

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

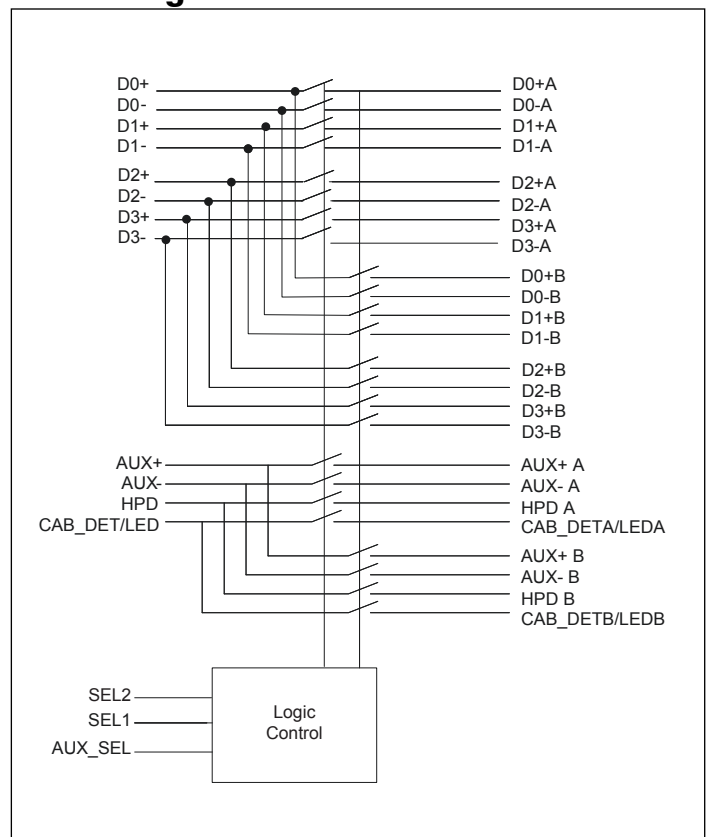
Pericom Semiconductor's PI3VDP612-A mux/demux is targeted for next generation digital video signals. This device can be used to connect a DisplayPort™ Source to two Independent DisplayPort Sinks or to connect two DisplayPort sources to a single DP display.

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



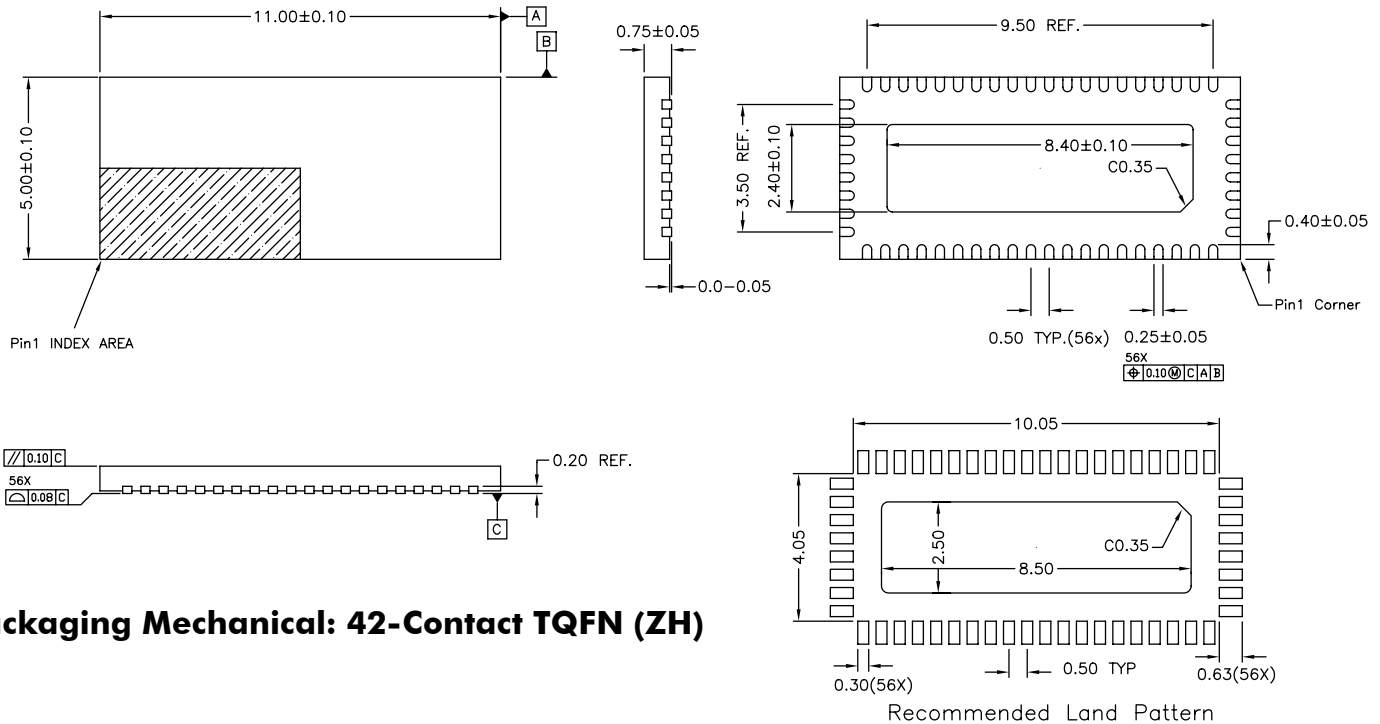
Ordering Information

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/
2. E = Pb-free and Green
3. Adding an X Suffix = Tape/Reel

