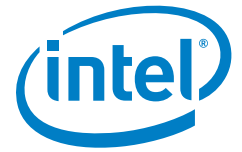


PRODUCT BRIEF

Intel® Solid State Drive E 7000s Series

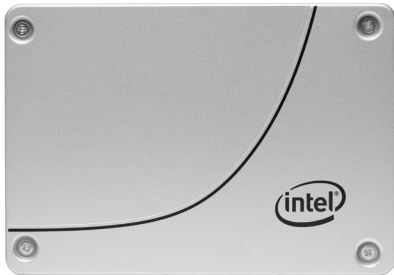
Embedded (E), SATA (s), 3D NAND



Built-in Reliability

Built-in Reliability Your Data Deserves

Trust the Intel® SSD E 7000s to reliably and consistently optimize the value of your data.



Superior Choice

Experience the exceptional performance of an Intel® Solid State Drive E 7000s Series. Available in 150GB and 240GB, the Intel® SSD E 7000s Series offers excellent durability, lasting integrity, security, and performance features across a variety of applications, including digital signage and ATMs.

Intel® 3D NAND SSDs

The E 7000s Series is part of the Intel® 3D NAND SSD family of products. Built on breakthrough 3D NAND and delivered by a proven and trusted supplier, Intel® 3D NAND SSDs transform the economics of storage.

Consistent Performance

Lasting integrity and consistency means more value for you and your customers

Cost of service on an embedded drive is often hundreds of dollars per call. While other drives' performance may degrade over time, the E 7000s Series offers predictable performance right out of the box and throughout the entire life of the drive. Intel closely evaluates drive fill performance to ensure it is at or near the same level when full as when empty, which helps your business remain competitive without frequent drive replacement.

Built-in Hardware-based Security

The E 7000s Series offers built-in security through AES 256-bit self-encryption to help protect your data.

Helping Avoid the Unexpected

Power Loss Imminent (PLI) technology significantly reduces the possibility of losing data during a power loss event.

Data retention is critical for many embedded applications and IoT solutions. Acts of nature, careless mistakes, or even inadvertent hot removal of the SSD pose a potential power loss threat. PLI continuously prepares for unexpected power loss, protecting your data to help ensure it will be reliably read or written, even during moments of power loss, for complete confidence.

Proven End-to-End Data Protection

With a demonstrated uncorrectable bit error rate (UBER) and protection against silent data corruption, the E 7000s Series helps give your data the robust protection it deserves.

Benefit from Intel Expertise Across the Entire Technology Spectrum

The E 7000s Series is designed to work with the entire Intel platform: from CPU, to chipset, to network interface, to firmware and drivers. You'll benefit from engineering across all ingredients, not just the SSDs, empowering you to focus on designing the best possible solution for your customers.

Best for IoT

Your best IoT solutions are built with Intel technology.

Data is vital when it comes to extracting the value of IoT solutions. The E 7000s Series reliably captures, stores, and manages data to accelerate decision-making.

Product Spotlight

- Increased endurance
- Consistent performance
- AES 256-bit self-encryption
- Power loss protection with PLI
- End-to-end data protection
- Extended supply life
- Backed by Intel's five year warranty

TECHNICAL SPECIFICATIONS¹

| | | | | | |
|---------------------------------|--|--|---|------------------------------------|-------------------------------------|
| Model Name | Intel® Solid State Drive E 7000s Series | | | | |
| Capacity (GB) | 2.5": 240GB; M.2: 150GB | | | | |
| NAND Flash Memory | 3D Multi-Level Cell (MLC) | | | | |
| Bandwidth | Form Factor | Sequential Read (up to) ^{2,3,7} | Sequential Write (up to) ^{2,3,7} | Random Read (up to) ^{2,7} | Random Write (up to) ^{2,7} |
| | Capacity Point | | | | |
| Bandwidth | 2.5" 240GB | 320MB/s | 300MB/s | 65K IOPs | 16K IOPs |
| | M.2 150GB | 165MB/s | 145MB/s | 39K IOPs | 28K IOPs |
| Interface | SATA 6Gb/s, compatible with SATA 3Gb/s and 1.5Gb/s | | | | |
| Form Factor, Height and Weight | Form Factor | Height/Weight | | | |
| | 2.5" | 7.0mm thick/62 grams ± 2 grams | | | |
| | M.2 | 9 grams ± 1 gram | | | |
| Life Expectancy ⁴ | 2 million hours Mean Time Between Failures (MTBF), 230 years | | | | |
| Lifetime Endurance ⁵ | Up to 1 Drive Writes Per Day (DWPD) | | | | |
| Power Consumption ⁶ | Active: Up to 2.8W Typical | | Idle: Up to 0.5W Typical | | |
| Operating Temperature | 2.5" | 0°C to 70°C | | | |
| | M.2 | 0°C to 70°C | | | |
| RoHS Compliance | Meets the requirements of European Union (EU) RoHS Compliance Directives | | | | |



For more information, visit www.intel.com/ssd

- Based on the Intel® SSD E 7000s Series Product Specifications: Contact your local Intel sales office or your distributor to obtain the latest specifications.
- Performance varies by capacity and is measured using FIO* with Queue Depth 32, for sequential workload with single worker. For random workload Queue Depth 32, with 4 workers.
- Measurements are performed on full span of logical block address (LBA) range on an SSD that is filled to capacity with data. System setup Intel® Xeon® CPU E5-2699v3 @ 2.30GHz on Intel® S2600WT2 motherboard, Intel® C612 Chipset (Intel® DH82029 PCH), BIOS Version SE5C610.86B.01.01.0014.121820151719 32GB DDR4, CentOS® 7, Kernel 4.3.3, FIO* 2.8, Intel® SSD DC S3520.
- Mean Time Between Failures is estimated based on Telcordia* methodology and demonstrated through Reliability Demonstration Test (RDT).
- Using JESD218 standard. All documented endurance test results are obtained in compliance with JESD218 Standards. See www.jedec.org for detailed definitions of JESD218 Standards.
- Active power measured during execution of Full Sequential Workload with 128KB transfer size, idle power is measured when there is no I/O to SSD.
- 150GB measured with 8GB span.

Intel technologies' features and benefits depend on system configuration and may require enabled hardware, software or service activation. Performance varies depending on system configuration. No computer system can be absolutely secure. Check with your system manufacturer or retailer or learn more at www.intel.com/ssd

Tests document performance of components on a particular test, in specific systems. Differences in hardware, software, or configuration will affect actual performance. Consult other sources of information to evaluate performance as you consider your purchase.

Cost reduction scenarios described are intended as examples of how a given Intel-based product, in the specified circumstances and configurations, may affect future costs and provide cost savings. Circumstances will vary. Intel does not guarantee any costs or cost reduction.

System Configuration for all performance testing: Intel® Core™ i7-3960x on Intel® DX79SI desktop motherboard, BIOS Version 0537 – SIX7910J.86A.0537.2012.0723.1217 8GB DDR3 LSI 9265-8i, FW 3.190.25-1776, Intel® SSD DC S3710 FW G2010110; Intel® SSD DC S3610 FW G2010110 (2.5" SKUs) and G2010120 (1.8" SKUs); Intel® SSD DC S3510 FW G2010130

The products described in this document may contain design defects or errors known as errata which may cause the product to deviate from published specifications. Current characterized errata are available on request. Contact your local Intel sales office or your distributor to obtain the latest specifications and before placing your product order.

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* Other names and brands may be claimed as the property of others.