

## 10Gb/s Ethernet Adapters

- CFFh expansion card for BladeCenter
- Integrated card for rack/tower
- PCIe card for rack/tower

### What customer problems does this solution solve?

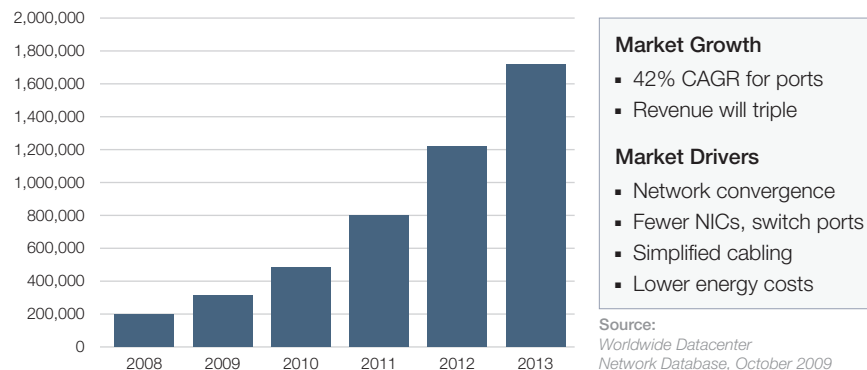
- Financial risk associated with I/O transitions
- High costs for adapters, switch ports, cabling and power
- Ever-changing I/O demands in virtualized environments

### What benefits can your customer expect from this solution?

- Investment protection in transition from Ethernet to FCoE or ISCSI (pay-as-you-go)
- Flexibility to tailor Ethernet bandwidth as required (vNIC)
- Lower hardware costs by 50-75%
- Reduce complexity with virtualized environments

### 10GbE market trends

Worldwide Data Center 10G Switch Port · 2008-2013



## What does this product do?

The Emulex VFA is a 2-port 10Gb/s Ethernet card for IBM System x and BladeCenter. IBM offers the VFA in three formats:

1. CFFh card for BladeCenter
2. Integrated card for rack/tower
3. PCIe option card for rack/tower

### Four Modes of Operation (one card, four personalities)

Mode	Description	Mixed Modes
pNIC	2-port Ethernet solution	+ FCoE or ISCSI
vNIC	Up to 8 virtual ports with variable bandwidth	+ FCoE or ISCSI
FCoE	Fibre Channel over Ethernet	+ pNIC or vNIC
ISCSI	ISCSI hardware acceleration	+ pNIC or vNIC

## What is unique about this solution?

Feature	Benefit to Customer
Pay-as-you-go option	Investment protection for customers looking to migrate to FCoE or ISCSI
Multi-platform coverage	Single driver across the IBM System x portfolio
OneCommand Manager	Optimized management with one console for Ethernet, FCoE, ISCSI and Fibre Channel throughout the data center
Virtual NIC (vNIC)	Flexibility to tailor bandwidth. Create up to eight virtual ports with variable bandwidth for each two-port adapter. Up to 75% reduction in switches for blade server environments.
ISCSI hardware offload	Hardware acceleration for iSCSI, including TOE. Up to 50% lower server overhead when compared to ISCSI software initiators. The card does the work.
FCoE	Single infrastructure for Fibre Channel and 10Gb/s Ethernet reduces costs for adapters, switch ports and cables.
High performance chip	Faster Ethernet performance and application responsiveness

## Sales resources

IBM System x landing page  
[www.emulex-ibm.com](http://www.emulex-ibm.com)

Virtual Fabric landing page  
[www.emulex.com/solutions/ibm-bladecenter-virtual-fabric.html](http://www.emulex.com/solutions/ibm-bladecenter-virtual-fabric.html)

## Call to action

- Engage in conversations with your customers regarding their 10GbE plans
- Use Emulex's VFA to differentiate your System x proposals
- Always configure Emulex's 8Gb/s Fibre Channel HBAs with Emulex VFA

## Contact information

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## Qualifying questions

What are your plans regarding deploying 10Gb/s Ethernet?

Have you considered using your 10Gb/s Ethernet infrastructure to also manage storage via FCoE or iSCSI?

Would you find it valuable to tailor your Ethernet bandwidth to optimize your virtualized environment?

Are you looking for a single 10Gb/s Ethernet solution that provides coverage across BladeCenter and rack/tower?

How valuable would it be to purchase a 2-port 10Gb/s Ethernet solution today and have the flexibility to create multiple virtual ports and add support for FCoE or iSCSI storage?

## How do your customers enable FCoE or iSCSI support?

- Collect adapter information with OneCommand Manager
- Upload adapter information to Emulex web site
- Download license keys and apply with OneCommand Manager

## Why should your customers use Emulex 8G Fibre Channel HBAs with the Emulex VFA?

**Virtualization optimization**—Best dual-port performance and server efficiency enables more virtual machines per server

**Unified management**—Emulex OneCommand Manager makes it easy to manage Ethernet and Fibre Channel

**Maximum scalability**—No re-boot firmware, batch mode updates, common driver architecture for HBAs and VFAs

## IBM server matrix

Card Options	IBM BladeCenter Servers			IBM Rack Servers				
	HS22	HS22v	HX5	x3550M3	x3650M3	x3690X5	x3850X5	x3950X5
10GbE Blade CFFh VFA	Option 49Y4235	MTM + Option 49Y4235	MTM	N/A	N/A	N/A	N/A	N/A
10GbE Integrated VFA	N/A	N/A	N/A	CTO	CTO	MTM	MTM	MTM
10GbE PCIe VFA	N/A	N/A	N/A	Option 49Y4250	Option 49Y4250	Option 49Y4250	Option 49Y4250	Option 49Y4250
8Gb Fibre Channel	Option 46M6140	Option 46M6140	Option 46M6140	Option 42D0485-1 port 42D0494-2 port	Option 42D0485-1 port 42D0494-2 port	Option 42D0485-1 port 42D0494-2 port	Option 42D0485-1 port 42D0494-2 port	Option 42D0485-1 port 42D0494-2 port

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