Statement of Volatility - Dell U3011 Monitor

The purpose of this document is to certify that Dell's U3011 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 U3011 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 the Dell U3011 monitor.

| Flash ROM | A25L016M |
|---------------------------------------------------------------------------------------|---------------------------------------------------------------|
| Size | 16 Mbit |
| 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 firmware file |
| How is this memory write protected? | Software write protected |

| DDR SDRAM | NA |
|---------------------------------------------------------------------------------|----------------------------------------------------------------------------------|
| Size | 8x16 Mbit |
| Type [e.g. Flash PROM, EEPROM] | DDR SDRAM |
| Volatility | Volatile |
| Can user programs or operating system write data to it during normal operation? | Νο |
| Purpose | Buffer of video decoder |
| How is data input to this memory? | Video is received by video decoder chip (CVBS processor) and processed in SDRAM. |
| How is this memory write protected? | No write protect mechanism |

| DDR2 SDRAM | NT5TU32M16CG |
|---------------------------------------------------------------------------------|----------------------------------------------------------------|
| Size | 32x16 Mbit |
| Type [e.g. Flash PROM, EEPROM] | DDR2 SDRAM |
| Volatility | Volatile |
| Can user programs or operating system write data to it during normal operation? | No |
| Purpose | Buffer for video processing |
| How is data input to this memory? | Video is received by monitor core chip and processed in SDRAM. |
| How is this memory write protected? | No write protect mechanism |

| System EEPROM | M24C64 |
|---------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| Size | 64Kbit |
| Type [e.g. Flash PROM, EEPROM] | EEPROM |
| Volatility | Non-volatile |
| Can user programs or operating system write data to it during normal operation? | 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 | M24LC02B |
|---------------------------------------------------------------------------------|------------------------------------------------------------------------|
| 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 | To store VGA EDID |
| How is data input to this memory? | Writing EDID requires a vendor-provided tool and a specific VGA cable. |

How is this memory write protected?

Hardware and software write protected

| DVI EDID EEPROM | M24LC02B |
|---------------------------------------------------------------------------------|------------------------------------------------------------------------|
| 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 | To store DVI EDID |
| How is data input to this memory? | Writing EDID requires a vendor-provided tool and a specific DVI cable. |
| How is this memory write protected? | Hardware write protected |

| Flash ROM | MX25L1605DM2I |
|---------------------------------------------------------------------------------|----------------------------------------------------------|
| Size | 16 Mbit |
| 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 firmware |
| How is this memory write protected? | Hardware write protected |

△ CAUTION: All other components on the system board lose data if power is removed from the system. Primary power loss (unplugging the power cord) destroys all user data.