



Understanding Dell network adapters and their relationship to iDRAC with Lifecycle Controller

Supported cards and their supported features and functionality for Dell's 12th and 13th generation of PowerEdge Servers

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Contents

Executive summary	3
Glossary.....	3
Introduction	3
Conclusion	10

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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 customers understand the differences in order to make the best choice to fit their needs.

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

Glossary

iDRAC	The integrated Dell Remote Access Controller (iDRAC) with Lifecycle Controller (iDRAC7 or iDRAC8) with Lifecycle Controller 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 M1000e blade chassis
Form Factor	PCIe – card resides in a PCIe slot bNDC – blade select Network Daughter Card. rNDC – rack select Network Daughter Card. Mezz – Mezzanine card LOM – LAN on motherboard
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 an orchestration app can depend on these settings disappearing (being volatile) if the system experiences a AC power loss or a cold boot.

Introduction

iDRAC 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 should be used to understand the features available for each card.

Legend –

- Green – Feature supported
- Red – Feature not supported
- N/A – Feature not available with this card

Vendor	Model	Dell Part Number	Form Factor	Speed	Supported on 12G Servers	Supported on 13G Servers	Inventory and Configuration through iDRAC	Configuration through F10 and F2 consoles	Out-of-band Firmware Updates	Inventory and Configuration via LC Remote Enablement	Flex Address - M1000e Slot-Based Address Management	IO Identity	Virtual Address Management - Persistence Policy
Broadcom	5719	KH08P	PCle	1Gb							N/A		
Broadcom	5719	22TDT	Mezz	1Gb									
Broadcom	5720	0FCGN	PCle	1Gb							N/A		
Broadcom	5720	MW9RC	bNDC	1Gb									
Broadcom	5720	FM487	rNDC	1Gb							N/A		
Broadcom	57810	W1GCR	PCle	10Gb							N/A		
Broadcom	57810	N20KJ	PCle	10Gb							N/A		
Broadcom	57810	JVFVR	bNDC	10Gb									
Broadcom	57810	55GHP	Mezz	10Gb									
Broadcom	57800	MT09V	rNDC	10Gb +1Gb							N/A		
Broadcom	57800	Y36FR	rNDC	10Gb +1Gb							N/A		
Broadcom	57840	JC10M	rNDC	10Gb							N/A		
Broadcom	57840	TKR5K	bNDC	10Gb									
Broadcom	57414	7M8VP	PCle	25Gb E							N/A		
Broadcom	57404	4GMN7	PCle	25Gb E							N/A		
Broadcom	57406	3KHCF	PCle	10Gb E							N/A		
Broadcom	57406	61J1X	PCle	10Gb E							N/A		

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Broadcom	57406	81V1W	PCle	10Gb E							N/A		
Broadcom	57402	9P1N8	PCle	10Gb E							N/A		
Intel	I354		LOM	1Gb									
Intel	i350	7MJH5	PCle	1Gb							N/A		
Intel	i350	THGMP	PCle	1Gb							N/A		
Intel	i350	R1XFC	rNDC	1Gb							N/A		
Intel	i350	8CF6D	Mezz	1Gb									
Intel	I350	V017G	bNDC	1Gb									
Intel	x540 + i350	P71JP	rNDC	10Gb +1Gb							N/A		
Intel	x520	2094N	PCle	10Gb							N/A		
Intel	x520	XWKGY	bNDC	10Gb									
Intel	x520	8F6NV	Mezz	10Gb									
Intel	x520 + i350	C63DV	rNDC	10Gb +1Gb							N/A		
Intel	x540	K7H46	PCle	10Gb							N/A		
Intel	X710	DX69G	bNDC	10Gb									
Intel	X710	Y348Y	bNDC	10Gb									
Intel	X710	Y5M7N	PCle	10Gb							N/A		
Intel	X710	DDJKY	PCle	10Gb							N/A		
Intel	X710 + I350	6VDPG	rNDC	10Gb +1Gb							N/A		
Intel	X710	68M95	rNDC	10Gb							N/A		
Intel	Omni-Path 100Gb SP	1VCRR	PCie	OPA1 00							N/A		
Intel	Omni-Path 100Gb SP	N64D3	PCle	OPA1 00							N/A		

