



New Emulex 10 GbE Virtual Fabric Adapter II for IBM BladeCenter and Emulex 10 GbE Virtual Fabric Adapter Advanced II for IBM BladeCenter deliver next-generation networking features

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Overview

The Emulex 10 GbE Virtual Fabric Adapter II for IBM® BladeCenter® and Emulex 10 GbE Virtual Fabric Adapter Advanced II for IBM BladeCenter provide great PCIe 2.0 Gen2 10 Gigabit Ethernet solutions and performance in both standard protocol NIC (pNIC) mode and in a virtual NIC (vNIC or vNIC2) environment through the IBM virtual fabric for IBM BladeCenter ecosystem.

Feature exchange

None

Key prerequisites

For prerequisites, refer to the System x® ServerProven® Plan at

<http://www-03.ibm.com/systems/info/x86servers/serverproven/compat/us/xseries/lan/matrix.html>

Planned availability date

November 30, 2012

Description

Emulex 10 GbE Virtual Fabric Adapter II for IBM BladeCenter and Emulex 10 GbE Virtual Fabric Adapter Advanced II for IBM BladeCenter

These high-performance, dual-port network adapters for 10 Gbps Ethernet (10 GbE) networks with protocol offloads enable maximum bandwidth with minimum use of CPU resources to realize a higher level of performance.

These virtual fabric adapters are members of IBM's comprehensive networking portfolio of 1 GbE and 10 GbE adapters and deliver industry-leading performance and scalability per watt, reducing requirements for power and cooling. Protocol offloads enable efficient use of computing resources, support more VMs per CPU, and reduce the number of servers required to support data center demands. The 10

Gb connection via IBM BladeCenter ecosystem can be via 10 Gb SFP+ SR multimode fiber connection or 10 Gb SFP+ Direct Attached Copper (DAC). DAC connection can be with Active DAC cables or Passive DAC cables.

Features and functions:

- Dual-channel, 10 Gbps Ethernet link speed
- TCIP/IP stateless offloads
- TCP chimney offload
- Hardware parity, CRC, ECC, and other advanced error checking
- PCI-E Gen 2
- IBM BladeCenter CFFh card form factor
- IPv4/IPv6 TCP, UDP checksum offload
- VLAN insertion and extraction
- Support for jumbo frames up to 9000 bytes
- Preboot eXecutive Environment (PXE) 2.0 network boot support
- Interrupt coalescing
- Load balancing and failover support
- One-year limited warranty

Product number

The following are features already announced for the 3331 machine type:

Description	MT	Model	Feature
Emulex 10GbE Virtual Fabric Adapter II - IBM BladeCenter	3331	HC1	A3NV
Emulex 10GbE Virtual Fabric Adapter Advanced II - IBM BladeCenter	3331	HC1	A3NW

Options

Description	SEO number
Emulex 2-port 10Gb Virtual Fabric Adapter II for IBM BladeCenter	00Y3266
Emulex 2-port 10Gb Virtual Fabric Adapter Advanced II for IBM BladeCenter	00Y3264

Business Partner information

If you are a Direct Reseller - System Reseller acquiring products from IBM , you may link directly to Business Partner information for this announcement. A PartnerWorld® ID and password are required (use IBM ID).

<https://www.ibm.com/partnerworld/mem/sla.jsp?num=112-233>

Publications

None

Services

Global Technology Services

IBM services include business consulting, outsourcing, hosting services, applications, and other technology management.

These services help you learn about, plan, install, manage, or optimize your IT infrastructure to be an on-demand business. They can help you integrate your high-speed networks, storage systems, application servers, wireless protocols, and an array of platforms, middleware, and communications software for IBM and many non-IBM offerings. IBM is your one-stop shop for IT support needs.

For details on available services, contact your IBM representative or visit

<http://www.ibm.com/services/>

For details on available IBM Business Continuity and Recovery Services, contact your IBM representative or visit

<http://www.ibm.com/services/continuity>

For details on education offerings related to specific products, visit

<http://www.ibm.com/services/learning/index.html>

Select your country, and then select the product as the category.

