

RX56-PAM4

56Gbps PAM-4/NRZ Receiver

KEY FEATURES

- Supports 56 Gbps bit rate.
- Low bit error rate under 16dB channel loss.
- Input equalization and adaptive DFE totally provide maximum 14dB boosting.
- Built-in eye monitor to detect eye quality in real time.
- Supporting dual mode: 28Gb/s NRZ and 56Gb/s PAM-4

APPLICATIONS

- SerDes and data link testing for 56Gb/s
- High speed 112Gb/s Ethernet

DESCRIPTION

The **RX56-PAM4** is a high speed PAM4 receiver which is used in ultra-high speed data links such as 100GbE. The **RX56-PAM4** provide tunable range of 8dB VGA swing control and maximum 9dB boosting from 100MHz to 14GHz by CTLE. In addition, the **RX56-PAM4** also provide maximum 5dB adaptive DFE compensation to achieve low bit error rate under 16dB channel loss. Moreover, the **RX56-PAM4** adopt half rate receiver structure and all digital PI-based CDR to save power and area. Finally, the built-in eye monitor provide user can detect eye quality in real time and the dual-mode can receive different input data format.

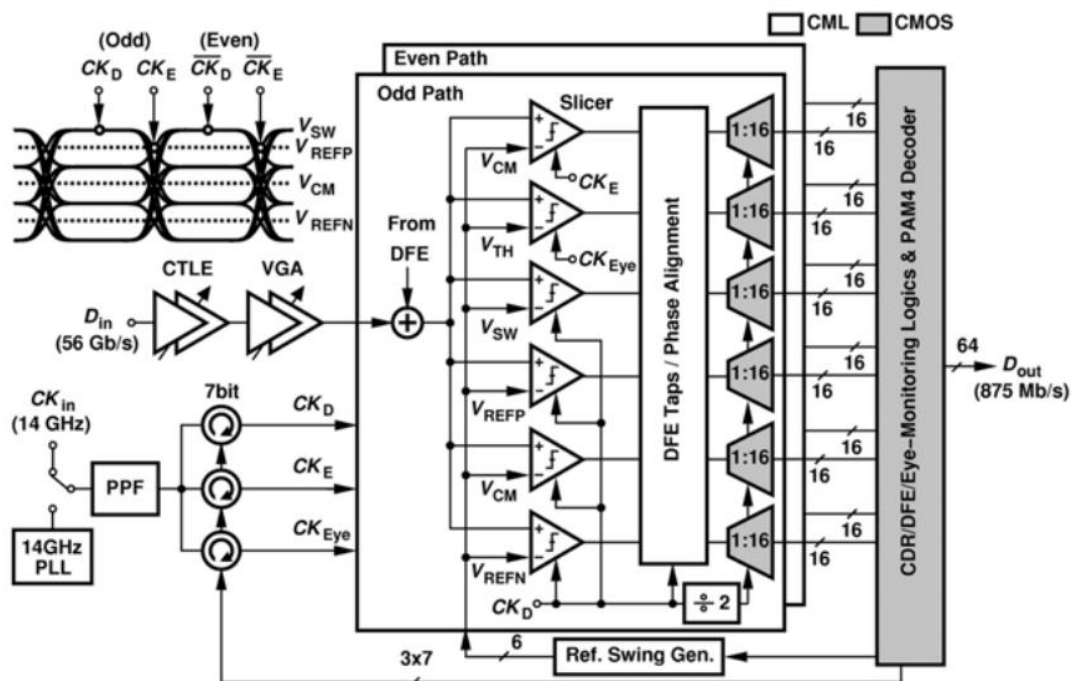


Fig. 1. Functional Block Diagram

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