



PRODUCT OVERVIEW

Interface	Contact Smart Card													Dual-Interface Smart Card			
Offline Authentication	SDA, Plaintext PIN					DDA, Enciphered PIN								SDA, Plaintext PIN		DDA, Enciphered PIN	
Card Platform	Native		MULTOS StepOne		Native	GP Java	MULTOS 4.06				MULTOS 4.2			MULTOS StepOne	MULTOS 4.06	MULTOS 4.2	
EEPROM Size (bytes)	5k	8k	4k	8k	8k	32k	8,5k	16k	20,5k	32,5k	8k	16k	32k	8k	16k	32k	
Product Name	EMV <i>Lite</i> Y	EMV <i>Plus</i> Y	MULTOS StepOne 4k	MULTOS StepOne 8k	Macelia	SmartFoxPro	MULTOS 8k	MULTOS 16k	MULTOS 16k	MULTOS 32k	MULTOS 8k	MULTOS 16k	MULTOS 32k	MULTOS StepOne 8k Combi	MULTOS 16k Combi	MULTOS 32k Combi	
Operating System	Sagem Orga	Sagem Orga	MULTOS STepOne	MULTOS StepOne	Sagem Orga	Sagem Orga	MULTOS 4.06	MULTOS 4.06	MULTOS 4.06	MULTOS 4.06	MULTOS 4.2	MULTOS 4.2	MULTOS 4.2	MULTOS StepOne	MULTOS 4.06	MULTOS 4.2	
Mask Version	V1.0	V1.0	-	-	3.0	V1.0	DNP4.08b	KeyCorp 1QCR2	DNP4.016b	DNP4.032f	-	KeyCorp I4D (1-1-9+)	KeyCorp I4D (1-1-9+)	-	KeyCorp P4C (4-1-8)	KeyCorp I4Dc (5-1-13)	
Silicon	Renesas AE420	Samsung S3CC9E8	Infineon SLE66C82P	Infineon SLE66C82P	Atmel AT90SC9608RC	Samsung S3CC9P9 (16bit)	Renesas AE43C	Infineon SLE66CX160P	Renesas AE45CH	Renesas AE45C	Infineon SLE66CX80P	Infineon SLE66CX165P	Infineon SLE66CX322P	Infineon SLE66CL80P	Philips P8RF5016	Infineon SLE66CLX320P	
Crypto-processor	3DES 112bits	3DES 112bits	3DES 112bits	3DES 112bits	3DES 112bits	3DES 112bits RSA 2048bits	3DES 112bits RSA 2048bits	3DES 112bits RSA 2048 bits	3DES 112bits RSA 2048bits	3DES 112bits RSA 2048bits	3DES 112bits RSA 2048bits	3DES 112bits RSA 2048bits	3DES 112bits RSA 2048bits	3DES 112bits	3DES 112bits RSA 2048bits	3DES 112bits RSA 2048bits	
Protocol	T=0	T=0	T=0 T=1	T=0 T=1	T=0	T=0	T=0 T=1 T=15	T=0 T=1	T=0 T=1 T=15	T=0 T=1 T=15	T=0 T=1	T=0 T=1	T=0 T=1	T=0 T=1 T=CL	T=0 T=1 T=CL	T=0 T=1 T=CL	
Application in ROM	M/Chip 4.0 VSDC (VIS1.4.0) PSE SmartyPlus Loyalty Welcome Real Time (XLS) MasterCard CAP	M/Chip 4.0 VSDC (VIS1.4.0) PSE SmartyPlus Loyalty Welcome Real Time (XLS) MasterCard CAP	M/Chip 4. VSDC (VIS1.4.0) MODS Welcome Real Time (XLS)	M/Chip 4.0 VSDC (VIS1.4.0) MODS Welcome Real Time (XLS)	M/Chip 4.0 VSDC (VIS1.4.0) S-Loyalty MasterCard CAP	M/Chip 4.0 VSDC2.5 SmartyPlus Loyalty Welcome Real Time (XLS) MasterCard CAP	M/Chip 2.05 Mondex Purse 2 Mondex Purse 2+SR Hitachi Multipockets	M/Chip 2.05 Mondex Purse 2 Mondex Purse 2+ SR KeyCorp PK	M/Chip 2.05 M/Chip 4.0 J/Smart V1.0 Mondex Purse 2+ SR MODS Hitachi Multipockets Seed (for Korea)	M/Chip 2.05 M/Chip 4.0 J/Smart V1.0 Mondex Purse 2+ S MODS Hitachi Multipockets Seed (for Korea)	M/Chip 2.05 M/Chip 4.0 VSDC (VIS1.4.0) Mondex Purse 2+ RS MODS KeyCorp PKI Seed (for Korea) Precise Biometrics "Match-On-Card" V1.00 Welcome Real Time (XLS)	M/Chip 2.05 M/Chip 4.0 VSDC (VIS1.4.0) J/Smart V2.0 Mondex Purse 2+ RS MODS KeyCorp PKI Seed (for Korea) Precise Biometrics "Match-On-Card" V1.00 Welcome Real Time (XLS)	M/Chip 2.05 M/Chip 4.0 VSDC (VIS1.4.0) J/Smart V2.0 Mondex Purse 2+ RS MODS KeyCorp PKI Seed (for Korea) Precise Biometrics "Match-On-Card" V1.00 Welcome Real Time (XLS)	M/Chip 2.05 M/Chip 4.0 VSDC (VIS1.4.0) Mondex Purse 2+ SR MODS KeyCorp PKI PayPass	M/Chip 2.05 KeyCorp PKI	M/Chip 2.05 VSDC (VIS1.4.0) Mondex Purse 2+SR MODS KeyCorp PKI Welcome Real Time (XLS) PayPass	
Key Management Authority			KeyCorp LiteOS Control Centre	KeyCorp LiteOS Control Centre		Global Platform 2.0.1 Javav 2.1.1	Global JSS	Global	Global JSS	Global	Global	Global	Global	Global	Global	KeyCorp LiteOS Control Centre	
Specification & Standards	EMV4.0 EMV CPS	EMV4.0 EMV CPS	EMV4.0	EMV4.0	EMV4.0 EMV CPS	EMV4.0	EMV3.1.1	EMV3.1.1	EMV4.0	EMV4.0	EMV4.0	EMV4.0	EMV4.0	EMV4.0	EMV4.0	EMV4.0	
Availability	Now	Q2Y06	Now	On Demand	Now	Now	Now	Now	Now	Now	Now	On Demand	Now	Now	Now	Now	

