

## 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

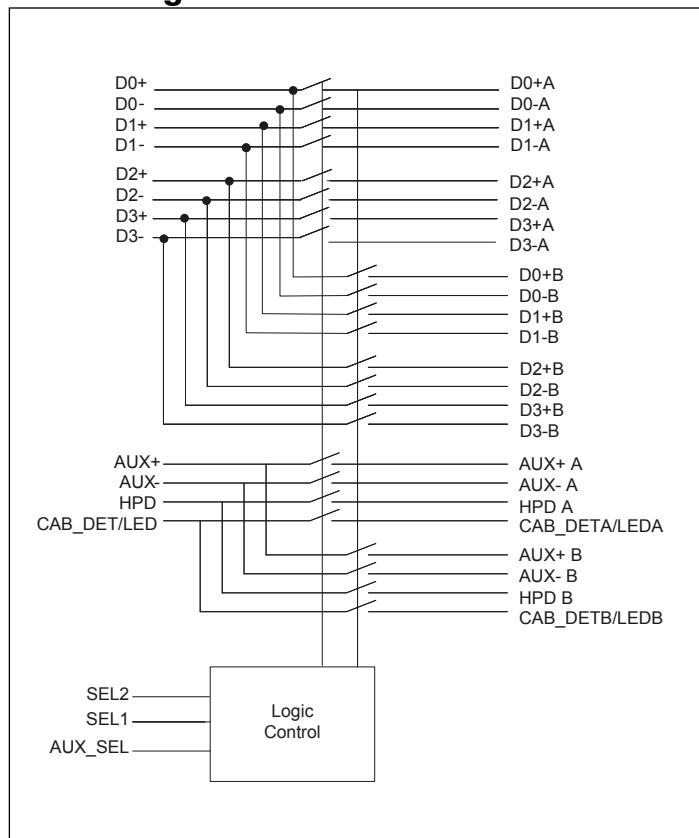
Pericom Semiconductor's PI3VDP612-A mux/demux is targeted for next generation digital video signals. This device can be used to connect a DisplayPort™ Source to two Independent DisplayPort Sinks or to connect two DisplayPort sources to a single DP display.

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



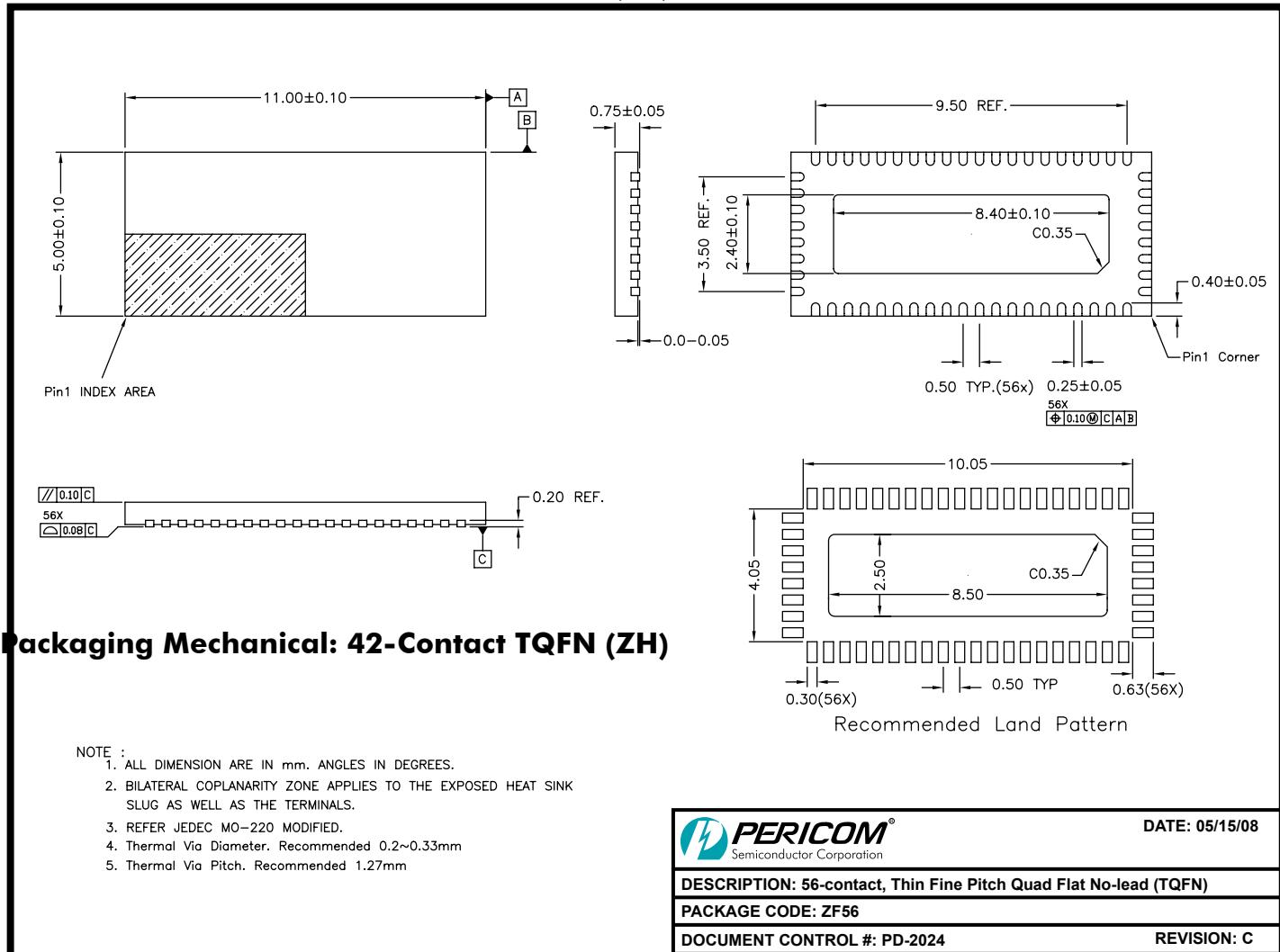
### Ordering Information

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

**4-Lane DisplayPort™ Rev 1.1a Compliant Switch with  
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**Packaging Mechanical: 56-Contact TQFN (ZF)**


