

LT8641UX --- Product Brief

HDMI2.0 4-In 1-Out Switch

Features

- 4 inputs, 1 output HDMI2.0 links
- HDMI 1.4/2.0 compliant
- Supports data rates up to 6.0Gbps
- TX/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
- Single 3.3V power supply
- 5V-tolerant DDC interfaces
- Jitter cleaning PLL for better performance
- DC/AC coupled signal input/output
- No external crystal is needed
- Adaptive equalization
- TX Lane swap for flexible PCB routing

Description

The Lontium LT8641UX HDMI2.0 Switch features a 4:1 switch compliant to HDMI2.0/1.4 specification, max 6Gbps high speed data rate, adaptive equalization RX input and pre-emphasized TX output to support long cable application, no XTAL and 1.2V power supply on board to save BOM cost, internal TX lane swap for flexible PCB routing .

LT8641UX HDMI2.0 Switch automatically detect the cable loss, and adaptively optimize the equalization setting. The CDR cleans the input data jitter, make it suitable for long cable and cascade application. It support RX termination resistor calibration to further improve signal integrity.

LT8641UX support DDC/SCDC compliant to HDMI2.0/1.4 specification. The integrated DDC and HPD switches further lower the cost of system manufacture, and simplify the routing on the system board.

Applications

- Front panel buffer for advanced television (HDTV) sets
- Standalone switcher
- Multiple input displays

Projectors

A/V receivers



Figure 1. Application Diagram

Ordering Information

Part Number	Operating Temperature Range	Package	Packing Method
LT8641UX	-40° C to +85° C	BGA144(10* 10) / QFN128(14* 14)	Tray

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