Statement of Volatility – Dell EMC PowerEdge C6525

The Dell EMC PowerEdge C6525 contains both volatile and non-volatile (NV) components. Volatile components lose their data immediately upon removal of power from the component. Non-volatile components continue to retain their data even after the power has been removed from the component.

Components chosen as user-definable configuration options (those not soldered to the motherboard) are not included in the Statement of Volatility. Configuration option information (pertinent to options such as microprocessors, remote access controllers, and storage controllers) is available by component separately.

The following Volatile / Non-Volatile components are present in the PowerEdge C6525 sled:

Item	Non-Volatile or Volatile	Quantity	Reference Designator	Size
Planar				
CPU Internal CMOS RAM	Volatile	1	CPU0	256 MB
BIOS SPI Flash	Non-Volatile	1	U4	32 MB
DATA ROM	Non-Volatile	1	U31	4MB
iDRAC SPI Flash	Non-Volatile	1	U_BMC_SPI1	4 MB
BMC EMMC	Non-Volatile	1	U_EMMC	8 GB
System CPLD RAM	Volatile/ Non-Volatile	1	U_CPLD	54 Kb /240 Kb
System Memory	Volatile	1	**CPU1:** CPU1_CH0_D0-CPU1_CH7_D0	Up to 64GB per DIMM (RDIMM)
			CPU2: CPU2_CH0_D0-CPU2_CH7_D0	Up to 128GB per DIMM (LRDIMM)
CPU Vcore and VDDCR SOC FW	Non-Volatile	1	Vcore/VDDCR SOC **CPU1**: PU62/ PU63 **CPU2**: PU64/ PU65	
MEM_VDDQ FW	Non-Volatile	1	**CPU1**: PU66 **CPU2**: PU67	
LOM NVRAM	Non-Volatile	1	U7	8Mb
Risers 1A				
MCU	Non-Volatile	1	U6	8KB
SD SPI ROM	Non-Volatile	1	U4	64KB
RSPI ROM	Non-Volatile	1	U5	4MB
Risers 1B				
MCU	Non-Volatile	1	U6	8KB
RSPI ROM	Non-Volatile	1	U5	4MB
Risers 2A				
MCU	Non-Volatile	1	U801	8KB

Item	How is data input to this memory?	How is this memory write protected?
Planar		
CPU Internal CMOS RAM	BIOS	N/A – BIOS code control only
BIOS SPI Flash	SPI interface via iDRAC	No HW write protection
DATA ROM	SPI interface via host	Software write by host
iDRAC SPI Flash	SPI interface via iDRAC	Software write protected by iDRAC
BMC EMMC	NAND Flash interface via iDRAC	No HW write protection.
Memory VDDQ, CPU Vcore and	By fixture via I2C.	No HW write protection.
System CPLD RAM	By fixture via Jtag.	No HW write protection.
System Memory	System OS RAM	System OS
System Memory	System OS	OS Control
Riser 1A		
MCU	C2 bus via iDRAC	No HW write protection
SD SPI ROM	Software utility	No HW write protection
RSPI ROM	SPI interface via iDRAC	No HW write protection
Riser 1B		
MCU	C2 bus via iDRAC	No HW write protection
RSPI ROM	SPI interface via iDRAC	No HW write protection
Riser 2A		
MCU	C2 bus via iDRAC	No HW write protection

Item	Type (e.g. Flash PROM, EEPROM)	Can user programs or operating system write data to it during normal operation?	Purpose? (e.g. boot code)
Planar			
CPU Internal CMOS RAM	Battery-backed CMOS RAM	No	Real-time clock
BIOS SPI Flash	SPI Flash	Yes	System BIOS Boot code
DATA ROM	SPI Flash	Yes	BIOS backup data
iDRAC SPI Flash	SPI Flash	No	iDRAC Uboot (bootloader)
BMC EMMC	eMMC NAND Flash	Yes	iDRAC Kernel FW
Memory VDDQ, CPU Vcore	NVM	No	VR Setting
System CPLD RAM	RAM	No	CPLD code
System Memory	RAM	Yes	System host RAM
Risers 1A			
MCU	Flash PROM	Yes	Riser FW
SD SPI ROM	SPI Flash	Yes	SD FW
RSPI ROM	SPI Flash	No	SPI flash device to store information about the system Service Tag, system configuration, or iDRAC license.
Risers 1B			
MCU	Flash PROM	Yes	Riser FW
RSPI ROM	SPI Flash	No	SPI flash device to store information about the system Service Tag, system configuration, or iDRAC license.
Risers 2A			
MCU	Flash PROM	Yes	Riser FW