

## 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<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

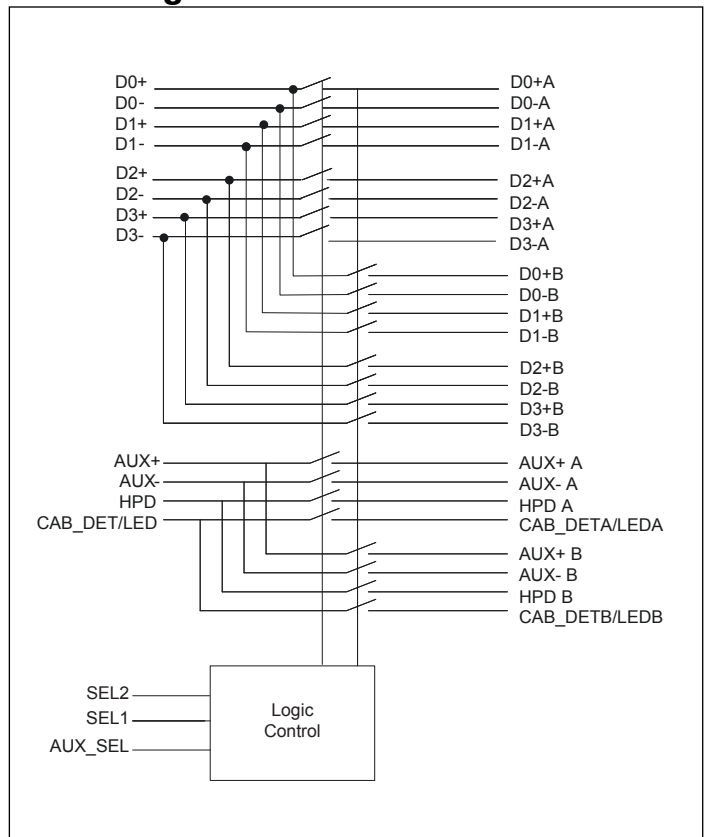
Pericom Semiconductor's PI3VDP612-A mux/demux is targeted for next generation digital video signals. This device can be used to connect a DisplayPort™ Source to two Independent DisplayPort Sinks or to connect two DisplayPort sources to a single DP display.

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

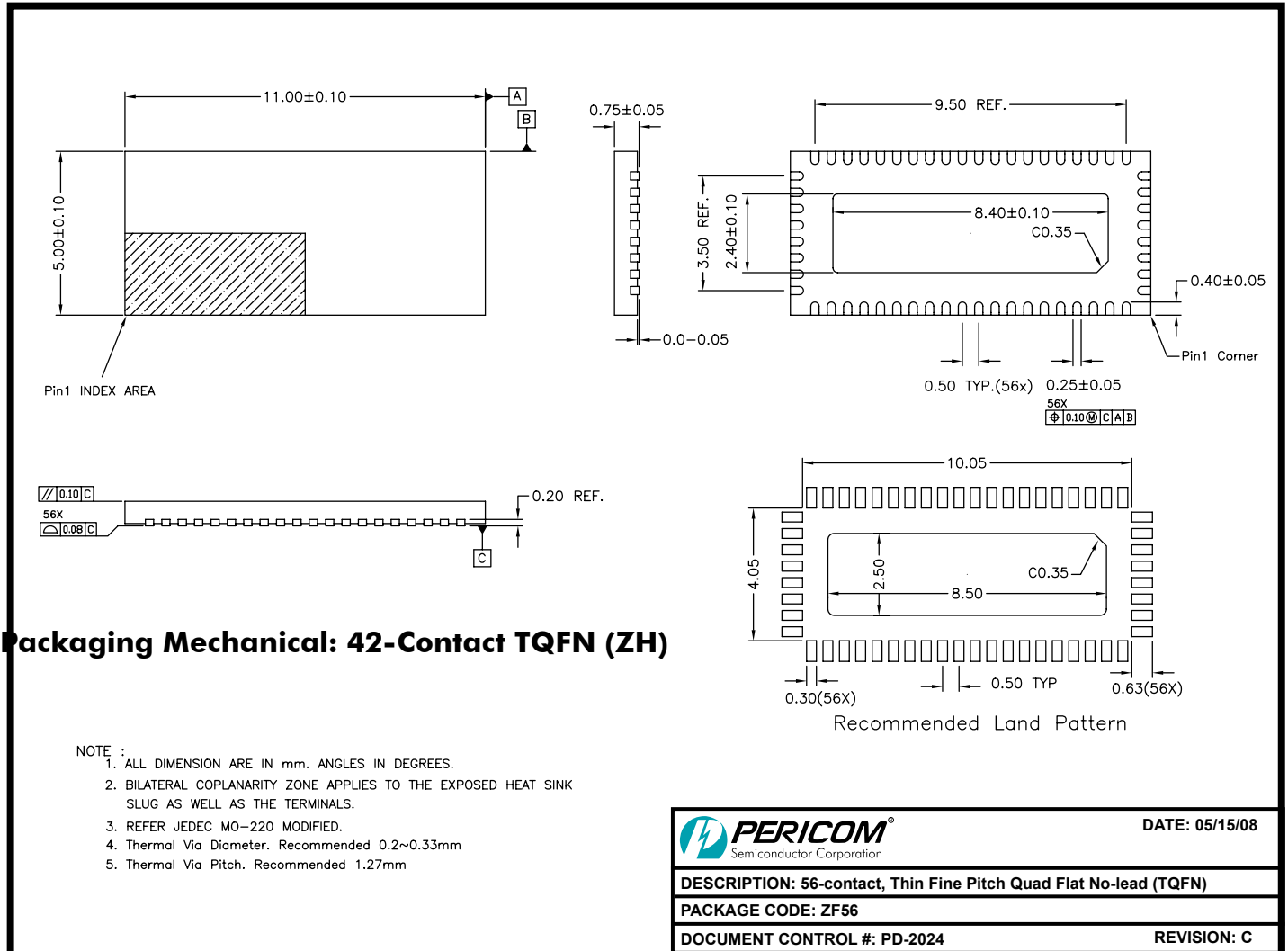
1. Thermal characteristics can be found on the company web site at [www.pericom.com/packaging/](http://www.pericom.com/packaging/)

