

Industrial SLC NAND

SD CARD

SDI730 SERIES

microSD CARD

SDT730 SERIES

SD 3.0

UHS-I

60K PE Cycles

SLC NAND



PRODUCT FEATURES

- SLC Flash Technology with 60K PE cycles endurance
- Global Wear Leveling, Static & Dynamic Wear Leveling and Early weak block retirement
- Sudden Power-Off Recovery (SPOR) resilient firmware with capability to avoid firmware crash when sudden power loss or unstable voltage occurs during operation mode and device initialization stage.
- Auto Read-Refresh, Read retry, Garbage collection
- SP Toolbox utility program to monitor Overall health status, Power Cycle count, Abnormal power cycle count,
- Bad block status including initial bad blocks, later bad blocks and spare blocks, Erase counts, ECC Uncorrectable counts.
- SP SMART Embedded applications with seamless integration with an edge' s device operating system.
- SP SMART IoT Sphere providing cloud service with alarm and notifications which monitors and analyzes the health and status of SP Flash products inside the connected devices.

PRODUCT SUMMARY

- Capacities : 1GB, 2GB, 4GB, 8GB
- Form Factor : SD Card, microSD Card
- Compliance : SD Specification: SD 3.0 UHS-I
- Speed Class: Class 10, U1
- Performance :

	1GB	2GB	4GB	8GB
Sequential Read (MB/s Max.)			32	
Sequential Write (MB/s Max.)		28		

** Actual performance may vary based on the specific model and capacity*

- Operating Temperature Range :
Normal: -25 °C to 85 °C
Wide: -40 °C to 85 °C
- Storage Temperature Range: -40 °C to 85 °C
- Operating Voltage: 3.3 V ± 10%
- Power Consumption (Maximum, unit: mA)
Read : 90mA
Write: 120mA
Stand-by: 0.25mA
** Actual performance may vary based on the specific model and capacity*
- Data Retention @40 °C : 10 Years @ Life Begin; 1 Year @ Life End
- Endurance in Tera Bytes Written (TBW) : (Unit: TB)

Workload	1GB	2GB	4GB	8GB
TBW	24.6	48	96	192

- Mechanical (SDA Spec) :
Bare Drop: 150cm free fall 6 faces
Torque: 0.15N
Bending: 10N-m
- BCH ECC up to 43 bits/1KB to ensure reliable 60K PE cycles with SLC Flash
- Mean Time Between Failure: > =2,000,000 hours
- Serious quality control and assurance
100% NAND Flash screening
Duration: 10,000 cycles
Compliant with SDA Spec. ISO 7816-1 to pass UV light exposure and X-ray exposure
Reliability criteria compliant with international standards IEC-60068 (Environmental test) and IEC-61000-4-2 (ESD, Contact +/-4KV, Air discharge +/-8KV)