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Intel	QSFP DP FH/LP	KF46X	PCle	40GE							N/A		
Intel	QSFP DP	XD56X	RNDC	40GE							N/A		
Intel	X550 BT	FKHKC	PCle	2 x 10 Gb							N/A		
Intel	X550 BT LP	HWWN0	PCle	2 x 10 Gb							N/A		
QLogic	QLE8262	JHD51	PCle	10Gb							N/A		
QLogic	QME8262	RX8GJ	Mezz	10Gb									
QLogic	QMD8262	D90TX	bNDC	10Gb									
QLogic	QME2572	2H47D	Mezz	FC8									
QLogic	QLE2560	6H20P	PCle	FC8							N/A		
QLogic	QLE2562	6T94G	PCle	FC8							N/A		
QLogic	QME2662	4GDP5	Mezz	FC16									
QLogic	QLE2660	0187V	PCle	FC16							N/A		
QLogic	QLE2662	9J1RG	PCle	FC16							N/A		
QLogic	QLE 2692 SP FC16 Gen 6 HBA FH	CK9H1	PCle	FC16							N/A		
QLogic	SP FC16 Gen 6 HBA LP	WVT0T	PCle	FC16							N/A		
QLogic	QLE 2690 DP FC16 Gen 6 HBA FH	P8PCK	PCle	FC16							N/A		
QLogic	DP FC16 Gen 6 HBA LP	P3T0T	PCle	FC16							N/A		
QLogic	QLE 2742 DP FC32 Gen 6 HBA FH	T3TK5	PCle	FC32							N/A		
QLogic	DP FC32 Gen 6 HBA LP	5H4YH	PCle	FC32							N/A		
QLogic	QLE2740	JV783	PCle	FC33									

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Emulex	LPe1205-M8	R072D	Mezz	FC8									
Emulex	LPe12002 (FH)	C856M	PCle	FC8							N/A		
Emulex	LPe12002 (LP)	R7WP7	PCle	FC8							N/A		
Emulex	LPe12000 (FH)	C855M	PCle	FC8							N/A		
Emulex	LPe12000 (LP)	CN6YJ	PCle	FC8							N/A		
Emulex	LPm15002B	WCRN1	Mezz	FC8									
Emulex	LPe15002B-M8 (FH)	91XY2	PCle	FC8							N/A		
Emulex	LPe15002B-M8 (LP)	443N6	PCle	FC8							N/A		
Emulex	LPe15000B-M8 (FH)	7RC9T	PCle	FC8							N/A		
Emulex	LPe15000B-M8 (LP)	N5R4R	PCle	FC8							N/A		
Emulex	LPe16002 (FH, A0)	4V0JT	PCle	FC16							N/A		
Emulex	LPe16002 (LP, A0)	8RJMK	PCle	FC16							N/A		
Emulex	LPe16000 (FH, A0)	8Y71H	PCle	FC16							N/A		
Emulex	LPe16000 (LP, A0)	Y2YMW	PCle	FC16							N/A		
Emulex	LPM16002B (B0)	Y97KM	Mezz	FC16									
Emulex	LPe16002B-M6 (FH, B0)	4G6WF	PCle	FC16							N/A		
Emulex	LPe16002B-M6 (LP, B0)	HD2MG	PCle	FC16							N/A		
Emulex	LPe16000B-M6 (FH, B0)	W12YJ	PCle	FC16							N/A		
Emulex	LPe16000B-M6 (LP, B0)	XRNN5	PCle	FC16							N/A		
Emulex	LPM16002B (P3)	73TM8	Mezz	FC16									
Emulex	LPe16002B-M6 (FH, P3)	F3VJ6	PCle	FC16							N/A		
Emulex	LPe16002B-M6 (LP, P3)	6VK2R	PCle	FC16							N/A		
Emulex	LPe16000B-M6 (FH, P3)	61M2K	PCle	FC16							N/A		

