Statement of Volatility – Dell Precision 3260

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

The Dell Precision 3260 contains both volatile and non-volatile 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 Precision 3260 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 lose data)
Embedded Flash memory in embedded controller MICROCHIP DEC1515H-D0-I/Z2	EC1	The two SRAM blocks in the DEC1515 total 256 KB. The DEC1515 contains a 64 KB block of ROM. EC use 1 MB with SPI ROM by G3 sharing mode.	Yes	N/A
System BIOS	U2501 U2504	Non-volatile memory, 128 M/256 M bits (16 MB/32 MB), System BIOS and Video BIOS for basic boot operation, ePSA (on board diagnostics.)	No	N/A
TPM Nuvoton NPCT750JADYX	U9101	28 K bytes non-volatile memory located in the TPM module.	No	N/A
System Memory – DDR5 DIMM memory	Connectons : DIMM1, DIMM2,	Volatile memory in OFF state (see state definitions later in text) One to two modules will be populated. System memory size will depend on DIMM modules and will be between 8 GB to 32 GB.	Yes	Power off system.
System memory SPD EEPROM	On memory DIMM(s)	Non-volatile EEPROM memory. 1024 bytes. One Device present on each DIMM. Stores memory manufacturer data and timing information for correct operation of system memory.	No	N/A
RTC CMOS	BATTERY BT1	Volatile battery back-backed CMOS memory 256 bytes. Stores CMOS information.	No	Removing the on-board Coin Cell battery.
Video memory – type – see next column	UMA architecture-uses system memory.	Volatile memory in off state. UMA uses main system memory size allocated out of main memory.	No	Enter S4-S5 state below.
Hard drive	User replaceable HDD1	Non-volatile magnetic media, various sizes in GB.	Yes	Low level format.
M.2 Solid State Disk	User replaceable NGFF1 and NGFF2	Non-volatile magnetic media, various sizes in GB.	Yes	Low level format.

⚠️ **CAUTION: All other components on the system board lose 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 (DDR4, 2666 MHz). Secondary power loss (removing the on- board coin-cell battery) destroys system data on the 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, S5 and Modern Standby):

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 chipset) 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 systems will be able to go to S3 if the operating system and the peripherals used in the system supports S3 state. Linux and Windows support S3 state.

S4 is called suspend to disk state or hibernate mode, with no power. In this state, the dynamic RAM is not maintained. If the system has been commanded to enter S4, the operating system writes the system context to a non-volatile storage file and leave appropriate context markers. When the system comes back to the working state, a restore file from the non-volatile storage can occur. The restore file must be valid. Dell systems will be able to go to S4 if the operating system and the peripherals support S4 state. Windows support S4 state.

S5 is the soft off state, with 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, that is cache or memory. The system requires 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 supported by Dell Precision 3260.

Model Number	S0	S1	ModS	S4	S5
Dell Precision 3260	X		X	X	X

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