Best.nr: 20100304

# 10G Fiber Optical Dual Port PCI Express Network Adapter

#### **Product Overview:**

Extending Intel Virtualization Technology Beyond Server Virtualization to the

Network with Hardware Optimizations and Offloads for the Rapid Provisioning of Networks in an Agile Data Center.



## **Key Features**

- Dual-port 10GbE adapters
- Supports 2x10GbE configurations
- PCI Express\* (PCle\*) 3.0, x8
- Exceptional low power adapters
- Network Virtualization offloads including VXLAN, NVGRE, and Geneve 1
- Intel® Ethernet Flow Director (Intel® Ethernet FD ) for hardware-based application traffic steering
- Data Plane Development Kit (DPDK) optimized for efficient packet processing
- Excellent small packet performance for network appliances and Network Functions Virtualization (NFV)
- Intelligent offloads to enable high performance with Intel® Xeon® processor-based servers
- I/O virtualization innovations for maximum performance in a virtualized server
- Unified networking providing a single wire support for LAN and storage: NAS

# **Leading 10 GbE Performance**

- Small Packet Performance: Maintains wire-rate throughput on smaller payload sizes
- Bulk Transfer Performance: Delivers line-rate performance with low CPU usage for large application buffers
- Virtualized Performance:Alleviates hypervisor I/O bottlenecks by providing flow separation for Virtual Machines (VMs)
- Network Virtualization:Network virtualization overlay offloads including VXLAN, NVGRE,and Geneve
- Storage Performance:Enables competitive performance with native OS drivers and intelligent offload for NAS (NFS, SMB), and SAN (iSCSI)

## **Basic Information:**

Products Name	10Gbps Quad Port Gigabit Ethernet Server Network Card					
Products Type	20100304					
Chipset	Intel XL710					
Bus Interface	x8 (x16) PCle	x8 (x16) PCle* 3.0				
Whole Duplex	· , ,	Compatible Whole Duplex and Half Duplex				
Network Interface Type	<u> </u>	SFP+ Slot*2, LC Fiber				
Transmission Speed	10Gbps					
Transmission Medium Type	LC Fiber, Con	LC Fiber, Comply with MMF62.5/50 Micron				
Network Standard	IEEE802.3 10GBASE-SR,10GBASE-LR					
Date Rate	10G/s	10G/s				
Fiber Module	10G-SFP+-SR 10G-SFP+-LR					
Long-range Awaken Function	Support	Support				
Operating System	IA-32	X86-64	IA-64			
Windows Server2012 R2*	N/A	Х	N/A			
Windows Server2012 R2 Core	N/A	X	N/A			
Windows Server2012	N/A	Х	N/A			
Windows Server2012 Core	N/A	Х	N/A			
Windows Server2008 R2*	N/A	X	N			
Windows Server2008 R2 Core	N/A	Х	N			
Linux* Stable Kernel Version 2.6/4x	N/A	Х	X			
Linux RHEL 6.6,6.7 and 6.8	N/A	X	X			
Linux SLES 11 SP4 and SLES 12SP1	N/A	X	Х			
FreeBSD* 10.2/10.3/11	N/A	X	X			
UEFI*2.1	N/A	X	Х			
UEFI*2.3 And 2.4	N/A	X	X			
VM Ware ESXI 2.1(Limited Functionality)	N/A	X	N/A			
VM Ware ESXI 5.5	N/A X N/A					

Working Humidity	85%	Storage Temperature	-40 °C to 70 °C (-40 °F to 158 °F)	
Working Temperature	0 °C to 55 °C (32 °F to 131 °F)		Maximum: 90% non-condensing relative humidity at 35 °	
Length	13.3cm	Full-height Bracket	12cm	
Width	6.8cm	Low-profile Bracket	8cm	
Packing Standard Size (Unit)		23cm*14.6cm*2.7cm		

#### Server Virtualization:

VMDq for Emulated Pat,SR-IOV for Direct Assignment,VEPA,VEB:

Intelligent Offloads:

TCP Stateless Offload, Host iSCSI Initiator, Flow Classification

#### **Power Savings**

Power efficiency is critical to IT specialists as energy consumption is a real OpEx concern.

#### LAN/SAN for Today's Data Centers

- Data: Best effort delivery of standard LAN traffic
- Storage:Lossless network for iSCSI
- Management: Guaranteed connectivity of data center IP management.

#### **Using Environment**

DELL Server,HP Server,IBM Server,INSPUR Server,Leno Server and other big server brand,IT System Integrator,Cloud,Big Date Center,Workstation,PC,FTTD Solution(Fiber to the desk) for Government,institution, School, personal using ,IDC etc.

## **Partners and End-Users**

China Telecom, China Netcom, China Railcom, China Unicom, Space Unisign servers, B ank of China, Founder Technology, Dawning servers, Lenovo servers, IBM servers, HP s ervers, Dell servers, the Great Wall Broadband, Beijing Radio and Television General Ins titute, , World Chinese Youth Federation, Tsinghua Huambo, China Urban Planning and Design, Gehua, The People's Republic of China Ministry of Railways, China City Planning Information Network, etc.

