

# Data Sheet

## PLAN EP MCX6-DX 100GbE QSFP28

Dual-port 100Gbit/s PCIe 4.0 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 100GbE QSFP28

The PLAN EP MCX6-DX 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.

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

# Features & Benefits

Main Features	Benefits
<b>Scalability across environments</b> <ul style="list-style-type: none"> <li>■ Designed for PRIMEQUEST Servers and PRIMERGY systems in SAP and all general purpose environments</li> </ul>	<ul style="list-style-type: none"> <li>■ 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 for general purpose, SAP HANA, and Microsoft S2D (Storage Spaces Direct) environments</li> </ul>
<b>Flexible OS support</b> <ul style="list-style-type: none"> <li>■ 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</li> </ul>	<ul style="list-style-type: none"> <li>■ Designed and released for qualifying PRIMERGY and PRIMEQUEST servers</li> </ul>
<b>Efficient networking</b> <ul style="list-style-type: none"> <li>■ RDMA over Converged Ethernet (RoCE)</li> </ul>	<ul style="list-style-type: none"> <li>■ 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</li> </ul>
<b>Connectivity</b> <ul style="list-style-type: none"> <li>■ Connectivity options</li> </ul>	<ul style="list-style-type: none"> <li>■ Interoperable with 1/10/25/40/50/100Gb Ethernet switches. Powered connectors for optical and active cable support. Tested with Mellanox and Cisco DAC 100G, AOC 100G. Mellanox QSFP28 optical transceivers are available from Fujitsu, 850nm SR4 up to 100m as well as 1310nm PSM4 up to 500m</li> </ul>
<b>Simplified Management</b> <ul style="list-style-type: none"> <li>■ ServerView Management and MCTP/PLDMNC-SI Support</li> </ul>	<ul style="list-style-type: none"> <li>■ 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</li> </ul>

# Technical details

## Technical details

Controller Silicon	Mellanox ConnectX6-DX MCX623106AN-CDAT Dual-Port 100 Gigabit Ethernet Controller
Controller type	Ethernet Ctrl.
Connector type	QSFP28
Released drivers list link	<a href="http://support.ts.fujitsu.com/Download/Index.asp">http://support.ts.fujitsu.com/Download/Index.asp</a>
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 type	PCIe 4.0
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
PYBLA412L	PLAN EP MCX6-DX 2X 100G QSFP28 PCIE LP	Low Profile (LP)	2	PRIMERGY Server
PYBLA412	PLAN EP MCX6-DX 2X 100G QSFP28 PCIE	Full Height (FH)	2	PRIMERGY Server
PY-LA412	PLAN EP MCX6-DX 2X 100G QSFP28 PCIE	Full Height / Low Profile	2	PRIMERGY Server

## Supported Interface Modules / Cables

Order code	Application	Type / mode	Connector / cable Length
S26361-F4052-E701	Ethernet 100 Gbit/s	QSFP28 / MMF (SWL)	up to 100m
S26361-F4052-L701	Ethernet 100 Gbit/s	QSFP28 / MMF (SWL)	up to 100m
S26361-F4052-L801	Ethernet 100 Gbit/s	QSFP28 / SMF (LWL)	up to 500m

## Environment

Power consumption	Typical Power 18.96W Maximum Power 26.64 W
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>

## Notes

Compatibility	If and to the extent a list of components or certain compatibilities are specified in the product data sheet, these component lists and compatibility specifications are exhaustive. Using deviating or other system components and applications together with the product may but does not necessarily have to lead to compatibility problems. A final statement and/or commitment on the compatibility of such deviating or other system components and applications can only be provided after a corresponding verification through a dedicated compatibility testing.
Performance	To the extent that specific performance specifications for the product are indicated in the product data sheet, these are usually also dependent on the specific use and workload of the product and may therefore not be reached equally in all application situations. Such performance specifications thus do not represent a specifically agreed characteristic or feature of the product, but only serves as an orientation. The responsibility for a sufficient sizing of the overall system functionality lies solely with the user.

# More information

## Fsas Technologies products, solutions & services

In addition to PLAN EP MCX6-DX 100GbE QSFP28, Fsas Technologies provides a range of platform solutions. They combine reliable Fsas Technologies products with the best in services, know-how and worldwide partnerships.

**Fsas Technologies Portfolio**  
Built on industry standards, Fsas Technologies offers a full portfolio of datacenter hardware, software and related services. This allows customers to select alternative sourcing and delivery models to increase their business agility and to improve their IT operation's reliability.

Data Center Solutions  
<https://eu.fsastech.com/eu/>

## More information

Learn more about PLAN EP MCX6-DX 100GbE QSFP28, please contact your Fsas Technologies sales representative or Business partner, or visit our website.  
<http://www.fujitsu.com/primergy>

## Fsas Technologies sustainability policy

Our product portfolio is developed with a commitment to environmental responsibility. For detailed product environmental information, please visit: <https://eu.fsastech.com/eu/about-us/sustainability/>

## 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.

Copyright FUJITSU LIMITED 2025

## 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.