

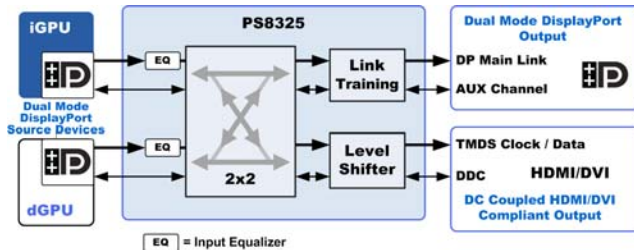


# PS8325 DisplayPort™ Dual Mode 2x2 Crosspoint Switch with One DP Output and One TMDS Level Shifter Output

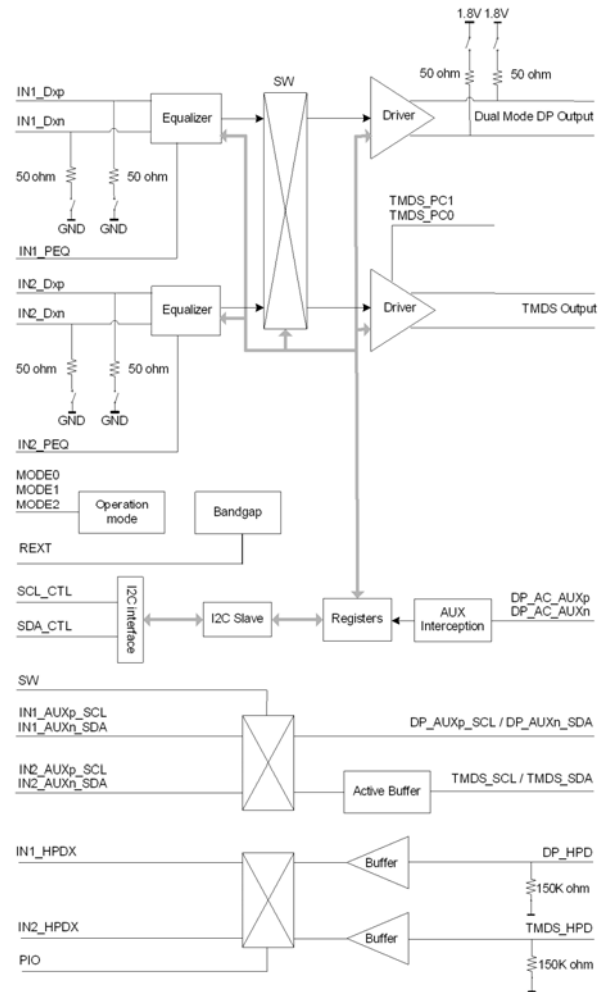
## Product Brief

# PS8325

### TYPICAL SYSTEM APPLICATION



### BLOCK DIAGRAM



### FEATURES

- Multiple system usage configurations:
  - 2:1 multiplexer with either DisplayPort™ or HDMI™/DVI output
  - 1:2 demultiplexer with one DisplayPort and one HDMI/DVI output
  - Dual repeater with one DisplayPort repeater and one HDMI/DVI level shifter
- Supports switchable GPU configurations
- Dual Mode DisplayPort output with repeater function
  - Automatic input equalizer adjustment
  - Transparent link training operation through AUX snooping, no software support needed
- Automatic power-down management
- Embedded level shifter function supports HDMI / DVI output
  - Supports HDMI 1.3a up to 225MHz TMDS clock rate, enabling 1080P with deep color (up to 12 bits per color)
  - Includes selectable HDMI identification DDC register
- DisplayPort interfaces compliant to VESA DP version 1.1a, supports up to 4 lanes up to 2.7 Gbps
- Automatic port switching in 1:2 demultiplexer mode
- Automatic Squelch for fail-safe operation and power saving
- HDMI/DVI output includes selectable pre-emphasis
- HDMI/DVI output includes EMI reduction and filtering technology
- Local I2C control or Pin Control options
- Single 3.3V power supply
- Packaged in a 72 pin 11x5mm TQFN
- ESD: HBM 8kV

### APPLICATIONS

- Desktop and notebook PC motherboards
- Notebook docking stations
- Monitors
- Graphics cards

### DESCRIPTION

The PS8325 is a dual mode DisplayPort crosspoint switch for digital display interface applications. The input side can interface to one or two dual mode DisplayPort source devices, and the output side can provide one dual mode DisplayPort output and/or one HDMI or DVI output. The device includes an automatic input equalizer to compensate for PCB signal loss. The DisplayPort output includes a repeater function complete with link training to assure system compliance test compatibility.

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