Technical information

Specified operating environment

Physical specifications

Environmental requirements

- Operating temperature: 0°C to +55°C
- Storage temperature: -20°C to +65° C
- Shipping conditions: -20°C to +70°C
- Air flow requirement (LFPM): 45 minimum
- Wet bulb (max): 27°C
- Relative humidity (operating/nonoperating): 10% to 90%
- Relative humidity (shipping): 5% to 95%, no condensation
- Relative humidity (storage): 5% to 80%
- Maximum dew point (operating): 21°C
- Maximum operating altitude: 7,000 feet or 2,134 meters
- Vibration and shock: IEC 68, FCC Part 68.302, NSTA, 1A
- Electrostatic/electromagnetic susceptibility: IEC 801-2, IEC 801-3, IEC 801-4, and IEC 801-5

Standards

Agency Approvals

- EN55022
- EN55024
- EN60950 / CE
- EN 61000-3-2

- EN 61000-3-3
- ICES-003, Issue-004
- IEC 950 CB Scheme
- FCC 47 CFR Part 15 Class A
- UL 1950
- CSA C22.2 950-95
- VCCI
- AS/NZS CISPR 22 / C-tick
- RRL for KC
- BSMI
- UL 94-/V

Software requirements

The following network operating systems have been tested for compatibility with the Emulex 10 GbE Virtual Fabric Adapter II for IBM BladeCenter and Emulex 10 GbE Virtual Fabric Adapter Advanced II for IBM BladeCenter .

Network operating systems

- Microsoft™
 - Windows™ Server 2012
 - Microsoft Windows Server 2008 R2
 - Microsoft Windows Server 2008 DC, Datacenter x64 Edition
 - Microsoft Windows Server 2008 EE, Enterprise x64 Edition
- Linux™
 - SUSE Linux Enterprise Server 10 for AMD64/EM64T
 - SUSE Linux Enterprise Server 10 for x86
 - SUSE Linux Enterprise Server 10 with Xen for AMD64/EM64T
 - SUSE Linux Enterprise Server 10 with Xen for x86
 - SUSE Linux Enterprise Server 11 for AMD64/EM64T
 - SUSE Linux Enterprise Server 11 for x86
 - SUSE Linux Enterprise Server 11 with Xen for AMD64/EM64T
- Red Hat
 - Red Hat Enterprise Linux 5 Server with Xen x64 Edition
 - Red Hat Enterprise Linux 5 Server x64 Edition
 - Red Hat Enterprise Linux 6 Server x64 Edition
- VMware
 - VMware ESX 4.1
 - VMware ESXi 4.1
 - VMware vSphere 5
 - VMware vSphere 5.1

Note: For information on additional support, certification, and versions of network operating systems, visit

<http://www.ibm.com/servers/eserver/serverproven/compat/us/>

IBM makes no representation or warranty regarding third-party products, including those designated as ServerProven .

Planning information

Cable orders

None

Security, auditability, and control

The customer is responsible for evaluation, selection, and implementation of security features, administrative procedures, and appropriate controls in application systems and communications facilities.

Terms and conditions

Warranty period

One year.

An IBM part or feature installed during the initial installation of an IBM machine is subject to a full warranty effective on the date of installation of the machine. An IBM part or feature which replaces a previously installed part or feature assumes the remainder of the warranty period for the replaced part or feature. An IBM part or feature added to a machine without replacing a previously installed part or feature is subject to a full warranty effective on its date of installation. Unless specified otherwise, the warranty period, type of warranty service and service level of a part or feature is the same as the machine it is installed in.

This option assumes the same warranty or maintenance terms as the machine in which it is installed for the remainder of the warranty or maintenance period for such machine.

IBM hourly service rate classification

One

Customer setup

Yes

Machine code

No.

All other terms and conditions are the same as those applicable to the IBM machine type in which the feature is installed.

Prices

For current prices, contact IBM at 888-Shop-IBM (746-7426) or visit

<http://www-03.ibm.com/systems/x/>

To locate the web price, search on the feature number in the Search field.

The following are features already announced for the 3331 machine type:

Description	Model Number	Feature Number	Initial/ MES/ Both/ Support
Emulex 10GbE Virtual Fabric Adapter II - IBM			

BladeCenter				
	HC1	A3NV		MES
Emulex 10GbE Virtual Fabric Adapter Advanced II - IBM BladeCenter				
	HC1	A3NW		MES

Option SEOs

Description	SEO Number	Initial/MES/Both/Support	CSU
Emulex 10GbE Virtual Fabric Adapter II for IBM BladeCenter	00Y3266	Both	Yes
Emulex 10GbE Virtual Fabric Adapter Advanced II for IBM BladeCenter	00Y3264	Both	Yes

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