

LT8631UXE --- Product Brief

HDMI2.0/1.4 3-In 1-Out Switch

1. Features

- 3 inputs, 1output HDMI/DVI links
- HDMI 1.4/2.0/DVI 1.0 compliant
- Supports data rates up to 6Gbps
- 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
- 5V-tolerant DDC interfaces
- No external crystal is needed
- Adaptive equalization
- SCDC monitor

switch compliant with 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.

LT8631UXE HDMI2.0/1.4 Switch automatically detects the cable loss, and adaptively optimize the equalization setting. It supports RX termination resistor calibration to further improve signal integrity.

LT8631UXE support DDC/SCDC compliant 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.

3. Applications

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

2. General Description

The LT8631UXE HDMI2.0/1.4 Switch features a 3:1

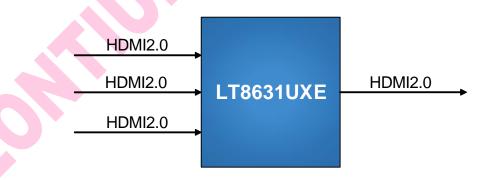


Figure 3.1 Application Diagram



LT8631UXE U1 ADVANCE INFORMATION – CONFIDENTIAL AND PROPRIETARY

4. Ordering Information

Table 4.1 Ordering Information

Product Name	Part Number	Product Status	Package	Bonding Wire	Grade	Operating Temperature Range	Stack Die Option	Packing Method	MPQ
LT8631UXE	LT8631UXE_U1Q05CEN	Preview	QFN64(9*9)Punch	Cu	E	-40°C to +85°C	N	Tape and Reel	3000pcs

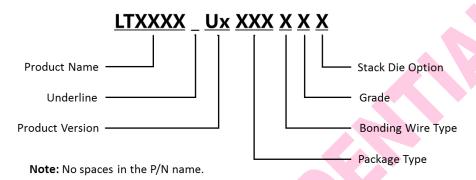


Figure 4.1 Part Number Naming Rules



LT8631UXE_U1 ADVANCE INFORMATION - CONFIDENTIAL AND PROPRIETARY

Copyright © 2024 Lontium Semiconductor Corporation, All rights reserved.

Lontium Semiconductor Proprietary & Confidential

This document and the information it contains belong to Lontium Semiconductor. Any review, use, dissemination, distribution or copying of this document or its information outside the scope of a signed agreement with Lontium is strictly prohibited.

LONTIUM DISCLAIMS ALL WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING THOSE OF NONINFRINGEMENT, MERCHANTABILITY, TITLE AND FITNESS FOR A PARTICULAR PURPOSE. CUSTOMERS EXPRESSLY ASSUME THEIR OWN RISH IN RELYING ON THIS DOCUMENT.

LONTIUM PRODUCTS ARE NOT DESIGNED OR INTENDED FOR USE IN LIFE SUPPORT APPLIANCES, DEVICES OR SYSTEMS WHERE A MALFUNCTION OF A LONTIUM DEVICE COULD RESULT IN A PERSONAL INJURY OR LOSS OF LIFE.

Lontium assumes no responsibility for any errors in this document, and makes no commitment to update the information contained herein. Lontium reserves the right to change or discontinue this document and the products it describes at any time, without notice. Other than as set forth in a separate, signed, written agreement, Lontium grants the user of this document no right, title or interest in the document, the information it contains or the intellectual property in embodies.

Trademarks

Lontium™ 龙迅™ and ClearEdge™ is a registered trademark of Lontium Semiconductor. All other brand names, product names, trademarks, and registered trademarks contained herein are the property of their respective owners.

Visit our corporate web page at: www.lontiumsemi.com

Technical support: support@lontium.com

Sales: sales@lontium.com