



Emulex 10GbE Adapters for IBM Power Servers

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Frequently Asked Questions (FAQs)

1. What are add-on Emulex 10GbE adapters for IBM Power servers?

IBM is offering four 10 Gigabit Ethernet (10GbE) add-on adapters that are based on OneConnect OCe11102-N network interface cards. They're supported for installation into a server slot that supports PCI Express (PCIe) 2.0. They can be ordered using the following IBM feature codes:

| Description | Feature Code |
|---|--------------|
| PCIe2 (Gen2) Low Profile 2-port 10GbE SR | 5284 |
| PCIe2 (Gen2) Low Profile 2-Port 10GbE SFP+ Copper | 5286 |
| PCIe2 (Gen2) Full Height 2-port 10GbE SR | 5287 |
| PCIe2 (Gen2) Full Height 2-Port 10GbE SFP+ Copper | 5288 |

2. What is the most significant benefit with Emulex 10GbE adapters for IBM Power servers?

Emulex 10GbE adapters for IBM Power servers are based on the third-generation BladeEngine™ 3 (BE3) controller and support the PCIe 2.0 standard with 500MB/s per-lane throughput, doubling the PCIe 1.0 standard and enabling full 10Gb/s bidirectional bandwidth. Emulex 10GbE adapters provide better performance than adapters that only support PCIe 1.0 and are priced below other Ethernet adapters for IBM Power servers that support PCIe 2.0.

3. How many ports are on Emulex 10GbE add-on adapters for IBM Power servers?

Two.

4. Are Emulex 10GbE adapters for IBM Power servers supported with PCIe 2.0 slots?

Yes. Emulex 10GbE adapters for IBM Power servers are PCIe 2.0-compatible 10GbE network interface cards that are sold by IBM for IBM Power servers.

5. Are Emulex 10GbE adapters for IBM Power servers supported with PCIe 1.0 slots?

No. Emulex 10GbE adapters for IBM Power servers should only be installed into PCIe 2.0 slots.

6. What IBM Power servers support Emulex 10GbE adapters?

- IBM Power 710 Express Server
- IBM Power 720 Express Server
- IBM Power 730 Express Server
- IBM Power 740 Express Server



Frequently Asked Questions (FAQs)

- IBM Power 770 Enterprise Server
- IBM Power 780 Enterprise Server
- IBM Power 795 Enterprise Server

Note: A PCIe 2.0 riser card (feature code 5685) is an option for the low profile slots (Feature Codes 5284 and 5286) for IBM support.

7. What is the form factor of Emulex 10GbE adapters for IBM Power servers?

Feature Codes 5284 and 5286 are low profile PCIe 2.0.

Feature Codes 5287 and 5288 are full height PCIe 2.0.

8. What are transceiver options for Emulex 10GbE adapters for IBM Power servers?

Optical-connect 10GbE adapters (Feature Codes 5284 and 5287) provide two 10GbE SFP+ Short Range (SR) ports attaching optical fiber cable up to 300 meters.

Copper-connect 10GbE adapters (Feature Codes 5286 and 5288) provide two 10GbE SFP+ active copper twin ax ports attaching direct attach copper (DAC) cables up to 5 meters.

9. Are there integrated Emulex 10GbE adapters for IBM Power servers?

IBM offers integrated Base Ethernet Adapter based on the same Emulex BE3 controller that is used in Emulex add-on cards for IBM Power servers. The Emulex 10GbE option is shipped as a Base Ethernet Adapter and is equivalent to a LAN-on-Motherboard (LOM) adapter.

10. What IBM Power servers can be configured with the Emulex 10GbE Base Ethernet Adapter?

- IBM Power 770 Server
- IBM Power 780 Server

11. How many ports are on Emulex 10GbE Base Ethernet Adapters for IBM Power servers?

Two 10GE ports and two 1GbE ports.

12. What operating systems are supported with Emulex 10GbE adapters for IBM Power servers?

- AIX
- IBM i
- Linux for Power



13. What are the business benefits with Emulex 10GbE adapters for IBM Power servers?

Optimized Network Connectivity

The IBM network adapter from Emulex is a high-performance, dual-port network adapter for 10GbE networks. Protocol offload for stateless TCP/IP provides maximum bandwidth with minimum use of CPU resources.

Next-Generation I/O

The Emulex 10GbE adapter is based on a third-generation BE3 controller and the only 10GbE adapter for IBM Power servers that supports the PCIe 2.0 standard. The PCIe 2.0 standard provides 500 MB/s per-lane throughput, doubling the PCIe 1.0 standard and enabling full 10Gb bidirectional bandwidth per port. PCIe 2.0 also uses a base clock speed of 5.0 GHz, twice the PCIe 1.0 standard.

Greener Data Centers

The Emulex OneConnect 10GbE platform delivers industry-leading performance and scalability per watt, reducing requirements for power and cooling. Protocol offload enables efficient use of computing resources, supports more virtual machine per CPU and reduces the number of physical servers required to support data center demands.

Advanced Error Checking

End-to-end data protection with hardware parity, CRC, ECC and Enhanced Error Handling (EEH) ensure that data is safe from corruption.

14. What are the key features with Emulex 10GbE adapters for IBM Power servers?
- Superior performance
 - ✓ TCP/IP stateless offloads
 - Energy-efficient design
 - ✓ Industry-leading performance per watt
 - ✓ Complements data center “green” initiatives
 - PCIe 2.0 8x (8-lane) support for leading performance on IBM Power servers

