Manufacturer: Seagate

Product Part Numbers

The 9-digit product part number as shown into brackets in below table can be found on the label applied under the Lyve Mobile Array device.

Table 1 - Product Configurations

Product reference	Capacity	SSD reference
STJX46000401 (2ZF9P7-500)	46TB	XS7680SE70094 (2XA240-XXX)
STJX90000401 (2ZF9P8-500)	92TB	XS15360SE70094 (2XA241-XXX)

Volatile Memory

Target Data	Туре	Size	Battery Backup	User ¹ Accessible	System Accessible	Sanitization Procedure
Cache Memory (User Data)	DDR4	512Mbx16 (8Gb)	No	Yes	Yes	Cycle Power
SC Memory (Metadata)	DDR3	512Mbx8 (4Gb)	No	No	Yes	Cycle Power
Operational data used by the MCU	RAM	20kB	No	No	No	Cycle Power
Operational data used by the internal USB hub	RAM	256B	No	No	No	Cycle Power
Operational data used by the internal PCIe switch	RAM		No	No	No	Cycle Power
Operational data used by the Thunderbolt controller	RAM	256B	No	No	No	Cycle Power
Operational data used by the SAS controller	RAM	16Mb	No	No	No	Cycle Power
Operational data used by the CPLD	RAM/SRAM	34+92kb	No	No	No	Cycle Power

¹ Refer to Terms and Definitions section for clarification of User and System Accessible

Non-Volatile Memory (incl. Media Storage)

Target Data	Туре	Size	Battery Backup	User Accessible	System Accessi ble	Sanitization Procedure
Storage Controller configuration data and event log	SPI Flash	128Mb	No	No	Yes	Sanitization procedure only available at Seagate, not available to end users
CPLD data	Internal Flash	96kb	No	No	Yes	Sanitization procedure only available at Seagate, not available to end users
CPLD recovery data	SPI flash	128Mb	No	No	No	Sanitization procedure only available at Seagate, not available to end users
Firmware, configuration data, debug logs and write cache persistent user data	eMMC	2x 32GB	No	No	Yes	Sanitization procedure only available at Seagate, not available to end users
USB controller firmware	SPI flash	2Mb	No	No	Yes	Sanitization procedure only available at Seagate, not available to end users
MCU firmware	SPI flash	128kB	No	No	Yes	Sanitization procedure only available at Seagate, not available to end users
USB hub firmware	SPI flash	256B	No	No	Yes	Sanitization procedure only available at Seagate, not available to end users
PCIe switch firmware	SPI flash	128Mb	No	No	Yes	Sanitization procedure only available at Seagate, not available to end users
Thunderbolt Controller firmware	SPI flash	8Mb	No	No	Yes	Sanitization procedure only available at Seagate, not available to end users
Storage Controller boot code	SPI flash	128Mb	No	No	Yes	Sanitization procedure only available at Seagate, not available to end users
SoC configuration data	SoC internal memory	256B	Yes	No	Yes	Sanitization procedure only available at Seagate, not available to end users
SAS controller firmware and configuration data	EEPROM	64Mb	No	No	No	Sanitization procedure only available at Seagate, not available to end users
User data	SSD	46 or 92TB	No	Yes	Yes	Can be sanitized using a specific procedure. Please contact your sales representative to obtain it.

Terms and Definitions

Cycle Power:

The process of completely removing power from the device and its components and allowing for adequate discharge. This process includes a complete shutdown of the PC and/or chassis containing the device; a reboot is not sufficient for the completion of this process.

Volatile Memory:

Requires power to maintain the stored information. When power is removed from this memory, its contents are lost. This type of memory typically contains application specific data such as capture waveforms.

Non-Volatile Memory:

Power is not required to maintain the stored information. Device retains its contents when power is removed. This type of memory typically contains information necessary to boot, configure, or calibrate the product or may include device power up states.

User Accessible:

The component is read and/or write addressable such that a user can store arbitrary information to the component from the host using a publicly distributed NI tool, such as a Driver API, the System Configuration API, or MAX.

System Accessible:

The component is read and/or write addressable from the host without the need to physically alter the product.

Clearing:

Per NIST Special Publication 800-88 Revision 1, "clearing" is a logical technique to sanitize data in all User Accessible storage locations for protection against simple non-invasive data recovery techniques using the same interface available to the user; typically applied through the standard read and write commands to the storage device.

Sanitization:

Per NIST Special Publication 800-88 Revision 1, "sanitization" is a process to render access to "Target Data" on the media infeasible for a given level of effort. In this document, clearing is the degree of sanitization described.