



# QLE3044

## Quad Port 1GbE to PCIe® Intelligent Ethernet Adapter

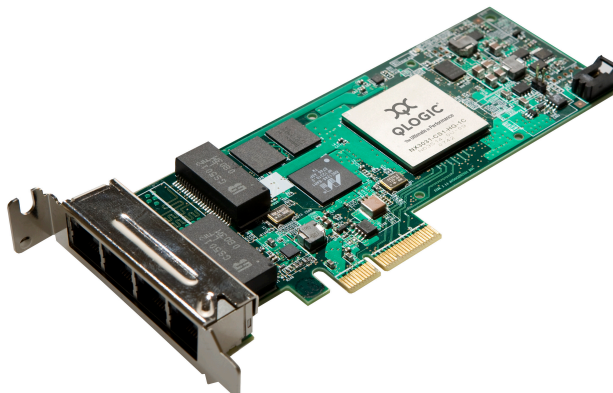
### Benefits

- Increased application throughput and reduced host CPU utilization due to stateless protocol offloads
- Optimal use of I/O slots — multiple network ports available on a single card
- Most power-efficient quad port Gigabit Ethernet (GbE) card on the market
- Performance scalability for consolidated server environments
- Investment protection — full programmability allows changes to protocols to be implemented in firmware, avoiding expensive hardware upgrades
- Improved reliability and error handling benefits of PCI Express® (PCIe)

### Features

- Checksum and stateless offloads
- NetSlice™ I/O
- Wake on LAN
- Four ports for teaming and failover

### DATA SHEET



**QLE3044 Intelligent Ethernet Adapter.** The QLE3044 is a quad port 1GbE Intelligent Ethernet adapter designed for various applications such as virtualization; network security appliances; cluster computing; IP content delivery systems; grid computing; database clustering; Network Attached Storage (NAS); and storage and backup servers.

**Performance Optimized.** The QLE3044 is a high-performance Intelligent Ethernet adapter that can support offload of TCP/IP tasks, significantly improving throughput of servers, server appliances, and storage platforms, all while reducing host CPU utilization. This allows overall system performance to scale dramatically.

**NetSlice Technology.** In the dynamic data center environment, managers need flexible solutions that can evolve along with the technology to protect current investments in virtualization and server consolidation. The QLogic NetSlice architecture addresses these requirements by incorporating a unique degree of programmable support for virtualization. The NetSlice architecture creates a platform that exports a number of independent virtual interfaces, with each virtual interface utilizing a share of the existing (hardware) resources. Each virtual interface is serviced in a fair manner. Optionally, each interface can be assigned a priority that determines how much of a share of the underlying resources are allocated to that interface. Strong isolation is built around each interface to ensure that one interface does not adversely affect another.

**Investment Protection.** The QLE3044 is built around QLogic's revolutionary Protocol Processing Engine architecture and allows for the support of multiple protocols on the same hardware. QLogic also uses common drivers across all Intelligent Ethernet (10GbE and 1GbE) adapters, which reduces Total Cost of Ownership (TCO).

**Unmatched Expertise.** QLogic is a leading supplier of high performance network infrastructure solutions including Fibre Channel, Ethernet, iSCSI, InfiniBand, and Converged Network adapters.

## QLE3044 Quad Port 1GbE to PCIe® Intelligent Ethernet Adapter

## Host Bus Interface Specifications

## Bus interface

- PCI Express Gen2 x4
- Interrupts
  - Message based INTx
  - MSI
  - MSI-X — up to 2K unique interrupts

## Ethernet Specifications

## High-performance networking mode

- Checksum offload
  - TCP, UDP, IP
  - Tx, Rx, IPv4, IPv6
- Advanced stateless offloads
  - Large Send Offload (LSO)
  - Large Receive Offload (LRO)
  - TCP Segmentation Offload (TSO)
- Jumbo frames
- 802.1p – priority
- 802.1q – VLAN – up to 4K
- 802.3x pause frame
- IPv6, IPv4
- Interrupt coalescing

## Power Management

- Wake on LAN

## Tools and Utilities

## Management tools and device utilities

- 64-bit MAC statistics for management
  - MIB, MIB2
  - RMON, RMON2

## Remote boot support

- PXE

## Operating systems

- Microsoft® Windows Server® 2003
- Microsoft Windows Server 2008
- Red Hat® Linux 4/5
- Novell® SLES 9/10/11
- VMware® ESX 3.5 and ESX/ESXi 4.0 (vSphere)
- Citrix® XenServer™ 5.2
- Solaris® 10 (x86/x64)

## Advanced Features

- NetSlice I/O virtualization support

## Physical Specifications

## Ports

- Quad Gigabit Ethernet

## Form factor

- Low-profile PCIe (6.6 in × 2.54 in)

## Environment and Equipment Specifications

## Airflow

- 150 LFM (minimum)

## Temperature

- Operating: 0°C/32°F to 55°C/131°F
- Storage: -20°C/-4°F to 70°C/158°F

## Humidity

- Relative: 10% to /90%
- Storage: 5% to 95%

## RoHS compliance

- RoHS 6

## Medium

- Cat5 — UTP

## Connector

- RJ-45

## Transceiver

- 1000BASE-T

## Speed

- 10/100/1000

## Distance

- 100m

## Agency Approvals—Product Safety

## US/Canada

- UL60950-1, 1st edition, 2007-10-31
- CSA C22.2 60950-1-03, 1st edition, 2006-07

## Europe

- EN60950-1:2001; IEC 60950-1:2001, 1st edition

## Agency Approvals—EMI and EMC

## US/Canada

- FCC CFR 47 Part 15, Subpart B; ICES-003, Class B

## Europe

- EN55022:2006 Class B
- EN55024-1998 + A1: 2001 + A2:2003

## Australia/New Zealand

- AS/NZS CISPR22: 2006 Class B

## Japan

- VCCI V-3 ITE Class B

## Korea

- KCC (RRL)

## Taiwan

- BSMI CNS 13438: 2006

## Ordering Information

## QLE3044-RJ-CK

- Ships in an individually packed box with a standard size bracket, a spare low-profile bracket, and Quick Start Guide.



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