



# PS8336 DisplayPort™ 1.2 Dual-mode Source Demultiplexer with DisplayPort and TMDS Outputs

## Product Brief

# PS8336

### KEY FEATURES

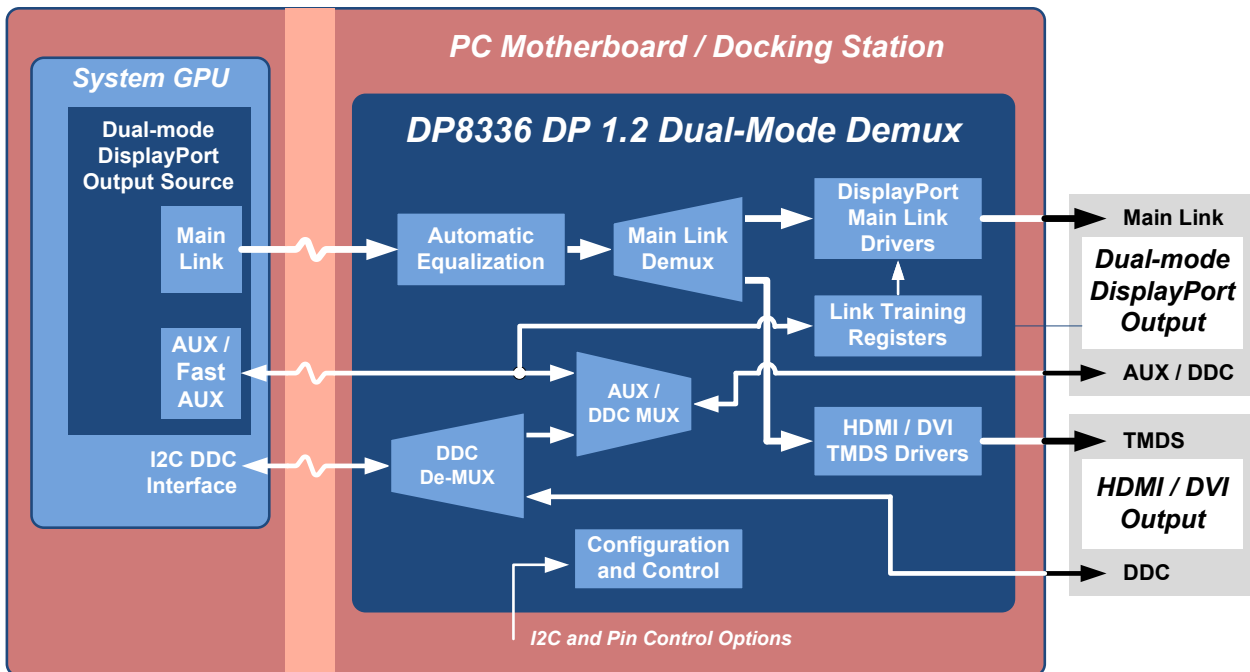
- Supports Dual-mode DisplayPort™ (DP) De-multiplexing to a Dual-mode DisplayPort and a TMDS™ output
- Full HDMI or DVI interface support from the TMDS output
- Compliant to the VESA DisplayPort 1.2 Standard
  - Supports up to 5.4-Gbps link rate (HBR2)
  - Supports AUX and Fast AUX modes
- Compliant to HDMI 1.4a specification
  - Supports up to 3.0-Gbps TMDS output
- DisplayPort repeater / redriver included for DisplayPort output
- Automatic receiver equalization compensates for signal loss
- Automatic power management and output selection settings
- ESD performance 8kV Human Body Model (HBM)
- Supply Voltage options
  - PS8330A: Dual supplies, 1.5V & 3.3V
  - PS8330B: Single 3.3V Supply
- 7x7mm 56-pin QFN package, 0 to 85°C operation

### APPLICATIONS

- PC Desktop and Notebook Motherboards
- Notebook Docking Stations
- Graphics Cards

### GENERAL DESCRIPTION

The PS8336A/PS8336B is a de-multiplexer that accepts a Dual-mode DisplayPort input, and outputs either Dual-mode DisplayPort, or HDMI/DVI from a TMDS output. An internal level-shifter is used to produce the HDMI/DVI output from the Dual-mode DisplayPort input. The Dual-mode DisplayPort output also supports a level shifter-based DisplayPort-to-HDMI/DVI Dual-mode video adapter (dongle). The PS8336 can be configured to use the output hot-plug detect pins to perform automatic mode switching and device power management. An automatic output squelch function disables the output when no input signal is present. The DisplayPort signal path includes a receiver input equalizer and link training similar to the DP8330.



Information furnished by Parade Technologies is believed to be accurate and reliable. However, no responsibility is assumed by Parade Technologies for its use, nor for any infringements of patents or other rights of third parties that may result from its use. Specification is subject to change without notice. No license is granted by implication or otherwise under any patent or patent rights of Parade Technologies. Trademarks and registered trademarks are the property of their respective owners.

**Parade Technologies, Inc.**  
2890 Zanker Road, Suite 102  
San Jose, CA 95134, U.S.A.  
TEL: 408-329-5540 FAX: 408-329-5541  
<http://www.paradetech.com>

© 2011 Parade Technologies, Inc.  
All rights reserved.

Rev. 1 Mar 2011