



FerriSSD®

Single-Chip Solid-State Drive

Silicon Motion leverages the industry leading technologies and experiences in NAND flash memory controller along with Multi-Chip Package (MCP) solution to introduce the FerriSSD® – the fully integrated SATA/PATA Solid-State Drive (SSD) in a single BGA package.

FerriSSD® is designed optimally for a wide range of embedded applications that behaves like a SATA/PATA hard drive featuring fast access time and enhanced endurance. Without any moving mechanical parts, FerriSSD® provides a shock-protected and quiet-operating environment for mobile storage requirements. The combination of Silicon Motion advanced technologies such as error correction, bad block management, and SSDLifeGuard® monitoring application enable FerriSSD® to deliver the most robust data integrity and protection in the market. The FerriSSD® is available in a variety of densities for different storage needs.

With high reliability, industry-leading performance and programmable firmware, the FerriSSD® is the ultimate non-volatile storage solution for today's fast-moving consumer electronics as well as industrial level applications.

APPLICATIONS

- Handheld / Portable Devices
- Blu-Ray Player / Recorder / Imaging Applications
- Automotive Infotainment System / GPS
- Network / Thin Client / Telecommunication Applications
- IPC / POS / MFP / HMI
- Test Instrument
- Military
- All Other Embedded Storage Applications



FEATURES

Easy-to-Use

- The Plug & Play device only requires format/fdisk prior to use

High-Efficiency Error Correction

- Advanced Hardware BCH Error Correcting Code (ECC) Engine
- StaticDataRefresh and EarlyRetirement technologies ensure the data reliability

Advanced Global Wear Leveling

- Even distribution of program/erase cycles across all NAND flash chips
- Maximizes the SSD lifespan with low Write Amplification Index (WAI)

Robust Data Protection

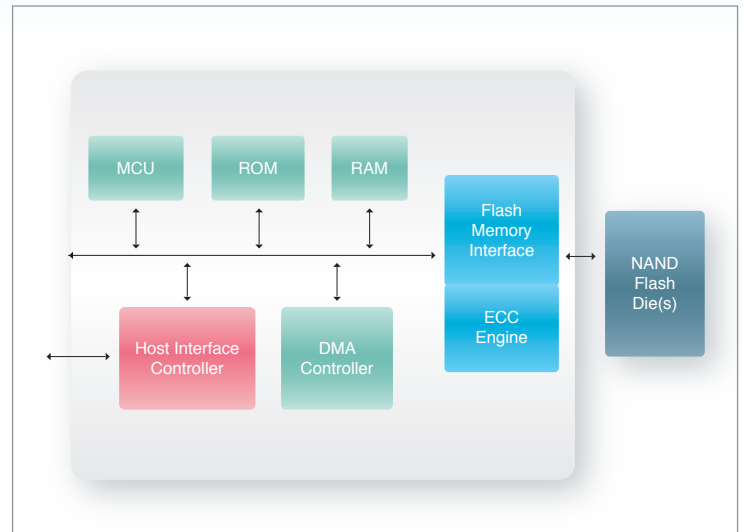
- Advanced system level protection against unstable power
- Software/hardware write protect option
- Multiple user data security zones
- Software/hardware secure erase function
- PowerShield and DataPhoenix technologies prevent data corruption in case of sudden power lost

SSD Status Monitoring

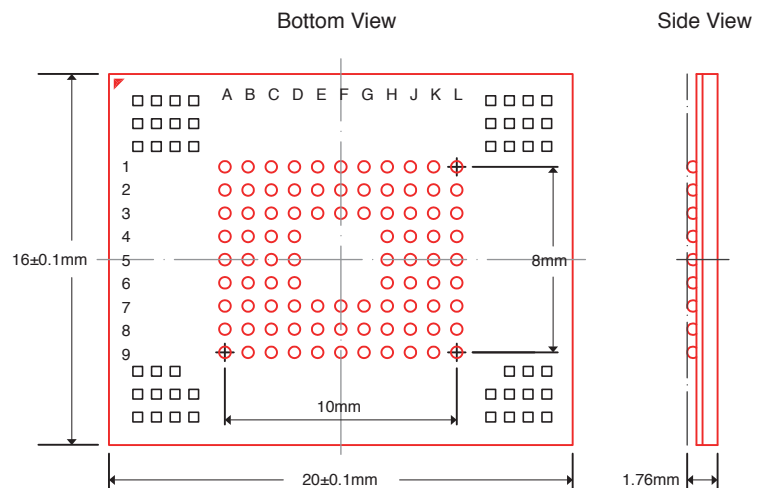
- Supports Self-Monitoring, Analysis, and Reporting Technology (S.M.A.R.T.)
- Provides SSDLifeGuard® application for real time SSD health status monitoring and warning

Available in SLC, SLCmode and MLC

BLOCK DIAGRAM



PACKAGING INFORMATION



SPECIFICATION

Density	SLC & SLCmode up to 32GB / MLC up to 64GB
Data Retention	JESD47G Compliant
Commercial Temperature	0°C to 70°C
Industrial Temperature	-40°C to 85°C
Form Factor	16 x 20 x 1.76 (mm) BGA
Green Product	RoHS Compliant / Halogen free / Lead free

For more information about FerriSSD®, please send e-mail to ferri@siliconmotion.com



Silicon Motion, Inc.

8F-1, No. 36, Taiyuan St., Jhubei City, Hsinchu County 30265, Taiwan

Tel: +886-3-552-6888

www.siliconmotion.com