4-Lane DisplayPort™ 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_{DD} 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):
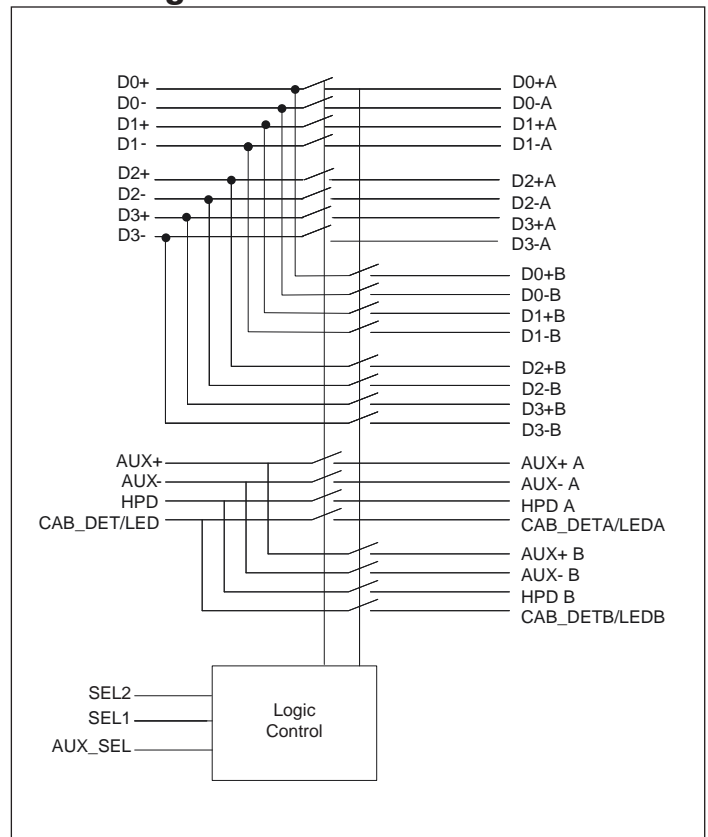   - 56 TQFN (ZFE)
   - 42 TQFN (ZHE)

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™ 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.
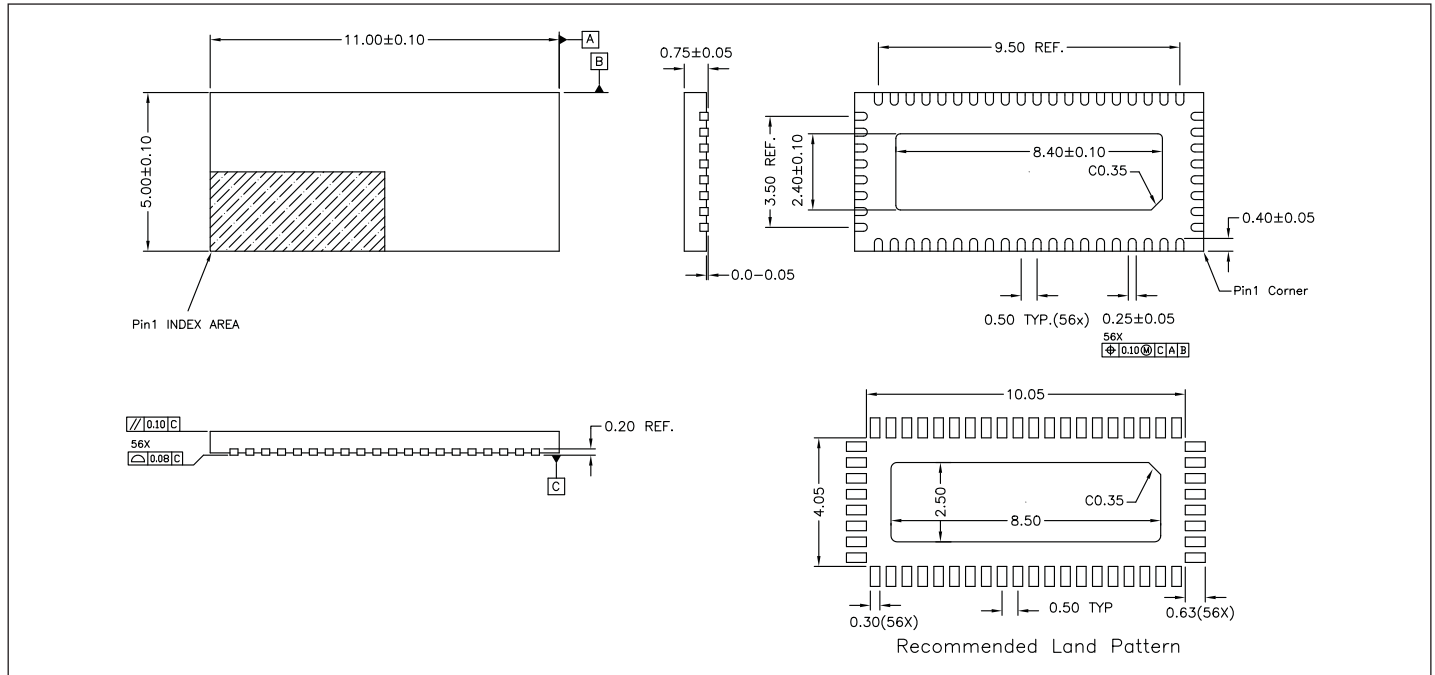
Block Diagram

