

LOM and PCIe Slots

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The following table lists the LOM and PCIe BIOS settings that you can configure through a BIOS policy or the default BIOS settings:

Name	Description	Supported Attributes			
		Versions	Platforms	Values	Dependencies
ACS Control GPU n where n varies from 1-14	Access Control Services (ACS) allow the processor to enable or disable peer-to-peer communication between multiple devices for GPUs	4.0(4), 4.1(1)	C480 M5	Enabled, Disabled • Disabled Disables peer-to-peer communication between multiple devices for GPUs. • Enabled Enables peer-to-peer communication between multiple devices for GPUs.	

Name	Description	Supported Attributes				
		Versions	Platforms	Values	Dependencies	
CDN Support for LOM	Whether the Ethernet Networking Identifier naming convention is according to Consistent Device Naming (CDN) or the traditional way of naming conventions.	4.0(4), 4.1(1)	C480 M5, B200 M6, X210c M6, X210c M7, X410c M7	Enabled, Disabled , LOMs only • Disabled OS Ethernet Networking Identifier is named in a default convention as ETH0, ETH1 and so on. • Enabled OS Ethernet Network Identifier is named in a consistent device naming (CDN) convention according to the physical LAN on Motherboard (LOM) port numbering; LOM Port 0, LOM Port 1 and so on.		
External SSC Enable	This option allows you to Enable/Disable the Clock Spread Spectrum of the external clock generators.	4.1(2)	B480M5, B200M5, S3X60M5, C220 M7, C240 M7, X210c M6, X210c M7, X410c M7 servers.	Enabled, Disabled , 0P3_Percent, 0P5_Percent, Hardware, Off		
IIO eDPC Support	This option allows a downstream link to be disabled after an uncorrectable error, making recovery possible in a controlled and robust manner.	4.2(1), 5.0(1), 5.0(2)	C220 M6 and C240 M6, B200 M6, X210c M6, C220 M7, C240 M7	Disabled, On fatal error, On fatal and non-fatal error		

Name	Description	Support			
		Versions	Platforms	Values	Dependencies
LOM Port <i>n</i> OptionROM, where <i>n</i> ranges from 0-3.	Whether Option ROM is available on the LOM port n	4.0(4), 4.1(1),	C220 M6 and C240 M6C220 M5, C240 M5, C480 M5	Disabled, Enabled, Legacy only, UEFI only • Disabled—The expansion slot is not available. • Enabled—The expansion slot is available. • UEFI only—The expansion slot is available only for UEFI. • Legacy only—The expansion slot is available only for legacy.	
All Onboard LOM Ports	Whether all onboard LOM ports are enabled or disabled.	4.0(2), 4.0(4), 4.1(1),	C220 M5, C240 M5 C480 M5	Disabled, Enabled Disabled—LOM Port 0 OptionROM and LOM Port 1 OptionROM are Disabled. Enabled—LOM Port 0 OptionROM and LOM Port 1 OptionROM are enabled	If set as Disabled, then LOM Port 0 OptionROM and LOM Port 1 OptionROM are Disabled. If set as Enabled, then LOM Port 0 OptionROM and LOM Port 1 OptionROM and LOM Port 1 OptionROM are Enabled.

Name	Description	Supported Attributes			
		Versions	Platforms	Values	Dependencies
All PCIe Slots OptionROM	Whether all PCIe OptionROM ports are enabled or disabled.	4.0(2), 4.0(4), 4.1(1),	C220 M5, C240 M5, C480 M5,	Disabled, Enabled, Legacy only, UEFI only • Disabled—LOM Port 0 OptionROM and LOM Port 1 OptionROM are Disabled. • Enabled—LOM Port 0 OptionROM and LOM Port 1 OptionROM are enabled • UEFI only—The expansion slot is available only for UEFI. • Legacy only—The expansion slot is available only for	
PCI ROM CLP	Whether all PCI ROM CLP ports are enabled or disabled.	4.0(2), 4.0(4), 4.1(1),	C220 M5, C240 M5, C480 M5,	legacy. Disabled, Enabled • Disabled—The options are Disabled. • Enabled—The options are enabled.	
PCIe ARI Support	Whether all ARI support ports are enabled or disabled.	4.2(1)	C225 M6 and C245 M6	Disabled, Enabled, Auto • Disabled—This option is Disabled. • Enabled—This options is enabled. • Auto—PCIe ARI Support is in auto mode	
PCIe PLL SSC Percent	Whether all PCIe PLL SSC ports are enabled or disabled.	4.1(2)	C220 M5, C240 M5 servers, C220 M6, C240 M6 servers, X210c M6 servers, C220 M7, C240 M7, X210c M7, X410c M7 servers.	0– 255 (Unit is (n/10)%)	

