Statement of Volatility – Dell Precision 7520

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

The Dell Precision 7520 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 7520 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	For SG mode For DSC mode using MXX	VBIOS include in system BIOS (U52) 2Mb for nVidia N17P-Q1 2Mb for nVidia N17P-Q3 4Mb for AMD F16M-S2-50 Baffin Pro WX4150 4Mb for AMD F16M-S1-30 Baffin LE WX4130	No	N/A
System Memory – DDR4 memory	Four SODIMM connectors: JDIMM1,2,3,4	Volatile memory in OFF state 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) – 1-4 present	Non Volatile memory 512 Bytes. Stores memory manufacturer data and timing information for correct operation of system memory.	No	N/A

Description	Reference Designator	Volatility Description	User Accessible for external data	Remedial Action (Action necessary to prevent loss of data)
RTC CMOS – BBRAM (battery backed up)	JRTC	Non Volatile memory, 64 Bytes. Stores CMOS information.	No	N/A
Video memory – frame buffer	For SG mode using system DDR4	Volatile memory in off state. SG mode uses main system memory size allocated out of main memory.	No	N/A
	For DSC mode using MXM VRAM	Discrete graphic mode: 4 GB GDDR5 for nVidia N17P-Q1 discrete graphics systems. 4GB GDD5 for nVidia N17P-Q3 4GB GDD5 for AMD F16M-S2-50 Baffin Pro WX4150 2GB GDD5 for AMD F16M-S1-30 Baffin LE WX4130		
Hard drive(s)	User replaceable	Non Volatile magnetic media, various sizes in GB. May also be SSD (solid state flash drive) and Hybrid HDD.	Yes	Low level format
PD controller EEPROM	UT20 (daughter board)	Non Volatile memory, 8 Mbit (1MB), Power Delivery and type C operation	No	N/A
Thunderbolt controller EEPROM	UT1 (daugher board)	Non Volatile memory, 8 Mbit (1MB), Thunderbolt/type C operation	No	N/A
TPM controller	U637	Non Volatile memory, 16K bytes flash	No	N/A
USH	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, 2400 MHz). Secondary power loss (removing the on-board coin-cell battery) destroys system data on the system configuration and time-of-day information.**