



Statement of Volatility – Dell PowerEdge FC430

Dell PowerEdge FC430 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 NV components are present in the PowerEdge FC430 server.

Item	Non-Volatile or Volatile	Quantity	Reference Designator	Size
Planer				
PCH Internal CMOS RAM	Volatile	1	U_WBG	256 Bytes
BIOS SPI Flash	Non-Volatile	1	U_SPI_BIOS1	8 MB
iDRAC SPI Flash	Non-Volatile	1	U_IDRAC_SPI1	4 MB
BMC EMMC	Non-Volatile	1	U_EMMC1	2 GB
BMC Memory	Volatile	1	U_IDRAC_MEM	2 Gb
CPU Vcore and Memory regulator	Non-Volatile	4	PU51, PU66, PU58, PU76	
System CPLD	Non-Volatile	1	U_CPLD	2210 logic elements 1700 macrocells 272 IOs
System Memory	Volatile	Up to 6 per CPU	CPU1: DIMM1~DIMMA4, CPU2: DIMM7~DIMMB4	Up to 32 GB per DIMM
FC430 1x1.8" SATA Backplane				
SEP internal flash	Non-Volatile	1	U_SEP1	Flash: 32 KB EEPROM: 16 KB
FC430 2x1.8" SATA Backplane				
SEP internal flash	Non-Volatile	1	U_SEP1	Flash: 32 KB EEPROM: 1 KB

Item	Volatile or Non-Volatile	Quantity	Reference designator	Size
Planner				
IDSDM card				
IDSDM SPI flash	Non-Volatile	1	U5	8 Mb
rSPI Flash	Non-Volatile	1	U15	4 MB
vFlash Card				
rSPI Flash	Non-Volatile	1	U15	4 MB
1G LOM Riser Card				
i350 SPI EEPROM	Non-Volatile	1	U1	512 KB
Flash	Non-Volatile	1	U4	8 Mb
10 G LOM Riser card				
Broadcom SPI flash	Non-Volatile	1	U5	16 Mb

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)
Planer			
PCH Internal CMOS RAM	Battery-backed CMOS RAM	Yes	Real-time clock and BIOS configuration settings
BIOS SPI Flash	SPI Flash	Yes	Boot code, system configuration information, UEFI environment, Flash Disceptor, ME
iDRAC SPI Flash	SPI Flash	Yes	iDRAC Uboot (bootloader), server managment persistent store (i.e. IDRAC MAC Address, iDRAC boot variables), lifecycle log cache, virtual planar FRU and EPPID, rac log, System Event Log
BMC EMMC	eMMC NAND Flash	Yes	Operational iDRAC FW, Lifecycle Controller (LC) USC partition, LC service diags, LC OS drivers, USC firmware
BMC Memory	RAM	Yes	iDRAC RAM

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)
CPU Vcore and VSA Regulators	NVRAM	No	CPU Vcore and Memory controller
System CPLD RAM	Flash	Yes	Power sequence controller and detection
System Memory	RAM	Yes	System OS RAM
FC430 1x 1.8-inch SATA Backplane			
SEP internal flash	Integrated Flash + EEPROM	Yes	Backplane controller
FC430 2x 1.8-inch SATA Backplane			
IDSDM SPI flash	Integrated Flash + EEPROM	Yes	Backplane controller
rSPI Flash	SPI Flash	No	rSPI function
vFlash Card			
rSPI Flash	SPI Flash	No	rSPI function
1G LOM Riser Card			
i350 SPI EEPROM	SPI EEPROM	Yes	Source code for i350 controller
flash	Flash	Yes	PXE function
10G LOM Riser card			
Broadcom SPI flash	SPI Flash	Yes	Source code for Broadcom controller

Item	How is data input to this memory?	How is this memory write protected?
Planer		
PCH Internal CMOS RAM	BIOS	J_NVRAM_CLR jumper
BIOS SPI Flash	SPI interface via PCH	Software write protected
iDRAC SPI Flash	SPI interface via iDRAC	Software write protected
BMC EMMC	NAND Flash interface via iDRAC	Embedded FW write protected
BMC Memory	Memory interface via iDRAC	Not applicable
CPU Vcore and VSA Regulators	OTP (one time programmable)	Not accessible
System CPLD	System OS RAM	System OS
System Memory	System OS	OS Control
FC430 1x 1.8-inch SATA Backplane		
SEP internal flash	Firmware + FRU	I2C interface via iDRAC
FC430 2x 1.8-inch SATA Backplane		
SEP internal flash	Firmware + FRU	I2C interface via iDRAC
IDSDM Card		
IDSDM SPI Flash	I2C interface via iDRAC	No write protected function, WP# pin pull high only
1G LOM Riser Card		
i350 SPI EEPROM	SPI interface via Intel i350	No write protected function, WP# pin pull high only
flash	SPI interface via Intel i350	No write protected function, WP# pin pull high only
10G LOM Riser card		
Broadcom SPI flash	SPI interface via Intel Broadcom	No write protected function, WP# pin pull high only

 **NOTE:** For any information that you may need, direct your questions to your Dell Marketing contact.

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