Statement of Volatility – Dell Latitude 5350

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

The Dell Latitude 5350 contains both volatile and non-volatile components. Volatile components erase 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 5350 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 erase data)
SSD drives	M.2 - 2230	Non-volatile magnetic media, various sizes in GB. Solid state drive (SSD).	Yes	Low-level format
System BIOS/EC Firmware	U2401 (EC MEC5200M) BIOS vPro/non-vPro: U2501 (64 MB) U2502 (32 MB)	EC: Volatile memory 384 KB/Data SRAM (320 KB code/64 KB Data optimized for performance) . Non-volatile memory, Video BIOS for basic boot operation, PSA (on board diags), PXE diags.	No	Not applicable
Thunderbolt EEPROM	U7103	Non-volatile memory, 8 Mbit (1 MB) (Thunderbolt FW)	No	Not applicable
LCD Panel EEDID EEPROM	Part of panel assembly	Non-volatile memory. Stores panel manufacturing information and display configuration data.	No	Not applicable
RTC CMOS	CPU1 (PCH)	Volatile memory, 256 bytes. Stores CMOS information.	No	Not applicable
Intel ME Firmware	Combine on BIOS ROM	Non-volatile memory, Intel ME firmware for computer configuration, security, and protection.	No	Not applicable
Security Controller Serial Flash Memory	Combine on USH ROM	Non-volatile memory.	No	Not applicable
TPM Controller	U9101	Non-volatile memory, 43K bits ROM.	No	Not applicable
Touch screen Embedded Flash	Combine on Touch panel	Non-volatile memory.	No	Not applicable
Digital IMVP9.2 controller	PU4601/ RAA225000	Non-volatile memory, 13,344 bits (full configuration size). Digital IMVP9.1 controller (OTP space supports up to four full configurations.)	No	Not applicable
Camera ISP Flash ROM	On Camera module	Non-volatile memory, 4M-bit.	No	Not applicable

CAUTION: All other components on the system board erase data if power is removed from the computer. Primary power loss (unplugging the power cable and removing the battery) destroys all user data on the memory. Secondary power loss (removing the onboard coin-cell battery) destroys computer data on the system configuration and time-of-day information.

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

- S0 state is the working state where the dynamic RAM is maintained and is read/write by the processor.
- Modern standby is a standby mode state that is different from S3 mode. In this state, the dynamic RAM is maintained.

- 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 computer has been commanded to enter S4, the operating system writes the computer context to a non-volatile storage file and leave appropriate context markers. When the computer is coming back to the working state, a restore file from the non-volatile storage can occur. The restore file must be valid. Dell computers can go to S4 if the operating system and the peripherals support S4 state.
- S5 is the “soft” off state. There is no power. The operating system does not save any context to wake up the computer. No data remains in any component on the system board that is cache or memory. The computer requires a complete boot when awakened. Since S5 is the shut off state, coming out of S5 requires a turn on which clears all registers.

The following table shows all the states supported by Dell Latitude 5350.

Table 2. ACPI power states supported by Dell Latitude 5350

Model Number	S0	Modern standby	S4	S5
Dell Latitude 5350	Yes	Yes	Yes	Yes

2024-03