

## Statement of Volatility - Latitude 9430

△ CAUTION: A CAUTION indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.

The Latitude 9430 contains both volatile and non-volatile components. Volatile components lose their data immediately after power is removed from the component. Non-volatile components continue to retain their data even after power is removed from the component. The following Non-volatile components are present on the Latitude 9430 system board.

Description	Reference Designator	Volatility Description		Remedial Action (action necessary to lose data)	
Embedded Flash in embedded controller MEC5200	UE1	384KB Code/Data SRAM 320KB code/64KB Data optimized for performance	No	N/A	
Panel EEDID EEPROM	Part of panel assembly	Non-Volatile memory, FHD+ 256 bytes, QHD+ 256 bytes.	No	Part of panel assembly	
System BIOS	UH8	Non-Volatile memory, 64MB *1 System BIOS and Video BIOS for basic boot operation, PSA (on board diags), PXE diags.	No	NA	
GOP BIOS	Embedded in system BIOS UH8	Non-Volatile memory, 256 kbit (32 KB), Graphics system BIOS.	No	NA	
System Memory – LPDDR5 on board memory	Two Channel on board memory: UD1, UD2 UD3, UD4	Volatile memory in OFF state System memory size will depend on LPDDR5 ,32Gb/64Gb (x32) per package	No	NA	
RTC CMOS – BBRAM (battery backed up)	UC1	Non-Volatile memory, 256 Bytes. Stores CMOS information.	No	NA	
Video memory – frame buffer	Using system memory	Leverage system memory (UD1, UD2, UD3, UD4)	No	NA	
Intel ME Firmware	Embedded in system BIOS UH8	Non-Volatile memory, 64MB*1, Intel ME firmware for system configuration, security, and protection	No NA		
Hard drive(s)	User replaceable - one	2230 M.2 type SSD (PCIE interface)	YES	Low level format	
BBR	UTS1	8Mbit (1MB) for Burnside bridge retime F/W flash.	No	NA	
Card Reader	uSD 4.0 Card reader controller F/W UR1	PCIE interface of embedded Flash memory	No	NA	
Touch screen Embedded Flash	Part of panel assembly	I2C interface of embedded Flash memory	No	Part of panel assembly	
Accelerometer + Gyro LSM6DSOTR	UG1 for 360 2-in-1 UG2 for 180 clamshell	I2C interface of embedded Flash memory	No	N/A	
Accelerometer (secondary) LIS2DW12TR	UAC1	I2C interface of embedded Flash memory	No	N/A	

Description	Reference Designator	Volatility Description	User Accessible for external data	Remedial Action (action necessary to lose data)	
Compass LIS2MDLTR	UCOM1	I2C interface of embedded Flash memory	No	N/A	
ALS TCS3430	Part of camera assembly	I2C interface of embedded Flash memory	No	Part of camera assembly	
TPM 2.0 ST33HTPH2X32AH D8	U712	SPI interface of embedded Flash memory	No	NA	
MCU ATSAMD21E16B- MUTN02	U717	USB interface of embedded Flash memory	No	N/A	
CVF CLOVER_FALLS	UCVF1	eSPI interface of embedded Flash memory	No	N/A	
Darwin 3.0	UW1	I2C interface of embedded Flash memory	No	N/A	
RF proximity sensor SX9324ICSTRT	U16	SMBUS interface of embedded Flash memory	No	N/A	
EC MEC5200	UE1	SPI interface of embedded Flash memory	No	N/A	
PD PTPS65994AE	UPD1	I2C interface of embedded Flash memory	No	N/A	
RF proximity sensor SX9331IULTRT	U718	SMBUS interface of embedded Flash memory	No	N/A	
CV3 ROM	U1	Non-Volatile memory. 128 Mbit (16MB) for CV3 F/W flash.	No	N/A	
Fingerprint Sensor	Module	USB interface of embedded Flash memory	No	N/A	
TouchPad	Module	I2C interface of embedded Flash memory	No	N/A	
Camera Sensor	Module	I2C interface of embedded Flash memory	No	N/A	

All other components on the system board lose data if power is removed from the system. Primary power loss (unplugging the power cord and removing the battery) destroys all user data on the memory (DDR4, CML-S Refresh (2666MHz), RKL-S (3200MHz)). Secondary power loss (removing the on-board coin-cell battery) destroys system data on the system configuration and time-of-day information.

In addition, to clarify memory volatility and data retention in situations where the system is put in different ACPI power states the following is provided (those ACPI power states are S0, S4, S5 and Modern Standby):

S0 state is the working state, where the dynamic RAM is maintained and is read/write by the processor.

S1 state is a low wake-up latency sleeping state. In this state, no system context is lost (CPU or chip set) and hardware maintains all system contexts.

S3 is called suspend to RAM state or stand-by mode. In this state the dynamic RAM is maintained. Dell systems will be able to go to S3 if the OS and the peripherals used in the system supports S3 state. Linux and Windows11 support S3 state.

S4 is called suspend to disk state or hibernate mode, with no power. In this state, the dynamic RAM is not maintained. If the system has been commanded to enter S4, the operating system writes the system context to a non-volatile storage file and leave appropriate context markers. When the system comes back to the working state, a restore file from the non-volatile storage can occur. The restore file must be valid. Dell systems will be able to go to S4 if the operating system and the peripherals support S4 state. Windows 7/8 support S4 state.

S5 is the soft off state, with no power. The operating system does not save any context to wake up the system. No data will remain in any component on the system board, that is cache or memory. The system requires a complete boot when awakened. Since S5 is the shut off state, coming out of S5 requires power on which clears all registers.

The following table shows all the states supported by Latitude 9430:

Model Number	S0	S1	S3	S4	S5
Latitude 9430	×		×	×	×