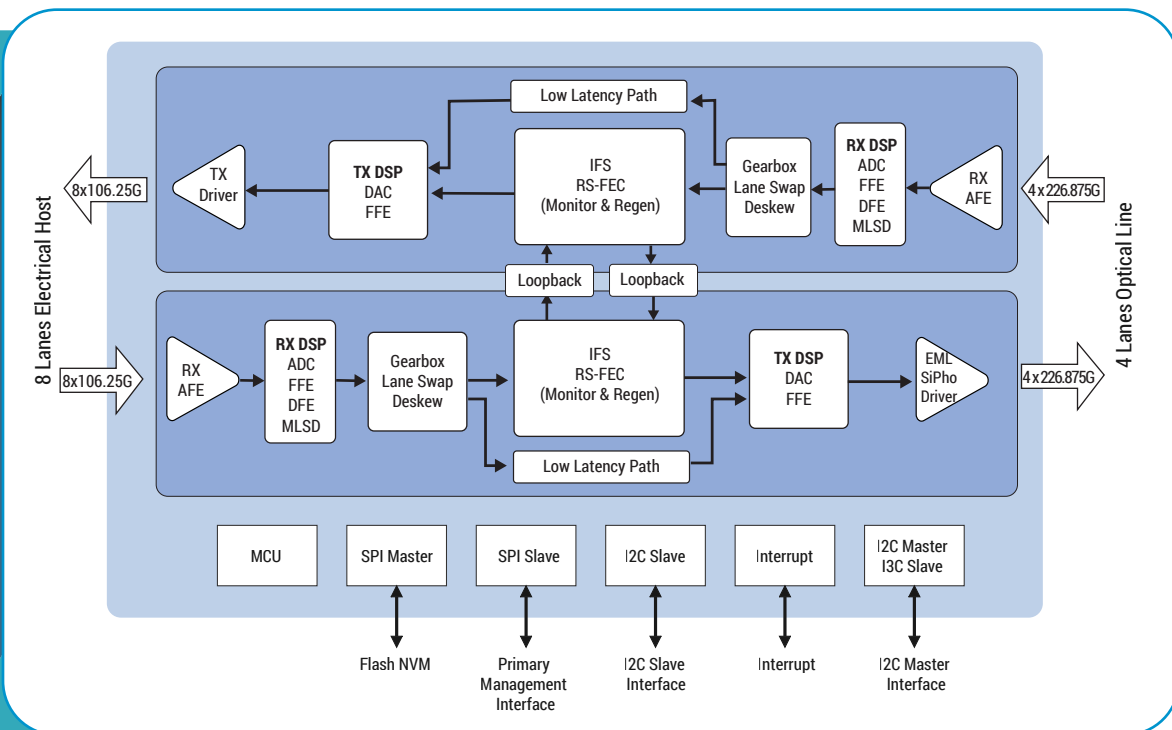
Overview

The AW200-G is a Gearbox Digital Signal Processor (DSP) for PAM4 optical applications. The gearbox features an 8x100G interface on the host side and a 4x200G interface on the line side. On the host interface, the device can equalize over 40dB of loss measured bump-bump. The line side transmit interface features optional laser drivers with DSP based, fully adaptive receivers on the line input. The AW200-G is fabricated in an advanced 3nm CMOS technology node and is offered as a Known Good Die (KGD).

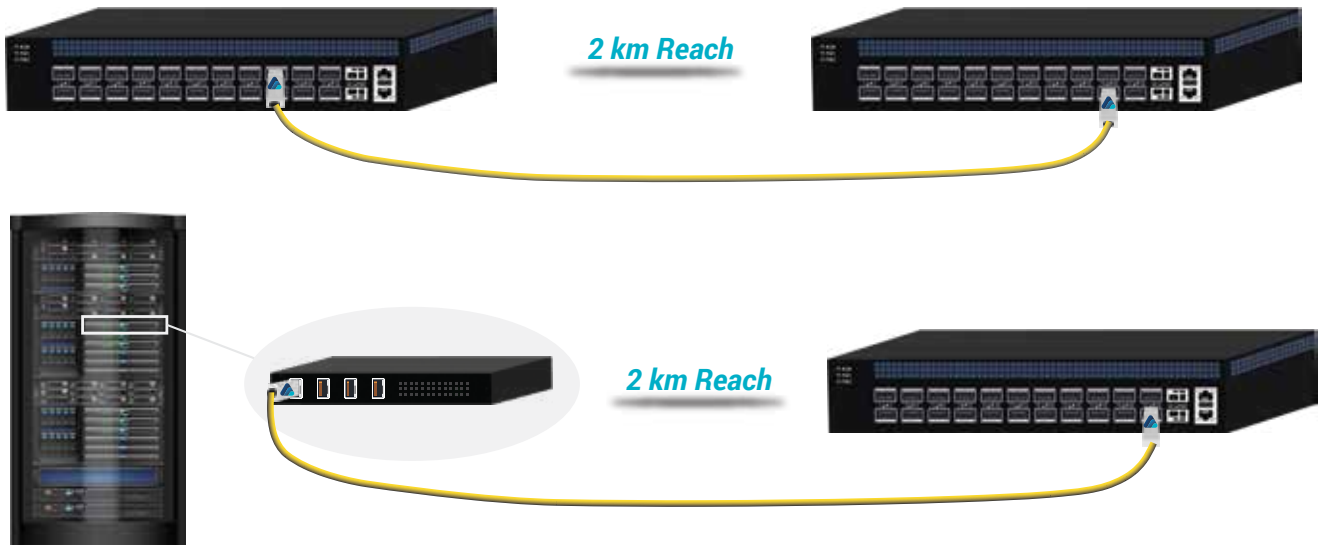
Features

- WidEye™ DSP technology
- EyeQ™ diagnostic and monitoring capabilities
- Integrated Laser Driver support for EML & SiPho
- Independent clocking per lane for breakout mode support
- Full XBAR to ease layout
- IEEE 802.3dj compliant IFS (Inner FEC Subsystem)

Figure1: O-Wave AW200-G Functional Block Diagram



Applications



Technical Specifications

EyeQ™ diagnostic and monitoring: FEC error, EYE, SNR, Host/Line Loopback

Compliant with IEEE 802.3dj and IEEE 802.3df

KP4 FEC Decode and Encode

PRBS gen/checker

800GbE, 4x200GbE applications

Available as Known Good Die (KGD)

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



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