



Understanding Dell Network Adapters And Their Relationship To iDRAC With Lifecycle Controller

This paper provides information on the supported cards, their supported features, and functionality for Dell 12th and 13th generation of PowerEdge Servers

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Executive summary

The number of server networking cards continues to grow at a rapid rate, as does the support for these cards from iDRAC with Lifecycle Controller. There are however, some limitations, and this brief document will help you understand the differences in order to make the best choice to fit your needs.

This paper covers network cards for both 12th generation of PowerEdge servers featuring iDRAC7 with Lifecycle Controller, as well as the new 13th generation PowerEdge servers featuring iDRAC8 with Lifecycle Controller.

Glossary

iDRAC	integrated Dell Remote Access Controller (iDRAC) with Lifecycle Controller (iDRAC7 or iDRAC8) is an embedded device in Dell PowerEdge servers that helps IT administrators manage, monitor, update and deploy Dell servers.
Flex Address	Slot based address management for the PowerEdge M1000e blade chassis
Virtual Address Management (VAM) with Persistence Policy	Virtual Address Management consists of two key features - IO Identity and Persistence Policy. Persistence Policy is a more flexible mechanism that determines whether the values persist after a reboot or not. It is designed to address several usage scenarios, namely: • Persisting volatile settings (the virtual address attribute) through cold boot/AC power loss. • Making settings volatile when current hardware persists them. This is particularly applicable to initiator and target settings, which are all persistent today, but it is desirable that a orchestration app can depend on these settings disappearing (being volatile) if the system experiences a AC power loss or a cold boot.

Introduction

Beginning with 12th generation PowerEdge servers, iDRAC7 with Lifecycle Controller has the ability to configure and monitor network cards, and some HBA's. As Dell continues to develop new solutions with our partners, the list of supported devices grows, as well as the features within each card.

However, due to the timing of some cards, not all features are available. This can cause issues and may result in loss of productivity. To safeguard against this, the following table must be used to understand the features available for each card.

Legend –

- Green – Feature supported
- Red – Feature not supported
- Blue – Feature to be supported in a upcoming release of iDRAC with Lifecycle Controller

Vendor	Model	Dell Part Number	Form Factor	Speed	Available on 12 th generation PowerEdge Servers	Available on 13 th generation PowerEdge Servers	Inventory and Configuration through iDRAC	Configuration through F10 and F2 consoles	Out-of-band Firmware Updates	Inventory and Configuration through LCRE	Flex Address - M1000e Slot-Based Address Management	Virtual Address Management - Persistence Policy
Broadcom	5720	0FCGN	PCIe	1Gb	Y	Y	Y	Y	Y	Y	N	Y
Broadcom	5719	KH08P	PCIe	1Gb	Y	Y	Y	Y	Y	Y	N	Y
Broadcom	57810	W1GCR	PCIe	10Gb	Y	Y	Y	Y	Y	Y	N	Y
Broadcom	57810	N20KJ	PCIe	10Gb	Y	Y	Y	Y	Y	Y	N	Y
Broadcom	57810	JVFVR	bNDC	10Gb	Y	Y	Y	Y	Y	Y	Y	Y
Broadcom	57800	MT09V	rNDC	10Gb+ 1Gb	Y	Y	Y	Y	Y	Y	N	Y
Broadcom	57800	Y36FR	rNDC	10Gb+ 1Gb	Y	Y	Y	Y	Y	Y	N	Y
Broadcom	57840	JC10M	rNDC	10Gb	Y	Y	Y	Y	Y	Y	N	Y
Broadcom	57840	TKR5K	bNDC	10Gb	Y	Y	Y	Y	Y	Y	Y	Y
Broadcom	5720	FM487	rNDC	1Gb	Y	Y	Y	Y	Y	Y	N	Y
Broadcom	5719	22TDT	Mezz	1Gb	Y	Y	Y	Y	Y	Y	Y	Y
Broadcom	57810	55GHP	Mezz	10Gb	Y	Y	Y	Y	Y	Y	Y	Y
Broadcom	5720	MW9RC	bNDC	1Gb	N	Y						
Intel	x540	K7H46	PCIe	10Gb	Y	Y	Y	Y	Y	Y	N	Y
Intel	x520	2094N	PCIe	10Gb	Y	Y	Y	Y	Y	Y	N	Y
Intel	i350	7MJH5	PCIe	1Gb	Y	Y	Y	Y	Y	Y	N	Y
Intel	i350	THGMP	PCIe	1Gb	Y	Y	Y	Y	Y	Y	N	Y
Intel	x540 + i350	P71JP	rNDC	10Gb+ 1Gb	Y	Y	Y	Y	Y	Y	N	Y
Intel	i350	R1XFC	rNDC	1Gb	Y	Y	Y	Y	Y	Y	N	Y
Intel	x520	XWKGY	bNDC	10Gb	Y	Y	Y	Y	Y	Y	Y	Y
Intel	x520	8F6NV	Mezz	10Gb	Y	Y	N	Y	Y	Y	Y	N
Intel	i350	8CF6D	Mezz	1Gb	Y	Y	Y	Y	Y	Y	Y	Y
Intel	x520 + i350	C63DV	rNDC	10Gb+ 1Gb	Y	Y	Y	Y	Y	Y	N	Y
Intel	I354		LOM	1Gb	Y	N	Y	Y	Y	Y	Y	N
Intel	I350	V017G	bNDC	1Gb	N	Y						
Intel	X710	Y348Y	bNDC	10Gb	N	Y						

