IBM

Broadcom 10 GbE SFP+ Network Adapters for IBM System x

Broadcom delivers an extensive family of 10 GbE network adapters

Highlights

- Delivers full line-rate 10 Gigabit Ethernet (GbE) performance

- Maximizes server processing performance by reducing CPU overhead and lowering interrupt latency through the use of the MSI-X standard

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

- Available in PCIe, IBM Mezzanine, and IBM Mezzanine LOM Gen2 (ML2) form factors

IBM offers a Broadcom 10 GbE SFP+ network adapter family that is based on the Broadcom BCM57811S and BCM57810S controllers for select IBM® System x® rack server platforms. It leverages Broadcom's longstanding history in Ethernet, providing rock-solid levels of performance, efficiency, and scalability for the enterprise data center.

Virtualization, cloud computing, high performance computing (HPC), and clustering initiatives are increasing workload demands. The Broadcom network adapter family is the solution of choice for workload-intensive computing environments, providing a reliable, high-performance 10 GbE connectivity solution.

Broadcom NetXtreme 10 GbE SFP+ Network Adapter Family for IBM System x at a glance

Broadcom 2x10 GbE PCIe Adapter	Broadcom 2x10 GbE Mezz Adapter	Broadcom 1x10 GbE Mezz Adapter	Broadcom 2x10 Gbe ML2 Adapter
Part numbers	• 00D9700: Broadcom NetXtreme 1x10 GbE SFP+ Embedded Adapter for IBM System x • 44T1360: Broadcom NetXtreme 2x10 GbE SFP+ Mezz (Embedded) Adapter for IBM System x • 94Y5180: Broadcom NetXtreme 2x10 GbE SFP+ Adapter for IBM System x • 00D2028: Broadcom NetXtreme ML2 2x10 GbE SFP+ for IBM System x		
Performance	Line rate with auto negotiation for 10 GbE and 1000/100/10 MB Ethernet		
ASIC	• Single-port: Broadcom BCM57811S • Dual-port: Broadcom BCM57810S		
Bus interface	• 00D9700: x8 PCIe 2.0 with IBM Mezz slot, one Mezz per server • 44T1360: x8 PCIe 2.0 with IBM Mezz slot, one Mezz per server • 94Y5180: x8 PCIe 2.0 • 00D2028: x8 PCIe 3.0 with IBM Mezzanine LOM slot, one ML2 per server		

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Supported servers	Visit the IBM ServerProven page at: **ibm.com**/servers/eserver/serverproven/compat/us/		
Interface	Open SFP+ cages		
Performance features	• TCP/IP offload engine (TOE) • TCP segmentation/large send offload • Receive-side scaling (RSS) for IPv4 and IPv6 • TCP/IP checksum offload for IPv4 and IPv6 • UDP/IP checksum offload for IPv4 and IPv6 • Message signal interrupt (MSI, MSI-X) support • PXE 2.x support		
Ethernet features	• Jumbo frame support (9600 bytes) • Flow control (IEEE 802.3) • VLAN support (IEEE 802.1q) • Link aggregation (IEEE 802.3ad) • Quality/Class of service (IEEE 802.1p)		
Virtualization features	• RX/TX multiqueue and VMQ/NetQueue		
Power dissipation	• 00D9700: 4.74 W typical • 44T1360: 7.14 W typical • 00D20208: 14.4 W typical • 94Y5180: 7.08 W typical		
Environmental	• Operating temperature: 32° F to 131° F • Storage temperature: -40° F to 149° F • Relative humidity: 5% to 95% noncondensing		
Dimensions	• 00D9700: Conforms to IBM Mezz form factor • 44T1360: Conforms to IBM Mezz form factor • 00D2028: Conforms to IBM Mezzanine LOM Gen 2 (ML2) form factor • 94Y5180: PCIe standard form factor: 167.64 mm x 68.91 mm (6.6 in. x 2.71 in.). Standard bracket (low-profile available)		
Warranty	One year limited warranty. When installed in an IBM System x server, these cards assume your system's base warranty and any IBM ServicePac® upgrade		

Why IBM?

To help optimize technology investments, IBM offers a single point of serviceability backed by renowned support and training. In addition, the Broadcom network adapter family is part of the IBM ServerProven® program, enabling compatibility among a variety of IBM and partner products.

For more information

To learn more about the Broadcom NetXtreme 10 GbE SFP+ Network Adapter Family, visit **ibm.com**/systems/x/options/networking/index.html or contact your IBM representative or IBM Business Partner.