NOTE :

1. ALL DIMENSION ARE IN mm. ANGLES IN DEGREES.
2. BILATERAL COPLANARITY ZONE APPLIES TO THE EXPOSED HEAT SINK SLUG AS WELL AS THE TERMINALS.
3. REFER JEDEC MO-220 MODIFIED.
4. Thermal Via Diameter. Recommended 0.2~0.33mm
5. Thermal Via Pitch. Recommended 1.27mm


**PERICOM®**  
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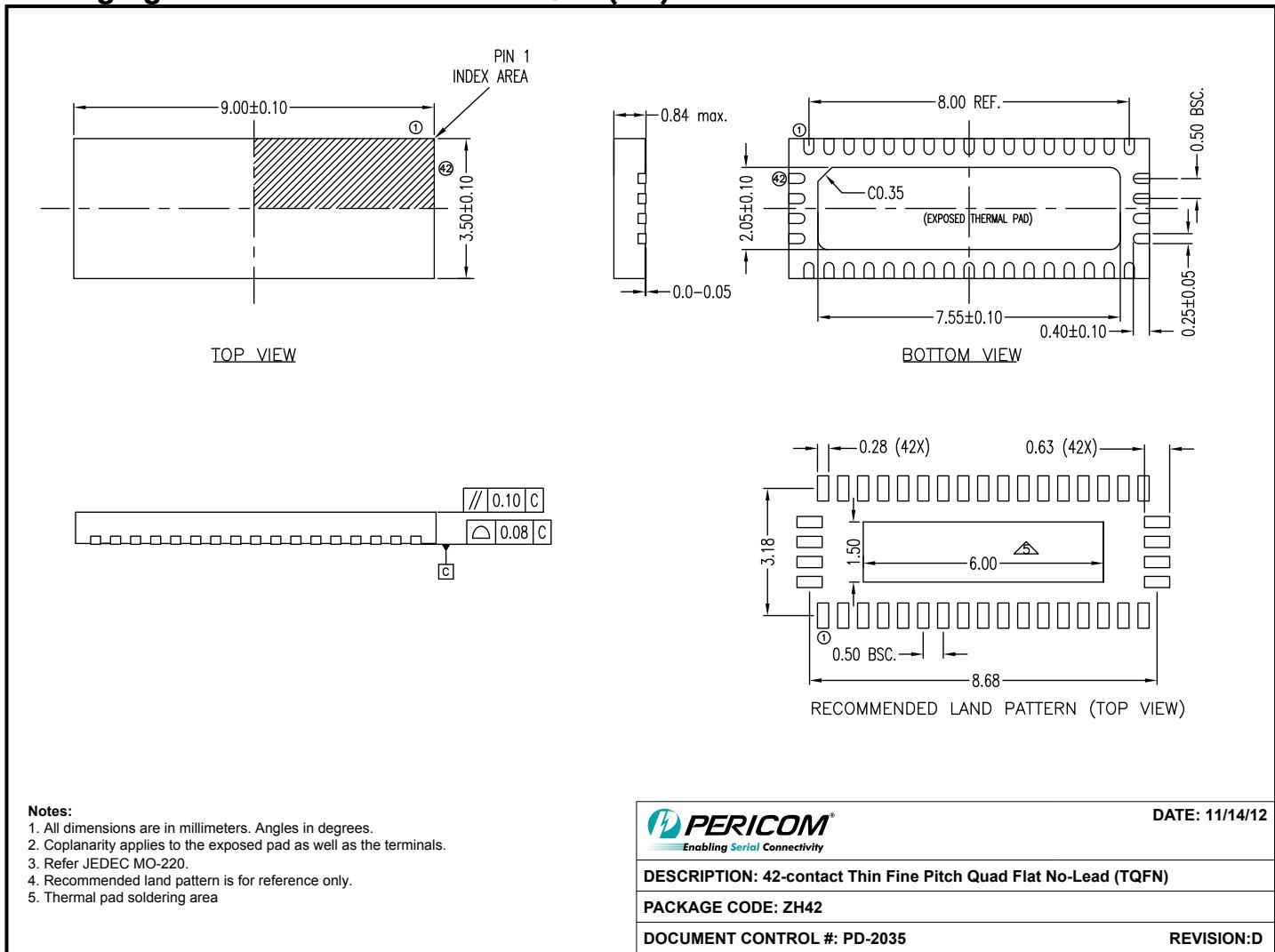
DATE: 05/15/08

DESCRIPTION: 56-contact, Thin Fine Pitch Quad Flat No-lead (TQFN)

PACKAGE CODE: ZF56

DOCUMENT CONTROL #: PD-2024

REVISION: C

**4-Lane DisplayPort™ Rev 1.1a Compliant Switch with  
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**Packaging Mechanical: 42-Contact TQFN (ZH)**


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