Name	Description	Supported Attributes				
		Versions	Platforms	Values	Dependencies	
MRAIDn Link Speed where n ranges from 1-2.	This option allows you to restrict the maximum speed of MRAID.	4.0(2), 4.0(4), 4.1(1), 4.2(1)	C220 M5, C240 M5, C225 M6, C245 M6, C240 M7	Auto, Disabled, Enabled, Gen 1, Gen 2, Gen 3, Gen 4, Gen 5 • Disabled—The maximum speed is not restricted. • Enabled—The maximum speed is restricted. • Auto—The maximum speed is set automatically. • Gen 1—2.5GT/s (gigatransfers per second) is the maximum speed allowed. • Gen 2—5GT/s is the maximum speed allowed. • Gen 3—8GT/s is the maximum speed allowed. • Gen 4—16GT/s is the maximum speed allowed. • Gen 4—16GT/s is the maximum speed allowed.		
				maximum speed allowed.		
MRAID <i>n</i> OptionROM where n ranges from 1-2.	Whether Option ROM is available on the MRAID port.	4.0(2), 4.0(4), 4.1(1), 4.2(1)	C220 M5, C240 M5, C225 M6, C245 M6, C240 M7	Disabled, Enabled • Disabled—The expansion slot is not available. • Enabled—The expansion slot is available.		

Name	Description	Supported Attributes				
		Versions	Platforms	Values	Dependencies	
PCIe Slot MSTOR Link Speed	This option allows you to restrict the maximum speed of an	4.2(1)	C225 M6 and C245 M6	Auto, Disabled, Gen 1, Gen 2, Gen 3, Gen 4 • Disabled—The maximum speed is not		
	MSTOR adapter.			restricted. • Auto—The maximum speed is set automatically.		
				• Gen 1—2.5GT/s (gigatransfers per second) is the maximum speed allowed.		
				• Gen 2—5GT/s is the maximum speed allowed.		
				• Gen 3—8GT/s is the maximum speed allowed.		
				• Gen 4—16GT/s is the maximum speed allowed.		
PCIe Slot MSTOR RAID OptionROM	Whether the server can use the Option ROMs present in the PCIe MSTOR RAID.	4.2(1)	C225 M6 and C245 M6, C220 M7, C240 M7	 Disabled, Enabled, Legacy only, UEFI only Disabled—Option ROM is not available. Enabled—Option ROM is available. 		

Name	Description	Supported Attributes				
		Versions	Platforms	Values	Dependencies	
NVME <i>n</i> Link Speed where <i>n</i> ranges from 0-6 and 13-24.	This option allows you to restrict the maximum speed of an NVME card installed in the PCIe slot.	4.0(2), 4.0(4), 4.1(1), 4.2(1), 4.3(2)	C220 M5, C240 M5, C225 M6, C245 M6 Note Note NVME 24 Link Speed supports C220 M7 and C240 M7 servers, and X210c M7 server.	 • Auto—The maximum speed is set automatically. • Gen 1—2.5GT/s (gigatransfers per second) is the 		
NVME <i>n</i> OptionROM where <i>n</i> ranges from 0-6.	This options allows you to control the Option ROM execution of the PCIe adapter connected to the SSD:NVMe slot n.	4.0(2), 4.0(4), 4.1(1), 4.2(1)	C220 M5, C240 M5, C225 M6, C245 M6	 Enabled, Disabled Disabled—Option is not restricted. Enabled—Option is restricted. 		