Focused on Banking from head to toe

MasterCard® Product Family

As a member of OneSmart™ MasterCard's Vendor Program and a fully registered MULTOS™ Issuance Partner, Sagem Orga offers the complete spectrum of EMV smart cards for your MasterCard® branded card.

The MasterCard® M/Chip™ application enables banks to issue globally interoperable chip-based MasterCard®, Maestro® and Cirrus® branded cards, fully compliant with the EMV (Europay, MasterCard®, VISA) standard.

MULTOS™ is an open, high security, multiapplication operating system for smart cards. MULTOS™ changes the smart card proposition for both banks and cardholders, providing tremendous flexibility to add or delete applications without any compromise on security.

The MULTOS™ Family also include the MULTOS™ StepOne specification for entry-level multi-application smart cards. MULTOS™ StepOne provides many of the benefits of MULTOS™, such as a platform interoperability and application portability, however it may be deployed on less sophisticated smart card platforms with less memory, therefore at much reduced cost.

Sagem Orga offers highly secure and innovative smart card products and services for the EMV banking market.

- Complete EMV smart card manufacturing facilities:
 - card printing
 - module manufacturing
 - card embedding
 - chip initialisation and enablement (MULTOS™ Issuance Partner, MIP).
- Innovative ideas and technology to boost your card-marketing program:
 - artwork design
 - special effect card bodies
 - gold and palladium modules
 - coloured magnetic stripe
- Comprehensive EMV smart card training and consultancy to our customers and worldwide partners



www.sagem-orga.com

Product Quick Guide