2. E = Pb-free and Green

3. Adding an X Suffix = Tape/Reel

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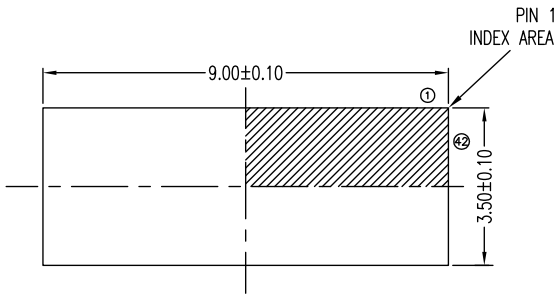
**Packaging Mechanical: 56-Contact TQFN (ZF)**



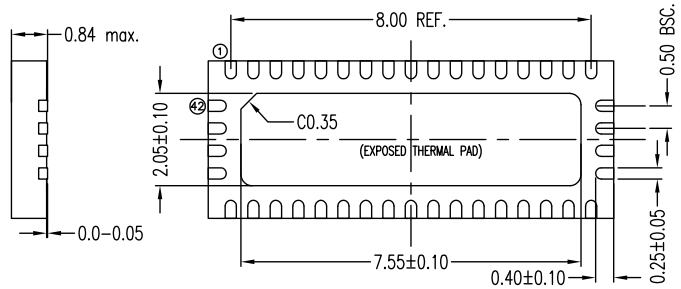
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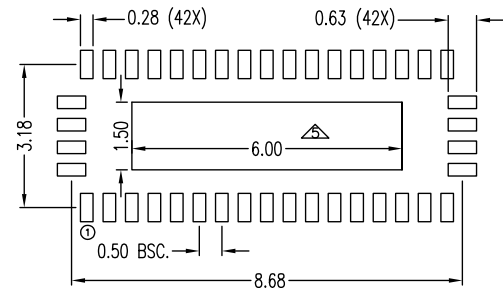
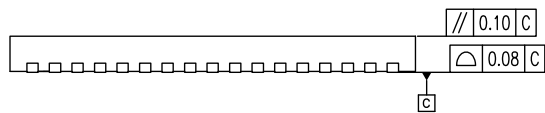
**Packaging Mechanical: 42-Contact TQFN (ZH)**



TOP VIEW



BOTTOM VIEW



RECOMMENDED LAND PATTERN (TOP VIEW)

**Notes:**

1. All dimensions are in millimeters. Angles in degrees.
2. Coplanarity applies to the exposed pad as well as the terminals.
3. Refer JEDEC MO-220.
4. Recommended land pattern is for reference only.
5. Thermal pad soldering area

<p><b>PERICOM</b> Enabling Serial Connectivity</p>	DATE: 11/14/12
DESCRIPTION: 42-contact Thin Fine Pitch Quad Flat No-Lead (TQFN)	
PACKAGE CODE: ZH42	
DOCUMENT CONTROL #: PD-2035	REVISION: D

12-0529