Marvell QLogic Fibre Channel adapters for HPE ProLiant servers

www.marvell.com/hpe

	SN1100Q	SN1610Q	SN1700Q	HPE Synergy 5830C
Part number	P9D934/P9D94A	R2E08A/R2E09A	R7N86A/R7N87A	777456-B21
Bandwidth	16GFC	32GFC	64GFC	32GFC
Ports	1/2	1/2	1/2	2
Connection	SFP+	SFP+	SFP+	N/A
Max IOPS	1.3 million	2.0 million	2.0 million	1.3 million
ECC encoding	64/66	64/66	64/66	64/66
Dual port isolation	✓	✓	✓	✓
Secure FW / RoT	-	✓	✓	-
NPIV port virtualization	✓	✓	✓	✓
Virtual Machine ID (VM-ID)	✓	✓	✓	✓
Virtual Lane	-	✓	✓	-
Forward error correction (FEC)	✓	✓	✓	✓
T10 protection information (T10-PI / T10-DIF)	✓	✓	✓	✓
FA-WWN / F-BLD	✓	✓	✓	✓
Diagnostic port	✓	✓	✓	✓
FDMI	✓	✓	✓	✓
Read diagnostic port (RDP)	✓	✓	✓	✓
Link cable beaconing (LCB)	✓	✓	✓	✓
FC-NVMe	✓	✓	✓	✓
Redfish device enablement (RDE) – reads only	✓	✓	✓	✓
Fabric performance impact notification (FPIN)	✓	✓	✓	✓
Gen10 server support	✓	✓	✓	✓
Gen10 Plus server support	✓	✓	-	✓
Gen11 server support	-	✓	✓	✓

Email: hpesolutions@marvell.com

Data Sheet

© Marvell 2023

ver 18b, Oct 2023

Marvell QLogic Fibre Channel adapters for HPE ProLiant servers
www.marvell.com/hpe

Fibre Channel Technology features explained

Feature	What is it?	Customer benefit?
Dual 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
NPIV port virtualization	Allows a single FC port to register multiple worldwide port names, allowing the adapter to virtualize the physical port	Reduces number of physical connections required to support storage connections for virtual machines
Virtual Machine ID (VM-ID)	Ability to tag each FC frame with ID info of the virtual machine that issued it	Enable administrators to monitor SAN traffic at the VM level and identify congestion issues faster
Virtual Lane	Ability to prioritize port traffic into three classes – low, normal, fast	Provide ability to set quality of service (QoS) on a workload basis
Forward error correction (FEC)	Enhanced error correction encoding now part of 32Gb FC Standard	Improves transmission reliability and reduces potential data errors in FC SAN
T10 protection information (T10-PI, T10-DIF)	Update to SCSI Standard to increase data integrity	Improves data fault tolerance and resiliency
Fabric assigned WWN, fabric-based boot LUN (FA-WWN, F-BLD)	Fibre Channel features to pre-configure adapter configuration setting in the fabric	Reduces SAN deployment time by as much as 30%
D-Port, FDMI, read diagnostic parameter (RDP), link cable beaconing (LCB)	Enhanced diagnostic and parameter information that can be transmitted in a 16GFC or 32GFC FC SAN	Reduces troubleshooting effort by as much as 50%
Universal SAN congestion mitigation (USCM)	Enables FC Fabric to notify end node of potential congestion build-up in the SAN using Fabric Performance Impact Notifications (FPIN)	Reduces likelihood of slow drain devices and fabric congestions, quarantining of affected flows on both B-Series and C-series fabrics
Non-Volatile memory express over Fibre Channel (FC- NVMe)	Ability to transport NVMe commands within Fibre Channel frames	Future-proof infrastructure – works today with Fibre Channel, will support NVMe when available

Email: hpesolutions@marvell.com

Data Sheet

© Marvell 2023