PRODUCT BRIEF Intel® High-Performance Value SATA Solid-State Drives NAND Storage Solutions from Intel



Intel[®] X25-V Value SATA Solid-State Drives

High-performance storage for value netbooks, boot drives for desktops and embedded application using 34nm NAND flash memory.





Intel® SSD Toolbox with Intel® SSD Optimizer

Performance Meets Value

Why wait for a traditional hard disk drive (HDD) to spin up? Now introducing 40 GB Intel® X25-V High-Performance Value Solid-State Drive. Intel® Value Solid-State Drives (Intel® SSDs) represent an advancement in storage technology that is specially engineered to deliver robust performance for cost effective solutions. Intel® X25-V SSD was created to tackle the most demanding applications your netbook or notebook PC has to offer, at a significant value for solid-state computing. It also provides a highperformance reliable boot drive for desktop and embedded applications.

Leadership Design with Superior Quality

Decades of memory experience and lithography leadership brings Intel's leading technology to even more consumer segments. Intel X25-V SSD takes pride in superior quality NAND on Industry leading 34nm technology, advanced manufacturing process and sophisticated firmware. Experience the difference of an Intel Value SSD with outstanding performance compared to common HDDs featuring the latest generation native SATA interface with a superior architecture employing five parallel NAND flash channels equipped with multi-level cell NAND flash memory. With powerful Native Command Queuing to enable



up to 32 concurrent operations, Intel Value SATA SSDs deliver higher input/ output per second and throughput performance that drastically outperform traditional hard disk drives.

Intel[®] SSD Toolbox with Intel[®] SSD Optimizer

Download the Intel[®] SSD Toolbox with Intel® SSD Optimizer for a set of applications to easily manage the health and optimize the performance of your Intel SSD. The Intel SSD Toolbox includes a powerful set of management, information and diagnostic tools, and is designed to work best with 34nm Intel SSDs. The Intel SSD Optimizer utilizes the new ATA Data Set Management Command (Trim Attribute) to help maintain your SSDs performance at "fresh-out-of-the-box" levels, and is specifically designed to run with Microsoft Windows 7.* The Intel SSD Optimizer also works with Microsoft Windows Vista* and XP* operating systems as well.

Save Money and Do More

The Intel Value SATA Solid-State Drive is available in 2.5" standard hard drive form factor. And the Intel Value SSDs are tested and validated on the latest Intel-based mobile and desktop platforms for your peace of mind.

Intel® Value SATA Solid-State Drive (34nm NAND Flash Memory Product Line)

Technical Specifications			
Model Name	Intel® X25-V Value SATA Solid-State Drive		
Capacity	40 GB		
NAND Flash Components	5 Parallel Channel Architecture with 34nm MLC ONFI 1.0 NAND		
Bandwidth	Sustained Sequential Read: up to 170 MB/s		
	Sustained Sequential Write: up to 35 MB/s		
Read Latency	65 microseconds		
Write Latency	110 microseconds		
Random I/O Operations	Random 4 KB Reads: up to 25,000 IOPS		
Per Second (IOPS) ¹	Random 4 KB Writes: up to 2,500 IOPS		
Interface	SATA I 1.5 Gb/s and SATA II 3.0 Gb/s		
Form Factor, Height,	Height,2.5" Industry Standard Hard Drive Form Factor		
and Weight	9.5 mm height; 68 grams +/- 2 grams weight		
Life Expectancy	1.2 million hours Mean Time Before Failure (MTBF)		
Power Consumption	Active: 150 mW Typical (PC workload ²)		
	Idle (DIPM): 75 mW Typical (34nm)		
Operating Shock	1,500 G/0.5 ms (34nm)		
Operating Temperature	0° C to +70° C		
Compatibility and Compliance	SATA Revision 2.6 Compliant. Compatible with SATA II 3.0 Gb/s with Native Command Queuing and SATA I 1.5 Gb/s interface rates		
RoHS Compliance	Meets the requirements of EU RoHS Compliance Directives and the Halogen Free Compliance Directives		
Product Health Monitoring	Self-Monitoring, Analysis, and Reporting Technology (S.M.A.R.T.) commands plus additional Intel solid-state monitoring		

Intel® Value SATA Solid-State Drive (40 GB)

	Intel [®] X25-V	Intel [®] X25-M	Intel [®] X25-M
Capacity	40 GB	80 GB	160 GB
Performance	•	••	•••
Low Power	•••	•••	•••
Rugged, Silent, Solid	•••	•••	•••

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• = Good •• = Better ••• = Best

Solid-State Computing Starts with Intel Inside." For more information, visit www.intel.com/go/ssd

¹ Measurement performed on 8 GB span.

² Active power is measured during execution of MobileMark* 2007 Productivity 2007 benchmark. Drive will initiate DIPM request to the host if idle for 25 msec whether or not standby or sleep command is received. If DIPM request is acknowledged drive will enter idle power mode.

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