

O-Wave™ AW100-R PAM4 Optical DSP for 800G Optical Transceiver Applications

8x100G<->8x100G PAM4 Optical DSP Retimer

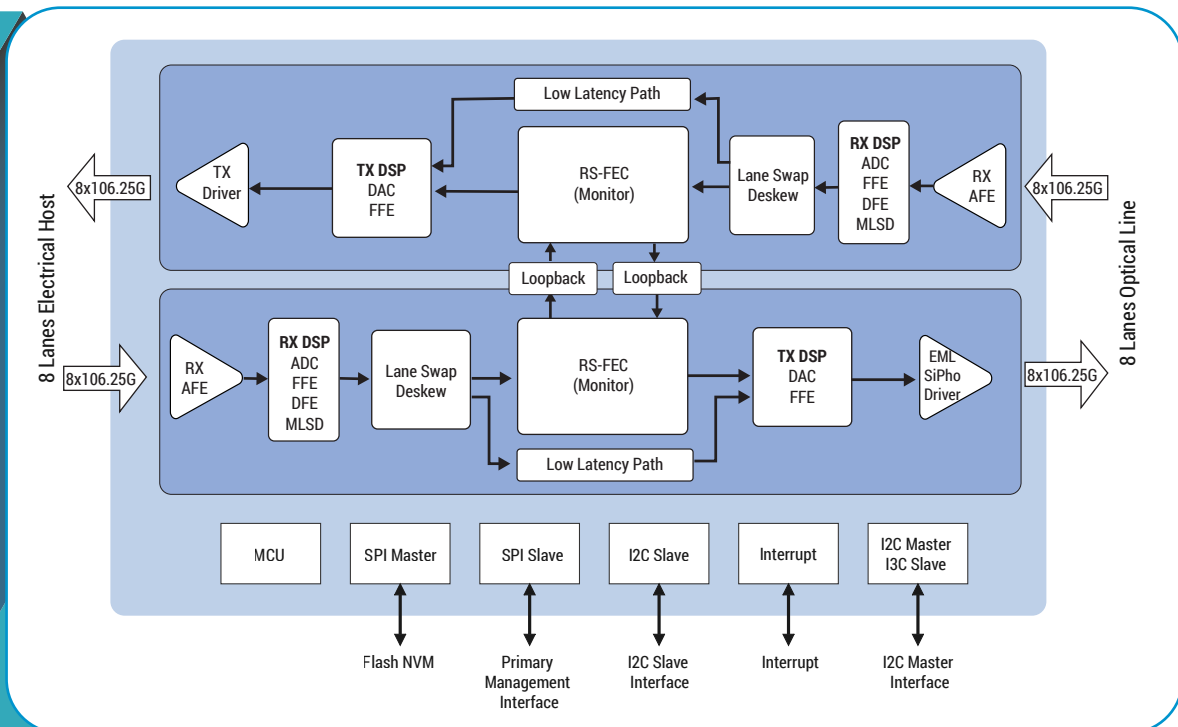
Overview

The AW100-R is a Digital Signal Processor (DSP) for PAM4 optical applications. On the host interface, the device can equalize up to 27dB 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 AW100-R is fabricated in an advanced 4nm CMOS technology node and is offered as a Known Good Die (KGD).

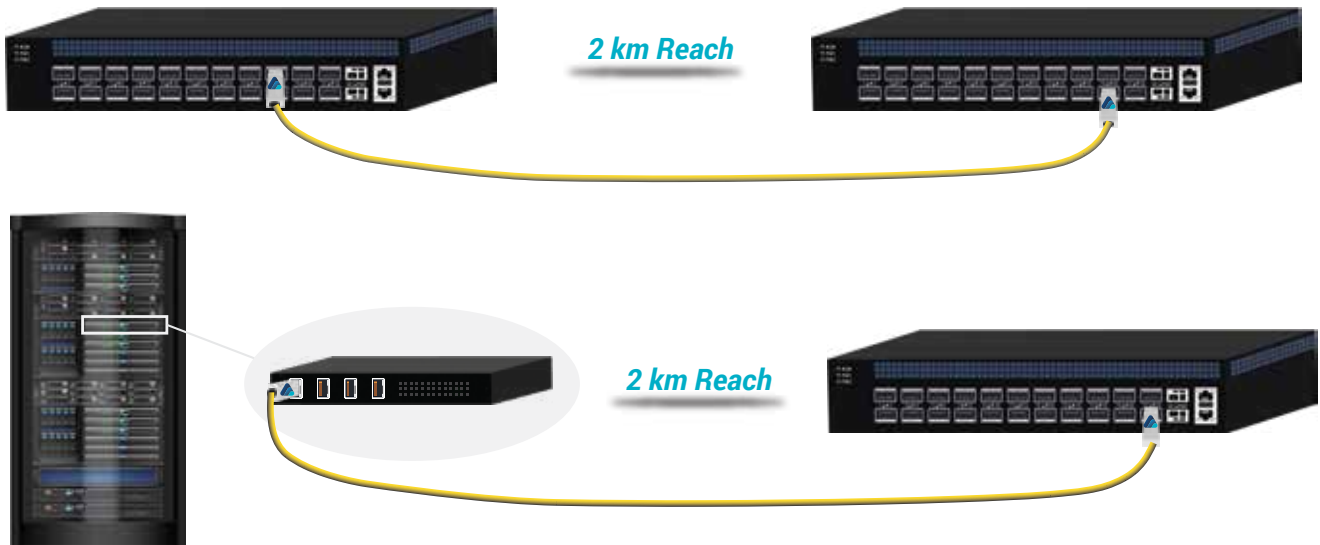
Features

- 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

Figure1: O-Wave AW100-R Functional Block Diagram



Applications



Technical Specifications

100G with two generations backwards compatibility (50G PAM4 and 25G NRZ)
EyeQ™ diagnostic and monitoring: FEC error, EYE, SNR, Host/Line Loopback
Compliant with IEEE 802.3ck and IEEE 802.3df
PRBS gen/checker
800GbE, 2x400GbE, 8x100GbE applications
Available as Known Good Die (KGD)

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



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