Date: 4/10/17

Certificate of Volatility								
				Manufacturer: United Electronic Industries, Inc				
UEIPAC 300/600/700	AC 300/600/700   UEIPAC 300/600/700			Street Address: 27 Renmar Ave				
				<u> </u>	e: 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.): DRAM	Size: 128 MB	User Modifiable:		Function: Scratch pad and temporary	Process to Clear: Power off unit			
	128 MB	X Yes		storage for firmware.				
Type (SRAM, DRAM, etc.):	Size:	User Modifiable:  Yes No		Function:	Process to Clear:			
Type (SRAM, DRAM, etc.):	Size:	User		Function:	Process to Clear:			
		Modifiable:  ☐ Yes ☐ No						
			Volat	ile 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, EEPR		User		Function:	Process to Clear:			
etc.): FLASH	4 MByte	Modifiable: X□ Yes		Holds specific unit info such as serial number. Also holds unit's	Can be cleared with "special" commands, but clearing the			
1 2012011		□ No	•	firmware and boot loader.	memory would render the unit			
				Writing to this memory will	inoperative. To clear data			
				likely overwrite required firmware and will render the	written by the user's application, it must be			
				Cube inoperative.	overwritten/cleared by the user.			
Type (BBRAM, Flash, EEPR	lash, EEPROM, Size: User			Function:	Process to Clear:			
etc.):		Modifiable:						
	☐ Yes ☐ No							
Type (BBRAM, Flash, EEPR	OM. Size:	User		Function:	Process to Clear:			
etc.):	Size.	Modifiah	le:	T unction:	Trocess to cicur.			
ŕ		☐ Yes						
		☐ No						
75 (1 1)	1 224 (1			edia	1 ( )			
X Yes No	storage capability (1.6	e., removab	le or no	on-removable disk drives, tape drive	es, memory cards, etc.)?			
	provide the following	information	on for e	ach type (use additional sheets if red	quired):			
Type (Disk, Tape, etc.):	Size:	User		Function:	Process to Clear:			
SD Card	Up to 32	Modifiah	le:	SD card typically holds the	The SD card can be cleared by			
Removable: X□ Yes □ No	GB	☐ Yes X☐ No		Linux kernel, the user application and any data the	reformatting the card, but that would render the card/chassis			
A les lino		ALI NO		user application saves	inoperative. User data and			
				and appearance and the	applications are typically			
					stored in separate directories			
					that can be erased by the user if desired.			
Type (Disk, Tape, etc.):	Size:	User		Function:	Process to Clear:			
<b>J.</b> 1 ( 1 1 ) 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Modifiable:		le:					
Removable:		Yes						
Yes No Type (Disk, Tape, etc.):	Size:	☐ No User		Function:	Process to Clear:			
Type (Disk, Tape, etc.):	Size:	Modifiah	le:	r unction:	1 rocess to Clear;			
Removable:		☐ Yes						
□ Ves □ No	I	□ No		1				

The information contained on this form shall be considered <u>Company Proprietary Data</u> 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 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.							
sectings are reset except for the unit 5.11 addresses.							
Vendor Representative Information							
Name:	Title:	Office Phone:	Fax/Email:				
Robert Judd	Director of Mktg	508-921-4557	bjudd@ueidaq.com				

The information contained on this form shall be considered <u>Company Proprietary Data</u> 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.