Date: 8/23/2011

| Certificate of Volatility | | | | |
|---|---|---|---|---|
| **Model:** DNR-12-1G | **Part Number:** DNR-12-1G | **Manufacturer: United Electronic Industries, Inc** | | |
| | | **Street Address: 27 Renmar Ave** | | |
| | | **City: Walpole** | **State: MA** | **Zip: 02081** |

## Volatile Memory

**Does the item contain volatile memory (i.e., memory whose contents are lost when power is removed)?**
**X☐ Yes ☐ No**

**If the answer is 'Yes', please provide the following information for each type (use additional sheets if required):**

| Type (SRAM, DRAM, etc.): | Size: | User Modifiable: | Function: | Process to Clear: |
|---|---|---|---|---|
| DRAM | 128 MB | X☐ Yes ☐ No | Scratch pad and temporary storage for firmware. | Power off unit |
| Type (SRAM, DRAM, etc.): | Size: | User Modifiable: ☐ Yes ☐ No | Function: | Process to Clear: |
| Type (SRAM, DRAM, etc.): | Size: | User Modifiable: ☐ Yes ☐ No | Function: | Process to Clear: |

## Non-Volatile Memory

**Does the item contain non-volatile memory (i.e., memory whose contents are retained when power is removed)?**
**X☐ Yes ☐ No**

**If the answer is 'Yes', please provide the following information for each type (use additional sheets if required):**

**Can this item contain Cache or Buffer information after shut down?**
**X☐ Yes ☐ No It could, but only data that the application specifically chose to write. The standard API does not suppor t this function**

| Type (BBRAM, Flash, EEPROM, etc.): | Size: | User Modifiable: | Function: | Process to Clear: |
|---|---|---|---|---|
| FLASH | 32 MByte | X☐ Yes ☐ No | Holds specific unit info such as serial number. Also holds unit's firmware and boot loader | Can be cleared with "special" commands, but clearing the memory would render the unit inoperative. |
| Type (BBRAM, Flash, EEPROM, etc.): | Size: | User Modifiable: ☐ Yes ☐ No | Function: | Process to Clear: |
| Type (BBRAM, Flash, EEPROM, etc.): | Size: | User Modifiable: ☐ Yes ☐ No | Function: | Process to Clear: |

## Media

**Does the item contain media storage capability (i.e., removable or non-removable disk drives, tape drives, memory cards, etc.)?**
**X☐ Yes ☐ No**

**If the answer is 'Yes', please provide the following information for each type (use additional sheets if required):**

| Type (Disk, Tape, etc.): | Size: | User Modifiable: | Function: | Process to Clear: |
|---|---|---|---|---|
| SD Card<br>Removable:<br>X☐ Yes ☐ No | Up to 32 GB | ☐ Yes<br>X☐ No | None in this version of the chassis | n/a |
| Type (Disk, Tape, etc.):<br>Removable:<br>☐ Yes ☐ No | Size: | User Modifiable: ☐ Yes ☐ No | Function: | Process to Clear: |
| Type (Disk, Tape, etc.):<br>Removable:<br>☐ Yes ☐ No | Size: | User Modifiable: ☐ Yes ☐ No | Function: | Process to Clear: |

The information contained on this form shall be considered **Company Proprietary Data** furnished by the item manufacturer. The data shall be released only to UEI customer employees or US Government representatives as necessary to accomplish the intended task (i.e., obtaining approval to operate a system processing classified data and incorporating the described item). The data shall not be disseminated to other vendor/contractor personnel without the express written authorization of the manufacturer.

**Additional Information:**

UEI's PowerDNA RACKtangles do not store any data, input or output, in any non-volatile memory unless the writing of this data is specifically implemented in the customer software. All data written to and/or read from PowerDNA chassis is lost within seconds of power loss or if the power switch is turned off.

The only exception to this rule is the user, either via the API or PowerDNA Explorer, may store default "power on" and "emergency shut-down" output conditions/states of the analog and digital output devices. Note that even this data is ONLY written to non-volatile memory upon specific instructions either from PowerDNA Explorer or the appropriate API call and never from standard data I/O functions.

A jumper on the Power-1GB board (part of the CPU module) allows the user to select whether writing to non-volatile FLASH memory is enabled or disabled. When set in the disable position, writes to FLASH are disabled in hardware as the jumper disables the write control line on the memory. Note that when these writes are disabled, the firmware on the chassis cannot be updated. For this reason most customers choose to do their development with the write enabled, and then move the jumper to disabled for deployment.

Though hardware for an SD card interface is provided, with the version of Firmware and Software provided in this version of the chassis (DNR-12-1G), there is no ability to read or write data to or from an SD card.

| **Validation Test** |
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| **Does the item have a validation test method? (to determine that it has been returned to default settings, cleared, flushed)**<br>**X☐ Yes ☐ No** |
| **If the answer is 'Yes', please provide the following information for each type (use additional sheets if required):** |
| **Additional Information:**<br>**Powering the unit off will flush all dynamic memory. During reboot after power-up, all factory default settings are reset except for the unit's IP addresses.** |

| **Vendor Representative Information** | | | |
|---|---|---|---|
| **Name:**<br>**Robert Judd** | **Title:**<br>**Director of Mktg** | **Office Phone:**<br>**508-921-4557** | **Fax/Email:**<br>**bjudd@ueidaq.com** |
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