DELL Technologies

Statement of Volatility – Dell Pro 14 PC14255

⚠ **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 PC14255 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 PC14255 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	U2401	384 kb code/Data SRAM 320 kb code/64 kb data optimized for performance.	No	Not applicable
LCD Panel EEDID EEPROM	Part of panel assembly	Non-volatile memory, stores panel manufacturing information, display configuration data.	No	Not applicable
System BIOS/EC	BIOS1 (64 MB), U2502(2M)	Non-volatile memory, system BIOS, embedded controller, video BIOS for basic boot operation, PSA (on board diags), and PXE diags.	No	Not applicable
System Memory – on SODIMM	2-channel memory: DM1, DM2	Volatile memory in OFF state. System memory size depends on DDR5 (1 x 8 GB; 2 x 8 GB; 1 x 16 GB; 2 x 16 GB; 2 x 32 GB).	Yes	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 BIOS1	Non-volatile memory, 64 MB x 1, AMD ME firmware for system configuration, security, and protection.	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
Touchscreen Embedded Flash	Part of panel assembly	Non-volatile memory	No	Not applicable
TPM Controller	U9101	Non-volatile memory, 384 kb	No	Not applicable
PD Controller FW	Embedded in system BIOS BIOS1	Non-volatile memory	No	Not applicable
Fingerprint Sensor	Module	USB interface of embedded Flash memory.	No	Not applicable
Touchpad	Module	I2C interface of embedded Flash memory.	No	Not applicable
Digital APU power SVI3 controller	PU4601	Non-volatile memory, 512 bytes Digital APU power SVI3 controller (Total 162 index, each index 0/4/8 bits.)	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, 5600 MT/s), 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, 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 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 non-volatile 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 (Hibernate) 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 PC14255:

Model Number	S0	Modern Standby	S4	S5
Dell Pro 14 PC14255	Yes	Yes	Yes	Yes