

SD Memory Card

High speed random access SD Card S Series
Fixed-Main-Parts SD Card K Series



Developed for implementation in industrial devices. The SD cards have a graspable product lifetime

Product features

● High speed random access

Writing efficiency for small size data is increased, and random access becomes greatly faster.

● Enhanced Electrical Shut Down Durability

Even if control information were to be damaged from a power shut down, the backed up control information will self-repair the logical and physical conversion table by re-building the memory control information so the device will boot up.

● Speed Stability

The S Series, the memory management method is specialized for Random Access, which guarantees consistent performance even after extensive use.

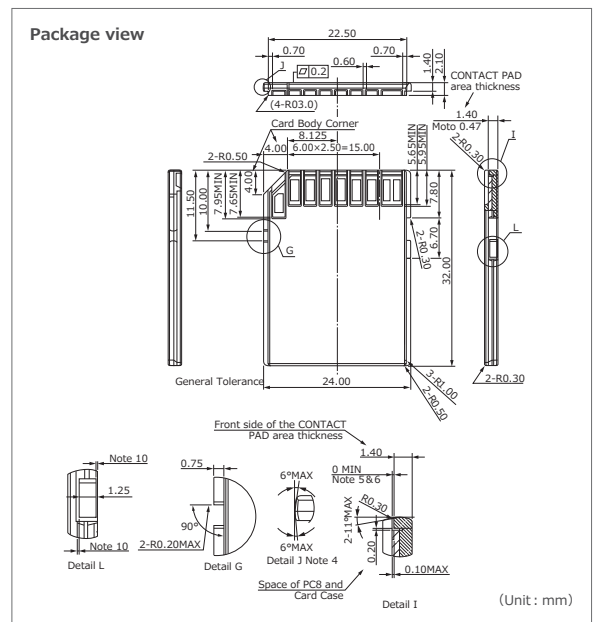
● Lifespan Diagnosis Support

We have developed a lifespan diagnostic tool dedicated to SD memory cards which allows our customers to check the state of the SD memory card in their environment setting.

*Only available for the Windows operating system.
Our exclusive reader/writer is required for lifespan diagnosis.



Exclusive Card Reader for Lifespan Diagnosis
Product Model Code: HPC-SDR1AD



S series

	Static wear leveling	Refresh Function	Read retry Function	Power loss guard Function	Off line scan	Fixed specifications	RoHS	FDE (Encryption)	Wide temperature	Environmental Documents	Live Monitor
SLC	●	●	●	-	-	●	●	-	-	●	●
Q-MLC	●	●	●	-	-	●	●	-	-	●	●
MLC	●	●	●	-	-	●	●	-	-	●	●

K series

	Static wear leveling	Refresh Function	Read retry Function	Power loss guard Function	Off line scan	Fixed specifications	RoHS	FDE (Encryption)	Wide temperature	Environmental Documents	Live Monitor
SLC	●	●	●	-	-	△	●	-	-	-	-
MLC	●	●	●	-	-	△	●	-	-	-	-



Product Specifications

		S series			K series	
Flash Type		SLC	Q-MLC	MLC	SLC	MLC
Capacity		512MB~32GB	4GB~128GB	8GB~256GB	128MB, 512MB~16GB	2GB~128GB
interface		SD 3.0				
Power SUPPLY Voltage		2.7V~3.6V				
Operating temperature	Standard	-	-25℃~85℃		-25℃~85℃	
	Wide temperature	-40℃~85℃	-	-	-40℃~85℃	-
Storage temperature		-40℃~85℃				-40℃~85℃
Operating Humidity		~95% (non condensing)				
Storage Humidity		~95% (non condensing)				
Dimensions (mm)		24 × 32 × 2.1				
Performance	Sequential read (MB/s)	[UHS-1] 90	[UHS-1] 88	[UHS-1] 78	[UHS-1] 88	[UHS-1] 90
	Sequential write (MB/s)	[UHS-1] 70	[UHS-1] 80	[UHS-1] 70	[UHS-1] 79	[UHS-1] 63
	Random read (IOPS)	-	-	-	-	-
	Random write (IOPS)	-	-	-	-	-
Current consumption (mA)	Read (Max)	150	170	210	110	120
	Write (Max)	150	140	170	130	180
Warranty period		1year				

Product lineup

S series	128MB	512MB	1GB	2GB	4GB	8GB	16GB	32GB	64GB	128GB	256GB	
SLC	-40~85℃	-	NSD6-512MS (P**SEI)	NSD6-001GS (P**SEI)	NSD6-002GS (P**SEI)	NSDB-004GS (N**SEI)	NSDB-008GS (N**SEI)	NSDB-016GS (N**SEI)	NSDB-032GS (N**SEI)	-	-	
Q-MLC	-25~85℃	-	-	-	-	NSDB-004GS (N**Q*S)	NSDB-008GS (N**Q*S)	NSDB-016GS (N**Q*S)	NSDB-032GS (N**Q*S)	NSDB-064GS (N**Q*S)	NSDB-128GS (N**Q*S)	
MLC	-25~85℃	-	-	-	-	-	NSDB-008GS (N**M*S)	NSDB-016GS (N**M*S)	NSDB-032GS (N**M*S)	NSDB-064GS (N**M*S)	NSDB-128GS (N**M*S)	NSDB-256GS (N**M*S)

K series	128MB	512MB	1GB	2GB	4GB	8GB	16GB	32GB	64GB	128GB	256GB
SLC	-25~85℃	NSD2-128MK (L**SEI)	NSD6-512MK (L**SEI)	NSD6-001GK (L**SEI)	NSD6-002GK (L**SEI)	NSDB-004GK (L**SEI)	NSDB-008GK (L**SEI)	NSDB-016GK (L**SEI)	-	-	-
	-40~85℃	-	NSD6-512MK (L**SEZ)	NSD6-001GK (L**SEZ)	NSD6-002GK (L**SEZ)	NSDB-004GK (L**SEZ)	NSDB-008GK (L**SEZ)	NSDB-016GK (L**SEZ)	-	-	-
MLC	-25~85℃	-	-	-	NSD6-002GK (L**MHI)	NSDB-004GK (L**MHI)	NSDB-008GK (L**MHI)	NSDB-016GK (L**MHI)	NSDB-032GK (L**MHI)	NSDB-064GK (L**MHI)	NSDB-128GK (L**MHI)

*management number

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