

Marvell QLogic Adapters for Dell Servers

FUTURE-READY I/O

Marvell technology enables superior performance, greater virtualization density, and improved storage area networking on Dell EMC PowerEdge Servers and Storage arrays. A leading provider of QLogic® Fibre Channel host bus adapters to Dell Technologies, Marvell offers Dell Technologies and its customers a broad portfolio of storage and networking solutions.

| Dell OEM SKUs | | | | | | |
|----------------------|------------------|-----------------|-------------------|--------|-----------------------------|--|
| Speed/ Protocol | QLogic Model | Factory Install | Customer Kit/APOS | Ports* | Form Factor | Notes |
| 32Gb Fibre Channel | QLE2772 V2 (FH) | 540-BDHC | 540-BDHO | 2 | PCIe 4.0 | 14G: R640, R740, R740XD, R840, R940(FH), R940XA, T640(FH), FC640(LP) 15G: R650, R650XS(LP), R750, R750XS(LP), R750XA, R6515(LP), R7515, R6525, R7525 16G: R660, R760, R760XA(FH), R6615, R6625, R7615, R7625, C6620(LP) |
| | QLE2772L V2 (LP) | 540-BDGU | 540-BDHM | 2 | PCIe 4.0 | |
| | QLE2770 (FH) | 540-BDKL | 540-BDKO | 1 | PCIe 4.0 | |
| | QLE2770L (LP) | 540-BDKN | 540-BDKM | 1 | PCIe 4.0 | |
| | QME2742 | 544-BBCP | 540-BCJG | 2 | Blade Server Mezzanine Card | 14G: MX740C, MX840C 15G: MX750C 16G: MX760C |
| 16Gb Fibre Channel | QLE2692 V2 (FH) | 540-BDHU | 540-BDHW | 2 | PCIe 3.0 | 14G: R540, R640, R740, R740XD, R740XD2, R840, R940(FH), R940XA, R6415(LP), R7415, R7425, T640(FH), M640 VRTX(1P), FC640(LP) 15G: R650, R650XS(LP), R750, R750XS(LP), R750XA, R6515 (LP), R7515, R6525, R7525, T550 (2P, FH) |
| | QLE2692 V2 (LP) | 540-BDIB | 540-BDHB | 2 | PCIe 3.0 | |
| | QLE2690 V2 (FH) | 540-BDGX | 540-BDHE | 1 | PCIe 3.0 | |
| | QLE2690 V2 (LP) | 540-BDGW | 540-BDHV | 1 | PCIe 3.0 | |
| 25Gb sNDC CNA | QL41262 | 543-BBDI | 540-BCJF | 2 | Blade Server Mezzanine Card | 14G: MX740C, MX840C 15G: MX750C 16G: MX760C |

* Port count is the same for both FH and LP models

Marvell's Global Dell Sales Team

| | | | |
|--------------|--------------------------|-------------------|---------------------|
| Jimmy Endres | Americas Sales | +1-512-657-2991 | jendres@marvell.com |
| Frank Heine | EMEA Dell Sales | +49 173-328-6633 | fheine@marvell.com |
| Loren Lan | China Dell Sales | +86 133-0600-8696 | LLan@marvell.com |
| Ken Hare | Global Account Manager | +1-512-406-1479 | khare@marvell.com |
| Todd Owens | Field Marketing Director | +1-970-692-4263 | towens@marvell.com |

Marvell's Field Application Engineer Dell Team

| | | |
|--------------|-----------|---------------------------------------|
| Klaus Scholz | EMEA FAE | kscholz@marvell.com |
| Xi Jiang | China FAE | +86-186-1023-255 xij@marvell.com |
| Shiro Yada | Japan FAE | +81-805-057-4639 syada@marvell.com |

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| Fibre Channel Facts |
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| ● Fibre Channel is a well adopted lossless protocol that is the gold-standard storage connectivity option for customers needing reliable performance, low latency, and scalability . |
| ● Marvell QLogic FC HBAs has dedicated processor, memory, and firmware for each port to help increase reliability and deliver predictable performance. |
| ● Many mission critical applications in banking and finance, healthcare, and government almost entirely depend on FC storage; it's not going away! |
| ● Marvell Qlogic is a market leader paving the way for NVMe over Fibre Channel (FC-NVMe) because of its low latency, scalable, secure, and proven technology. |
| ● Future-proof: 32Gb backwards compatible with 16Gb and 8Gb . |
| ● Only QLogic FC HBAs utilize a single driver for both FC and FC-NVMe connectivity |
| ● UNIVERSAL Congestion Mitigation technology at NO additional cost ; works with Brocade and Cisco switches. |
| ● PowerMax and PowerStore supports FC-NVMe to provide end-to-end NVMe with QLogic from servers to storage. |
| ● Tape backup uses fibre channel because it is lossless for a seamless offsite backup strategy! |
| ● Fibre Channel technology drives more external storage ports than any other I/O interconnect. |

| | Technology | What is it? | Customer benefit? |
|---------------------------------|--|---|--|
| | Port Isolation Design | ASIC design utilizing dedicated processor, memory and firmware for each adapter port | Ensures predictable per-port performance and increases overall SAN reliability |
| | Secure Firmware Update/Silicon Root of Trust (RoT) | Encrypted signature match between firmware and HBA ASIC | Improves security by eliminating possibility of rogue F/W to be introduced into the adapter. |
| | Forward Error Correction (FEC) | Enhanced error correction encoding now part of 32GFC Standard | Improves transmission reliability and reduces potential data errors in FC SAN |
| | NVMe over Fibre Channel (FC-NVMe) | Ability to process NVMe storage commands to Storage Arrays that support native NVMe connect | Improved performance due to efficiency of NVMe protocol compared to SCSI protocol |
| S t o r a g e | Universal SAN Congestion Mitigation (USCM) | Support for Fabric Performance Impact Notification (FPIN) messages and responses | Minimize SAN congestion in both B-Series and C-series SAN Fabrics for customers |
| | Virtual Machine ID (VM-ID) | Provides VM awareness for Fibre Channel traffic from the server to the SAN | Improve VM workload visibility, diagnostics and improves ability to meet SLAs |
| | Fabric Assigned WWN, (FA-WWN) | Fibre Channel features to pre-configure adapter configuration setting in the fabric | Reduces SAN deployment time by as much as 30% |
| | Diagnostic Port, FDMI, Read Diagnostic Parameter (RDP), Link Cable Beaconing (LCB) | Enhanced diagnostic and parameter information that can be transmitted in a 16GFC or 32GFC SAN | Reduces troubleshooting effort by as much as 50% |