HIRSCH

MIFARE® DESFire® Credentials
Secure, Flexible HF Technology

MIFARE® DESFire® credentials from Hirsch deliver high-security and flexible support for multiple applications on a single device.

Powered by NXP's MIFARE DESFire family of highly secure microcontroller-based ICs, Hirsch offers multiple credential options to meet the needs of any use case. MIFARE DESFire technology is driving smart-cities around the world because of its balance of speed, performance, and cost efficiency.

NXP MIFARE DESFire ICs are based on global open standards and high-security AES cryptography to enable secure and efficient services across education, public transportation, access control, customer loyalty, and more.

Hirsch MIFARE DESFire credentials are available in multiple product styles and chip configurations for broad applicability and affordability. Choose from standard credit card formats, to keyfobs, wristbands, or disk tags. Depending on product type, Hirsch can also package MIFARE DESFire with legacy technology like 125 kHz prox or magnetic stripes.

In most cases, Hirsch offers MIFARE DESFire credentials without programming. Please consult with your Hirsch sales representative to discuss requirements and pricing for programming requests.

Secure
- Common Criteria certification: EAL4+ or higher
- AES 128-bit keys
- 7-byte UID

Flexible
- Multiple chip configurations and form factors
- Flexible file system for multi-application support

Compliance
- Global open standards for both air interface and cryptographic methods
- ISO/IEC 14443 Type A
- Mutual authentication according to ISO/IEC 7816-4

Multiple form factors
- ISO composite cards
- Keyfobs
- Wristbands
- Adhesive disk tags

Specifications

	ISO Card	Keyfob	Disk Tag	Wristband
Material	Composite (PVC/PET)	Polyamide 6	PVC/Adhesive backing	Silicone
Dimensions	3.37 x 2.125 x 0.033 in (85.6 x 54 x 0.84 mm)	1.77 x 1.18 x 0.09 in (45 x 30 x 2.2 mm)	Diameter: 1.2 in (30 mm)	9.5 x 0.75 in (242 x 19 mm)
Weight	0.212 oz (6 g)	0.12 oz (3.5 g)	0.045 oz (1.3 g)	0.5 oz (15 g)
Read Range	Up to 2.5 in (64 mm)	Up to 2 in (51 mm)	Up to 2.4 in (61 mm)	Up to 1.25 in (32 mm)
Slot Punch	Varies by Item	Keyring Hole	n/a	n/a
Operating Temperature	-49˚ to 158˚ F (-45˚ to 70˚ C)			
RF Interface	ISO/IEC 14443 Type A			
Memory	256B, 2 kB, 4 kB, 8 kB options, 7-byte UID			
Endurance (Write Cycles)	500,000 cycles			
Data Retention	10 years			

ISO Cards

Chip Type	Memory	Item	Description
DESFire EV1	4kB	3240	MIFARE DESFire EV1 4K ISO Composite Card, Unbranded
DESFire EV1	4kB	3242	MIFARE DESFire EV1 4KB ISO Composite Card + Magnetic Stripe, Unbranded
DESFire EV1	8kB	3252[1]	MIFARE DESFire EV1 8KB ISO Composite Card, Unbranded
DESFire EV1	8kB	3260[1]	MIFARE DESFire EV1 8KB + Prox ISO Composite Card, Unbranded
DESFire EV2	2kB	3674	MIFARE DESFire EV2 2KB ISO Composite Card + Magnetic Stripe, Unbranded
DESFire EV2	2kB	3772[2]	MIFARE DESFire EV2 2KB + Prox ISO Composite Card, Unbranded
DESFire EV2	4kB	3644	MIFARE DESFire EV2 4KB ISO Composite Card + Magnetic Stripe, Unbranded
DESFire EV3	2kB	3872	MIFARE DESFire EV3 2KB ISO Composite Card, Unbranded
DESFire EV3	2kB	3972	MIFARE DESFire EV3 2KB + Prox ISO Composite Card, Unbranded
DESFire EV3	4kB	3842	MIFARE DESFire EV3 4KB ISO Composite Card, Unbranded
DESFire EV3	4kB	3942	MIFARE DESFire EV3 4KB + Prox ISO Composite Card, Unbranded
DESFire EV3	4kB	3844	MIFARE DESFire EV3 4KB ISO Composite Card + Magnetic Stripe, Unbranded
DESFire EV3	8kB	3852	MIFARE DESFire EV3 8KB Composite Card, Unbranded
DESFire EV3	8kB	3952	MIFARE DESFire EV3 8KB + Prox ISO Composite Card, Unbranded

Keyfobs

1 – Slot-punch marks in vertical and horizontal orientations.
2 – Slot-punch marks in vertical orientation only.

Chip Type	Memory	Item	Description
DESFire EV2	4kB	3646-BLUE	MIFARE DESFire EV2 4K Overmolded Pear Keyfob (Blue)
DESFire EV3	4kB	3846-BLUE	MIFARE DESFire EV3 4K Overmolded Pear Keyfob (Blue)

Disk Tags

Chip Type	Memory	Item	Description
DESFire EV1	256B	4290	PVC Disc Tag, Metal Mount, MIFARE DESFire 256B EV1, 30mm, White
DESFire EV2	8kB	4690	PVC Disc Tag, MIFARE DESFire 8kB EV2, 30mm, White

Wristbands

Chip Type	Memory	Item	Description
DESFire EV1	2kB	4095-DFEV12K-XX	4095 Adjustable Wristband, MIFARE DESFire EV1 2K, *Color*
DESFire EV3	2kB	4095-DFEV32K-XX	4095 Adjustable Wristband, MIFARE DESFire EV3 2K, *Color*

Note: Most Hirsch MIFARE DESFire credentials can be printed with custom graphics for an additional charge. Camera-ready artwork required. Set-up fees and minimum order quantities may apply. Please consult with your Hirsch sales representative.