Data Sheet FUJITSU Network Adapter EmulexOCe14102-NT

trovaprezzi.it

# FUjitsu

# Data Sheet FUJITSU Network Adapter EmulexOCe14102-NT

Dual-port with 10GbE Network Adapter

Ethernet cards enable data exchange between all the devices connected in a local network (LAN). A networked IT infrastructure that functions well is of great significance when managing and controlling critical business processes in a company. The wide range of complex information transported across the network relies on fast and reliable data processing by the network cards. The cards offers at least one Ethernet interface which is designed for the respective network types and network architectures. The bus interface links the network card with the server.

#### Network Adapter EmulexOCe14102-NT

As a member of the OCe14000 network adapter family the "Fujitsu OCe14102-NT" offers a high performance networking solution, which perfectly fits for virtualization, enterprise cloud and datacenter tasks. The difference - in contrast to the Emulex OCe14102 adapter - is the use of the RJ45 connector type. This connector is compatible with CAT6/6A/7/7A twisted pair cabling standards for a maximum 10Gb strong Ethernet connectivity at very low costs. The NIC only adapter OCe14102-NT focusses on cloud functions; it can thus not handle the storage off-load functions (iSCSI and FCoE) of a Converged Network Adapter.

The OCe14102-NT from Emulex is a high availability dual-port adapter combined with many scalability options as well as massive bandwidth speeds in long-established and field-proven

networking technology. This includes a rich set of features, for example enhanced Single-Root I/O Virtualization (SR-IOV) for cost-effective virtualization, RDMA over Converged Ethernet v2 (RoCE) which guarantees a direct memory movement of server data over the internet in a way that is more performant than normal application communication. SMB Direct (SMB over RDMA) provides an improvement of the SMB protocol for remote storage and ensures better performance values like RoCE. Moreover, NIC port partitioning for dividing physical ports into multiple virtual ports and other next generation overlay technologies acts as a flexible platform to overachieve virtual machines requirements in public or hybrid enterprise cloud environments.



main reacules	Benefics
Superior network scalability - 10GbE bandwidth on common software platform	Maximizes server hardware ROI with high virtual machine density
RDMA over Converged Ethernet v2 (Routable RoCE) Support	Extends the RoCE network protocol with internet routing

- functionality. Lays on previous benefits as higher throughput at lower latency and a low utilization of the system processor through memory level processing.
- Address the requirements of virtual machine (VM) mobility and massive scaling of Layer 2 subnets inside private or hybrid cloud infrastructures
- Provides the bandwidth needed for slot constrained server platforms
- Same driver and management support as for LOM on new dual socket M1 server generation

#### Main Features

- Powerful Overlay Networking offloads (NVGRE and VXLAN)
- Stateless TCP/IP offloads
- Common technology with Dynamic LoM

## Technical details

Technical details				
Controller Silicon	Emulex Engine XE100			
Controller type	Ethernet Ctrl.			
Connector type	10Gbit/s Eth (RJ45)			
Operating system	Information to released operating systems can be found in the server datasheets. Details can be found in the released drivers list on the support portal.			
Released drivers list link	http://support.ts.fujitsu.c	om/Download/Index.asp		
Number of ports	2			
Data transfer rate(s)	10 Gbit/s			
Bus interface	PCIe 3.0 x8			
Bus transfer rate	8GT/s			
LEDs	2 LED per port Green: Blink = Activity Amber: On = Link up	Off = Link down		
HW Virtualization	SR-IOV support (up to 64 Overlay Network Virtualiz Universal Multi-Channel			
Interrupt Levels	MSI-X			
Teaming	all teaming functions pro	ovided by the OS		
Remote boot support	PXE 2.1 RoCE and RoCE v2 (RDMA over Converged Ethernet) observe OS dependencies			
Additional features				
Offloading	Powerful hardware offloa - Overlay networks (NVGI - Stateless TCP			
Standards	Ethernet: - IEEE 802.3an 10GBASE-T - IEEE 802.3ab 1000BASE-T - IEEE 802.1Q virtual LANs (VLAN) - IEEE 802.3x Flow control with Pause frames - IEEE 802.1Qbg Edge Virtual Bridging - IEEE 802.1Qaz Enhanced Transmission Selection (ETS); Data Center Bridging Capability Exchange (DCBX) - IEEE 802.1Qbb Priority Flow Control (PFC) - IEEE 802.1AB Link Layer Discovery Protocol (LLDP) - IEEE 802.1Qau Congestion Notification <b>DCE/CEE Support:</b> - IEEE 802.1Qaz Enhanced Transmission Selection (ETS) Data Center Bridging Capability Exchange (DCBX) - IEEE 802.1Qau Congestion Notification (ETS) Data Center Bridging Capability Exchange (DCBX) - IEEE 802.1Qau Congestion Notification (QCN)			
Technology				
Order code	Height of bracket	Number of ports	Related product	
MC-0JXE71	Low Profile (LP)	2	PRIMEQUEST Server	
MC-0JXE72	Full Height (FH)	2	PRIMEQUEST Server	
MCX0JXE71	Full Height / Low Profile	2	PRIMEQUEST Server	
\$26261 E5557 E1	Eull Hoight (EH)	2		

