BROADCOM®

Connecting
e v e r y t h i n g ™

BCM4401
PRODUCT Brief

INTEGRATED 10/100 ETHERNET

BCM4401 FEATURES

- **PCI 2.2, mini PCI 1.0 compliant 10/100 Ethernet solution**
- **Fully integrated 10/100 MAC/PHY**
- **IEEE 802.3 compliant MAC/PHY**
- **Full-duplex flow control compliant with 802.3x**
- **IEEE802.1p/Q and 802.3x support**
- **64-entry content addressable memory filtering**
- **SNMP, RMON integrated MIB counters**
- **Low-power IEEE 802.3u Fast Ethernet transceiver**
- **HP Auto-MDIX**
- **Remote boot PXE support**
- **Meets PCI power management interface v1.1 (ACPI)**
- **Integrated 3.3V to 1.8V regulator for lowest system cost**
- **0.18µ CMOS process**
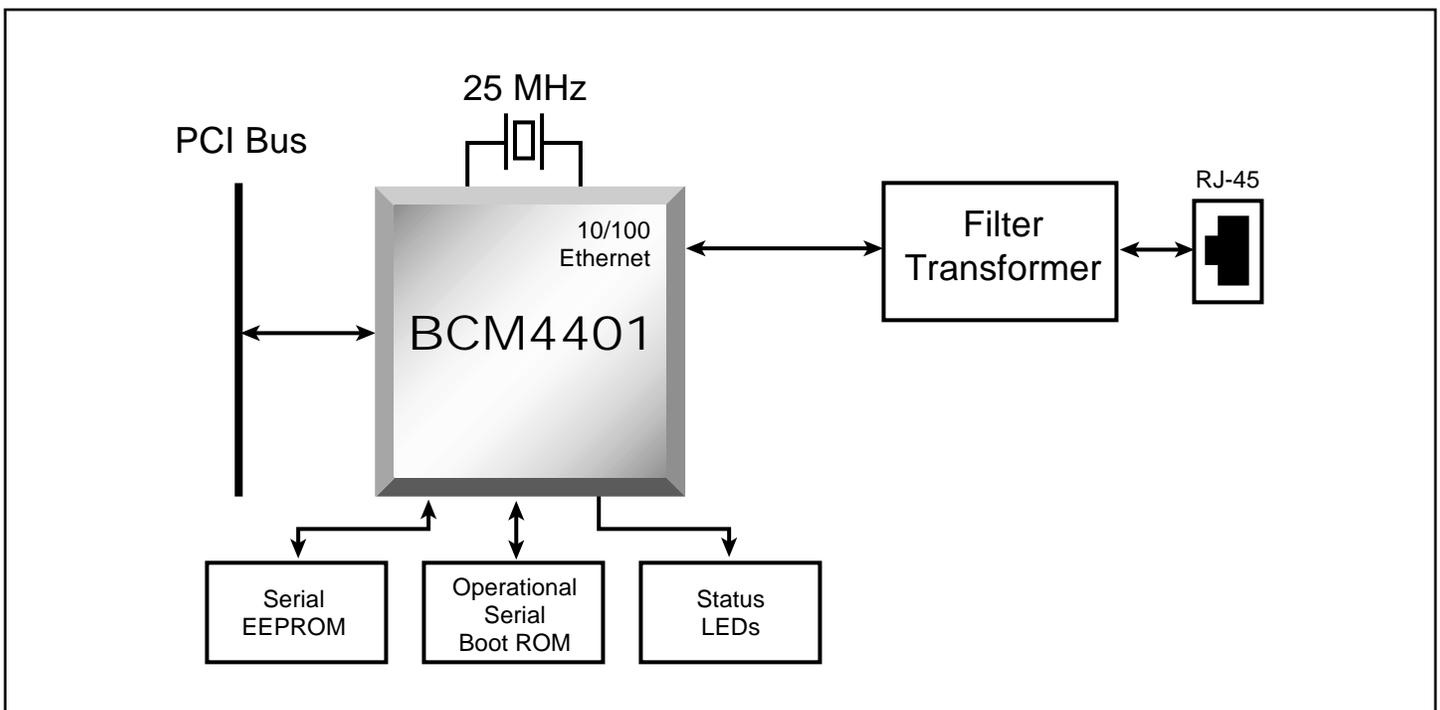- **Packaged in 196-pin FBGA or 128-pin LQFP**
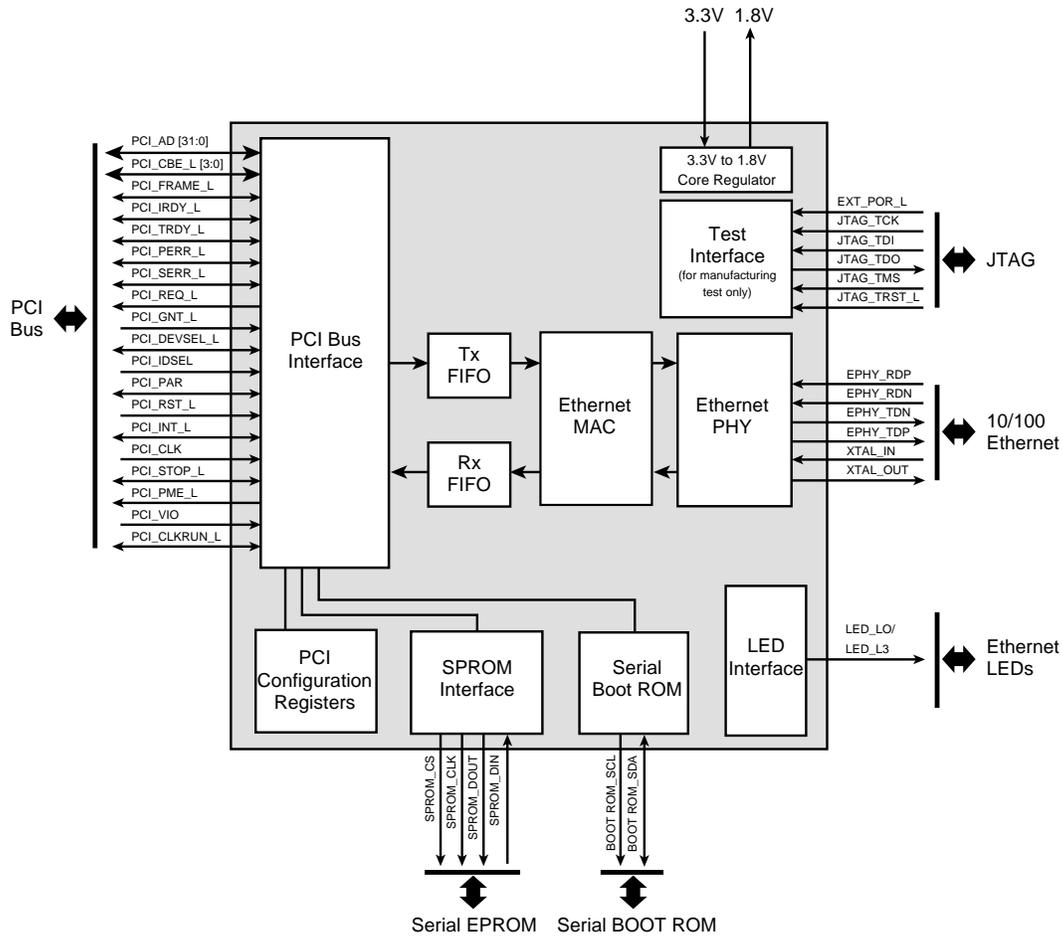
BCM4401 FEATURES

