# PI3VDP612-A

4-Lane DisplayPort<sup>™</sup> Rev 1.1a Compliant Switch with Triple Control Logic for Fast Switching

#### Features

- ➔ 4-lane, 1:2 mux/demux that will support 2.7Gbps or 1.62Gbps DP rev 1.1a signals
- → 1-channel 1:2 mux/demux for DP\_HPD signal
- → 1-differential channel 1:2 mux/demux for DP\_Aux signal
- → Insertion Loss for high speed channels @ 2.7 Gbps: -1.5dB
- → -3dB Bandwidth for high speed channels of 3.25 Ghz
- → Low Bit-to-Bit Skew, 7ps max (between '+' and '-' bits)
- → Low Crosstalk for high speed channels: -33dB@2.7 Gbps
- → Low Off Isolation for high speed channels: -26dB@2.7 Gbps
- → V<sub>DD</sub> Operating Range: 3.3V ±10%
- ➔ ESD Tolerance: ±8kV contact on Ports A and B per IEC61000-4-2 Specification
- → Low channel-to-channel skew, 35ps max
- → Packaging (Pb-free & Green):
  - □ 56 TQFN (ZFE)
  - 42 TQFN (ZHE)

## Description

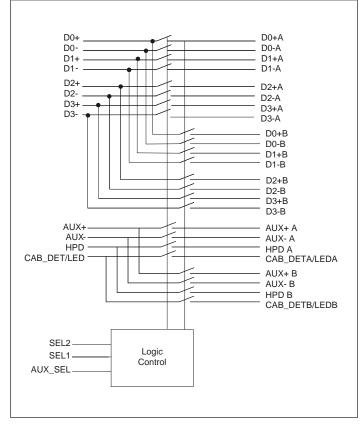
Pericom Semiconductor's PI3VDP612-A mux/demux is targeted for next generation digital video signals. This device can be used to connect a DisplayPort<sup>™</sup> Source to two Independent Display-Port Sinks or to connect two DisplayPort sources to a single DP display.

The newly released DisplayPort spec requires a data rate of 2.7 Gbps with AC coupled I/Os. Pericom's solution has been specifically designed around this standard and will support such signals.

# Application

Routing of DisplayPort signals with low signal attenuation between source and sink.

#### **Block Diagram**



# **Ordering Information**

Ordering Code	Package Code	Package Type
PI3VDP612-AZFE	ZF	Pb-free & Green, 56-contact TQFN
PI3VDP612-AZHE	ZH	Pb-free & Green, 42-contact TQFN

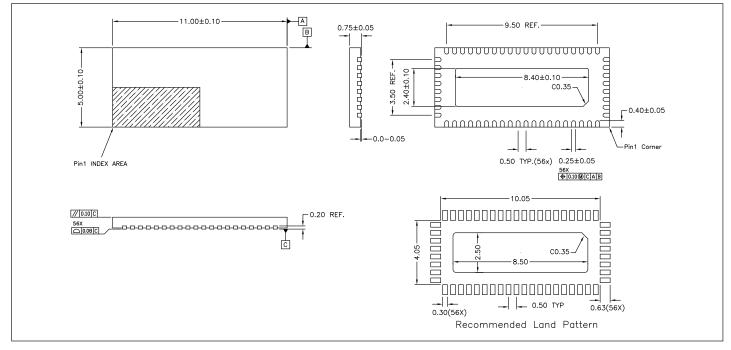
1. Thermal characteristics can be found on the company web site at www.pericom.com/packaging/

#### 2. E = Pb-free and Green

3. Adding an X Suffix = Tape/Reel

### 4-Lane DisplayPort<sup>™</sup> Rev 1.1a Compliant Switch with Triple Control Logic for Fast Switching

# Packaging Mechanical: 56-Contact TQFN (ZF)



# Packaging Mechanical: 42-Contact TQFN (ZH)

