

MULTOS

8K to 160K

The Multi-app Smartcard for EMV, Identity and Data Security

MULTOS - Still the Safest Choice

Multos International's products have achieved **the highest level of security evaluation** for any multi-application smartcard operating system. MULTOS remains the best choice for securing your data and the preferred platform for EMV, identity and data security.

Confidence of a Proven Solution

MULTOS has a proven field performance in projects ranging from EMV to transportation to large-scale national ID. This history provides assurance that MULTOS can be successfully implemented in an increasingly diverse array of smartcard projects. **Reduce the risk** in your project by using MULTOS.

Maintain Control Over your Smartcard Project

MULTOS is the only fully open smartcard platform that also gives you full control over your smartcard project. The fully defined lifecycle management means there can be multiple sourcing at every level of the supply chain and you get to choose which parts to implement. The simple message is that MULTOS is **smartcards made easy**.

Comprehensive Support Community

You can be certain that you will be comprehensively supported by Multos International and the many vendors in the MULTOS community. The industry's leading companies have been involved in MULTOS projects over the years - you can choose from multiple card manufacturers, bureaux, application developers or off-the-shelf applications ranging from EMV payments, e-purse, loyalty, ID, health, biometrics, PKI and others.

Simplify and Value Add

The flexibility of a multi-application platform means that you can combine several different applications onto the one card, at any stage in the card lifecycle, along with the pre-loaded applications already installed on the MULTOS module. All this brings the chance to introduce value-add into any smartcard project.

More applications pre-loaded

We have included a range of the popular options to choose from including: M/Chip Advance, M/Chip4, M/Chip 2.06, D-PAS, VSDC, J/Smart, PBOC, whitelabel EMV, XLS, PKI, biometrics, loyalty and regional applications for Korea, Taiwan and Malaysia.

New Features

The latest in the Multos International family of MULTOS implementations offer new features on the most advanced silicon platform. Now available across a whole new range of chip options **MULTOS offers even more**.

Also available: Contactless MULTOS for contactless payment, e-Passports, transit and more; MULTOS step/one for low-cost SDA EMV migration

MULTOS

8K, 18K, 36K, 68K, 80K, 160K

Features

World's leading implementation of MULTOS

Why is MULTOS considered the platform of choice for secure smartcard operating systems? Because MULTOS provides for the highest levels of privacy between multiple applications on the same card, with application firewalls ensuring the integrity and security of application-specific code and data.

Applications Pre-loaded

Multos International has combined a selection of the most popular applications in ROM. This saves valuable EEPROM memory for customer applications, cuts production time and reduces costs.

Application Management

The MULTOS scheme provides the issuer with full control over the applications resident on the card. This is achieved by using a secure load and delete mechanism that manages the applications on the card.

8K to 160K EEPROM

A number of choices for EEPROM size provides space for additional applications (code and data) with the most cost effective solution for your needs. And MULTOS applications are renowned as being the most efficient in the industry allowing you to choose the best size platform for your needs and reducing your costs..

Fast Operation

The MULTOS implementation from Multos International and Infineon's secure chips provides even more horsepower: faster DES and RSA cryptographic operations; application loading times of encrypted applications are even faster than previous versions – another cost benefit of MULTOS from Multos International.

Interapplication Communications

The delegation functionality enables an application to delegate commands to other applications, increasing the efficiency of MULTOS applications by removing the need to duplicate common functionality within each separate application.

Development Kit

Free SDK available for application development in 'C', java or MEL.

Efficient Memory Management

The application memory, released when applications are removed, is defragmented to give full access to available memory.

Cryptographic Capabilities

- DES**
 - Signature generation (CBC single/triple DES)
 - Encryption/decryption (ECB single DES)
- RSA**
 - Built in RSA crypto co-processor
 - RSA encryption up to 2048-bit key lengths
 - CRT calculation time of less than 150ms for 1024-bit keylengths, and less than 650ms for 2048-bit keylengths.
- SHA**
 - Calculation of message block request
 - SHA-256, AES available on request
- SEED**

MC1 Family	MC4 Family	MC3 Family
Target Markets		
EMV	EMV	Identity
CPU		
SLE66CX Series	SLE77CFX Series	SLE78CX Series
Memory		
Total EEPROM: 8K, 18K, 36K, 68K	Total EEPROM: 8K, 18K, 36K, 68K, 120K	Total EEPROM: 36K, 80K, 160K
Applications pre-loaded*		
D-PAS		
J/Smart		
K-Cash (Korea)		
M/Chip 2.06		
M/Chip 4		
M/Chip Advance		
PBOC		
PKI		
PMPC		
VSDC		
Whitelabel EMV		
XLS		
<i>* Other applications available, check for product options and configurations</i>		

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