

WORLD'S FIRST IEEE 1394/FireWire HOT-SWAP CONTROLLER

Highest Integration IC Includes Diode OR-ing, and Is Optimized for High Reliability, Performance, and Design Flexibility

Your Best Choice for Four Reasons!

1

Fully IEEE 1394/FireWire™ Compliant

- ◆ +7.5V to +37V Input Voltage Range
- ◆ 0.5A to 3A Programmable Current Limit
- ◆ 34µs to 11ms Adjustable Current-Limit Timeout

2

Highest Integration Combines Three Functions in One IC

- ◆ Inrush and Output Overcurrent Protection
- ◆ Low-Voltage-Drop, Power-Supply OR-ing Solution
- ◆ True Bidirectional Load-Disconnect Switch Between Input Supply and Load

3

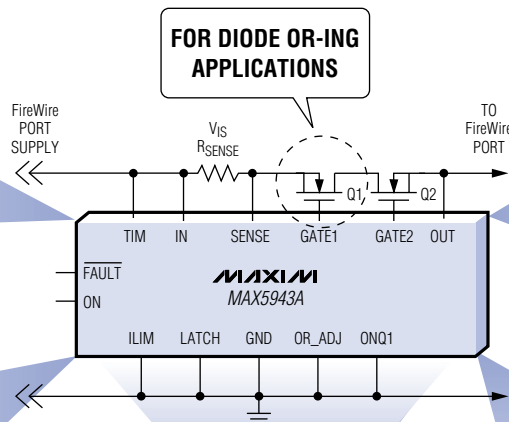
Optimized for High Reliability and Performance

- ◆ Low 10µA Shutdown Supply Current Is Ideal for Portable Systems
- ◆ 100ns Current-Limit Time Prevents Excessive Load Currents and Protects Against Short-Circuit Conditions
- ◆ Control Input For Fast Load Disconnect

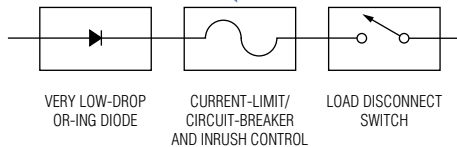
4

Flexibility of Design

- ◆ Adjustable Current-Limit/Circuit-Breaker Threshold and Timeout
- ◆ Adjustable-Diode Threshold
- ◆ Programmable Undervoltage Lockout
- ◆ Latched or Autoretry Fault Management



EQUIVALENT
CIRCUIT



| Part | No. of Channels | Pin-Package | Price† (\$) |
|-------------------|-----------------|-------------|-------------|
| MAX5943A–MAX5943E | 1 | 16-QSOP | 1.34 |
| MAX5944 | 2 | 16-SO | 1.98 |

FireWire is a registered trademark of Apple Computer, Inc.

†500-up recommended resale. Price provided is for design guidance and is FOB USA. International prices will differ due to local duties, taxes, and exchange rates. Not all packages are offered in 1k increments, and some may require minimum order quantities.

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