Date: 5/24/18

Certificate of Volatility				
Model: **UEIPAC x00-1G**	**Part Number:** **UEIPAC x00-1G**	**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 used to hold user programs and/or data.**	**Can be cleared with "special" commands, but clearing the memory would render the unit inoperative. To clear data written by the user's application, it must be overwritten/cleared by the user.**
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 Removable: X☐ Yes ☐ No	**Up to 32 GB**	X☐ Yes ☐ No	**SD card typically holds the Linux kernel, the user application and any data the user application saves**	**The SD card can be cleared by reformatting the card, but that would render the card/chassis inoperative. User data and applications are typically stored in separate directories that can be erased by the user if desired.**
Type (Disk, Tape, etc.): Removable: ☐ Yes ☐ No	Size:	User Modifiable: ☐ Yes ☐ No	Function:	Process to Clear:
Type (Disk, Tape, etc.): Removable: ☐ Yes ☐ No	Size:	User Modifiable: ☐ Yes ☐ No	Function:	Process to Clear:

Additional Information:

UEI's UEIPAC series chassis 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. To clear this information out of memory an application would have to be written by the customer that overwrites the memory that has been written by the user applications.

All other data written to and/or read from UEIPAC 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
Does the item have a validation test method? (to determine that it has been returned to default settings, cleared, flushed) X☐ Yes ☐ No
If the answer is 'Yes', please provide the following information for each type (use additional sheets if required):
Additional Information: **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			
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