



Sealys Secure Storage
MPCOS EMV R5

MPCOS EMV R5, Doing more for multi application programs than other smart card

Gemalto offers the the fifth generation of the highly successful MPCOS microprocessor card, which has been in the market since 1994.

This new card range was built on the need from Governments, Public organizations and Banks to switch to secure storage and EMV technology with minimal impact on their existing infrastructure and value-added applications.

At the same time, the best security measures were implemented to safeguard against all known attacks against smart cards.

The Gemalto MPCOS multi-application card continues to enjoy industry-wide support. It provides a fast and flexible smart card application environment that is even more cost effective.

MPCOS Success story

It has been adopted as the national standard for electronic purse in some countries, while being the de facto standard in others for e-ID, e-healthcare and banking cards.

Our customers, more than 350 worldwide, and partners choose MPCOS because it is easy to use, comes with good technical support, tools and documentation, and it is a generally well-known solution for system developers.

More than 110 million cards have already been deployed worldwide.

Many possible applications

The MPCOS card permits to combine the applications below:

- E-ID and e-healthcare: identification, healthcare, electronic benefit transfer, electronic health record
- Financial services: debit/credit, pre-authorized debit, electronic purse, e-loyalty, on-line banking authentication
- Electronic business security: network and computer access control, digital certificate storage, secure e-commerce
- Corporate and schools: combined identification, physical access and electronic purse
- Transport: electronic road pricing, toll collection

Key benefits

Easy application development:

- All the commands to build contactless Point of Sale (POS) or “over the Internet” applications are already embedded in the MPCOS application development tool. You need only define your application with its related business case and you are ready to enter into the “Smart World”.

The guarantee of an evolving application, from the basic contact cards to...

A selection of MPCOS-compatible smart card platforms that are available to create new applications, while capitalizing on existing ones that are already built on MPCOS:

- **MPCOS Entry** - Secure entry range storage card
- **MPCOS Easy** - Secure Contactless storage card
- **MPCOS EMV** ranges - Secure storage on EMV compliant cards
- **MPCOS Multi App** - Multi application on PK platforms, contact or Dual interface (Combi card)

Interoperability & stability to protect your investment:

- MPCOS allows quick card rollout due to its interoperability with the international standards and the support by existing infrastructure of Gemalto' partners.

MPCOS-EMV R5 Technical Specifications

General Features

- ISO 7816-1, -2, -3, supporting the T=0 and T=1 direct protocols
- ISO 7816-4, basic inter-industry commands and files types
- ISO 7816-5, application identifiers
- EMV '2000
- VSDC
- M-Chip lite
- Protected by PIN (Global or Local)
- Secure messaging based on 3DES algorithm to protect data integrity
- Electronic purse architecture with ability for debit, credit and signature transactions
- Secure Mutual authentication between Reader and Card
- In-house personalization allowed
- I/O routines (up to 115,200 Baud) and fast cryptographic routines
- EEPROM range: From 2K Bytes to 8K Bytes.

Ordering Options

Card Body Ordering Options

- PC
- PET,
- PVC with banking attributes (Signature panel, Hologram ...),
- Standard PVC,
- GemTwin for solutions including an additional contactless module.

Electrical Ordering Options

- Standard flow
- Customized flow

For more details, please contact the Technical Consultant

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