Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

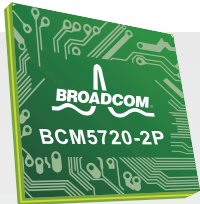Tel: +86-755-8981 8866 Fax: +86-755-8427 6832
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# NetXtreme® BCM5720-2P Dual-Port Ethernet Server Adapter

**BROADCOM**

Connecting
e v e r y t h i n g ®

**BCM5720-2P**

- Delivers full line-rate performance across all ports.

- Ideal for high-transaction environments requiring greater small packet performance.

- Dual-port connectivity for improved performance in multi-processor systems.

- Optimizes virtualization: VMware NetQueue and Microsoft VMQ support.

- Reduces adapter power consumption by up to 42% leveraging Energy Efficient Ethernet standards.

- Improves reliability and interoperability—leverages Broadcom's market-proven Ethernet architecture and software.

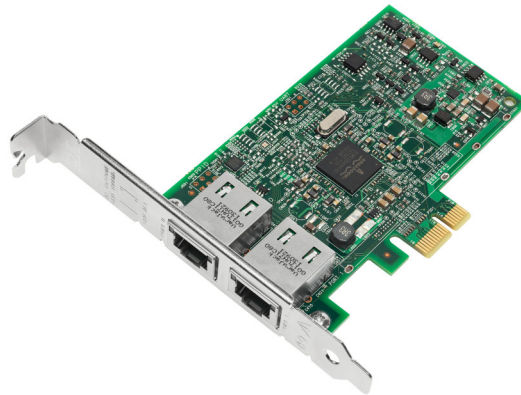| BCM5720-2P | |
|:---:|:---|
| ✓ | Service Provider |
| ✓ | Data Centers |
| ✓ | Enterprise |

## OVERVIEW

Leveraging long-standing industry leadership in Ethernet, Broadcom now offers the NetXtreme BCM5720-2P Ethernet Server Adapter, providing the highest levels of performance, efficiency, and scalability for the enterprise data center.

Designed for today's enterprise and data center environments, the Broadcom BCM5720-2P Ethernet Server adapter is the ideal solution for multicore servers, delivering full line-rate through-put across all ports. The adapter utilizes Broadcom's field-proven dual-port BCM5720-2P integrated controller device to deliver lower power consumption and Energy Efficient Ethernet (EEE), reducing IT operation costs. The BCM5720-2P is compatible with x86 and x64 servers utilizing the PCIe v1.x and v2.x interfaces.

Increasing application workloads are placing greater demands on enterprise networks, and the BCM5720-2P-based dual-port 1GbE Server Adapter is the solution of choice for such environments, providing a reliable, high-performance, energy-efficient 1GbE connectivity solution.

## FEATURES

- Dual-port 1GbE adapter for rack and tower servers

- x1 PCI Express (PCIe) v2.0 (5 GT/s) support

- Energy Efficient Ethernet (EEE)

- I/O Virtualization supported with 17 receive queues and 16 transmit queues per port

- Full line-rate performance across all ports

- Broad OS and hypervisor support

- Preboot eXecution Environment (PXE) support

- Support for VMware NetQueue and Microsoft VMQ

- Link aggregation and automatic load-balancing

- Wake-on-LAN support

- MSI and MSI-X support

- IPv4 and IPv6 offloads

- TCP, UDP, and IP checksum offloads

- Large Send Offload (LSO)

- TCP Segmentation Offload (TSO)

- Receive Side Scaling (RSS)

- Transmit Side Scaling (TSS)

- VLAN support with VLAN tagging

- Jumbo frame support for frames larger than 1500 Bytes

- Broadcom Advanced Control Suite (BACS) management application

- iSCSI remote boot support

## BENEFITS

- Accelerates Server Performance:
  - Boosts network performance with full line-rate performance across all ports.
  - Maximizes server processing performance by reducing CPU overhead and lowering interrupt latency through the use of the MSI-X standard.
  - Boosts performance in Windows and Linux environments by directing interrupts to the server's CPU cores, leveraging Transmit/Receive Side Scaling (TSS/RSS).
- Delivers Advanced Ethernet Capabilities:
  - Energy Efficient Ethernet—Reduces adapter power consumption by up to 42% through intelligent adaptive power management, adjusting power based on data traffic load.
- Robust Virtualization Capabilities:
  - Superior network performance with support for VMware NetQueue and Microsoft VMQ technologies.
  - Enhances network management and efficiency with support for VLAN tagging.
- Streamlines Deployment and Management:
  - Simplifies deployment and management complexity—Broadcom Ethernet solutions available across a wide range of server platforms.
  - Unifies the Server Adapter and storage management using Broadcom Advanced Management Suite (BACS).

## SPECIFICATIONS

### General

- Form factor—Low profile 4.3" x 2.7" (109.22 mm x 68.58 mm)
- Bus type—x1 PCI Express 2.0 (5 GT/s)
- Data rate—10/100/1000 Mbps per port, per direction
- MAC controller—BCM5720-2P
- Connector—RJ-45

### OS Support

- Microsoft—Windows Server 2008, 2008 R2, and 2012, all editions
- Linux
  - Red Hat Enterprise Linux (RHEL) 5.9/5.8, 6.4/6.3
  - Novell SUSE Linux Enterprise Server (SLES) 10 SP4/SP3, 11 U3/U2
- VMware—vSphere 5.x
- Citrix—XenServer 6.1

### Hardware

- Certifications—RoHS, FCC A, UL, CE, VCCI, BSMI, CTICK, KCC
- Compatible with x86 and x64 servers utilizing the PCIe v1.x and v2.x interfaces

### Management

- Broadcom—BACS management application, WMI, and Broadcom Management API (BMAPI)

### Environmental Requirements

- Operating temperature: 32°F to 131°F (0°C to 55°C)
- Storage temperature: –40°F to 149°F (–40°C to 65°C)
- Relative humidity: 5% to 95% noncondensing

### Advanced Features and Standards

- PCI Express base specification 2.0
- PCI bus power management interface (rev 1.2)
- Advanced Error Reporting (AER)
- TCP segmentation/large send offload
- ACPI v2.0
- SMBus 2.0
- IEEE 802.3ab 1000BASE-T
- IEEE 802.3u 100BASE-TX
- IEEE 802.3i 10BASE-T
- IEEE 802.1q—VLAN tagging support
- IEEE 802.3x—Flow control
- IEEE 802.3az—EEE
- IPv4 and IPv6 offload
- Teaming support
- MSI-X supports independent queues

## ORDERING INFORMATION

| | Part Number |
|---|---|
| Broadcom BCM5720-2P Dual-Port Ethernet Server Adapter (Single) | BCM5720-2P |
| Broadcom BCM5720-2P Dual-Port Ethernet Server Adapter (Bulk 10-pack) | BCM5720-2PBLK |

For more information, visit:
www.broadcom.com

## ABOUT BROADCOM

Broadcom Corporation (NASDAQ: BRCM), a FORTUNE 500® company, is a global leader and innovator in semiconductor solutions for wired and wireless communications. Broadcom® products seamlessly deliver voice, video, data, and multimedia connectivity in the home, office, and mobile environments. With the industry's broadest portfolio of state-of-the- art system-on-a-chip and embedded software solutions, Broadcom is changing the world by Connecting everything®. For more information, go to www.broadcom.com.

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