

# LT8641UX --- Product Brief

## HDMI2.0 4-In 1-Out Switch

### 1. 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
- No external crystal is needed
- Adaptive equalization

### 2. General 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 on board to save BOM cost.

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. This package is QFN128 14mmx14mm. It operate from -40°C to +85°C.

### 3. Applications

- Front panel buffer for advanced television (HDTV) sets
- Standalone switcher
- Multiple input displays
- Projectors
- A/V receivers

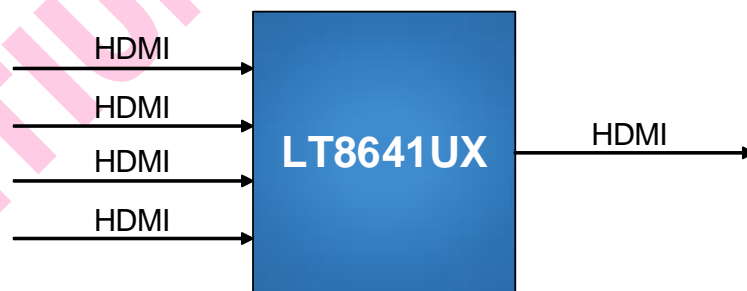


Figure 3.1 Application Diagram

### 4. Ordering Information

Table 4.1 Ordering Information

| Part Number | Product Status | Operating Temperature Range | Package        | Packing Method | MPQ     |
|-------------|----------------|-----------------------------|----------------|----------------|---------|
| LT8641UX_U5 | MP             | -40°C to +85°C              | QFN128 (14*14) | Tray           | 1190pcs |

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