Statement of Volatility – Dell Pro 14 PC14250

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

The Dell Pro 14 PC14250 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 Dell Pro 14 PC14250 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)
LCD Panel EEDID EEPROM	Part of panel assembly	Non-volatile memory, stores panel manufacturing information, and display configuration data.	No	Not applicable
System BIOS/EC	U2401 (EC NPCX497CA0BX-GP)	Non-volatile memory, video BIOS for basic boot operation, PSA (on board diags), and PXE diags.	No	Not applicable
RTC CMOS	CPU1	Non-volatile memory, 256 bytes. Stores CMOS information.	No	Not applicable
SSD drive(s)	M.2 2230	Non-volatile magnetic media, various sizes in GB. SSD (solid state drive).	Yes	Low-level format
TPM Controller	U9101	Non-volatile memory, 328 kb ROM	No	Not applicable
Thunderbolt EEPROM (For computers shipped with Intel Core Series)	U7503	Non-volatile memory, 8 Mbits (1 Mbyte) flash memory Thunderbolt Firmware	No	Not applicable
Thunderbolt EEPROM (For computers shipped with Intel Core Ultra 200U Series)	U7188	Non-volatile memory, 8 Mbits (1 Mbyte) flash memory Thunderbolt Firmware	No	Not applicable
Cypress PD EEPROM	U7201	Non-volatile memory, 96 kb	No	Not applicable
Touch screen Embedded Flash	Not applicable	Non-volatile memory	No	Not applicable
UFS	U6303	Non-volatile magnetic media, various sizes in GB.	Yes	Low-level format
Intel ME Firmware	Combine on BIOS ROM	Non-volatile memory, Intel ME firmware for system configuration, security, and protection.	No	Not applicable
Security Controller Serial Flash Memory	Combine on BIOS ROM	Non-volatile memory	No	Not applicable
ISH	Combine on BIOS ROM	Not applicable	No	Not applicable

CAUTION: All other components on the system board erase 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 [DDR5, 5200 MT/s (For computers shipped with Intel Core Series) and 5600 MT/s (For computers shipped with Intel Core Ultra 200U Series)], 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, S1, S3, S4, and S5):

- 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 computer 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 computers will be able to go to S3 if the operating system and the peripherals that are used with the computer supports the S3 state. Windows 10 and Windows 11 support the 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 computer has been commanded to enter S4, the operating system will write the system 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 nonvolatile storage can occur. The restore file must be valid. Dell computers will be able to go to S4 if the operating system and the peripherals support S4 state. Windows 10 and Windows 11 support the S4 state.
- S5 is the “soft” off state. There is 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, i.e. cache or memory. The computer 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 that are supported by Dell Pro 14 PC14250:

Model Number	**S0**	**S1**	**S3/Modern Standby**	**S4**	**S5**
Dell Pro 14 PC14250	Yes	Not applicable	Yes	Yes	Yes

2025-03