Statement of Volatility – Dell P2421 Monitor

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

The purpose of this document is to certify that Dell's P2421 monitor will not save, retain or reproduce a signal to any internal or external component after power has been removed and reapplied to the unit.

The Dell P2421 monitor contains both volatile and non-volatile (NV) memory ICs. Volatile memory(s) lose their data immediately upon removal of power. Non-volatile memory ICs continue to retain their data even after the power has been removed. However, no input video data is written into these memory ICs during operation.

List below contains volatile and non volatile memory ICs used in Dell P2421 monitor.

System EEPROM	ST M24C16
Size	16Kbit
Type [e.g. Flash PROM, EEPROM]	EEPROM
Volatility	Non-volatile
Can user programs or operating system write data to it during normal operation?	OSD setting: Yes
Purpose	Storage of system setting (OSD)
How is data input to this memory?	Control the OSD menu and change OSD setting (ex. Brightness, contrast, color setting) and the setting will be stored into system EEPROM
How is this memory write protected?	Software write protected

VGA EDID EEPROM	ST M24C02
Size	2Kbit
Type [e.g. Flash PROM, EEPROM]	EEPROM
Volatility	Non-volatile
Can user programs or operating system write data to it during normal operation?	No
Purpose	Storage of VGA EDID
How is data input to this memory?	VGA EDID is embedded in the firmware, and copied to EEPROM after F/W programming. (or via customized EDID tool)
How is this memory write protected?	Hardware and software write protected

May 2020

HDMI EDID EEPROM	ST M24C02
Size	2Kbit
Type [e.g. Flash PROM, EEPROM]	EEPROM
Volatility	Non-volatile
Can user programs or operating system write data to it during normal operation?	No
Purpose	Storage of HDMI EDID
How is data input to this memory?	HDMI EDID is embedded in the firmware, and copied to EEPROM after F/W programming. (or via customized EDID tool)
How is this memory write protected?	Hardware and software write protected

DVI EDID EEPROM	ST M24C02
Size	2Kbit
Type [e.g. Flash PROM, EEPROM]	EEPROM
Volatility	Non-volatile
Can user programs or operating system write data to it during normal operation?	No
Purpose	Storage of DVI EDID
How is data input to this memory?	DVI EDID is embedded in the firmware, and copied to EEPROM after F/W programming. (or via customized EDID tool)
How is this memory write protected?	Hardware and software write protected

Flash ROM	ISSI PM25LQ040B
Size	4M bit
Type [e.g. Flash PROM, EEPROM]	Serial flash memory
Volatility	Non-volatile
Can user programs or operating system write data to it during normal operation?	No
Purpose	To store firmware
How is data input to this memory?	Loading flash memory requires a vendor-provided tool and firmware
How is this memory write protected?	Software write protected

Flash ROM	WINBOND W25X10CLSNIG
Size	1M bit
Type [e.g. Flash PROM, EEPROM]	Serial flash memory
Volatility	Non-volatile
Can user programs or operating system write data to it during normal operation?	No
Purpose	To store USB firmware
How is data input to this memory?	Loading flash memory requires a vendor-provided tool and firmware
How is this memory write protected?	Hardware write protected