

Cu-Wave™ AW100-C PAM4 DSP for 800G Active Electrical Cable (AEC)

8x100G PAM4 DSP Retimer

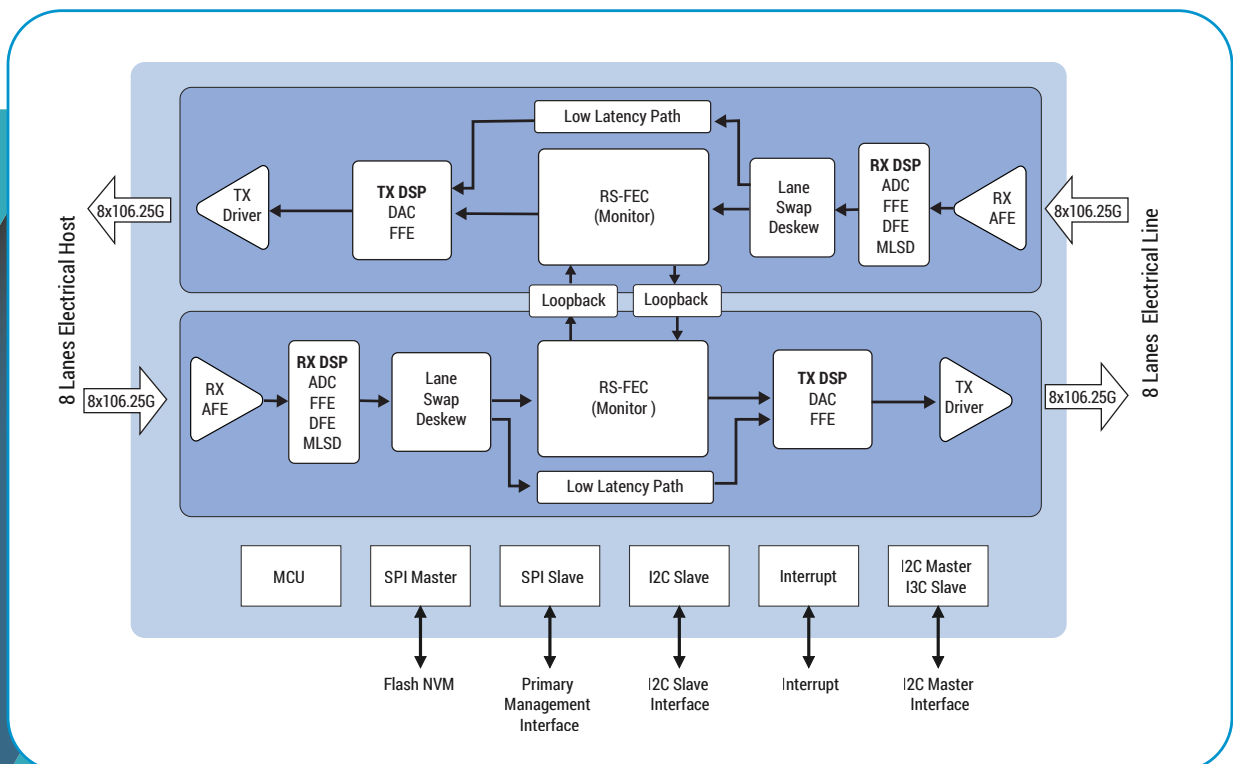
Overview

The AW100-C is a PAM4 Digital Signal Processor (DSP) for driving Active Electrical Cable applications of up to 3m. The AW100-C can equalize up to 27dB of loss (measured bump-bump) on the host-side and 25dB on the line-side interface. The AW100-C is fabricated in an advanced 4nm CMOS technology node and is offered as FCBGA and Known Good Die (KGD). Alphawave Semi offers a full 800G AEC reference design.

Features

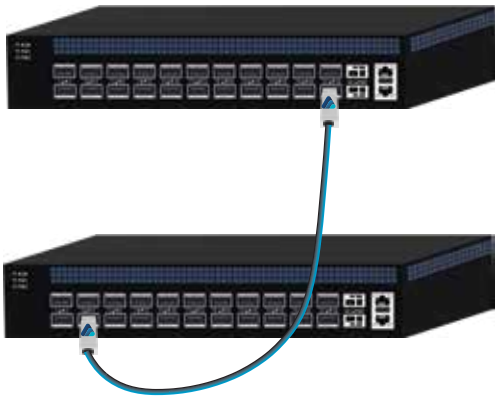
- WidEye™ DSP technology
- EyeQ™ diagnostic and monitoring capabilities
- Full XBAR support to ease layout
- Support for breakout mode

Figure1: Cu-Wave AW100-C Functional Block Diagram



Applications

Switch to Switch



Server to Switch



Technical Specifications

100G with two generation backwards compatibility (50G PAM4 and 25G NRZ)

Compliant to IEEE 802.3 df Standard

Medium Reach (MR) reach capability (25dB bump-bump)

EyeQ™ Diagnostics: FEC error, EYE, SNR, Host/Line Loopback

Available as FCBGA PKG and KGD

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



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