

Slim SATA

Solid-State Drive

Modular Embedded Storage with Maximum Data Integrity

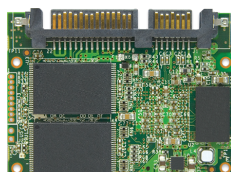
With its industry-standard SATA interface, small footprint and high performance, HGST's Slim SATA SSD is the ideal HDD replacement for industrial and embedded applications.

HGST Slim SATA SSDs have a 50 percent smaller footprint than 2.5-inch and 1.8-inch HDDs, making them the ideal storage alternative for integrated embedded modular solutions. With up to 80 percent lower power consumption, Slim SATA SSDs are a logical drop-in replacement for conventional HDD storage, and provide an excellent option for tiered storage in embedded systems.

HGST's embedded SATA SSDs provide the advanced flash management technology and data integrity of HGST's industry-leading enterprise SSDs in small-form factors designed for space-constrained applications. They provide flexible, low-power, and small-capacity solutions that are ideal for embedded systems.

Features and Benefits

Feature / Function	Benefits
High performance	Multi-channel flash architecture and 3Gbps SATA interface provide fast data throughput with zero latency
Rugged design	Supports embedded applications in harsh environments: high shock, vibration and industrial temperature (-40° to 85° C)
Full data-path protection	Advanced ECC algorithms protect data in flash and cache memory in addition to mapping data in spare area of flash—an industry first. Also includes advanced power-fail protection technology
High endurance	Total drive wear-leveling algorithm increases the useful life of flash up to 10x over the manufacturer's stated useful life.
Simple integration	Includes standard 22-pin SATA connector, so existing SATA cabling can be reused
High reliability	Integrated bad block management and error handling improves data integrity
Advanced controller technology	Provides unmatched performance, reliability and data integrity in embedded applications



Information and Technical Support

www.hgst.com (Main Web site)
www.hgst.com/partners (Partner Web site)

North America

support_usa@hgst.com
Toll free: 1 888 426-5214, Direct: 1 408 717-8087

Asia Pacific

support_ap@hgst.com / 65 6840 9595

EMEA and UK

support_uk@hgst.com / 44 20 7133 0032

Germany

support_uk@hgst.com / 49 6929 993601

Program Support

Partners First Program channelpartners@hgst.com

Specifications

Models	s230 Slim SATA	MACH16 SLC Slim SATA	MACH16 MLC Slim SATA
Interface			
Capacity	8/16/32GB	25/50GB	50/100GB
Type	3Gbps SATA	3Gbps SATA	3Gbps SATA
Form Factor	Slim SATA (MO-297A)	Slim SATA (MO-297A)	Slim SATA (MO-297A)
Performance			
Average Response Time	<12ms	<16ms	<16ms
Transfer Rate (Read)	Up to 178MB/s	Up to 245MB/s	Up to 245MB/s
Transfer Rate (Write)	Up to 85MB/s	Up to 150MB/s	Up to 65MB/s
MTBF	8 million hours	5 million hours	5 million hours
Physical			
Power	<1.2W typical	4W	4W
Power Supply	5V	5V or 3.3V	5V
Environmental			
Operational Temperature	-40° to 85°C	-40° to 85°C	0° to 70°C
Humidity	Non-condensing 5-95%	Non-condensing 5-95%	Non-condensing 5-95%
Shock	350G/20G	350G/20G	350G/20G
Altitude	-1,000 to 80,000ft	-1,000 to 80,000ft	-1,000 to 80,000ft
Compliance	RoHS-6, EU Directive	RoHS-6, EU Directive	RoHS-6, EU Directive

¹ One GB is equal to one billion bytes when referring to hard drive capacity. Accessible capacity will vary depending on the operating environment and formatting.

² Portion of buffer capacity used for drive firmware

³ MB is equal to MillionBytes

⁴ Excludes command overhead

⁵ MTBF target is based on a sample population and is estimated by statistical measurements and acceleration algorithms under median operating conditions. MTBF ratings are not intended to predict an individual drive's reliability. MTBF does not constitute a warranty.

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Please visit the Support section of our website, www.hgst.com/support, for additional information on product specifications. Photographs may show design models.

One GB is equal to one billion bytes and one TB equals 1,000 GB (one trillion bytes) when referring to hard drive capacity. Accessible capacity will vary from the stated capacity due to formatting and partitioning of the hard drive, the computer's operating system, and other factors.

MTBF target is based on a sample population and is estimated by statistical measurements and acceleration algorithms under median operating conditions. MTBF ratings are not intended to predict an individual drive's reliability. MTBF does not constitute a warranty.