

# Data Sheet

## FUJITSU Cloud Adapter for PAN Solutions Emulex OCec14102 Cloud Adapter Server

Dual-port Cloud Adapter with 10GbE CNA functionality

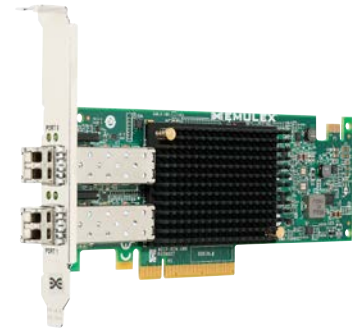
### Cloud Adapter for PAN Solutions Emulex OCec14102 Cloud Adapter

The Emulex OneConnect Universal CNA OCe14000 family of Ethernet Network Adapters is the FCoE and most advanced generation of Emulex Ethernet adapters. Powered by the XE100 controller, OCe14000 adapters offers enhanced support for virtualization, cloud and hyperscale cluster deployments. This paper highlights support for Emulex's Virtual Network eXceleration initiative that delivers support for Universal Multi-Channel™ and Stateless TCP/IP Offloads amongst its many capabilities.

As a member of the CNA 14000 family, the OCec14102 Cloud Adapter uses a 10Gbit/s DCB (Converged Enhanced Ethernet) infrastructure for networking and storage, reducing capital expense (CAPEX) for adapters, switches and cables, and operational expense (OPEX) for power, cooling and IT administration. The OCec14102 Cloud Adapter increases data center IT agility and scalability, as well as optimization of the server hardware utilization by scaling high density virtualization. The OCec14102 Cloud Adapter with 10GbE CNAs functionality is designed for the high bandwidth and scalability demands of Tier-1 enterprise applications with storage protocol (FCoE and iSCSI) offloads, more scalable virtualization with support for cloud optimization using Overlay Networking technology.

The Emulex OpenWorks Connector offers a bare metal adapter configuration management and rapid provisioning/deployment capabilities for scale-out environments such as cloud-based infrastructures. Third party provisioning tools are able to utilize the new OpenWorks Connector Boot Manager to oversee the Emulex OneConnect OCec14000 Cloud Adapters.

Egenera, a provider of cloud and data center infrastructure management software, utilize this API, and when combined with Egenera's PAN Manager 8.0, allows rapidly configuration and provisioning of machine images to bare metal rack servers for physical and virtual environments.



Main Features	Benefits
<ul style="list-style-type: none"> <li>Emulex OpenWorks Connector</li> <li>Superior network scalability - 10GbE bandwidth on common software platform</li> <li>Powerful Overlay Networking offloads (NVGRE and VXLAN)</li> <li>State TCP offload, Storage protocol offload (iSCSI and FCoE)</li> <li>Greater bandwidth with PCIe 3.0</li> <li>The Emulex OpenWorks Connector allows provisioning tools, e.g. Egenera's PAN Manager, to have complete control down to the I/O adapter level when provisioning bare metal rack servers for new deployments.</li> </ul>	<ul style="list-style-type: none"> <li>Offers rapid provisioning/deployment capabilities for scale-out environments</li> <li>Maximizes server hardware ROI with high virtual machine density</li> <li>Accelerates applications performance</li> <li>Provides the bandwidth needed for slot constrained server platforms</li> <li>Reduces complexity through the deployment of a common network platform</li> <li>Minimizes TCO through deployment of heterogeneous workloads on Converged Infrastructure</li> </ul>

# Technical details

## Technical details

<b>Controller Silicon</b>	Emulex Engine XE100
<b>Controller type</b>	Converged Network Adapter
<b>Connector type</b>	SFP+
<b>Number of ports</b>	2
<b>Data transfer rate(s)</b>	10 Gbit/s
<b>Bus interface</b>	PCIe 3.0 x8
<b>Bus transfer rate</b>	8GT/s
<b>HW Virtualization</b>	Overlay Network Virtualization (NVGRE & VXLAN)
<b>Interrupt Levels</b>	MSI-X
<b>WoL</b>	No
<b>LEDs</b>	2 LED per port Green: Blink = Activity Off = No activity Amber: On = Link up Off = Link down
<b>Teaming</b>	all teaming functions provided by the OS
<b>Remote boot support</b>	PXE 2.1 iSCSI FCoE
<b>Remote boot support notes</b>	just one boot function can be enabled at the same time SAN boot (FCoE boot) requires a CNA configuration
<b>Offloading</b>	Stateless TCP Storage protocols: iSCSI and FCoE Virtual Network Fabrics (NVGRE & VXLAN)
<b>Standards</b>	<b>Ethernet:</b> - IEEE 802.3-2008 10Gb/s Ethernet ports - IEEE 802.1Q virtual LANs (VLAN) - IEEE 802.3x Flow control with Pause frames - IEEE 802.3ad Link Aggregation / LACP - IEEE 802.1AB Link Layer Discovery Protocol (LLDP) - IEEE 802.1Qbg Edge Virtual Bridging <b>DCE/CEE Support:</b> - IEEE 802.1Qaz Enhanced Transmission Selection (ETS) Data Center Bridging Capability Exchange (DCBX) - IEEE 802.1Qbb Priority-based Flow Control (PFC) <b>Fibre Channel over Ethernet:</b> FC-BB-5 by INCITS Technical Committee T11