Ordering Information

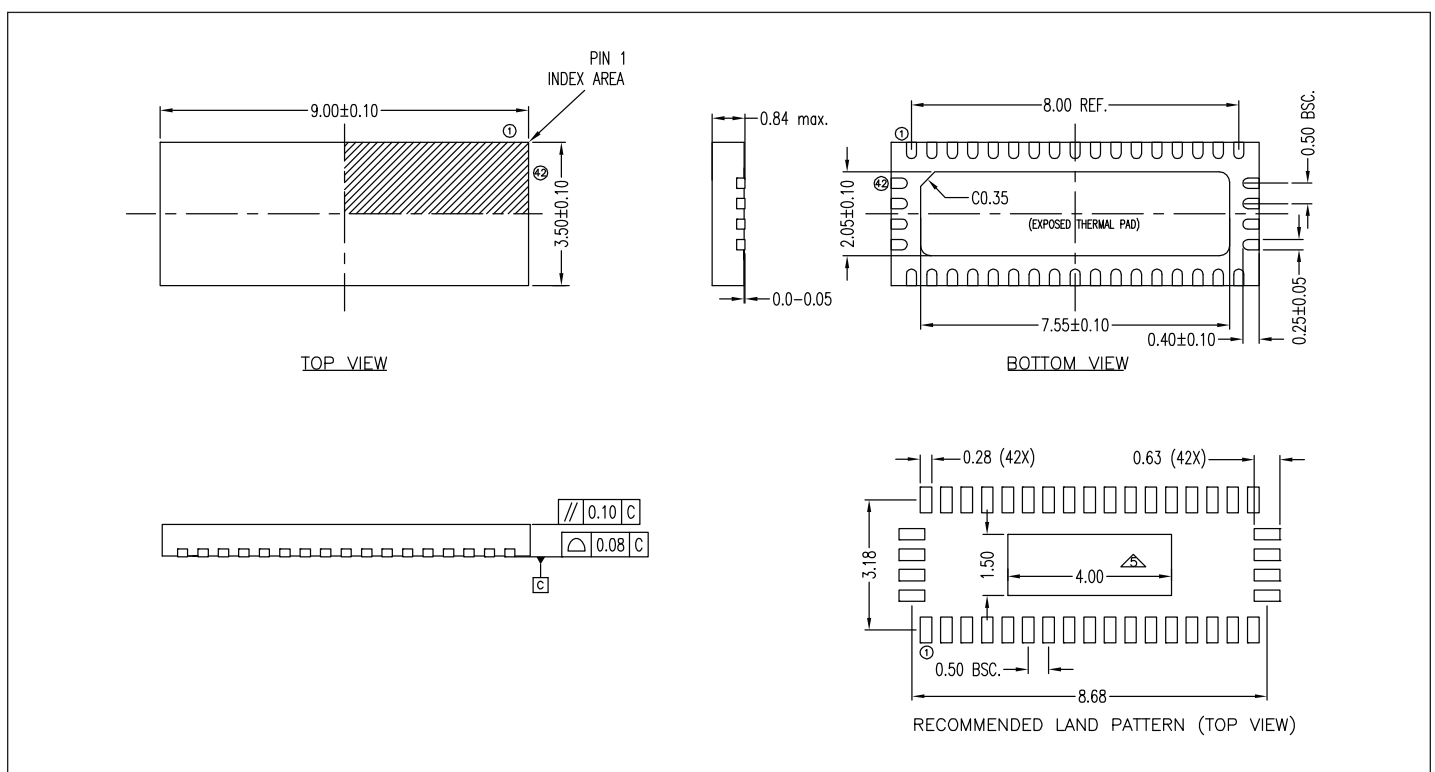| Ordering Code	Package Code	Package Type
PI3VDP612-AZFE	ZF	Pb-free & Green, 56-contact TQFN
PI3VDP612-AZHE	ZH	Pb-free & Green, 42-contact TQFN

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

Packaging Mechanical: 56-Contact TQFN (ZF)

Recommended Land Pattern

Packaging Mechanical: 42-Contact TQFN (ZH)

TOP VIEW

BOTTOM VIEW

RECOMMENDED LAND PATTERN (TOP VIEW)

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Pericom](#):
  [PI3VDP612-AZFEX](#)   [PI3VDP612-AZHEX](#)