Name	Description	Supported Attributes				
		Versions	Platforms	Values	Dependencies	
PCIe Slot <i>n</i> Link Speed where <i>n</i> ranges from 1 to 12.	Link speed for PCIe Slot designated by slot n.	4.0(1), 4.0(2), 4.0(4), 4.1(1), 4.2(1)	C220 M5, C240 M5, C480 M5, C125 M5, C225 M6, C245 M6, C220 M7, C240 M7(Slots 4–8)	Disabled, Auto, GEN1, GEN2, GEN3, GEN4, GEN5 GEN5 is supported only for speeds 1 to 6. • Disabled—Maximum speed is not restricted. • Auto—The maximum speed is set automatically. • Gen 1—2GT/s (gigatransfers per second) is the maximum speed allowed. • Gen 2—5GT/s is the maximum speed allowed • Gen 3—8GT/s is the maximum speed allowed • Gen 4—16GT/s is the maximum speed allowed • Gen 5—32 GT/s is the maximum speed allowed		

Name	Description	Supported Attributes			
		Versions	Platforms	Values	Dependencies
Slot <i>n</i> State where <i>n</i> ranges from 1 to 14.	The state of the adapter card installed in PCIe slot n.	4.0(2), 4.0(4), 4.1(1), 4.2(1)	C480 M5 ML, C220 M6, C240 M6, B200 M6	Disabled, Enabled, Legacy only, UEFI only • Disabled—The expansion slot is not available. • Enabled—The expansion slot is available. • UEFI only—The expansion slot is available only for UEFI. • Legacy only—The expansion slot is available only for legacy.	C220 M6, C240 M6, B200 M6 supports Slot 9 State only.
PCIe Slot:FLOM Link Speed	To configure link speed for PCIe Slot:FLOM.	4.0 (1), 4.0(2), 4.0(4), 4.1(1), 4.2(1)	C220 M5, C240 M5, C225 M6, C245 M6	Disabled, Auto, GEN1, GEN2, GEN3 • Disabled—Maximum speed is not restricted. • Auto—The maximum speed is set automatically. • Gen 1—2GT/s (gigatransfers per second) is the maximum speed allowed. • Gen 2—5GT/s is the maximum speed allowed • Gen 3—8GT/s is the maximum speed allowed	

Name	Description	Support	ed Attributes		
		Versions	Platforms	Values	Dependencies
Front NVME <i>n</i> Link Speed where <i>n</i> ranges from 1 to 12.	This option allows you to restrict the maximum speed of an NVME card installed in the front PCIe slot.	4.0(4), 4.1(1), 4.2(1)	C220 M5, C240 M5, C225 M6, C245 M6, C220 M7, C240 M7 (Slots 11–24)	Disabled, Auto, GEN1, GEN2, GEN3, GEN4, GEN5 • Disabled—Maximum speed is not restricted. • Auto—The maximum speed is set automatically. • Gen 1—2.5GT/s (gigatransfers per second) is the maximum speed allowed. • Gen 2—5GT/s is the maximum speed allowed • Gen 3—8GT/s is the maximum speed allowed • Gen 4—16GT/s is the maximum speed allowed • Gen 5—32GT/s is the maximum speed allowed	
Front NVME <i>n</i> OptionROM where <i>n</i> ranges from 1 to 24.	This options allows you to control the Option ROM execution of the PCIe adapter connected to the SSD:NVMe slot n.	4.2(1)	C225 M6, C245 M6, C220 M7, C240 M7(Slots 11–24)	 Enabled, Disabled Disabled—Option is not restricted. Enabled—Option is restricted. 	

Name	Description	Supported Attributes				
		Versions	Platforms	Values	Dependencies	
Front 1 and 2 Link Speed	This options allows you to control the link speed execution of the front PCIe adapter connected to the slot 1 and 2.	4.0(4), 4.1(1), 4.2(1)	C220 M5, C240 M5, C225 M6, C245 M6	Disabled, Auto, GEN1, GEN2, GEN3, GEN4 • Disabled—Maximum speed is not restricted. • Auto—The maximum speed is set automatically. • Gen 1—2.5GT/s (gigatransfers per second) is the maximum speed allowed. • Gen 2—5GT/s is the maximum speed allowed • Gen 3—8GT/s is the maximum speed allowed • Gen 4—16GT/s is the maximum speed allowed		

Name	Description	Supported Attributes				
		Versions	Platforms	Values	Dependencies	
PCIe Slot:HBA Link Speed	This option allows you to restrict the maximum speed of an HBA card.	4.2(1)	C225 M6, C245 M6	Disabled, Auto, GEN1, GEN2, GEN3, GEN4 • Disabled—Maximum speed is not restricted. • Auto—The maximum speed is set automatically. • Gen 1—2.5GT/s (gigatransfers per second) is the maximum speed allowed. • Gen 2—5GT/s is the maximum speed allowed • Gen 3—8GT/s is the maximum speed allowed • Gen 4—16GT/s is the maximum speed allowed		
PCIe Slot:HBA OptionROM	This option allows you to configure the option ROM execution of an HBA card.	4.2(1)	C225 M6, C245 M6	Disabled, Enabled, Legacy only, UEFI only • Disabled—The expansion slot is not available. • Enabled—The expansion slot is available. • UEFI only—The expansion slot is available only for UEFI. • Legacy only—The expansion slot is available only for legacy.		

