



ATP Industrial Grade microSD/microSDHC

Targeted Product Portfolio, Engineered Specifically for Your Mission Critical Applications



ATP Industrial microSD/microSDHC cards are designed for demanding applications, such as navigation system, digital camera, driving recorder, handheld devices, multi-media player and systems.

ATP microSD cards with read disturb protector- AutoRefresh technology and Autoscan features are best suited for read intensive applications. For instance ATP microSD cards have been tested and qualified by major handheld companies such as Motorola and Honeywell. On the other hand, ATP microSD cards with SLC mode and Power cycling solution are ideal for write intensive applications. Such applications include data logging and storage of hospital medical devices and surveillance systems.

Moreover, with ATP's SIP (System-In-Packaging) manufacturing process, the operating/ storage temperature of ATP Industrial Grade microSD cards is -40 to 85 degrees Celsius. All ATP Industrial Grade products go through multi data pattern burn in test. This is to screen for early fallout occasionally seen in any semiconductor technology.

Key Features

- SLC (Single-Level-Cell) NAND flash and MLC (Multi-Level-Cell / 2-bit per Cell) NAND Flash
- Advanced Wear Leveling algorithm
- Bad Block Management
- Read Disturb Protector - AutoRefresh to ensure data integrity during read operation
- IP57 waterproof/Dustproof test (IEC 60529)
- Highly reliable and pass environmental test (Bend/Torque/Salt Spray/Solar radiation)
- ESD resistance
- Life Monitor (Note : The compatibility and support of Life Monitor may vary on different platform/operation system)

Applications

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



Specifications

Product Name	microSD/microSDHC	
Flash Type	SLC	MLC
Density	512MB to 8GB	8GB to 32GB
Performance	Sequential Read up to 20MB/s	Sequential Read up to 68.3MB/s
	Sequential Write up to 18MB/s	Sequential Write up to 24.4MB/s
Interface	SD2.0	SD3.0 UHS Mode
Operation Temperature	-40°C to +85°C	-25°C to +85°C
Reliability	Advanced Static/Dynamic Wear-Leveling	
	TBW**(max.): 96TB	TBW**(max.):19.2TB
	MTBF@25°C:>5,000,000 hours	MTBF@25°C:>2,000,000 hours
	Number of Insertions: 10,000 minimum	
Dimensions: LxWxH (mm)	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	microSD / microSDHC (SLC)	microSDHC (MLC)
512MB	AF512UDI-OEM	-
1GB	AF1GUDI-OEM	-
2GB	AF2GUDI-OEM	-
4GB	AF4GUDI-OEM	-
8GB	AF8GUDI-OEM	AF8GUD3-OEM
16GB	-	AF16GUD3-OEM
32GB	-	AF32GUD3-OEM

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