

PRODUCT BRIEF

Intel® Solid State Drive E 6100p Series
Embedded (E), PCIe® (p), 3D NAND



Twice the Performance. Half the Power Consumption.

Accelerate data with the Intel® SSD E 6100p Series, reliably built, and optimized for embedded and IoT Solutions.



Designed for
embedded systems
and IoT solutions.

The Intel® SSD E 6100p Series combines PCIe® performance with Intel® 3D NAND Technology to deliver twice the performance than the previous generation – the Intel® SSD E 6000p Series. Within an M.2 thin profile, the Intel SSD E 6100p offers a low power solution packed with excellent durability, and security and manageability features to seamlessly integrate performance across a variety of embedded and IOT solutions, including point-of-sale and digital signage.

Design-in a Reliable Storage Solution

Data deserves the highest level of integrity, regardless of where it was captured. Because embedded and IoT solutions have to work in rigorous conditions, we engineered reliability into the SSD E 6100p. The SSD E 6100p is also backed by Intel's five-year limited warranty, including Intel's world-class post sales customer support.

Help Secure and Manage Data

The SSD E 6100p offers built-in security through AES 256-bit self-encryption to help protect data captured by embedded and IOT solutions.

Additionally, with Intel® Remote Secure Erase capability, you can remotely erase the drive to negate any risk of ghost data continuing to live on after the command is executed. This helps ensure highly sensitive information remains safeguarded.

Extended Supply Life

The SSD E 6100p offers a robust supply life, helping to reliably minimize unnecessary development costs.

Performance at Lower Power

The SSD E 6100p provides extended battery life through low power modes. It reduces idle consumption by >90% compared to a typical hard disk drive, reducing power consumption from watts to milliwatts.¹ In addition, the advanced power mode settings reduce active and idle power consumption by up to 50% versus the prior generation device (SSD E 6000p Series).²

Intel Expertise Across the Entire Technology Spectrum

The SSD E 6100p is designed to work with the entire Intel platform. With our better-together capabilities, customers benefit from top-level engineering across all ingredients—not just the SSDs. Better-together empowers you to focus on designing the best possible solution.

Ramp solutions with confidence, reduce complexity, and accelerate time to deployment with a common architecture that streamlines implementation and helps connect things more easily.

FEATURES-AT-A-GLANCE³

Model Name	Intel® Solid State Drive E 6100p Series					
Capacity (GB)	128, 256					
NAND Flash Memory	64-layer, TLC, Intel® 3D NAND Technology					
Bandwidth	Sequential Read (up to) ⁵	Sequential Write (up to) ⁵	Random Read (up to) ⁵	Random Write (up to) ⁵		
	3210 MB/s	1315 MB/s	205K IOPS	265K IOPS		
Interface	PCIe® Gen3 x4, NVMe®					
Form Factor, Height and Weight	Form Factor	Height/Weight				
	M.2 (80mm)	Up to 2.38mm / up to 10 grams				
Life Expectancy ⁶	1.6 million hours Mean Time Between Failure (MTBF)					
Power Consumption	Active: 50mW Typical ⁷	Idle: 25mW Typical ⁴		L1.2 Sleep: 3mW Typical ⁸		
Operating Temperature	0°C to 70°C					
RoHS Compliance	Meets the requirements of European Union (EU) RoHS Compliance Directives					
Software Tools	Intel® Solid State Drive Toolbox with Intel® SSD Optimizer at www.intel.com/go/ssdtoolbox					



For more information, visit intel.com/ssd

1. Power measured during idle on system with PCIe ASPM and NVMe low power states.
2. Power consumption comparison: MobileMark 2014 V1.5. Drives being compared: Intel® SSD 600p vs Intel® SSD 760p. System: Lenovo® Ideapad 720s. Processor: Intel® i7-8550U @4.0 GHz Turbo Frequency, 8T/4C, 8MB cache, 15 W TDP. OS: Windows 10 Pro (x64). Drive is configured as primary drive plugged into M.2 slot through a adaptor card and power measured and collected using Agilent 6705B while running MobileMark 2014 V1.5.
3. Based on the Intel® SSD E 6100p Series Product Specifications. IOMeter Test and System Configurations: Intel® Core™ i7-5960X @ 3.00GHz, ASRock® Deluxe X99 motherboard, NVIDIA® Geforce 2109.18.13.4195, BIOS: AMI® P1.90, Chipset: Intel® INF 10.0.20.0, Memory: 16GB (4X4GB) Corsair® DDR4-2400, Microsoft® Windows 10 Enterprise 64-bit using native NVMe storage driver.
4. Power measured during idle on system with PCIe ASPM and NVMe low power states.
5. Performance varies by capacity and is measured by Intel using IOMeter®.
6. All documented endurance test results are obtained in compliance with JESD218 Standards. See www.jedec.org for detailed definitions of JESD218 Standards.
7. Active power measured during execution of MobileMark® 2014 with PCIe ASPM and NVMe low power states.
8. Power consumption during PCIe L1.2 link state with NVMe PS4 for lowest power consumption.

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.

Benchmark results were obtained prior to implementation of recent software patches and firmware updates intended to address exploits referred to as "Spectre" and "Meltdown". Implementation of these updates may make these results inapplicable to your device or system. For more information go to www.intel.com/benchmarks.

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.

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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