# LT8644 --- Product Brief

Digit al Cr osspoin t Sw

## Features

- DC t o 3.4 Gbps per port
- Pr ogr ammable r eceiv e equal izat ion
- DC- or AC-coupled differen t ial CML inputs
- DC- or AC-coupled differen t ial CML outputs
- Pr ogr ammable CML output lev els offer s pr ogr ammable lev el of input equal izat ion
- 50 Ω on-chip I/O t er mination
- Supports 8b/10b, scr ambled or encoded NRZ data
- I2C bus or con trol in ter face
- ESD r at ing: HBM at 2kV

## Description

The LT8644 is a 16 × 16 digit al cr osspoin t NRZ data swit ch. Each input can be configured to accept differen t ial CML or single-ended signals and each output can be configured to pr ovide differen t ial CML or single-ended signals. The LT8644 is optimized for high data r at e operation up t o 3.4 Gbps per port and offers pr ogr ammable lev els of input equal izat ion and pr ogr ammable output de-emphasis. The LT8644 supports independen t channel and bank configur at ion. The LT8644 has a two-wir e I2C bus or con trol in ter face. The LT8644 has built-in self-t est capabilities and provides access to advanced feat ures.

## Applications

- Fiber optic t est and measur emen t equipmen t
- Digit al video (HDMI, DVI, DisplayPor t)
- Dat a cen t er switches and r ou t ers

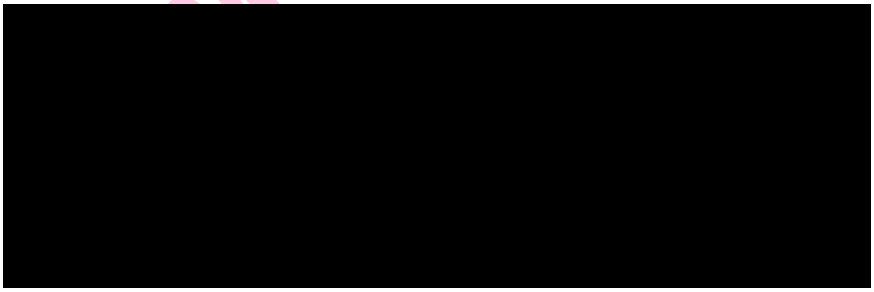

**Figure 1. Application Diagram**

## Ordering Information

| Part Number | Operating Temperature Range | Package | Packing Method |
|---|---|---|---|
| LT8644 | -40 °C to +85 °C | TQFP100(14*14) | Tray |

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