

# Mellanox MCX653105A-ECAT-SP Datasheet



Mellanox MCX653105A-ECAT-SP ConnectX-6 VPI adapter card, 100Gb/s (HDR100, EDR IB and 100GbE), single-port QSFP56, PCIe3.0/4.0 x16, tall bracket, single pack

MCX653105A-ECAT-SP

NVIDIA MCX653105A-ECAT-SP ConnectX-6 VPI Adapter Card HDR100 EDR InfiniBand and 100GbE Single-Port QSFP56 PCIe 3.0/4.0 x16 Tall Bracket (-SP indicates Single Pack)

ConnectX-6 VPI Card HDR100 EDR InfiniBand and 100GbE Ethernet Adapter Card

ConnectX-6 Virtual Protocol Interconnect (VPI) cards are a groundbreaking addition to the ConnectX series of industry-leading network adapter cards. Providing two ports of HDR100 EDR InfiniBand and 100GbE Ethernet connectivity, sub-600ns latency and 215 million messages per second, ConnectX-6 VPI cards enable the highest performance and most flexible solution aimed at meeting the continually growing demands of data center applications. In addition to all the existing innovative features of past versions, ConnectX-6 cards offer a number of enhancements to further improve performance and scalability.

ConnectX-6 VPI series supports HDR, HDR100, EDR, FDR, QDR, DDR and SDR InfiniBand speeds as well as 200, 100, 50, 40, 25, and 10Gb/s Ethernet speeds.

## Features

- Up to HDR100 EDR InfiniBand and 100GbE Ethernet connectivity per port
- Max bandwidth of 200Gb/s
- Up to 215 million messages/sec
- Sub 0.6usec latency
- Block-level XTS-AES mode hardware encryption
- FIPS capable
- Advanced storage capabilities including block-level encryption and checksum offloads
- Supports both 50G SerDes (PAM4) and 25G SerDes (NRZ) based ports
- Best-in-class packet pacing with sub-nanosecond accuracy
- PCIe Gen 3.0 and Gen 4.0 support
- RoHS compliant
- ODCC compatible

## Benefits

- Industry-leading throughput, low CPU utilization and high message rate
- Highest performance and most intelligent fabric for compute and storage infrastructures
- Cutting-edge performance in virtualized networks including Network Function Virtualization (NFV)
- Host Chaining technology for economical rack design
- Smart interconnect for x86, Power, Arm, GPU and FPGA-based compute and storage platforms
- Flexible programmable pipeline for new network flows
- Efficient service chaining enablement
- Increased I/O consolidation efficiencies, reducing data center costs & complexity

For more specifications of this MCX653105A-ECAT-SP, please visit below Mellanox website:

<https://docs.mellanox.com/display/ConnectX6VPI/Specifications>

[Buy Now](#)