

ATP aMLC (*advanced*MLC) SDHC/microSDHC

Targeted Product Portfolio, Engineered Specifically for Your Mission Critical Applications



ATP aMLC SDHC/microSDHC cards are designed for most up-to-date industrial applications, such as surveillance, medical imaging, transportation, drive recorder and automation where customers require higher reliability, endurance and performance but also seek for cost-effective solution to meet their budget.

ATP aMLC SD/microSD cards are considered as escalation of MLC memory cards. With advanced firmware algorithm, ATP aMLC technology manipulates MLC flash 2 bits each cell into 1 bit to improve aMLC product spec in all respects. ATP aMLC memory cards with overall upgrades, 13X endurance, 1.5X write performance, 5X data retention improvement compared with traditional MLC cards. aMLC is suitable for intensive write applications due to increasing endurance (40K P/E cycles) and enhanced write speed. Nonetheless, it's also a reliable solution for read applications owing to the faster read performance and Read Disturb Protector – AutoRefresh technology to assure the data integrity at the same time.

Moreover, with SIP (System-In-Package) manufacturing process, the operating/storage temperature of ATP aMLC SD/microSD cards is -25 to 85 degrees Celsius. ATP aMLC memory cards passed a series of power cycling test and thorough evaluation process. Each aMLC card will conduct 100% production level burn-in test before delivering to customers.

Key Features

- aMLC (*advanced*MLC technology /1-bit per Cell) NAND Flash
- Advanced Wear Leveling algorithm
- Bad Block Management
- Read Disturb Protector - AutoRefresh to ensure data integrity during read operation
- Enhanced F/W algorithm to minimize the risk of a sudden power-off
- Water proof, Dust proof and ESD resistant
- Highly reliable and pass environmental test (Bend/Torque/Salt Spray/Solar radiation)
- Life Monitor (Note : The compatibility and support of Life Monitor may vary on different platform/operation system)

Applications

- Industrial PCs
- Medical devices
- Automotive IVI systems
- Drive recorders
- Surveillance systems
- Navigations
- Test and Measurement
- Mobile/Handheld computers
- Automation





Specifications

Product Name	SDHC	microSDHC
Flash Type	aMLC	
Density	4GB to 8GB	4GB to 16GB
Performance	Sequential Read up to 74.5MB/s	Sequential Read up to 74.5MB/s
	Sequential Write up to 27.3MB/s	Sequential Write up to 36.2MB/s
Interface	SD3.0 UHS Mode	
Operation Temperature	-25°C to +85°C	-25°C to +85°C
Reliability	Advanced Static/Dynamic Wear-Leveling	
	TBW**(max.): 128TB	TBW**(max.):256TB
	MTBF@25C:>3,000,000 hours	
	Number of Insertions: 10,000 minimum	
Dimensions: LxWxH (mm)	32.0 x 24.0 x 2.1	15.0 x 11.0 x 1.0

** All TBW data listed are under highest sequential write value in each product line. The TBW data are subject to change by density, configuration and customers' applications.

Ordering Information

Density	SDHC	microSDHC
4GB	AF4GSD3A-WAAXX	AF4GUD3A-WAAXX
8GB	AF8GSD3A-WAAXX	AF8GUD3A-WAAXX
16GB	-	AF16GUD3A-WAAXX

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