

PI3HDX511D

Low Power DP Dual-mode Level Shifter/HDMI1.4b ReDriver (2.5x4.5mm size)

PI3HDX511D is a small size DisplayPort dual mode Level Shifter and HDMI1.4b redriver packaged into 2.5x4.5mm size QFN with 48-bpp Deep Color support.

This small QFN package with low power consumption is suitable to solve the ultra mobile devices, extremely tight design space limitations. PI3HDX511D has small stand-by current consumption less than 1mA to extend battery hours.

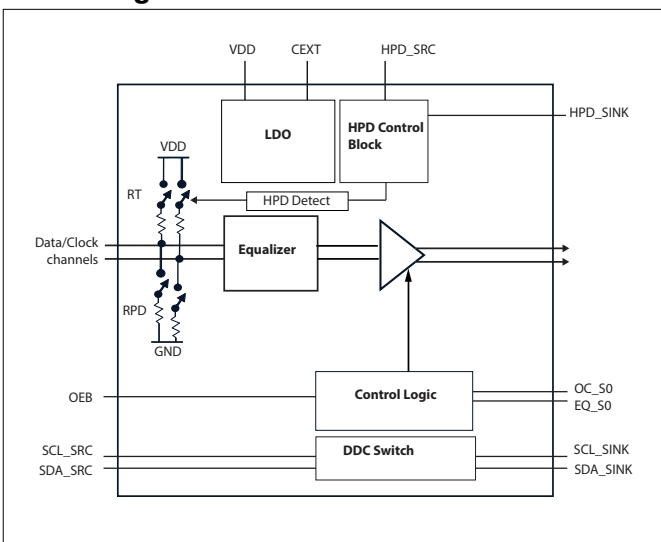
In addition of small package advantage, it also support smart power states managements. Automatic squelch function can disable outputs signals when no input signal presents with Hot plug detection.

Also ESD/EOS 8kV protection meets many set makers requirement.

Application

- Ultra Mobile devices
- Notebook computers

Block Diagram



Features

- Low power small package size HDMI 1.4b compliant redriver with DisplayPort dual mode level shifter suitable for ultra-mobile application
- Operation up to 3.4 Gbps per lane (340MHz pixel clock)
- 4K Ultra HD, 3D Video formats (1080p, 1080i, 720p), 48-bit per pixel Deep Color support
- Low standby current <1mA with DDC passive switch mode
- Flexible 6 steps equalization control steps: 2.5, 5, 7.5 dB
- Pre-emphasis control 3 steps: 0, 1.5, 2.5 dB
- Automatic output squelch and HPD function for power saving states management at no input signal condition
- Convert low-swing DC or AC coupled differential input
- Integrated DDC level shifter
- 3.3V single power supply
- Integrated ESD protection on I/O pins, 8kV contact and 8kV HBM
- 30-pin QFN(ZL30) 2.5 x 4.5mm package

Application Diagram

