



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China





# 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-I Mode	
Operation Temperature	-25°C to +85°C	-25°C to +85°C
Reliability	Advanced Static/Dynamic Wear-Leveling	
	TBW**(max.): 64TB	TBW**(max.):128TB
	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 random 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-OEM	AF4GUD3A-OEM
8GB	AF8GSD3A-OEM	AF8GUD3A-OEM
16GB	-	AF16GUD3A-OEM

### ATP TAIWAN(HQ)

TEL: +886-2-2659-6368  
FAX: +886-2-2659-4982  
sales-apac@atpinc.com

### ATP USA

TEL: +1-408-732-5000  
FAX: +1-408-732-5055  
sales@atpinc.com

### ATP EUROPE

TEL: +49-89-374-9999-0  
FAX: +49-89-374-9999-29  
sales-europe@atpinc.com

### ATP JAPAN

TEL: +81-3-6206-8097  
FAX: +81-3-6206-8098  
sales-japan@atpinc.com

### ATP CHINA

TEL: +86-21-5080-2220  
FAX: +86-21-9687-0000-026  
sales@cn.atpinc.com