## Supported Interface Modules / Cables

Order code	Application	Type / mode	Connector / cable Length
S26361-F5250-E110	Ethernet 10 Gbit/s	SFP+ / MMF (SWL)	LC-style / up to 400m
S26361-F5250-L110	Ethernet 10 Gbit/s	SFP+ / MMF (SWL)	LC-style / up to 400m
S26361-F3989-E600	Ethernet 10 Gbit/s	SFP+ Twinax Cable / active	SFP+ / 2m or 5m
S26361-F3989-L102	Ethernet 10 Gbit/s	SFP+ Twinax Cable / active	SFP+ / 2m
S26361-F3989-L105	Ethernet 10 Gbit/s	SFP+ Twinax Cable / active	SFP+ / 5m
S26361-F3989-L110	Ethernet 10 Gbit/s	SFP+ Twinax Cable / active	SFP+ / 10m
S26361-F3873-E500	Ethernet 10 Gbit/s	SFP+ Twinax Cable / active	SFP+ / 3m or 5m
S26361-F3873-L501	Ethernet 10 Gbit/s	SFP+ Twinax Cable / active	SFP+ / 1m
S26361-F3873-L503	Ethernet 10 Gbit/s	SFP+ Twinax Cable / active	SFP+ / 3m
S26361-F3873-L505	Ethernet 10 Gbit/s	SFP+ Twinax Cable / active	SFP+ / 5m
<b>Interface Module notes</b>	Only Fujitsu certified modules are supported Order codes starting with "S26361-F3873" are Brocade branded cables, required for connections to Brocade switches Order codes starting with "S26361-F4571" are Cisco branded cables, required for connections to Cisco switches		

**Supported Interface Modules / Cables**

Order code	Application	Type / mode	Connector / cable Length
Description optional cable	10Gbit/s transceiver module for MMF (S26361-F5250-E110 / -L110):		
	- OM1 (Multi Mode Fiber 62.5/125µm, 200 MHz*km) up to 33m		
	- OM2 (Multi Mode Fiber 50.0/125µm, 500 MHz*km) up to 82m		
	- OM3 (Multi Mode Fiber 50.0/125µm, 2000 MHz*km) up to 300m		
	- OM4 (Multi Mode Fiber 50.0/125µm, 4700 MHz*km) up to 400m		

**Environment**

Temperature (operating)	0 - 55 °C
Storage temperature	-40 - 70 °C

**Compliance**

Compliance notes	According to the corresponding system
Compliance link	<a href="https://sp.ts.fujitsu.com/sites/certificates">https://sp.ts.fujitsu.com/sites/certificates</a>

# More information

## Fujitsu platform solutions

In addition to Fujitsu with Cloud Adapter for PAN Solutions

Emulex OCec14102 Cloud Adapter, Fujitsu provides a range of platform solutions. They combine reliable Fujitsu products with the best in services, know-how and worldwide partnerships.

### Dynamic Infrastructures

With the Fujitsu Dynamic Infrastructures approach, Fujitsu offers a full portfolio of IT products, solutions and services, ranging from clients to datacenter solutions, Managed Infrastructure and Infrastructure as-a-Service. How much you benefit from Fujitsu technologies and services depends on the level of cooperation you choose. This takes IT flexibility and efficiency to the next level.

### Computing Products

[www.fujitsu.com/global/products/computing/](http://www.fujitsu.com/global/products/computing/)

### Software

[www.fujitsu.com/software/](http://www.fujitsu.com/software/)

## More information

Learn more about Fujitsu Cloud Adapter for PAN Solutions  
Emulex OCec14102 Cloud Adapter, please contact your Fujitsu sales representative or Fujitsu Business partner, or visit our website.  
<http://ts.fujitsu.com/Primergy>

## Fujitsu green policy innovation

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