

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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## **PI3WVR12412**

### Wide Voltage Range DisplayPort™ & HDMI Video Switch

Pericom Semiconductor's PI3WVR12412 is a multi-standard video switch with wide voltage range capability. It supports DisplayPort™1.2, HDMI 1.4, and emerging and proprietary standards.

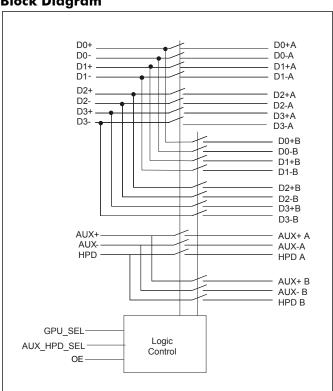
The PI3WVR12412 can pass high-speed signals up to 1.2 V peak-to-peak differential with a common-mode voltage from 0 to 3.4V. The wide voltage range allows DC-coupled multi-standard operation. Eliminating AC coupling capacitors saves board space and improves signal integrity for dense PCB designs.

In addition to four high-speed lanes, PI3WVR12412 also switches AUX and HPD signals.

#### **Application**

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

#### **Block Diagram**



#### **Features**

- → 4-lane, 1:2 mux/demux that will support RBR, HBR1, or HBR2
- → 1-channel 1:2 mux/demux for HPD signal
- → Differential switch matrix for DP AUX
- → Supports 720 Mbps high-speed DP AUX
- → -1.6 dB Insertion Loss for Dx channels @ 2.7 GHz
- → -3 dB Bandwidth for Dx channels: 4.6 GHz
- → Return loss for Dx channels @ 2.7GHz: -16 dB
- → Low Crosstalk for high speed channels: -28 dB@5.4 Gbps
- → Low Off Isolation for high speed channels: -22dB@5.4 Gbps
- → Low channel-to-channel skew, 35ps max
- → Low Bit-to-Bit Skew, 5ps typ (between '+' and '-' bits)
- → V<sub>DD</sub> Operating Range: 3.3V +/-10%
- → ESD Tolerance: 2kV HBM
- → Packaging (Pb-free & Green): 42 TQFN (ZHE)

#### **Application**

