Statement of Volatility – Dell Latitude 3550

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

The Dell Latitude 3550 contains both volatile and non-volatile (NV) components. Volatile components lose their data immediately after power is removed from the component. Non-volatile (NV) components continue to retain their data even after power is removed from the component. The following NV components are present on the Latitude 3440 system board.

Table 1. List of Non-Volatile Components on System Board

Description	Reference Designator	Volatility Description	User Accessible for external data	Remedial Action (Action necessary to prevent loss of data)
Hard drive(s)	User replaceable - one	Non Volatile magnetic media, various sizes in GB. May also be SSD (solid state flash drive).	Yes	Low level format
System BIOS	U2302	Non Volatile memory, 64Mbit (8MB), and Video BIOS for basic boot operation, PSA (on board diags), PXE diags.	No	NA
eDP to VGA converter	UV6	Embedded Non Volatile memory. To program thru the ISP interface.	No	NA
LCD Panel EEDID EEPROM	Part of panel assembly	Non Volatile memory, Stores panel manufacturing information, display configuration data	No	NA
System Memory – DDR3L memory	Two SO-DIMM connectors: JDIMM1, JDIMM2	Volatile memory in OFF state (see state definitions later in text) One or both modules will be populated. System memory size will depend on SO-DIMM modules and will be between 2GB and 16GB inclusive	Yes	Power off system
System memory SPD EEPROM	On memory SoDIMM(s) – one or two present	Non-Volatile memory 512 bytes. One device present on each SO-DIMM. Stores memory manufacturer data and timing information for correct operation of system memory.	No	NA
RTC CMOS	UC1 (PCH)	Non Volatile memory 256 bytes Stores CMOS information	No	NA
Video memory – frame buffer	For UMA platform: Using system memory For DSC platform: UV17, UV18, UV19, UV20,	Volatile memory in off state. UMA uses main system memory size allocated out of main memory.	No	Power off system
Intel ME Firmware	U2302	Non Volatile memory, Intel ME firmware for system configuration, security and protection	No	N/A
E-fuse of Giga-LAN	UL1	Volatile memory 256 bytes, Internal OTP memory (OTP)	No	NA

⚠ **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 (DDR3L, 1600 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 (those ACPI power states are S0, S3, S4 and S5):

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

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, Win 7 and Win 8 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, the OS will write the system context to a non-volatile storage file and leave appropriate context markers. When the system is coming back 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 if the OS and the peripherals support S4 state. Win 7 and Win 8 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 requires power on which clears all registers.

The following table shows all the states supported by Dell Latitude™ 3440:

Model Number	S0	S3	S4	S5
Dell Latitude™ 3550	X	X	X	X