Name	Description	Support	Supported Attributes			
		Versions	Platforms	Values	Dependencies	
GPU <i>n</i> OptionROM where <i>n</i> ranges from 1 to 8.	Whether the Option ROM is enabled on GPU slot n.	4.0(4), 4.1(1)	C480 M5 ML	 Enabled, Disabled Disabled—Option is not restricted. Enabled—Option is restricted. 		
PCIe LOM:1 and 2 Link	This option allows you to restrict the maximum speed of an adapter card installed in PCIe slot 1 and 2.	4.0 (1), 4.0(2), 4.0(4), 4.1(1)	All M5 servers	 Enabled, Disabled Disabled—Option is not restricted. Enabled—Option is restricted. 		
Slot Mezz State	This option allows you to configure the Mezz state for PCIe slot.	4.0 (1), 4.0(2), 4.1(1)	All M5 servers	Disabled, Enabled, Legacy only, UEFI only • Disabled—The expansion slot is not available. • Enabled—The expansion slot is available. • UEFI only—The expansion slot is available only for UEFI. • Legacy only—The expansion slot is available only for legacy.		

Name	Description	Supported Attributes			
		Versions	Platforms	Values	Dependencies
PCIe Slot:MLOM Link Speed	This option allows you to restrict the maximum speed of an MLOM adapter.	4.0 (1), 4.0(2), 4.0(4), 4.1(1)	C220 M5, C240 M5, C480 M5, C125 M5, C220 M6, C240 M6, C220 M7, C240 M7	Auto, Disabled, Gen 1, Gen 2, Gen 3, Gen 4, Gen 5 • Disabled—The maximum speed is not restricted. • Auto—The maximum speed is set automatically. • Gen 1—2.5GT/s (gigatransfers per second) is the maximum speed allowed. • Gen 2—5GT/s is the maximum speed allowed. • Gen 3—8GT/s is the maximum speed allowed. • Gen 4—16GT/s is the maximum speed allowed. • Gen 5—32GT/s is the maximum speed allowed.	

Name	Description	Support	pported Attributes			
		Versions	Platforms	Values	Dependencies	
PCIe Slot:MLOM OptionROM	Whether Option ROM is available on the MLOM port.	4.0(4),	C220 M5, C240 M5, C480 M5, C125 M5, B200 M6, C220 M6, C240 M6, C220 M7, C240 M7	Disabled, Enabled, Legacy only, UEFI only • Disabled—The expansion slot is not available. • Enabled—The expansion slot is available. • UEFI only—The expansion slot is available only for UEFI. • Legacy only—The expansion slot is available only for legacy.		

Name	Description	Supported Attributes			
		Versions	Platforms	Values	Dependencies
MRAID Link Speed	This option allows you to restrict the maximum speed of MRAID.	4.0(2), 4.0(4), 4.1(1), 4.2(1)	C220 M5, C240 M5, C220 M6, C240 M6, C225 M6, C220 M7	Auto, Disabled, Gen 1, Gen 2, Gen 3, Gen 4, Gen 5 • Disabled—The maximum speed is not restricted. • Auto—The maximum speed is set automatically. • Gen 1—2.5GT/s (gigatransfers per second) is the maximum speed allowed. • Gen 2—5GT/s is the maximum speed allowed. • Gen 3—8GT/s is the maximum speed allowed. • Gen 4—16GT/s is the maximum speed allowed. • Gen 5—32GT/s is the maximum speed allowed.	
PCIe Slot:MRAID OptionROM	Whether Option ROM is available on the MLOM port.	4.0(2), 4.0(4), 4.1(1)	C220 M5, C240 M5, C480 M5, C125 M5, C220 M6, C225 M6, C220 M7	Disabled, Enabled, Legacy only, UEFI only • Disabled—The expansion slot is not available. • Enabled—The expansion slot is available.	

