

RFID Silicone Wristband With MIFARE DESFire EV1 2K Chip-spec sheet

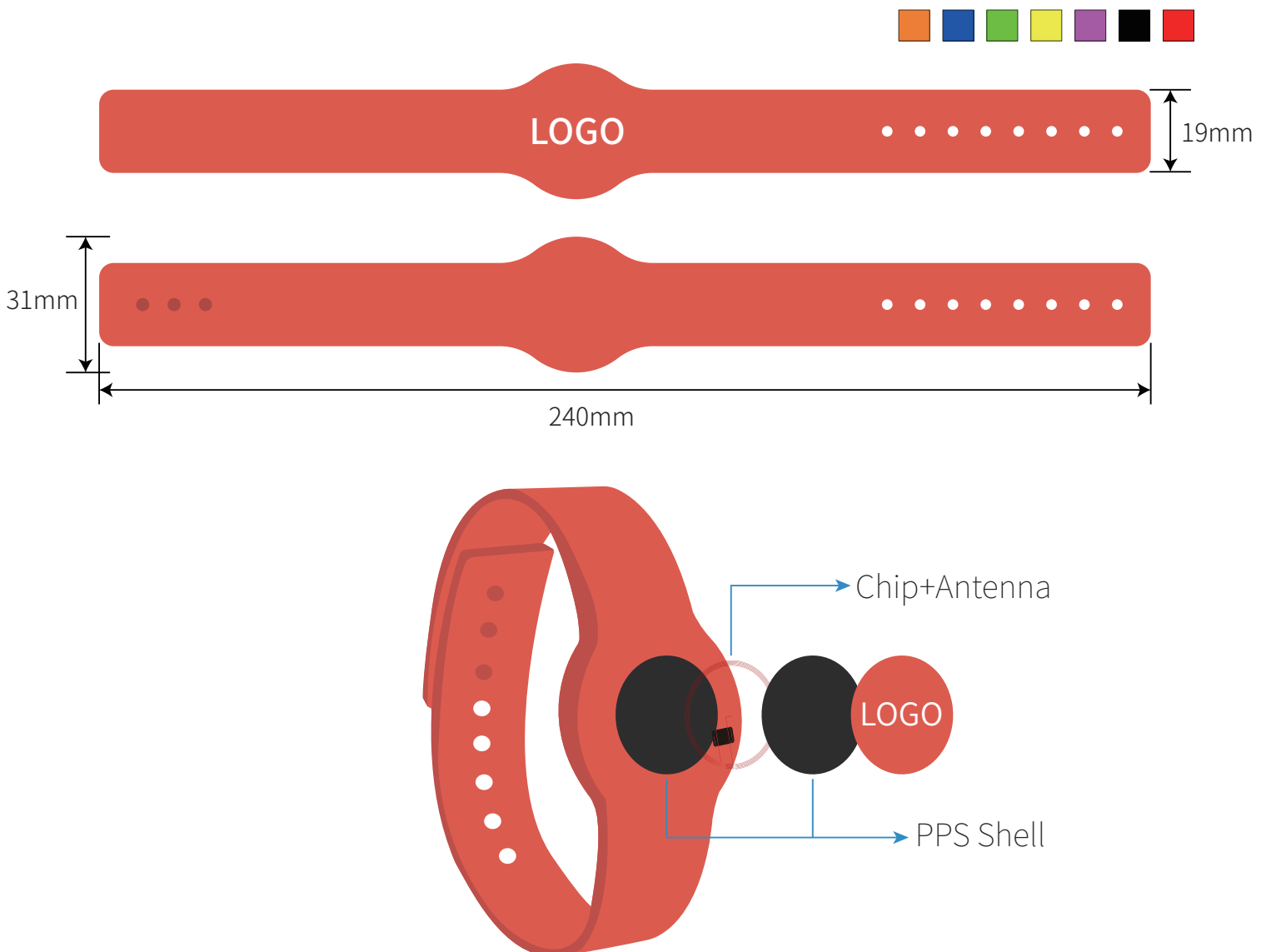


MIFARE DESFire series of RF interfaces and encryption methods are based on global development standards. This micro-control-based ic has a high degree of security. The name DESFire represents its main features-“DES” means the use of DES, 2K3DES, 3K3DES and AES hardware encryption engines for testable data transmission.

Parameters

Item	High Security Silicone RFID Wristband With MIFARE DESFire EV1 2K Chip	Color	Blue, red, white, black, purple, green purple, orange (Customizable)	Working Temperature	-25°C to 65°C
Material	Silicone	Size	240*31*19mm(8 holes)/(11 holes)	Data Retention Time	10 years
Write Endurance	100000 times	Chip	MIFARE DESFire EV1 2K/4K/8K	Eeprom	2K Byte/4K Byte/8K Byte
Frequency	13.56MHz	Reading Distance	0-10cm	Crafts Available	Logo or number printing, Bar code, QR code, etc.
Protocol	ISO14443A	Printing Options	Silk-screen printing, Laser Engraving, CMYK full color, Pantone, etc.		

Dimensional Diagram



Available chips

125KHz Chip

Common Chip Types	Protocol	Capacity	Anti-collision	Function
TK4100	ISO 11784/11785	64 bits	No	Read Only
EM4200	ISO 11784/11785	128 bits	No	Read Only
EM4305	ISO 11784/11785	512 bits	No	Read/Write
T5577	ISO 11784/11785	330 bits	No	Read/Write

HF 13.56 MHz Chips

Chip Name	Protocol	Capacity	Frequency
Ntag213	ISO14443A	180 byte	13.56 MHz
Ntag215	ISO14443A	540 byte	13.56 MHz
Ntag216	ISO14443A	924 byte	13.56 MHz
MIFARE Classic 1K	ISO14443A	1 KB	13.56 MHz
MIFARE Classic 4K	ISO14443A	4 KB	13.56 MHz
MIFARE Ultralight EV1	ISO14443A	80 byte	13.56 MHz
MIFARE Ultralight C	ISO14443A	192 byte	13.56 MHz
ICODE SLIX	ISO15693	1024 bits	13.56 MHz

860~960 MHz UHF Chips

Chip Name	Protocol	Capacity	Frequency
Alien H3	ISO18000-6C	512 bits	860~960 MHz

Feature

- ▶ Common Criteria Certification: EAL4+ (Hardware and Software)
- ▶ Unique 7 bytes serial number for each device
- ▶ Optional “RANDOM” ID for enhance security and privacy
- ▶ 1 card master key and up to 14 keys per application
- ▶ Hardware DES using 56/112/168 bit keys featuring key version, data authenticity by 8 byte CMAC
- ▶ Hardware AES using 128-bit keys featuring key version, data authenticity by 8 byte CMAC
- ▶ Authentication on application level

APPLICATIONS

- Advanced public transportation schema
- Highly secure access management
- Closed-loop e-payment scheme
- Event ticketing
- eGovernment applications