- **Multiple form factors:**
  - PCI 2.2 adapter—supports 2-layer PCB and low profile form factor
  - Mini PCI 1.0 for low-cost laptop solution
  - LAN on Motherboard (LOM) option
- **Advanced software suite:**
  - Universal driver leverages mature NetXtreme™ BCM570x enterprise driver architecture
  - Windows® 2000, NT 4, Me, XP compatible
  - Microsoft® certification
- **Pin-to-pin and software compatible with BCM5702 for seamless migration to gigabit 10/100/1000**

APPLICATIONS

- **PCI Network Interface Cards (NIC)**
- **Mini PCI cards**
- **LAN on motherboards (LOM)**

BCM4401 System Diagram

The **BCM4401** 10/100 Ethernet function incorporates a complete IEEE 802.3u compliant MAC and PHY. The MAC also supports 802.1p/Q, 802.3x, and management functions including RMON, Ethernet-like MIB, and IEEE 802.3μ Ethernet MIB. The 10/100 PHY uses Broadcom's advanced Digi-PHY™ architecture for low power and includes advanced power management. The 10/100 PHY also supports auto-negotiation and HP Auto-MDIX functions to eliminate installation errors.

The BCM4401KFB is pin-to-pin and software compatible with the BCM5702 32-bit PCI Gigabit Ethernet controller. This provides a seamless migration path from Fast Ethernet to Gigabit Ethernet capabilities using a single PCB design.

By leveraging the NetXtreme™ BCM570x Gigabit Ethernet driver architecture and the complete proven advanced software suite, the **BCM4401** 10/100 solution brings enterprise-proven technology for migrating business desktops and laptops to gigabit performance.

Ordering Infoprmation:

BCM4401KFB

BCM4401KQL

Connecting
everything™

BROADCOM

Phone: 949-450-8700
FAX: 949-450-8710
Email: info@broadcom.com
Web: www.broadcom.com