DELLTechnologies

Statement of Volatility – Dell Pro 14 Plus PB14250/Dell Pro 14 Plus 2-in-1 PB14250

⚠ **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)
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	UE1 (EC MEC5407) UC2	Non-volatile memory. Video BIOS for basic boot operation, PSA (onboard diagnostics), PXE diagnostics.	No	Not applicable
System memory – LPDDR5x memory	Integrated Memory Controller	Volatile memory in OFF state.	No	Not applicable
System memory SPD EEPROM	Not applicable	Non-volatile memory.	No	Not applicable
RTC CMOS	UC1	Non-volatile memory 256-bytes stores CMOS information.	No	Not applicable
Video memory – frame buffer	For UMA platform: Using system DDR	Volatile memory in off state. UMA uses main system memory size that is allocated out of main memory.	No	Power off system
Security controller Serial Flash Memory	UK253 (Upsell USH daughterboard)	Non-volatile memory, 128 Mbit (16 Mbyte).	No	Not applicable
SSD drive(s)	M.2 – 2230 or 2280 support	Non-Volatile magnetic media, various sizes in GB Solid state drive (SSD).	Yes	Low-level format
TPM controller	UK101	Non-volatile memory, 328K bits ROM.	No	Not applicable
Thunderbolt EEPROM	UT4	Non-volatile memory, 8 Mbit (1 MB) flash memory (Thunderbolt FW).	No	Not applicable
Thunderbolt PD EEPROM	Combine on BIOS ROM	Non-volatile memory.	No	Not applicable
Touchscreen embedded flash	Not applicable	Non-volatile memory.	No	Not applicable
Digital IMVP9.2 controller	PUZ001	Non-volatile memory, 1204 bits Digital IMVP9.2 controller (Total 162 index, each index 0/4/8 bits).	No	Not applicable
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	Non-volatile memory.	No	Not applicable
MIPI camera firmware	UDV22 (Upsell middle daughterboard)	Non-volatile memory, 128 Mbit (16 Mbyte).	No	Not applicable

⚠ **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 (DDR5, 5600 MT/s), 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, 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 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 computers go to S3 if the operating system and the peripherals used in the computer supports S3 state. Win10 supports 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 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 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	S1	S3/Modern Standby	S4	S5
Dell Pro 14 Plus PB14250/Dell Pro 14 Plus 2-in-1 PB14250	Yes		Yes	Yes	Yes