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Packaging Mechanical: 56-Contact TQFN (ZF)



Packaging Mechanical: 42-Contact TQFN (ZH)

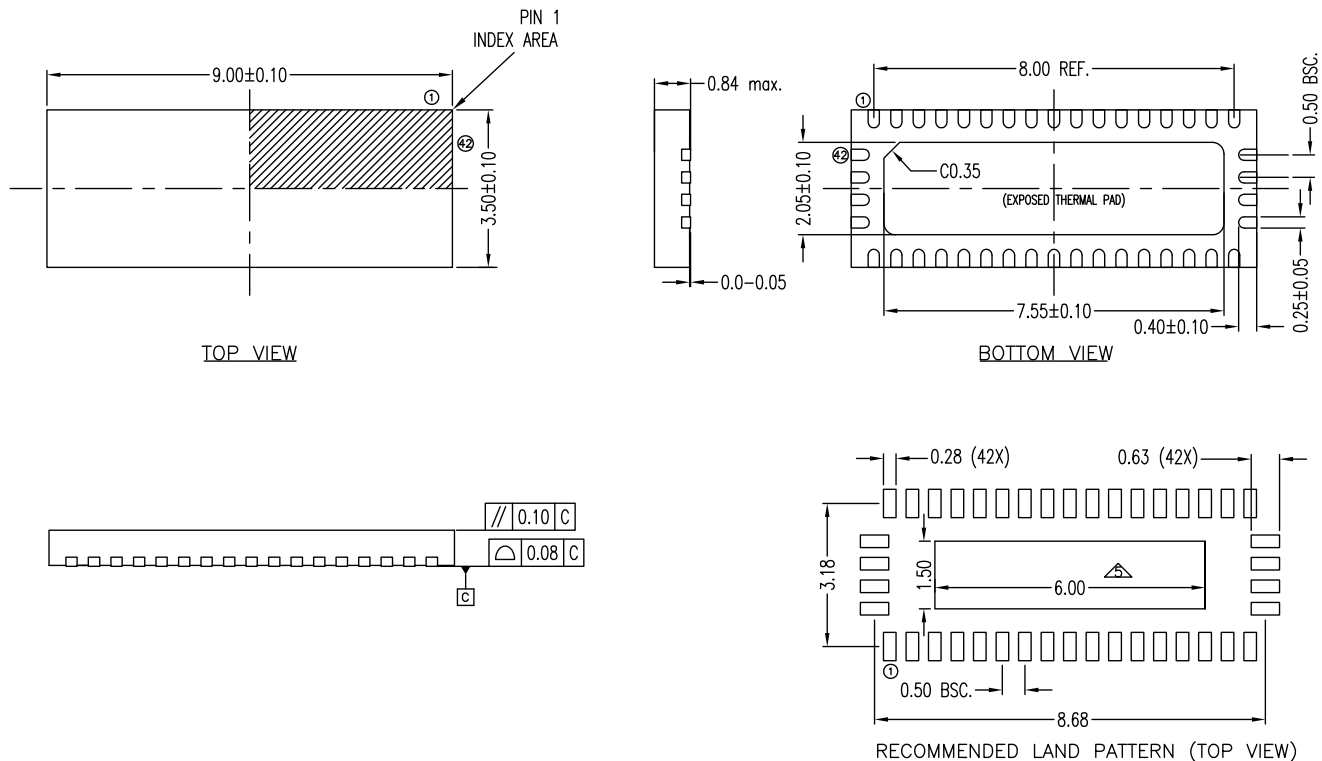
- NOTE :
1. ALL DIMENSION ARE IN mm. ANGLES IN DEGREES.
 2. BILATERAL COPLANARITY ZONE APPLIES TO THE EXPOSED HEAT SINK SLUG AS WELL AS THE TERMINALS.
 3. REFER JEDEC MO-220 MODIFIED.
 4. Thermal Via Diameter. Recommended 0.2~0.33mm
 5. Thermal Via Pitch. Recommended 1.27mm

	DATE: 05/15/08
DESCRIPTION: 56-contact, Thin Fine Pitch Quad Flat No-lead (TQFN)	
PACKAGE CODE: ZF56	
DOCUMENT CONTROL #: PD-2024	REVISION: C

08-0208

**4-Lane DisplayPort™ Rev 1.1a Compliant Switch with
Triple Control Logic for Fast Switching**

Packaging Mechanical: 42-Contact TQFN (ZH)



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



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