

## SIGNAL INTEGRITY SOLUTIONS

# **PI3DPX1203**

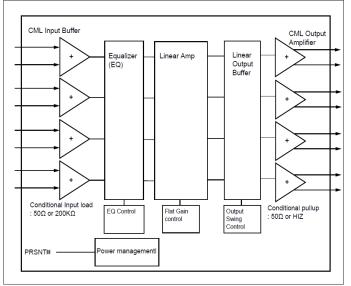
DisplayPort 1.3 8Gb/s Linear ReDriver for Source, Active Cable & Sink-side Applications

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<sup>™</sup>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 I<sup>2</sup>C 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 I<sup>2</sup>C port
- → Supply Voltage: 3.3V
- → Package : 42-pin TQFN (3.5mm x 9mm)