



Automotive/Industrial Solutions Solid-State Drives

Best-in Class SSD Solutions with High-Reliability, Manageability, and Durability.

Offers extended temperature solutions. Ready to Take on a Wide Range of Demanding Applications.

CIRCUIT PROTECTION FOR INFOTAINMENT SYSTEMS

LITE-ON's automotive series SSD withstands over current and voltage spikes with its protective circuit designs. Voltage spikes usually happen when the engine RPM increases. However, semiconductor memory is sensitive with these spikes. For unexpected high voltage, it can cause damage to the data on the device. LITE-ON SSDs built with an integrated design can help prevent these types of damages. With over current protection circuit issues, the power supply will switch off if the consumption exceeds the designed range. This action is able to detect and prevent a burning and smoking effect when a circuit shorts.

THERMAL THROTTLING FOR IMPROVED SYSTEM APPLICATIONS

LITE-ON's thermal throttling technology is a feature that enforces a parameter of the operating temperature in the storage device. By implementing this design the SSD will dynamically make changes on the fly to reduce heat and power usage to protect itself from damage and data error that high temperature might cause.

POWER LOSS PROTECTION

In the case of an unstable power supply or power outage, LITE-ON SSD comes with Power Loss Protection (PLP). This proprietary feature can effectively backup and store all temporary data to prevent data loss and system damage during power surge or outages.

PSEUDO-SLC TECHNOLOGY

The P-SLC solution uses MLC NAND to simulate SLC like behavior, which provides faster performance and greater endurance. With P-SLC technology, the SSD offers Program Erase (PE) cycles in excess of 10x comparing to that of MLC (MLC is typically 3,000 (PE) cycles under normal operation). P-SLC technology also provides better data retention properties, which is ideal for automotive applications where reliability and robust data integrity outweighs far more than just the speed of the SSD. P-SLC solution is a cost effective alternative to a true SLC solution at half or less than the cost per gigabyte.

FEATURES

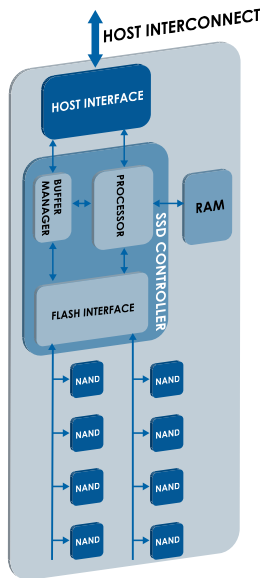
- SHOCK AND VIBRATION RESISTANT
- WIDE-TEMPERATURE RANGE: -40°C TO 85°C
- INTERNAL TEMPERATURE MONITORING SYSTEM
- THERMAL THROTTLING
- SELF-MONITORING AND REPORTING TECHNOLOGY (SMART)
- POWER LOSS PROTECTION (PLP) AVAILABLE
- P-SLC (PSEUDO-SLC) TECHNOLOGY AVAILABLE
- ISO/TS16949 CERTIFIED
- AVAILABLE IN 32 GB TO 1TB CAPACITIES
- VARIETY OF FORM FACTORS AND INTERFACES

APPLICATION WORKLOADS

- NAVIGATION MAP AND ENTERTAINMENT DATA (MUSIC AND VIDEO)
- ADAS SURROUND VIEW RECORDING
- IN-VEHICLE DATA RECORDING
- AUTONOMOUS CAR BLACK BOX RECORDING
- BUFFER FOR AUTONOMOUS 3D HIGH RESOLUTION MAP
- BUFFER FOR CONNECTED CAR APPLICATIONS

LITEON[®]

SOLID-STATE DRIVE COMPONENTS



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Technical Specifications				
Model Name	K8 (K3)	S7	N3	J8
Capacity	32GB - 1T	32 - 96 GB	64 - 128 GB	32 - 128 GB
Performance				
Sequential Read/Write ¹	500/450	60/60	520/210	320/160
4K Random Read/Write ¹	80K/80K IOPS	5K/5K IOPS	75K/50K IOPS	50K/36K IOPS
Compatibility				
Host Interface	SATA	PATA	SATA	SATA
Form Factor	2.5"		M.2 2242	M2. 2260
Reliability				
Power On/Off Cycle	25000 cycles			
MTBF ²	2 million hours			
Environment				
Operating Temperature	-40°C ~ 85°C			
Non-operating Temperature	-40°C ~ 95°C			
Shock	1500G (Max), at 1 msec half-sine			
Vibration (OP)	2.17Grms (Max), 7~800 Hz			
Vibration (OP)	3.08Grms (Max), 7~800 Hz			
Applications	Automotive; Aerospace; Digital Signage; Gaming; Transportation; IOT			

1. Based on internal testing, performance, may vary depending on host device, OS and application

2. MTBF - Mean Time Between Failures based on parts stress analysis



For more information, please visit
liteonssd.com



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LITE-ON Storage is a Strategic Business Group (SBG) of LITE-ON Technology Corporation.

LITE-ON Storage is a global leader in the design, development, and manufacturing of Solid State Drives (SSDs) and Optical Disc Drives (ODDs).

LITE-ON Storage offers customized solutions and superior firmware to PC Client, Industrial Solutions, Automotive, Enterprise, and Cloud Computing environments. All LITE-ON SSDs are designed and developed 100% in-house at their state-of-the-art facilities in Taiwan.

Specifications and data are subject to change without notice.

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