



Statement of Volatility – Dell Precision 7510

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

The Dell Precision 7510 contains both volatile and non-volatile (NV) components. Volatile components lose their data immediately after power is removed from the component. Non-volatile (NV) components continue to retain their data even after power is removed from the component. The following NV components are present on the 7510 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 prevent loss of data)
Embedded Flash in embedded controller MEC5085	U51	288 KB of embedded Flash memory for keyboard controller BIOS code, asset tag and BIOS passwords. 4K Boot block protection.	No	N/A
Panel EEDID EEPROM	Part of panel assembly	Non Volatile memory, 512 bytes.	No	Part of panel assembly
System BIOS	U52(16MB)	Non Volatile memory, 128 Mbit (16 MB), System BIOS and Video BIOS for basic boot operation, PSA (on board diags), PXE diags.	No	N/A
Video BIOS	U52	VBIOS include in system BIOS	No	N/A
System Memory – DDR4 memory	Four SODIMM connectors: JDIMM1,2,3,4	Volatile memory in OFF state NOTE: See state definitions later in text. Two to four modules must be populated. System memory size will depend on SODIMM modules and up to 64 GB.	No	Power off system
System memory SPD EEPROM	On memory SODIMM(s) – 2-4 present	Non Volatile memory 512 Bytes. Stores memory manufacturer data and timing information for correct operation of system memory.	No	N/A
RTC CMOS – BBRAM (battery backed up)	JRTC	Non Volatile memory, 64 Bytes. Stores CMOS information.	No	N/A

Description	Reference Designator	Volatility Description	User Accessible for external data	Remedial Action (Action necessary to prevent loss of data)
Video memory – frame buffer	On system VRAM	Volatile memory in off state. 2 GB GDDR5 for nVidia N16P-GX/Q1 discrete graphics systems. 4GB GDD5 for nVidia N16P-Q3 2GB GDD5 for AMD Tropo XT GL	No	N/A
LOM Serial Flash Memory	No on board LOM	No on board LOM	No	N/A
Hard drive(s)	User replaceable - two.	Non Volatile magnetic media, various sizes in GB. May also be SSD (solid state flash drive) and Hybrid HDD.	Yes	Low level format
CD-ROM/RW/ DVD/ DVD+RW/ Diskette Drives	No support	No support	No	N/A
internal ROM for EEDID	No support	No support	No	N/A
PD controller EEPROM (option)	UT20 (daughter board)	Non Volatile memory, 8 Mbit (1MB), Power Delivery and type C operation	No	N/A
Thunderbolt controller EEPROM (option)	UT1 (daughter board)	Non Volatile memory, 8 Mbit (1MB), Thunderbolt/type C operation	No	N/A
USH (option)	U1 (daughter board)	Non Volatile memory, 32 Mbit (4MB), for Control Vault operation	No	N/A

⚠ 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, 2133 MHz). Secondary power loss (removing the on-board coin-cell battery) destroys system data on the system configuration and time-of-day information.

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