Name	Description	Support	ed Attributes		
		Versions	Platforms	Values	Dependencies
PCIe Slot NnOptionROM , where n ranges from 1 to 24.	Whether Option ROM is available on the port.	4.0(2), 4.0(4), 4.1(1)	C220 M5, C240 M5, C480 M5, C125 M5, C220 M6, C240 M6, C220 M7, C240 M7 (Slots 4–8)	Disabled, Enabled, Legacy only, UEFI only • Disabled—The expansion slot is not available. • Enabled—The expansion slot is available.	
RAID Link Speed	This option allows you to restrict the maximum speed of RAID.	4.0 (1), 4.0(4), 4.1(1),	C480 M5	Disabled, Auto, GEN1, GEN2, GEN3 • Disabled—Maximum speed is not restricted. • Auto—The maximum speed is set automatically. • Gen 1—2GT/s (gigatransfers per second) is the maximum speed allowed. • Gen 2—5GT/s is the maximum speed allowed • Gen 3—8GT/s is the maximum speed allowed	
PCIe Slot RAID OptionROM	Whether Option ROM is available on the RAID slot or not.		C480 M5	 Enabled, Disabled Disabled—Option is not restricted. Enabled—Option is restricted. 	

Name	Description	iption Supported Attributes				
		Versions	Platforms	Values	Dependencies	
Rear NVME n Link Speed, where n ranges from 1 to 4.	This option allows you to restrict the maximum speed of rear NVME.	4.0(4), 4.0 (1), 4.2(1)	C240 M5, C240 M6, C245 M6, C220 M7, C240 M7 Note NVME 4 Link Speed supports C240 M7 servers, and X210c M7 server.	restricted. • Auto—The maximum speed is set automatically.		
Rear NVME <i>n</i> OptionROM, where n ranges from 1 to 8.	Whether Option ROM is available on the rear NVME or not.	4.0(4), 4.0 (1), 4.2(1)	C240 M5, C240 M6, C245 M6, C220 M7, C240 M7	 Enabled, Disabled Disabled—Option is not restricted. Enabled—Option is restricted. 		

Name	Description	Support	ed Attributes		Dependencies
		Versions	Platforms	Values	Dependencies
PCIe Slot:Riser Link Speedn, where n is 1 and 2.	This option allows you to restrict the maximum speed of Riser.	4.0(4), 4.0 (1), 4.2(1)	C220 M5, C240 M5, C480 M5, C125 M5,	Disabled, Auto, GEN1, GEN2, GEN3 • Disabled—Maximum speed is not restricted. • Auto—The maximum speed is set automatically. • Gen 1—2GT/s (gigatransfers per	
				second) is the maximum speed allowed. • Gen 2—5GT/s is the maximum speed allowed • Gen 3—8GT/s is the maximum speed allowed	
PCIe Slot:Riser nSlotx Link Speed, where n is 1 and 2 and x is from 1 to 6.	This option allows you to restrict the maximum speed of Riser in the <i>x</i> slot .	4.0(2), 4.0(4), 4.1(1)	C220 M5, C240 M5, C480 M5, C125 M5,	Disabled, Auto, GEN1, GEN2, GEN3 • Disabled—Maximum speed is not restricted. • Auto—The maximum speed is set automatically. • Gen 1—2GT/s (gigatransfers per second) is the maximum speed allowed. • Gen 2—5GT/s is the maximum speed allowed • Gen 3—8GT/s is the maximum speed allowed	

Name	Description	Supported Attributes			
		Versions	Platforms	Values	Dependencies
PCIe Slot:SAS OptionROM	Whether Option ROM is available on SAS slot or not.	4.0(2), 4.0(4), 4.1(1)	C220 M5, C240 M5, C480 M5, C125 M5	Disabled, Enabled, Legacy only, UEFI only • Disabled—The expansion slot is not available. • Enabled—The expansion slot is available. • UEFI only—The expansion slot is available only for UEFI. • Legacy only—The expansion slot is available only for legacy.	
PCIe Slot:FrontSSD <i>n</i> Link Speed, where <i>n</i> is 1 and 2.	This option allows you to restrict the maximum speed of Front SSD.	4.0(2), 4.0(4), 4.1(1)	C220 M5, C240 M5, C480 M5, C125 M5	Disabled, Auto, GEN1, GEN2, GEN3 • Disabled—Maximum speed is not restricted. • Auto—The maximum speed is set automatically. • Gen 1—2GT/s (gigatransfers per second) is the maximum speed allowed. • Gen 2—5GT/s is the maximum speed allowed • Gen 3—8GT/s is the maximum speed allowed	