



Statement of Volatility

Dell XPS 15 9570/Precision 5530

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

The Dell XPS 15 9570/Precision 5530 contains both volatile and non-volatile (NV) components. Volatile components lose their data immediately after power is removed from the component.

NV components continue to retain their data even after power is removed from the component. The following NV components are present on the Dell XPS 15 9570/Precision 5530 system board.

Table 1. List of NV components on system board

Description	Reference designator	Description	User accessible for external data	Remedial action (action necessary to prevent loss of data)
Embedded flash in embedded controller MEC5105	UE3	320 KB of SRAM	No	N/A
System BIOS	UH8	256 Mbit (32 MB), system BIOS, Intel management engine firmware and video BIOS for basic boot operation, PSA (on-board diagnostics), PXE diagnostics.	No	N/A
System memory—SPD EEPROM	JDIMM1 JDIMM2	The SPD data is stored in a 512-byte JEDEC JC-42.4-compliant EEPROM that is segregated into four 128-byte, write-protectable blocks on module.	Yes	N/A
RTC CMOS—SRAM	UH2	256 bytes, keeping date and time and storing system data in its SRAM when the system is powered down.	No	N/A
Solid State Drive	JNGFF2	M.2 SSD for Operating System (OS) installation	Yes	N/A
Hard drive	JHDD	2.5" HDD/SSD for data storage	Yes	N/A
Touch-screen Embedded flash in Wacom control board	N/A	Flash ROM for touch-screen firmware storage	No	N/A
Power delivery controller—SPI ROM	UT5	8 Mbit for firmware storage	No	N/A

Description	Reference designator	Description	User accessible for external data	Remedial action (action necessary to prevent loss of data)
TPM NPCT750JAAYX	U32	19 KB data storage	No	N/A
TBT Controller—SPI ROM	UT2	8 Mbit for firmware storage	No	N/A
HDMI 2.0 Controller—SPI ROM	UM2	2 Mbit for firmware storage	No	N/A

△ CAUTION: 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 (DDR3, 1067 MHz). 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 (ACPI power states are S0, S1, S3, S4 and S5):

- S0 state is the working state where the dynamic RAM is maintained and is read/written 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 state if the OS and the peripherals used in the system support S3 state. Linux and Windows 7 support S3 state.
- S4 is called “suspend to disk” state or “hibernate” mode. There is no power. In this state, the dynamic RAM is not maintained. If the system has been commanded to enter S4 state, the OS will write the system context to a non-volatile storage file and leave appropriate context markers. When the system returns to the working state, a restore file from the non-volatile storage can occur. The restore file has to be valid. Dell systems will be able to go to S4 state if the OS and the peripherals support S4 state. Windows 7 support S4 state.
- S5 is the “soft” off state. There is no power. The OS does not save any context to wake up the system. No data will remain in any component on the system board, i.e. cache or memory. The system will require a complete boot when awakened. Since S5 is the shut-off state, coming out of S5 state requires power-on which clears all registers.

The following table shows all the states supported by Dell XPS 15 9570/Precision 5530.

Model Number	S0	S1	S3	S4	S5
Dell XPS 15 9570/Precision 5530	X		X	X	X