

# LT8631SX --- Product Brief

## 3:1 HDMI/DVI Switch

### Features

- 3 inputs, 1 output HDMI/DVI links
- HDMI 1.4/DVI 1.0 compliant
- Supports data rates up to 3.4Gbps
- Supports deep color
- RX side ODTs and management circuitry
- Integrated HPD switch, DDC switch, and +5V Power indicator switch, greatly lowering the cost and simplifying the manufacturing process
- Source/Sink connection detection for flexible system management
- I2C control supported
- Low added jitter
- Single 3.3V power supply
- 5V-tolerant DDC interfaces
- HPD, DDC, data/clock channels ESD protection level meets class 3A according to JESD22-A114-B.

### Description

The LT8631SX is 3-Port HDMI/DVI switch that enable the connection of multiple HDMI/DVI source devices to high-definition television (HDTV). Based on ClearEdge™ Technology, it is compliant with the HDMI 1.4/DVI 1.0 specifications. LT8631SX is an advanced high-speed switch that delivers a cost-effective method for manufacturers to add additional HDMI/DVI ports to their HDTV. Multiple HDMI/DVI ports allow consumers to connect variety HDMI/DVI sources to their HDTV.

The LT8631SX is a three-to-one (3:1) switch ideally suited for use in the back panel of HDTV and A/V receivers, allowing consumers to connect multiple HDMI/DVI devices such as high-definition DVD players, set top boxes and game consoles. The LT8631SX switch selects a single HDMI/DVI signal from the three receiver ports and generates fully compliant HDMI/DVI audio/video output, as well as DDC and HPD switching in full compliance with the HDMI/DVI specifications.

The chip also integrates RX side on-die-terminations (ODTs), and employs the ODT management circuitry for cost-efficient system design and enhanced performance. The integrated DDC and HPD switches further lower the cost of system manufacture, and simplify the routing on the system board.

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