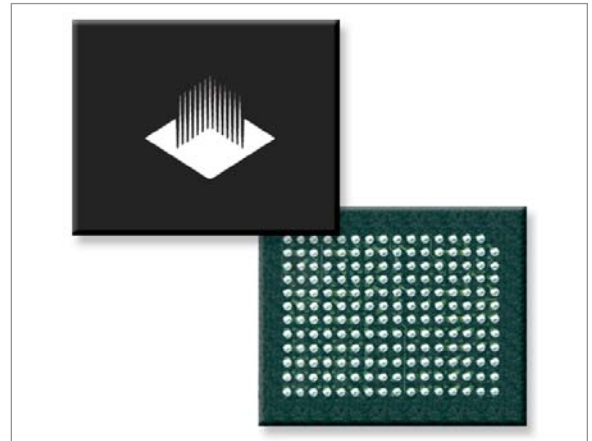




Secure SSD For Military Embedded Systems

This SSD PBGA is designed to provide a secure and reliable data storage solution for today's military design engineer. By putting data security and component reliability at the top of the priority list, this solution delivers important new features at a competitive price.

Utilizing a 1.27 mm pitched ball array, this drive maximizes second level mechanical reliability performance. The product ships with tin/lead solder balls, so no costly re-balling is required to satisfy military assembly requirements. The 32-bit RISC-based controller brings with it more processing bandwidth than commodity flash controllers. This added robust computational power is utilized to provide industry-leading wear leveling and bad block management, while at the same time ensuring consistent data throughput performance without compromise. Adding solid error correction management as well as the superior SLC NAND flash cell structure, a maximized write/erase endurance life is achieved. To round off the device's feature set, a hardware and software triggered security erase feature provides assurance that critical data will be removed when it is required to do so.



Product Features

- Hardware & software triggered security erase that meets:
 - NISPOM DoD 5220.22-M
 - NSA-130-2
 - Air Force AFSSI-5020
 - Army AR380-19
 - Navy NAVSO P-5239-26
- Available in industrial temperature ranges
- Sophisticated wear leveling firmware
- Data corruption protection during power loss events
- Connector-free surface mountable solution designed for harsh environment survival
- Tin/lead interconnects eliminate re-balling requirements for military compliant assembly
- Density: 4 GByte SLC NAND
- 256 Bytes of attribute memory
- External backup erase power input (battery, supercap) to insure erase completes if power is removed
- Data transfer rate: Up to 66 MB/s UDMA mode 4
Up to 25 MB/s PIO mode 6 or MDMA mode 4
- Sustained read: Up to 45 MB/s
- Sustained write: Up to 30 MB/s with interleaving
- Random read: Up to 35 MB/s
- Random write: UP to 6 MB/s
- Built in ATA/PCMCIA 2.1, and compact flash 3.0 interface capability
- True IDE mode
- ECC = 4 random Bytes per 512 Byte sector
- Data reliability: 1 non-recoverable error in 10^{14} bits read
- Page read operation
- Page program time: 200 μ s (Typ)
- Block erase time : 1.5 ms (Typ)
- Program/Erase lockout during transitions
- Voltage supply: Supports 3.3V ($\pm 10\%$)

* This product is under development, is not qualified or characterized and is subject to change without notice.

** Contact factory for correct part number.



WHITE ELECTRONIC DESIGNS

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