2

2

2

Full Height (FH)

Low Profile (LP)

Full Height / Low Profile

PRIMERGY Server

PRIMERGY Server

PRIMERGY Server

S26361-F5557-E1

S26361-F5557-E201

S26361-F5557-L501

Supported Interface Modules /	Cables
Description optional cable	10GBASE-T - 100m on Cat 6A or Cat 7 - 55m on Cat 6 (compliant to TSB-155) 1000BASE-T - 100m on Cat 5e, Cat 6, Cat 6A or CAT 7 100BASE-T - 100m on Cat 5e, Cat 6, Cat 6A or CAT 7
Environment	
Power consumption	max. 15 W
Temperature (operating)	0 - 55 °C
Temperature (not operating)	-40 - 70 °C
Compliance	
Compliance notes	According to the corresponding system
Compliance link	http://globalsp.ts.fujitsu.com/sites/certificates

### More information

#### Fujitsu OPTIMIZATION Services

In addition to Fujitsu with Network Adapter EmulexOCe14102-NT, Fujitsu provides a range of platform solutions. They combine reliable Fujitsu products with the best in services, know-how and worldwide partnerships.

#### Fujitsu Portfolio

Build on industry standards, Fujitsu offers a full portfolio of IT hardware and software products, services, solutions and cloud offering, ranging from clients to datacenter solutions and includes the broad stack of Business Solutions, as well as the full stack of Cloud offering. This allows customers to leverage from alternative sourcing and delivery models to increase their business agility and to improve their IT operation's reliability.

#### **Computing Products**

www.fujitsu.com/global/products/computing/

#### Software

www.fujitsu.com/software/

#### More information

Learn more about Fujitsu Network Adapter EmulexOCe14102-NT, please contact your Fujitsu sales representative or Fujitsu Business partner, or visit our website. http://www.fujitsu.com/primergy

#### Fujitsu green policy innovation

Fujitsu Green Policy Innovation is our worldwide project for reducing burdens on the environment.

Using our global know-how, we aim to contribute to the creation of a sustainable environment for future generations through IT. Please find further information at http://www. fujitsu.com/global/about/environment



#### Copyrights

All rights reserved, including intellectual property rights. Changes to technical data reserved. Delivery subject to availability. Any liability that the data and illustrations are complete, actual or correct is excluded. Designations may be trademarks and/or copyrights of the respective manufacturer, the use of which by third parties for their own purposes may infringe the rights of such owner.

For further information see http://www.fujitsu. com/fts/resources/navigation/terms-of-use. html

©2015 Fujitsu Technology Solutions GmbH

#### Disclaimer

Technical data are subject to modification and delivery subject to availability. Any liability that the data and illustrations are complete, actual or correct is excluded. Designations may be trademarks and/or copyrights of the respective manufacturer, the use of which by third parties for their own purposes may infringe the rights of such owner.

Contact FUJITSU LIMITED

Website: www.fujitsu.com 2015-09-03 CE-EN All rights reserved, including intellectual property rights. Changes to technical data reserved. Delivery subject to availability. Any liability that the data and illustrations are complete, actual or correct is excluded.

Designations may be trademarks and/or copyrights of the respective manufacturer, the use of which by third parties for their own purposes may infringe the rights of such owner.

For further information see http://www.fujitsu.com/fts/resources/navigation/terms-of-use.html

©2015 Fujitsu Technology Solutions GmbH