



# Ferri Family

## BGA 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 Ferri family – the fully integrated SATA/PATA Solid-State Drive (SSD) in a single BGA package.

The Ferri family 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. The combination of Silicon Motion advanced technologies enables the Ferri SSD to deliver the most robust data integrity and protection in the market. The Ferri family is available in a variety of densities for different storage needs.

With high reliability, industry-leading performance and programmable firmware, the Ferri family is the ultimate non-volatile storage solution that is easy to design and manufacture for today's fast-moving consumer electronics as well as industrial level applications.

## APPLICATIONS

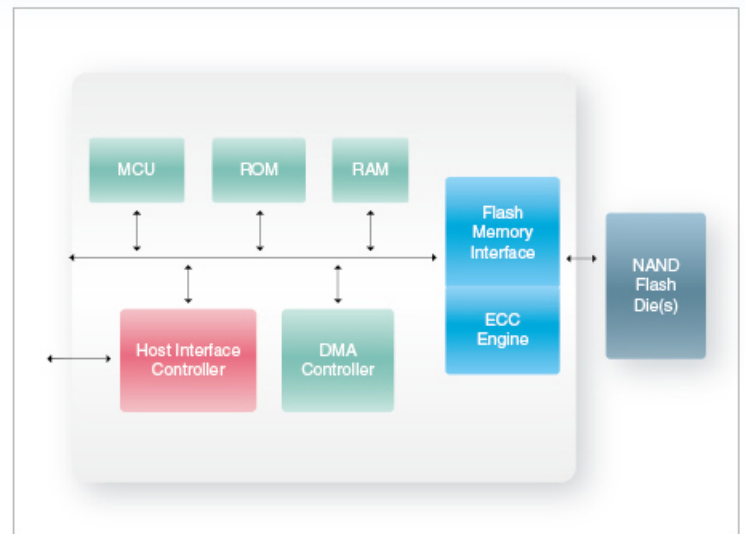
- Handheld / Portable Devices
- Blu-Ray Player / Recorder / Imaging Applications
- Automotive Infotainment System / GPS
- Network / Telecommunication Applications
- IPC / POS / MFP / HMI
- Test Instrument
- Thin Client
- All Other Embedded Storage Applications



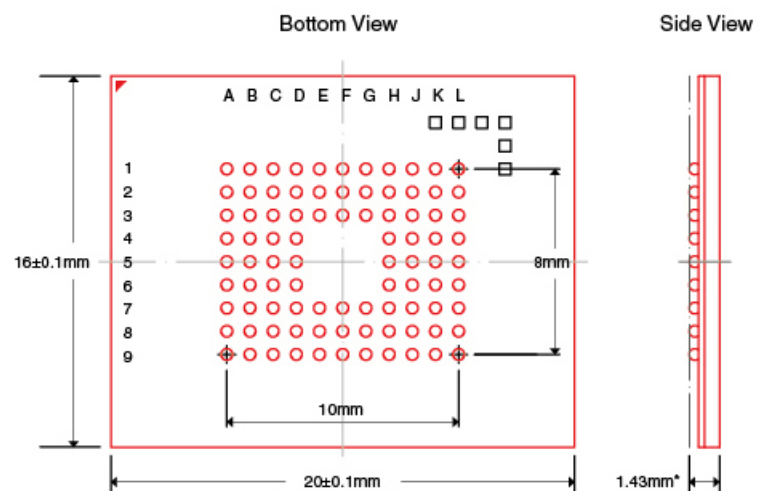
## FEATURES

- **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**
  - Software/hardware write protect option
  - Multiple user data security zones
  - Software/hardware secure erase function
  - PowerShield technology prevents data corruption in case of sudden power-off
  - DataPhoenix technology recovers data after unexpected sudden power-off
- **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 and MLC NAND Flash**

## BLOCK DIAGRAM



## PACKAGING INFORMATION



Note: \*The package height of 32GB SLC and 64GB MLC is 1.76mm.

## SPECIFICATION

Density	SLC up to 32 GB / MLC up to 64 GB
Data Retention	10 years
Commercial Temperature	0°C to 70°C
Industrial Temperature	-40°C to 85°C
Form Factor	20 x 16 (mm) BGA
Green Product	RoHS Compliant / Halogen free / Lead free

For more information about Ferri, please send e-mail to [ferri@siliconmotion.com](mailto:ferri@siliconmotion.com)



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