

LT8644EX --- Product Brief

Digital Crosspoint Switch

1. Features

- 250Mbps to 6 Gbps per port NRZ data rate
- Programmable receive equalization, compensates 40 inches of FR4 at 6Gbps
- DC- or AC-coupled differential CML inputs
- DC- or AC-coupled differential CML outputs
- Programmable CML output levels and pre-emphasis levels
- Support output polarity swap
- 50Ω on-chip I/O termination
- Supports 8b/10b, scrambled or uncoded NRZ data
- Integrated 100/400kHz I2C slave
- Low power consumption
- Power supply: 3.3V for I/O and 1.2V for core
- ESD 4kV HBM
- Temperature Range: -40°C ~ +85°C
- 128-pin QFN 14*14 package

2. General Description

The LT8644EX is a 16×16 digital crosspoint switch, with 16 differential CML compatible inputs and 16 differential CML outputs. The LT8644EX is optimized for non return-to-zero (NRZ) signaling with data rates of up to 6 Gbps per port. Each port offers programmable level of input equalization and programmable output swing. The LT8644EX supports independent channel switching through the serial control interface. The LT8644EX has low latency and very low channel-to-channel skew. An I2C interface is used to control the device and provide access to advanced features.

3. Applications

- Fiber optic network switching
- Digital video (HDMI, DVI, Display Port)
- Data storage networks

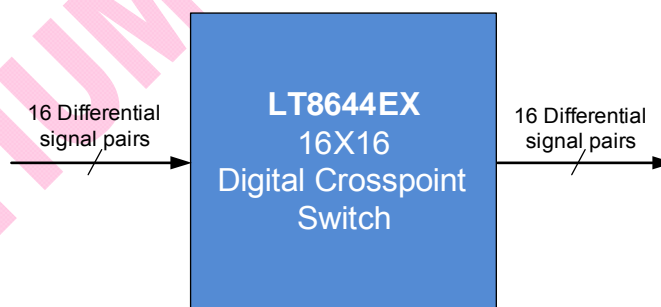


Figure 3.1 Application Diagram

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
LT8644EX	LT8644EX_U1Q00CEN	Preview	QFN128 (14*14)Saw	Cu	E	-40°C to +85°C	N	Tray	1190pcs

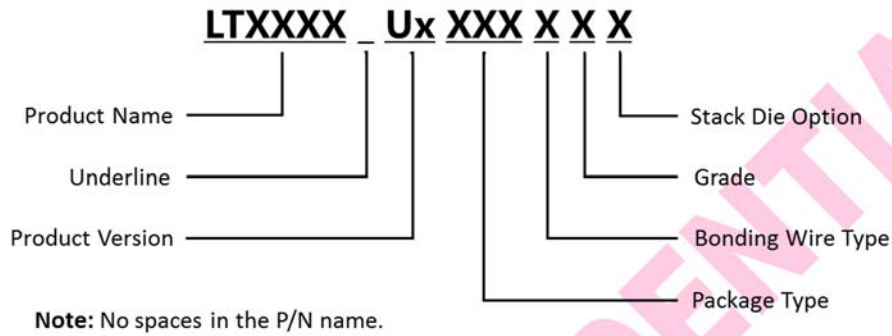


Figure 4.1 Part Number Naming Rules

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