

Certificate of Volatility				
Model: UEIPAC x00-1G-03	Part Number: UEIPAC x00-1G-03	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)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> 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: 256 MB	User Modifiable: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Function: Scratch pad and temporary storage for firmware.	Process to Clear: Power off unit
Type (SRAM, DRAM, etc.):	Size:	User Modifiable: <input type="checkbox"/> Yes <input type="checkbox"/> No	Function:	Process to Clear:
Type (SRAM, DRAM, etc.):	Size:	User Modifiable: <input type="checkbox"/> Yes <input type="checkbox"/> 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)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> 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? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No It could, but only data that the application specifically chose to write. The standard API does not support this function				
Type (BBRAM, Flash, EEPROM, etc.): FLASH	Size: 128 MByte	User Modifiable: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Function: 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.	Process to Clear: 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: <input type="checkbox"/> Yes <input type="checkbox"/> No	Function:	Process to Clear:
Type (BBRAM, Flash, EEPROM, etc.):	Size:	User Modifiable: <input type="checkbox"/> Yes <input type="checkbox"/> 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.)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No				
If the answer is 'Yes', please provide the following information for each type (use additional sheets if required):				
Type (Disk, Tape, etc.): SD Card Removable: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Size: Up to 32 GB	User Modifiable: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Function: SD card typically holds the Linux file system, drivers, the user application and any data the user application saves	Process to Clear: The SD card can be cleared by reformatting the card, but that would render the card/chassis inoperative if booting from card location. User data and applications are typically stored in separate directories that can be erased by the user if desired.

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.

Type (Disk, Tape, etc.): SSD (optional) Removable: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Size: Up to 64 GB	User Modifiable: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Function: Optional SSD can hold the Linux file system, drivers, user application and any data the user application saves	Process to Clear: The SSD can be cleared by reformatting the drive, but that would render the drive/chassis inoperative if booting from drive location. User data and applications are typically stored in separate directories that can be erased by the user if desired Alternatively, the SSD can be removed, but it requires tools and the system must be disassembled in order to get to the SSD.
Type (Disk, Tape, etc.): Removable: <input type="checkbox"/> Yes <input type="checkbox"/> No	Size:	User Modifiable: <input type="checkbox"/> Yes <input type="checkbox"/> 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 (PPCx-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)

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

Name: Austyn Turner	Title: Application Engineer	Office Phone: 508-921-4592	Fax/Email: aturner@ueidaq.com

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.