C-PCIE3-2RJ45-10G 10Gbs Dual RJ-45 Port PCIe 3.0 x8 100m, Network Interface Card

# Pro**Labs**

### C-PCIE3-2RJ45-10G

10Gbs Dual RJ-45 Port 100m PCIe 3.0 x8 Network Interface Card

#### Features

- Low cost, low power, 10GbE performance for the entire datacenter
- New generation dual port 10GBase-T controller with integrated MAC and PHY
- Standard CAT 6a cabling with RJ45 connectors
- Supports NBase-T\* technology (2.5 and 5.0 GbE over CAT 5e)
- Backward compatibility with existing 1000Base-T networks simplifies the transition to 10GbE
- PCI Express\* (PCIe\*) v 3.0 with up to 8.0 GT/s
- Unified networking delivering LAN iSCSI and FCoE in one lowcost CNA
- Flexible 1/0 virtualization for port partitioning and Quality of Service (QoS) of up to 64 virtual ports
- Reliable, proven 10GbE technology from Intel Corporation



#### **Product Description**

This is a 10-Gigabit Ethernet PCIe 3.0 x8 network interface card with dual RJ-45 ports that comply with IEEE 802.3 standards. It is based on an Intel X550 chipset and is compatible with a variety of different applications and operating systems, including Windows, Linux and Unix-like systems. Providing 10Gbs of network speed, it fully supports high-end servers and various other networking applications. In addition, this card supports high level VLAN filtering. The dual RJ-45 ports operate over copper patch cable, allowing for an operating distance of 100m. This product includes both half-height and full-height brackets. Our network interface cards are 100% compliant and offer a cost effective solution for all of your network upgrade needs. With our certification test program, we guarantee your product will work right the first time.

## Specifications

Parameter	Specification
Controller	Intel Ethernet Controller X550AT2
Baffle Height	Full height and half height
Power Consumption	Typical Power 11.2W; Maximum Power 13.0W
System Support	Windows Server* 2012 R2; Windows Server 2012 R2 Core; Windows Server 2012; Windows Server 2012 Core; Windows Server 2008 R2; Windows Server 2008 R2;
	Windows Server 2008 R2 Core; Linux* Stable Kernel version 2.6.32/3x; Linux* RHEL 6.5 and RHEL 7.0; Linux* SLES 11 SP3 and SLES 12; FreeBSD* 9 and FreeBSD* 10; UEFI* 2.1; UEFI* 2.3; VMware ESXi 5.1 (Limited Functionality); VMware ESXi 5.5
Ports	Dual 10GBASE-T RJ45 Port
Bus type	PCIe v3.0 (8.0GT/s) (2.0 and 1.1 compatible)
Bus Width	x4 lane PCle operable in x8 and x16 slots
Data rate supported per port	10 GbE
LED Indicators	Link (green/orange bright) and ACTIVITY (green flashing) Link Rate(green=10Gbps ; orange=1Gbps/100Mbps)
Virtual Machine Device Queues (VMDq)	<ul> <li>Offloads data sorting from the hypervisor to silicon, improving data throughput and CPU usage</li> <li>QoS feature for Tx data by providing round-robin servicing and preventing head-of-line blocking</li> <li>Sorting based on MAC addresses and VLAN tags</li> </ul>
Support for PCI-SIG SR-IOV	Up to 64 VFs per port
IEEE 802.1Q VLAN Support with VLAN Tag	Ability to create multiple VLAN segments
VXLAN Stateless Offloads	A framework for overlaying virtualized layer 2 networks over layer 3 networks. VXLAN enables users to create a logical network for VMs across different networks
NVGRE Stateless Offloads	Network Virtualization using Generic Routing Encapsulation. The encapsulation of an Ethernet Layer 2 Frame in IP that enables the creation of virtualized Layer 2 subnets that can span physical Layer 3 IP networks
Intel <sup>®</sup> Flow Director	Yes
MSI-X	Yes
FPP - 64 VFs Per Port	Yes
Tx/Rx IP SCTP TCP and UDP Checksum Offloading (IPv4IPv6) Capabilities	Yes

Tx TCP Segmentation Offload	Yes
SNMP and RMON	Yes
Protocol Support	IEEE 802.1Q* VLANs
	IEEE 802.3 2005* flow control support
	compatible 10 GbE and 1 GbE Ethernet/ 802.3ap (KX/KX4) Specification
	compatible the 10 GbE 802.3ap (KR) Specification
PXE	Yes
WoL	No
Jumbo frames	15.5 КВ
Ethernet power management	Yes
Storage	iSCSI, NFS, FCoE, SMB
Operating temperature	0 °C to 55 °C (32 °F to 131 °F)
Storage temperature	-40 °C to 70 °C (-40 °F to 158 °F)
Storage humidity	Maximum: 90% non-condensing relative humidity at 35 °C
Air Flow	Minimum of 1 50 LFM required
Certifications	FCC CE RoHS
Size (LxWxH) mm	137*69*1.6 mm