

Statement of Volatility – Dell Pro 14 Plus PB14255/ Dell Pro 14 Plus 2-in-1 PB14255

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

The Dell Pro 14 Plus/Dell Pro 14 Plus 2-in-1 contains both volatile and non-volatile (NV) 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 Dell Pro 14 Plus/Dell Pro 14 Plus 2-in-1 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)
Embedded flash in embedded controller MEC5407	UE1	384 KB Code/Data SRAM 320 KB Code/64 KB data optimized for performance.	No	Not applicable
LCD panel EEDID EEPROM	Part of display-panel assembly	Non-volatile memory. Stores panel manufacturing information, and display configuration data.	No	Not applicable
System BIOS/EC	UC2 (64 MB) UC20	Non-volatile memory. System BIOS, embedded controller and video BIOS for basic boot operation, PSA (onboard diagnostics), PXE diagnostics.	No	Not applicable
System memory – LPDDR5x onboard memory	Two-channel onboard memory: UD1, UD2, UD3, and UD4.	Volatile memory in OFF state. System memory size depends on LPDDR5x, 32 GB/64 GB/128 GB (X64) per package.	No	Not applicable
RTC CMOS – BBRAM (battery backed up)	UC1	Non-volatile memory, 256-bytes stores CMOS information.	No	Not applicable
Video memory – frame buffer	For UMA platform: Using system memory	Volatile memory in off state. UMA uses main system memory size that is allocated out of main memory.	No	Not applicable
Pro firmware	Embedded in system BIOS UC2	Non-volatile memory, 64 MBx1. AMD ME firmware for system configuration, security, and protection.	No	Not applicable
SSD drive(s)	M.2 2230 support M.2 2280 support	Non-volatile magnetic media, various sizes in GB. Solid state drive (SSD).	Yes	Low-level format
Touchscreen embedded flash	Part of display-panel assembly	Non-volatile memory.	No	Not applicable
SFH	Combine on BIOS ROM	Non-volatile memory.	No	Not applicable
TPM controller	UK101	Non-volatile memory, 384K bits.	No	Not applicable
PD controller firmware	Embedded in system BIOS UC2	Non-volatile memory.	No	Not applicable
Security controller serial flash memory	UK251 (USH daughterboard)	Non-volatile memory, 128 Mbit (16 MB).	No	Not applicable
Fingerprint sensor	Module	USB interface of embedded flash memory.	No	Not applicable
Digital APU power SVI3 Controller	PUZ1	Non-volatile memory, 512 bytes. Digital APU power SVI3 controller. Total 162 index, each index 0/4/8 bits.	No	Not applicable
Touchpad	Module	I2C interface of embedded flash memory	No	Not applicable

Camera ISP Flash ROM	On camera module, UDV2 on middle daughterboard	Non-volatile memory, 64 KB. Non-volatile memory, 16 MB.	No	Not applicable
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⚠ CAUTION: All other components on the system board lose 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 (LPDDR5x, 7500 MT/s), system 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 is commanded to enter S4, the operating system writes 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 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. Windows 10 and Windows 11 support the S4 (Hibernate) 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 Pro 14 Plus/Dell Pro 14 Plus 2-in-1.

Table 2. ACPI power states supported by Dell Pro 14 Plus/Dell Pro 14 Plus 2-in-1

Model Number	S0	Modern standby	S4	S5
Dell Pro 14 Plus/Dell Pro 14 Plus 2-in-1	Yes	Yes	Yes	Yes