

MIFARE Classic Card

The MIFARE Classic Card is an ISO 14443-compliant contactless smart card. Introduced in 1994, it helped start the contactless card era and paved the way for a wide range of applications. MIFARE Classic EV1 is the current version of the product family and suits transportation, hospitality, event management and corporate access.

Specification

Item	MIFARE Classic Card
Material	PVC, RPVC, PET, PETG, ABS, WOOD
Chip	MIFARE S50 / MIFARE S70
Frequency	13.56MHZ
Color	Customizable
Size	CR80 (85.5*54mm) or customize
Reading distance	2-10cm depending on readers
Write Endurance	200,000 times (Classic EV1; original chips rated 100,000)
Working Temperature	-40°C to 65°C
Data Retention Time	10 years
Printing Options	CMYK full color, Pantone, digital printing, Silk-screen printing, UV Printing, etc.
Crafts Available	number printing, Laser Engraving, DOD, Bar code, QR code, magnetic stripe, encoding, etc.

1K or 4K: the two memory sizes

	MIFARE Classic 1K (S50)	MIFARE Classic 4K (S70)
Current part	MF1S50 (Classic EV1 1K)	MF1S70 (Classic EV1 4K)
EEPROM	1024 bytes	4096 bytes
Layout	16 sectors × 4 blocks × 16 bytes	32 sectors × 4 blocks + 8 sectors × 16 blocks
User data (approx.)	752 bytes	3440 bytes
Keys	One 16-byte trailer per sector: 6-byte Key A, 3 access-condition bytes, 1 general-purpose byte and 6-byte Key B	Same, 40 sectors
UID	4-byte (NUID) or 7-byte	4-byte (NUID) or 7-byte
Typical use	Access control, hotel keys, membership, single-purpose ticketing	Multi-application campus and city cards, transport with several products, systems that log data on the card

The memory map: sectors, blocks and the sector trailer

MIFARE Classic 4K (S70) region	Layout	Contents
Sectors 0–31	4 blocks × 16 bytes = 64 bytes each	3 data blocks + 1 sector trailer (sector 0 block 0 is the manufacturer block)
Sectors 32–39	16 blocks × 16 bytes = 256 bytes each	15 data blocks + 1 sector trailer
Total	40 sectors, 4096 bytes	≈ 3440 bytes usable for data

Ordering

- Free standard samples; customised samples carry a setup fee.
- Standard lead time is 2–3 weeks.
- Quote-only pricing—send your quantity for a quotation.
- Printing, numbering and encoding options are available for the selected product and material.

Contact

- Email: info@proudtek.com
- WhatsApp: +86 186 6582 0632
- Web: <https://proudtek.com/product/mifare-classic-card/>