

PI3DPX1203

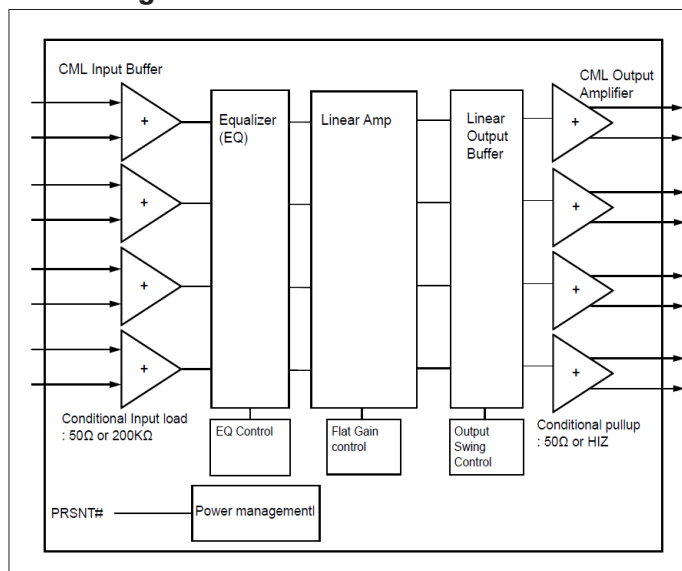
DisplayPort 1.3 8Gb/s Linear ReDriver for Source, Active Cable & Sink-side Applications

Pericom Semiconductor's PI3DPX1203 is DisplayPort compliant, 8Gbps link speed, single differential channel Linear ReDriver with Link Training transparent mode. Since DisplayPort source and sink-side device are unaware of the Linear ReDriver, they never generate AUX link training transactions, and pass through all the AUX transactions between source and sink-side devices. PI3DPX1203 provides programmable input equalization, linear swing and flat gain control to optimize output over a variety of physical mediums by reducing intersymbol interference. The integrated linear equalization circuitry provides flexibility with signal integrity of the signal before and after the ReDriver. A low-level input signal detection and output squelch function is provided.

Application

- PCs and Peripherals
- DisplayPort Active cables

Block Diagram



Features

- DisplayPort standard 1.3 Compliant Linear ReDriver
- Support flexible placement for Active cable, Sink and Source side
- Ideal for USB Type-C™ sink and source-side application with PD controllers
- Transparent DisplayPort link training. No need Aux Link training listener circuits
- Low latency transparent for the DisplayPort link training allow for Sink-side application
- Linear Input Equalization Increases Link Margin for Systems Implementing Decision Feedback Routing Equalizers (DFE)
- Independent channel configuration of input equalization, output swing and flat gain
- Pin strap or I²C programmable for device configuration setting
- Channel order swap and polarity swap support
- Aux channel connect directly from source to sink device
- 4-bit selectable address bit for I²C port
- Supply Voltage: 3.3V
- Package : 42-pin TQFN (3.5mm x 9mm)