

Data Sheet

FUJITSU PLAN EP MCX6-DX OCPV3 100GbE QSFP28

Dual-port 100Gbit/s OCPV3 Network Interface Card

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.



PLAN EP MCX6-DX OCPV3 100GbE QSFP28

The FUJITSU PLAN EP MCX6-DX OCPV3 100GbE is based on Mellanox's ConnectX®-6 DX (Dual port) Network Interface Card. ConnectX-6 DX Network Controller with 100Gb/s Ethernet connectivity addresses virtualized infrastructure challenges, delivering best-in-class and highest performance to various demanding markets and applications. Providing true hardware-based I/O isolation with unmatched scalability and efficiency, achieving the most cost-effective and flexible solution for Web 2.0, Cloud, data analytics, database, and storage platforms. 100Gb Ethernet (100GbE) enables network bandwidth to be cost-effectively scaled in support of next-generation server and storage solutions residing in Cloud and Web-scale data center environments.

FUJITSU PLAN EP MCX6-DX OCPV3 100GbE Network Interface Cards deliver advanced Ethernet solutions designed for FUJITSU Server PRIMERGY and PRIMEQUEST systems with use cases such as SAP HANA® or Microsoft Storage Spaces Direct (S2D).

Features & Benefits

Main Features	Benefits
Scalability across environments <ul style="list-style-type: none"> ■ Designed for FUJITSU Server PRIMEQUEST and PRIMERGY systems in SAP and all general purpose environments 	<ul style="list-style-type: none"> ■ Delivering highest performance and true hardware-based I/O isolation with unmatched scalability and efficiency for general purpose, SAP HANA®, and Microsoft S2D (Storage Spaces Direct) environments
Flexible OS support <ul style="list-style-type: none"> ■ Microsoft Windows Server 2019 and 2016, Red Hat Enterprise Linux 8 and 7, SuSE Linux Enterprise Server 15 and 12, VMware ESXi 7 and 6 Support 	<ul style="list-style-type: none"> ■ Designed and released for qualifying PRIMERGY and PRIMEQUEST servers with multiple OS support
Efficient networking <ul style="list-style-type: none"> ■ RDMA over Converged Ethernet (RoCE) 	<ul style="list-style-type: none"> ■ Delivering low-latency and high-performance Remote Direct Memory Access (RDMA) over Ethernet networks; RoCE provides efficient low-latency RDMA services over Layer 2 and Layer 3 networks
Connectivity <ul style="list-style-type: none"> ■ Connectivity options 	<ul style="list-style-type: none"> ■ Interoperable with 1/10/25/40/50/100Gb Ethernet switches; powered connectors for optical and active cable support
Simplified Management <ul style="list-style-type: none"> ■ ServerView Management and MCTP/PLDMNC-SI Support 	<ul style="list-style-type: none"> ■ ServerView Update Tools and CLP for iRMC Network Inventory are supported for UEFI and in legacy boot. CLP for eIOV is supported for UEFI only. MCTP Base/Control, MCTP over PCIe/VDM, PLDM Monitoring/Control, PLDM FRU, NC-SI over MCTP

Technical details

Technical details

Controller Silicon	Mellanox ConnectX6-DX MCX623436AN-CDAB Dual-Port 100 Gigabit Ethernet Controller
Controller type	Ethernet Ctrl.
Connector type	QSFP28
Released drivers list link	http://support.ts.fujitsu.com/Download/Index.asp
Number of ports	2
Number of Connectors	2
Number of external ports	2
Data transfer rate(s)	100 Gbit/s
Auto Negotiation support	Yes
Bus interface	OCPV3
Bus type	OCPV3
Bus transfer rate	16GT/s
Bus width	x16
Network protocol and standards compatibility	IEEE 802.1p Class of Service IEEE 802.1q VLAN IEEE 802.1Qau Congestion Notification IEEE 802.1Qaz Enhanced Transmission Selection (ETS) IEEE 802.1Qbb Priority Flow Control (PFC) IEEE 802.3ad LACP IEEE 802.3ae 10Gbit Ethernet IEEE 802.ap based auto-negotiation and KR startup IEEE 802.3az Energy Efficient Ethernet (EEE) IEEE 802.3ba 40Gbit Ethernet IEEE 802.3bj, 802.3bm 100 Gigabit Ethernet IEEE 802.3x Flow Control IEEE 1588 Precision Time Protocol IPv4, IPv6 and mixed IPv4/IPv6 network protocols
HW Virtualization	SR-IOV: Up to 256 Virtual Functions
Interrupt Levels	MSI-X
WoL	No
Virtualization	Hardware-based I/O Server Virtualization - SR-IOV - Multi-function per port - Address translation and protection - Multiple queues per virtual machine - Enhanced QoS for vNICs - VMware NetQueue support Overlay Networks - Stateless offloads for overlay networks and tunneling protocols - Hardware offload encapsulation and decapsulation of overlay networks Network Virtualization Offload - NVGRE - VXLAN"CPU Offloads - RDMA over Converged Ethernet (RoCE) - TCP/UDP/IP stateless offload - LSO, LRO, checksum offload - RSS (can be done on encapsulated packet), TSS, HDS, VLAN insertion / stripping, Receive flow steering - Intelligent interrupt coalescence"
Offloading	CPU Offloads - RDMA over Converged Ethernet (RoCE) - TCP/UDP/IP stateless offload - LSO, LRO, checksum offload - RSS (can be done on encapsulated packet), TSS, HDS, VLAN insertion / stripping, Receive flow steering - Intelligent interrupt coalescence
Data transfer rate up to	100 Gbit/s

Order code	Product Name	Height of bracket	Number of ports	Related product
PYBLA412U	PLAN EP MCX6-DX 2X 100G QSFP28 OCPV3	OCPV3	2	PRIMERGY Server
PY-LA412U	PLAN EP MCX6-DX 2X 100G QSFP28 OCPV3	OCPV3	2	PRIMERGY Server

Supported Interface Modules / Cables

Order code	Application	Type / mode	Connector / cable Length
Environment			
Power consumption	Passive Cables typical 19W Passive Cables maximum 26.6W Active Cables maximum 34.5 W		
Temperature (operating)	0 - 55 °C		
Storage temperature	0 - 70 °C		

Compliance

Compliance notes	According to the corresponding system
Compliance link	https://sp.ts.fujitsu.com/sites/certificates

More information

Fujitsu products, solutions & services

In addition to Fujitsu with PLAN EP MCX6-DX OCPV3 100GbE QSFP28, 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 PLAN EP MCX6-DX OCPV3 100GbE QSFP28, 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>



Green Policy Innovation

Copyrights

All rights reserved, including intellectual property rights. Designations may be trademarks and/or copyrights of the respective owner, the use of which by third parties for their own purposes may infringe the rights of such owner. For further information see <https://www.fujitsu.com/global/about/resources/terms/>
Copyright 2024 FUJITSU LIMITED

Disclaimer

Technical data is 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.