



e-Galleon

The ultimate
banking card
for your
EMV migration

Access

Finance

Mobile Communications

Public Sector

Public Telephony

Transport

Product Range



axalto

e-Galleon

The ultimate banking card for your EMV migration

- Certified by Visa, Europay/MasterCard for world-wide interoperability
- Multi-chip sourcing for large flexibility
- Fast, simple and efficient customization for local needs
- Credit/debit plus multi-application functionality integrated in existing OS

We've come a long way since the galleons of Spain transported tons of gold and silver across the oceans. We're still moving money across the world, but now, the galleon fits in your wallet. More than just a complete range of cards, e-Galleon* is the key component of a complete Axalto EMV solution, including software tools for customization, consulting, project management, personalization, and post-issuance facilities. Combining security, speed and support for complementary services such as loyalty, the e-Galleon EMV card is the most versatile on the market.

⇒ EMV-certified for world-wide interoperability

e-Galleon has been certified by Visa, Europay/MasterCard and complies with the latest EMV specifications, which makes it interoperable throughout the globe, working on any EMV-compliant terminal equipment. What's more, multi-application is supported thanks to the large storage capacity. e-Galleon has also been designed to support non-EMV applications, thanks to a framework of EEPROM files and directories, access conditions and security mechanisms. This allows the issuer the flexibility to design the application that best fits his needs without any modification of the Operating System in ROM.

⇒ High transaction speed under highest security levels

e-Galleon guarantees high transaction speed, and has the capacity to host multiple applications without sacrificing security.

This opens the door to new loyalty applications and supports new partnerships between banks and the retail community. The capacity of post-issuance makes the card very flexible as it can easily reflect local market changes.

⇒ The preferred choice for EMV rollout

United Kingdom is rolling out to EMV to fight fraud and offer new services to cardholders. Since 1999, e-Galleon has been chosen by most of the major UK financial institutions for the EMV "chip and pin" rollout. At November 2003, there were more than 30 millions e-Galleon cards in the field.

⇒ Complete EMV migration solution around e-Galleon

- EMV Migration Kit
It is the key to unlock the potential of the latest generation e-Galleon cards. You can customize and test your own cards for a perfect fit with local requirements.
- non-EMV application development
Our experts are available to help you implement and customize value-added applications such as loyalty, and create new partnerships through co-branding. The full e-Galleon range is XLS ready.
- Training & Program Management
Leveraging on its well-known experience in the EMV migration project, we will ensure a seamless migration process. Our specialists offer on-site training, tailored to fit your background and expectations.
- Facilities

We offer world-wide expertise in smart card personalization services with 12 Research & Engineering and 11 Personalization centers. Axalto applies specialized technical resources to support the development of EMV-ready applications for the fast-moving financial services environment.

Standard compliant

- ISO 7816 (T=0)
- EMV 3.1.1 – EMV 2000
- VIS 1.3.2 – VIS 1.4
- M/Chip lite 2.1
- UKIS
- non-EMV application implementation

- Extra AID implementation
- Add new EEPROM files or directories
- Define access conditions of files
- Counters
- Read/Update record
- Read/Update binary

Silicon features

- From 2Kb to 8Kb of highly reliable CMOS

EEPROM technology

- 8 bit architecture CPU
- External frequency : from 1MHz to 5MHz at 5 V
- Internal clock: 13Mhz@5Volts ; 8.5MHz@3Volts
- Sleep mode to minimize power consumption
- Power-down protection against malfunction
- Low frequency protection against static analysis
- High frequency protection against manipulation
- Single power supply of 5V * 10%
- Temperature range of -25 to 75°C
- EEPROM with min 100,000 write/erase cycles
- Data retention for 10 years minimum

Card body

- PVC
- Embossable with overlay
- Magnetic stripe, hologram and signature panel available
- Hybrid contactless card body.

Security features

- Static data authentication available during transaction to avoid counterfeiting
- Several cardholder verification methods available
- Issuer authentication available
- Programmable directory/file access conditions
- Keys attached to the directory for file and directory management (Management Key File) with individual retry counter and key version
- Security firewalls for memories
- EEPROM writing warning counter (end of EEPROM life reached)
- Lock file capability
- Secured personalization stage and unique card

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