

O-Wave™ AW200-R PAM4 Optical DSP for 1.6T Optical Transceiver Applications

8x200G PAM4 Optical DSP Retimer

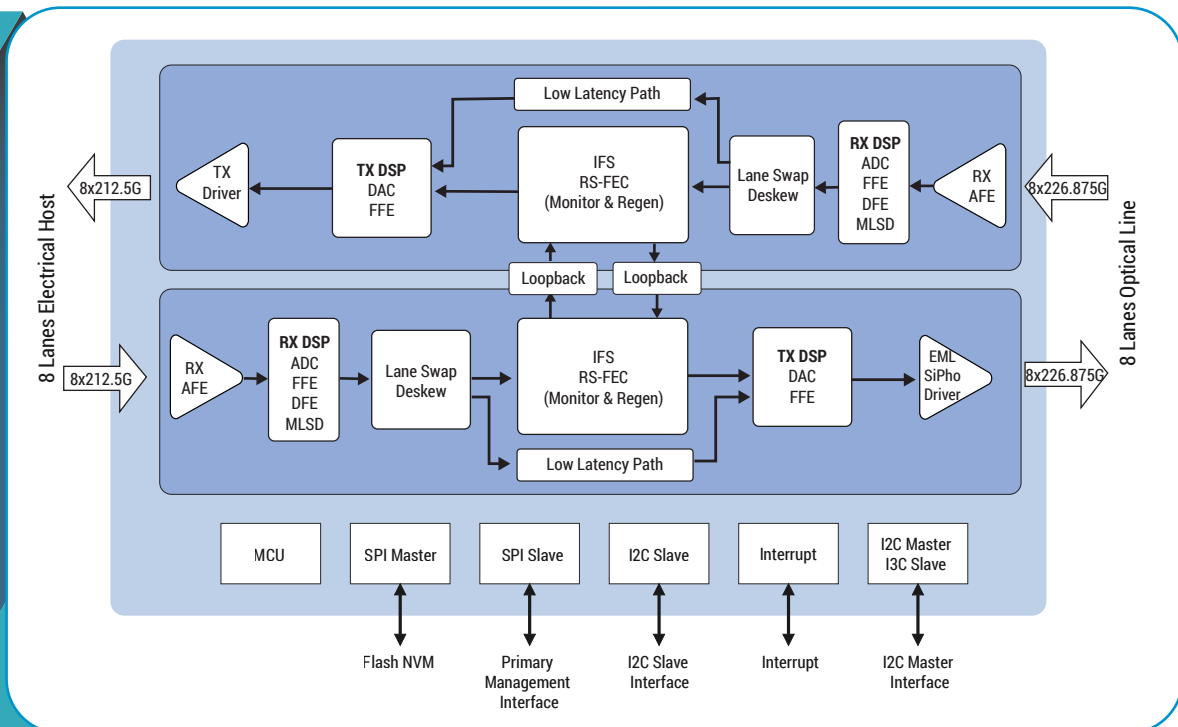
Overview

The AW200-R is a Digital Signal Processor (DSP) for PAM4 optical applications. 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-R is fabricated in an advanced 3nm CMOS technology node and is offered as a Known Good Die (KGD).

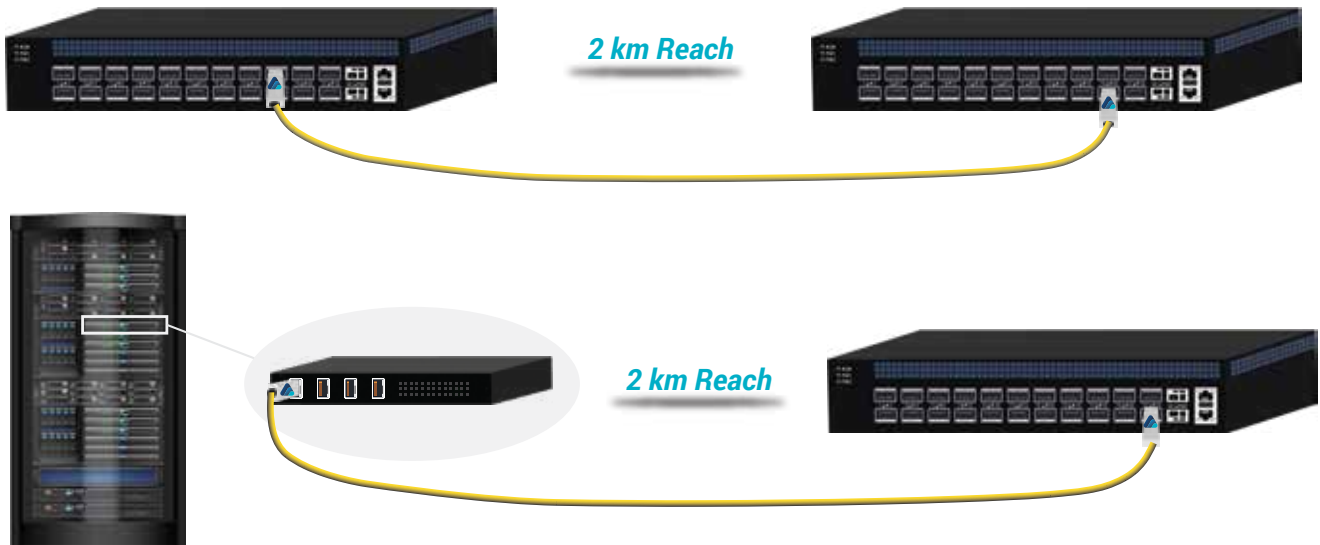
Features

- 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-R Functional Block Diagram



Applications



Technical Specifications

200G with two generations backwards compatibility (100G PAM4 and 50G PAM4)
EyeQ™ diagnostic and monitoring: FEC error, EYE, SNR, Host/Line Loopback
Compliant with IEEE 802.3df and IEEE 802.3dj
KP4 FEC Decode and Encode
PRBS gen/checker
1.6TbE, 2x800GbE applications
Available as Known Good Die (KGD)

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



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