MIFARE® DESFire Tags
MIFARE DESFire Card/Key fob 8K
DESFire CARD 4K
DESFire CARD 2K

Mifare® DESFire Tags are card or keyfob sized transponders with multi-application capabilities and high security features enabled by Mifare® technology.

Specifications

	Mifare DESFire Card/Key fob 8K	DESFire Card 4K	DESFire Card 2K
Memory			
EEPROM Size (byte)	8192	4096	2048
Write Endurance [cycles]	500 000	500 000	500 000
Data Retention [yrs]	10	10	10
Organization	flexible file system	flexible file system	flexible file system
RF Interface			
Acc. to ISO 14443 A	yes - up to layer 4	yes - up to layer 4	yes - up to layer 4
Frequency [MHz]	13,56	13,56	13,56
Baudrate [kbit/s]	106 … 848	106 … 848	106 … 848
Anticollision	bit-wise	bit-wise	bit-wise
Operating Distance [mm]	up to 100	up to 100	up to 100
Security			
Unique Serial Number [byte]	7, cascaded	7, cascaded	7, cascaded
Random Number Generator	yes	yes	yes
Access Keys	14 keys per application	14 keys per application	14 keys per application
Access Conditions	per file	per file	per file
DES & 3DES Security	MACing / Encipherment	MACing / Encipherment	MACing / Encipherment
AES Security	MACing / Encipherment	MACing / Encipherment	MACing / Encipherment
Anti-tear supported by chip	yes	yes	yes
Special Features			
Multi-application	28 applications, MAD3	28 applications, MAD3	28 applications, MAD3
Purse Functionality	value file	value file	value file
Transaction Logging Capability	record file	record file	record file
Secure Transport Transaction example	512 byte read, 128 byte write	512 byte read, 128 byte write	512 byte read, 128 byte write
Related Transaction Time [ms]	89	89	89