Statement of Volatility – Dell OptiPlex 3020

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

The Dell OptiPlex 3020 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 OptiPlex 3020 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 memory in embedded controller SMSC SCH5553	MT-U23 SFF-U19	Non Volatile: 8042 Controller: 2k Bytes of Program ROM MCU ROM: 96K Bytes of Program ROM Volatile: 8042 Controller: 256k Bytes of Data RAM MCU ROM: 8k Bytes of Data RAM	No	N/A
System BIOS	MT-U17 SFF-U14	Non Volatile memory, 64 Mbit (8 MB), System BIOS and Video BIOS for basic boot operation, PSA (on board diags), PXE diags.	No	N/A
Video memory – type – see next column	UMA architectur e- uses system DDR3.	Volatile memory in off state. UMA uses main system memory size allocated out of main memory.	No	Enter S3-S5 state below.
System Memory – DDR3 memory	Connectors : DIMM1, DIMM2	Volatile memory in OFF state **NOTE:** See state definitions later in text One to Two modules must be populated. System memory size will depend on DIMM modules and must be between 2 GB and 16 GB.	Yes	Power off system
System memory SPD EEPROM	On memory DIMM(s) – one, two, present	Non-Volatile EEPROM memory. 2Kbit (256 bytes) One Device present on each DIMM. Stores memory manufacturer data and timing information for correct operation of system	No	N/A

Description	Reference Designator	Volatility Description	User Accessible for external data	Remedial Action (Action necessary to prevent loss of data)
		memory		
RTC CMOS	MT-U29 SFF-U32	Volatile Battery back-backed CMOS memory 256 bytes Stores CMOS information	No	Removing the on board Coin Cell battery
Ethernet Controller Embedded Efuse REALTEK RTL8151GD	MT-U13 SFF-U13	256 bytes in non-volatile memory, which stores driver information and the system MAC address.	No	N/A
TPM ST33ZP24AR 28PVSP	MT- U21 SFF-U23	4K bytes non-volatile memory located in the TPM module.	No	N/A
Hard drive(s)	User replaceable - one or two.	Non Volatile magnetic media, various sizes in GB. May also be SSD (solid state flash drive).	Yes	Low level format
CD-ROM/RW/ DVD/ DVD+RW/ Diskette Drives	User replaceable	Non Volatile optical media.	Yes	Low level format/erase
△ 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 (DDR3, 1067 MHz). Secondary power loss (removing the on-board coin-cell battery) destroys system data on the system configuration and time-of-day information.				