Intel	X710	Y5M7N	PCIe	10Gb	N	Y					N	
Intel	X710	DDJKY	PCIe	10Gb	N	Y					N	
Intel	X710 + I350	6VDPG	rNDC	10Gb+ 1Gb	N	Y					N	
Intel	X710	68M95	rNDC	10Gb	N	Y					N	
QLogic	QLE8262	JHD51	PCIe	10Gb	Y	N	Y	Y	Y	Y	N	Y
QLogic	QME8262	RX8GJ	Mezz	10Gb	Y	N	Y	Y	Y	Y	Y	Y
QLogic	QMD8262	D90TX	bNDC	10Gb	Y	N	Y	Y	Y	Y	Y	Y
QLogic	QME2572	2H47D	Mezz	FC8	Y	Y	N	Y	Y	Y	Y	N
QLogic	QLE2560	6H20P	PCIe	FC8	Y	Y	N	Y	Y	Y	N	N
QLogic	QLE2562	6T94G	PCIe	FC8	Y	Y	N	Y	Y	Y	N	N
QLogic	QME2662	4GDP5	Mezz	FC16	Y	Y	Y	Y	Y	Y	N	Y
QLogic	QLE2660	0187V	PCIe	FC16	Y	Y	Y	Y	Y	Y	N	Y
QLogic	QLE2662	9J1RG	PCIe	FC16	Y	Y	Y	Y	Y	Y	N	Y
Emulex	LPM16002	Y97KM	Mezz	FC16	Y	Y	Y	Y	Y	Y	Y	Y
Emulex	LPe16000	8Y71H	PCIe	FC16	Y	N	Y	Y	Y	Y	N	N
Emulex	LPe16002	4V0JT	PCIe	FC16	Y	N	Y	Y	Y	Y	N	N
Emulex	LPe16000	W12YJ	PCIe	FC16	Y	Y	Y	Y	Y	Y	N	Y
Emulex	LPe16002	4G6WF	PCIe	FC16	Y	Y	Y	Y	Y	Y	N	Y
Emulex	LPM16002	73TM8	Mezz	FC16	Y	Y	Y	Y	Y	Y	Y	Y
Emulex	LPe16000	61M2K	PCIe	FC16	Y	Y	Y	Y	Y	Y	N	Y
Emulex	LPe16002	4G6WF	PCIe	FC16	Y	Y	Y	Y	Y	Y	N	Y
Emulex	OCm14104- UX-D	D6T93	rNDC	10Gb	Y	N	Y	Y	Y	Y	N	Y
Emulex	OCm14102- U2-D	JJPC0	bNDC	10Gb	Y	N	Y	Y	Y	Y	Y	Y
Emulex	OCm14102- U3-D	KYKT7	Mezz	10Gb	Y	N	Y	Y	Y	Y	Y	Y
Emulex	OCe14102- UX-D	YGW92	PCIe	10Gb	Y	N	Y	Y	Y	Y	N	Y
Emulex	OCm14104- UX-D	F6PCP	rNDC	10Gb	N	Y	Y	Y	Y	Y	N	Y
Emulex	OCm14102- U4-D	P3V42	bNDC	10Gb	N	Y	Y	Y	Y	Y	Y	Y
Emulex	OCm14102- U5-D	HCJR0	Mezz	10Gb	N	Y	Y	Y	Y	Y	Y	Y
Emulex	OCe14102- UX-D	CG7YT	PCIe	10Gb	N	Y	Y	Y	Y	Y	N	Y
Mellanox	ConnectX-3 10G	6256K	Mezz	10Gb	Y	Y	Y	Y	Y	Y	Y	
Mellanox	ConnectX-3 40G	8KP6W	PCIe	40Gb	Y	Y	Y	Y	Y	Y	N	
Mellanox	ConnectX-3 10G	W0RM9	PCIe	10Gb	Y	Y	Y	Y	Y	Y	N	

Conclusion

Understanding the features and functionality of the network adapters can help you to quickly and accurately choose the adapter that best suits your need.

For more information on iDRAC with Lifecycle Controller, see the [Dell TechCenter](#).