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Emulex	LPe16000B-M6 (LP, P3)	11H8D	PCle	FC16							N/A		
Emulex	LPe31000-M6-SP	3T3T7	PCle	FC16									
Emulex	LPe31002-M6-D DP	RXNT1	PCle	FC16									
Emulex	LPe32000-M2-D SP	WT48R	PCle	FC32									
Emulex	LPe32002-M2-D DP	MHFK	PCle	FC32									
Emulex	OCm14104-UX-D	D6T93	rNDC	10Gb							N/A		
Emulex	OCm14102-U2-D	JJPC0	bNDC	10Gb									
Emulex	OCm14102-U3-D	KYKT7	Mezz	10Gb									
Emulex	OCe14102-UX-D (FH)	YGW92	PCle	10Gb							N/A		
Emulex	OCe14102-UX-D (LP)	RFPC9	PCle	10Gb							N/A		
Emulex	OCm14104-U1-D	F6PCP	rNDC	10Gb							N/A		
Emulex	OCm14102-U4-D	P3V42	bNDC	10Gb									
Emulex	OCm14102-U5-D	HCJR0	Mezz	10Gb									
Emulex	OCe14102-U1-D (FH)	CG7YT	PCle	10Gb							N/A		
Emulex	OCe14102-U1-D (LP)	6FC2Y	PCle	10Gb							N/A		
Emulex	OCm14104-N1-D	T800X	rNDC	10Gb							N/A		
Emulex	OCm14102-N6-D	R6D8Y	bNDC	10Gb									
Emulex	OCm14102-N5-D	196TN	Mezz	10Gb									
Emulex	OCe14102-N1-D (FH)	2P2FN	PCle	10Gb							N/A		
Emulex	OCe14102-N1-D (LP)	P90KD	PCle	10Gb							N/A		
Emulex	OCm14104B-U1-D	4X4RK	rNDC	10Gb							N/A		
Emulex	OCm14102B-U4-D	C10W7	bNDC	10Gb									
Emulex	OCm14102B-U5-D	6XKVM	Mezz	10Gb									
Emulex	OCe14102B-U1-D (FH)	DDF4D	PCle	10Gb							N/A		
Emulex	OCe14102B-U1-D (LP)	7NVY2	PCle	10Gb							N/A		

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Emulex	OCm14104B-N1-D	5VK2G	rNDC	10Gb							N/A		
Emulex	OCm14102B-N6-D	499CR	bNDC	10Gb									
Emulex	OCm14102B-N5-D	YY3WM	Mezz	10Gb									
Emulex	OCe14102B-N1-D (FH)	0MF05	PCle	10Gb							N/A		
Emulex	OCe14102B-N1-D (LP)	NTF8N	PCle	10Gb							N/A		
Mellanox	ConnectX-3 10G	6256K	Mezz	10Gb									
Mellanox	ConnectX-3 40G	8KP6W	PCle	40Gb							N/A		
Mellanox	ConnectX-3 10G	W0RM9	PCle	10Gb							N/A		
Mellanox	ConnectX-3 Pro 10G	2T0WW	Mezz	10Gb									
Mellanox	ConnectX-3 Pro 40G	C8Y42	PCle	40Gb							N/A		
Mellanox	ConnectX-3 Pro 10G	19RNV	PCle	10Gb							N/A		
Mellanox	ConnectX-4 LX 25GE SFP DP rNDC	R887V	rNDC	25Gb							N/A		
Mellanox	ConnectX-4 LX 25GE DP FH	MRT0D	PCle	25Gb							N/A		
Mellanox	ConnectX-4 LX 25GE DP LP	20NJD	PCle	25Gb							N/A		
Mellanox	ConnectX-4 100GE QSFP DP FH	NHYP5	PCle	100Ge							N/A		
Mellanox	ConnectX-4 100GE QSFP DP	XR0K2	PCle	100Ge							N/A		
SolarFlare	SFN8522, OnloadPlus, FH	WY7T5	PCle	10Gb							N/A		
SolarFlare	SFN8522, OnloadPlus, FH	R76FD	PCle	10Gb							N/A		
SolarFlare	SFN8522, FH	NPHCM	PCle	10Gb							N/A		
SolarFlare	SFN8522, FH	332MM	PCle	10Gb							N/A		

Conclusion

Understanding the features and functionality of the network adapters can help IT professionals quickly and accurately choose the adapter that best suits their need.

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