

Visa Open Platform - For A Maximum Of Variety



ORGA
The Smart Card Integrator

The Open Platform - Dual Interface for Visa integrates the advantages of the Java Card™ Open Platform and the dual interface technology giving the customer a maximum of opportunities. Combining the advantages of contact and contactless interfaces, the card can be used in a wide range of multi-application scenarios. Visa open platform offers a wide range of possible fields of application. One of them is the Cornish Key Card Scheme.

United Kingdom

Cornish Key

The Cornish Key Project

In a groundbreaking project to provide their citizens with the latest in multi-application smart card technology, the seven Local Authorities in Cornwall have joined forces following a successful bid for Pathfinder funding.

ORGA has been selected to provide 50,000 dual-interface smart cards for the scheme - a world first for the commercial use of these cards. ORGA also developed an application to enable cardholders to view their personal details, how much credit they have left and the last 10 transactions they have used their smart card for via their own PC. Indeed, the entire project has been implemented successfully in a period of only 4 months from inception - a challenging schedule, particularly as 16 separate companies were involved in providing the high level of interoperability required by the project.

The Cornish Key Scheme Applications

Citizens involved in phase one of the Cornish Key Card scheme will use their cards for a number of functions including car parking payments, library book borrowing, bus concessionary fares, school registration and access control. Further applications will be added in later phases, thanks to the future-proof Java platform offered by this particular card. Over 200,000 Cornish citizens (40% of the population there) are planned to receive cards by full rollout.

The Cornish Key Project Team

The entire project was coordinated by Cornwall County Council, who managed the project implementation phase for the Pathfinder Programme Board on behalf of the seven Local Authorities in that county.

The project was set up as part of a strategy to tackle social exclusion and to offer access to local authority services amongst Cornwall's scattered rural communities. Smart cards were identified as essential to provide an appropriate level of security and data storage. The project also supports current e-Government strategy for the provision electronically of the entire range authority services by 2005.

The Best Of Both Worlds...

ORGA's dual interface card is fully compatible with the existing MIFARE® and Global Platform open standard in use worldwide.

The use of the contactless MIFARE® interface provides convenience and speed whilst also offering easy integration into existing MIFARE® systems.

The dual interface makes this card ideal both for customers needing the high security of an operating system like JavaCard™ and customers wanting the high transaction volumes offered by the use of contactless technology.

The JavaCard™ operating system provides a high level of security and also allows applications to be loaded onto the card post-issuance so that the customer does not have to reissue cards in order to make application changes. Lastly, Java™ development resources are more widely available.

High Security

In addition to the in-built security mechanisms of the JavaCard™ operating system, the main security feature of this card is its Triple-DES co-processor. They are essential to execute secure authentication and data encryption or electronic signature. Co-processors allow for the implementation of highly secure authentication methods and integrity checks based on both secret key or public key methods. However, the card also uses a design technique called 'glue logic design' which ensures that it is virtually impossible to 'hack' the card by monitoring its signals.

The flexibility of this card also makes it suited to the requirements of any multi-application system such as:

- ID Cards, Access Control
- Transport, Parking
- Retail, Banking
- Electronic Key

Features

- 64K ROM
- High speed Triple-DES coprocessor
- 8K or 16K EEPROM (4K and 8K without crypto-controller available on request)
- Contact interface according to ISO 7816
- Contactless interface according to ISO/IEC 14443 A
- Full compatibility with existing MIFARE® readers
- High speed memory access
- Operating range up to 100 mm (for contactless)
- 16-bit functionality