



CERTIFICATE OF VOLATILITY

Date: 26 April 2018

Model No. SyncServer S80
P/N 090-15200-080

Model Description Ruggedized and Secure Network Time Server

This certification defines volatile and non-volatile memory devices for use by End Users in clearing memory device data for security purposes.

Memory Size	Memory Type	Volatile/Non-Volatile	User Data	Location
64 KB Embedded SRAM (eSRAM) 512 KB Embedded Nonvolatile Memory (eNVM)	FPGA	Non Volatile	No	U10
	Microsemi P/N 148-01993-000 Microsemi P/N M2S090T-1FGG484IX418 (IC FPGA: SmartFusion2 System-on-Chip FPGA)			
Function:	Flash based FPGA. The software automatically checks for the latest FPGA image version. The FPGA will be automatically updated when the device detects a version number is greater then what is running,			
Clearing Process:	There is no clearing procedure for this memory. User cannot write to this device.			
1M BIT	EEPROM	Non-Volatile	No	U14
	Microsemi P/N 148-01780-000 ATMEL P/N AT24CM01-XHD-T (IC 2-WIRE SERIAL EEPROM 1MBIT 1MHZ 8TSSOP)			
Function:	Manufacture information such as MAC address, etc.			
Clearing Process:	There is no clearing procedure for this memory. User cannot write to this device.			
1G-BIT	RAM	Volatile	No	U8
	Microsemi P/N 148-01759-000 MICRON P/N MT46H64M16LFBF-5 IT:B (IC MEMORY LPDDR SDRAM 1G-BIT 64MX16 1.8V VFBGA-60 TRAY)			
Function:	Temporary data storage.			
Clearing Process:	Remove power from the unit.			



Memory Size	Memory Type	Volatile/Non-Volatile	User Data	Location
512 Mbit	Flash Memory	Non-Volatile	Yes	U4
Microsemi P/N 148-01881-000 SPANSION P/N S25FL512SDPBHC10 (IC MEMORY FLASH SPI 512M-BIT 256Kbytes sector FAB024 BGA-24)				
Function:	Firmware, FPGA image and user configuration settings..			
Clearing Process:	User cannot write to this device. To remove all configuration setting and return to the factory default settings, use the following commands. Reference Page 34 of the S80 User Guide			
	Set configuration: Use this command to set the current configuration to factory setting and remove all attributes. Use of this command results in reboot of the S80.			
	Command Syntax: set configuration factory			
	Level: Config and Admin			
	Example 1: To set the factory configuration S80> set configuration factory			

The Microsemi P/N 112-00090-000 Time & Frequency Reference GNSS module (u-blox P/N LEA-M8F-0) is installed in the S80 NTS Unit.

Note: The following information was received from u-blox regarding their P/N LEA-M8F-0 device.

Memory Size	Memory Type	Volatile/Non-Volatile	User Data
176k x 8 bit	SRAM	Volatile	No
Function:	Temporary Data (System RAM)		
Clearing Process:	User can not modify this memory device. Remove power from the device.		
128k x 8 bit	SRAM	Volatile	No
Function:	Temporary Data (GPS RAM)		
Clearing Process:	User can not modify this memory device. Remove power from the device.		




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Memory Size	Memory Type	Volatile/Non-Volatile	User Data
32k x 8 bit	BBRAM	Volatile	Yes
Function:	Configuration, calibration data User can modify this memory device.		
Clearing Process:	Remove power from the device.		
8,192 pages x 256 Bytes	Flash (16 Mbit)	Non-Volatile	Yes
Function:	GNSS module firmware and configuration settings User can modify this memory device.		
Clearing Process:	Use "set configuration factory" command to clear all configuration settings. Allow device to run for 3-4 minutes after rebooting to clear configuration data from the GNSS receiver flash memory.		

Robert Mengelberg, 
Authorized Signature,

Compliance Engineer
Title,

126 April 2018
Date