



SMART RUGGED

EXTREME MEMORY

SSDs | DRAM | EMBEDDED FLASH



SMART[®]
Modular Technologies

30
YEARS



SMART RUGGED™

By SMART Modular Technologies

Combining Talent and Technology to be Effectively Trusted and Applied.



SSDs

SMART RUGGED is the dedication to developing the industry's most rugged, reliable, and secure SSDs. These "extreme memory" SSDs are loaded with standard features utilizing SLC, MLC and TLC flash, along with a host of security options such as AES encryption and Mil erase sequences.



DRAM

SMART RUGGED DRAM offering combines our global purchasing power with our unique ability to ruggedize products to a specific customer requirement. This includes enhanced temperature testing, component staking and die sorting. The combination of these attributes allows SMART RUGGED to be uniquely positioned for the customer requiring a higher degree of confidence in the DRAM module they are integrating in mission critical applications.



EMBEDDED FLASH

SMART RUGGED's flash memory products are used in a wide variety of applications requiring features not found on commercial flash storage devices. These include extended temperature requirements, higher write endurance, flash components, construction alternatives and security.

STANDARD



SHOCK & VIBRATION



SECURITY



CONFORMAL COAT



HUMIDITY
CONDENSATION



ALTITUDE



INDUSTRIAL
TEMPERATURE

OPTIONAL



SPECIFIC
SHOCK & VIBRATION



UNDERFILL & STAKING



LEADED PROCESS



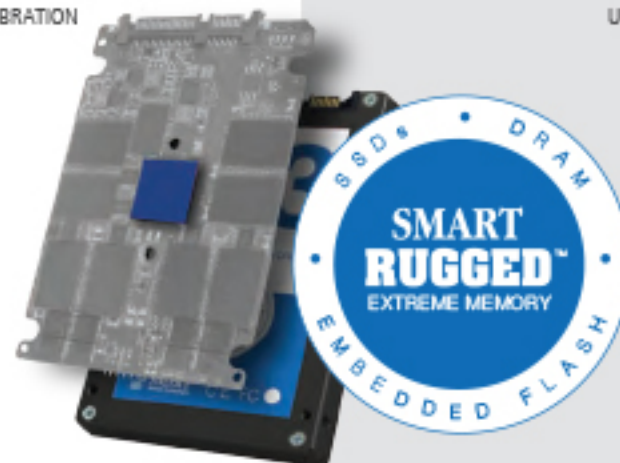
CUSTOM FW



CUSTOM HW



EXTREME TEMPERATURE
SCREENING



SMART RUGGED
designs, develops and deploys
rugged, reliable and secure memory.

SMART RUGGED is dedicated to developing the industry's most rugged, reliable, and secure memory that meets the needs of a wide variety of demanding applications found in the defense, aerospace, industrial automation, transportation, medical, energy, telecommunications and other industries. SMART's memory products are equipped with standard features utilizing DRAM and NAND flash, along with options such as AES encryption, Secure Data Elimination Technology (SDET) SMART's secure erase function. These features make SMART's memory far more robust than commercial offerings. Additionally, SMART offers a variety of options to customize memory for any high reliability application.

SMART Advantages

- Meets over 15 US military security protocols in ruggedized design
- Rugged, environmental resilience, and resistance to shock and vibration
- Hardened for resistance to extreme temperature, shock, vibration and tampering
- Terabytes of data storage for mission critical applications
- Comprehensive security, performance and durability
- Safeguard in-flight data from a sudden power loss (SPL) event

CUSTOM SOLUTIONS



Specializing in developing ultra-rugged, reliable and secure solid-state storage solutions for military, industrial and mission-critical applications.

DETAILS IN SECURITY

Military erase with logical blocks

Initial implementation of various military style erase sequences with multiple overwrite passes.

AES 128 and 256 – bit encryption

AES is an encryption standard with 128 and 256 bits defining the strength of the encryption, with the higher number being more secure. With 256-bit encryption it is almost impossible to break the encryption key. Since the SSD controls the encryption, it can erase the encryption key within milliseconds, effectively preventing any recovery of the user data. This is much more efficient than the multiple overwrites of Military erase sequences that could take minutes, if not hours to complete.

TCG Opal

TCG Opal is a standard that defines authentication on a drive that is stronger and more feature rich than the standard 256-bit passwords provided by ATA; combined with 256-bit encryption, the drive is more secure than ever.

FIPS 140-2

FIPS 140-2 is a federal government standard for protecting government secrets requiring specific levels of AES encryption, authentication (such as TCG Opal) tamper protection and electronic emissions control.



INDUSTRIAL



RELIABILITY



SECURITY



MILITARY





REDEFINING INGENUITY.

Since 1988, SMART continues to be relentless in its pursuit of innovation without limits. For our clients, that means going “beyond engineering” to discover the next generation of advances that will propel your company to greater success.

SMART believes the promise of tomorrow won't be realized with technology alone. It will take a fusion of form, function and creative thinking to visualize the future - and advanced engineering to make it a reality.

At SMART, every day is a testament to this approach and the results are proof of this philosophy.

“We love what we do. It's who we are.”

