

## smart security component

silicon

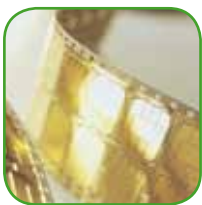
hardware security

100%

processor



### smart security component<sup>©</sup>



charismathics provides affordable, easy to use and flexible identity solutions for the issuance and personalization of hardware tokens and smart cards.

Our smart security component<sup>©</sup> is an integrated platform made up of a PKI smart card chip and the charismathics CSP, PKCS#11 and tokenD interfaces. This unique solution provides complete independence with maximum flexibility when selecting your smart card chip platform and operating system for use with identity management applications. The result is an enabling technology supporting all major smart card platforms that integrates into all PKI and client application environments. charismathics makes it possible to utilize smart tokens in new ways for secure mobile computing and secure data storage.

Never before has it been so easy to integrate a new authentication solution into an existing infrastructure.

#### Overview:

- smart card chips for end-to-end security applications
- 3D independence
- secure key generation and key pair storage
- plugs into all standard software applications
- quick integration with software and customized file structures

#### Benefits

- smart card chip based technology for true data encryption, secure key generation and key pair storage
- seamless integration with existing PKI environments for smooth hardware upgrades
- support for all standard software applications such as MS Explorer, Firefox, MS Outlook, Entourage, Mail.app, Safari, etc.
- multiple smart card chip platform support
- quick integration with software and customized file structures
- support of pre-boot environments (Check Point, McAfee, PGP, Secude, Ultimaco)

#### Product Integration Support

charismathics supplies a wide range of integrated circuits for PKI environments to the world market. Experience in security hardware integration as well as expertise to custom manufacture products meeting your specific requirements and certifications make our bundle of hardware and software unique. We offer simple, yet complete packages which maximize your price to value ratio. With our large buying power and our top level supplier relationships, charismathics can meet the demands for large quantities with rapid deliveries.

charismathics

## 3D-independence on platform, vendors, and applications

The smart security component<sup>©</sup> optionally comes with our smart security interface<sup>©</sup>, the middleware which allows the use of a smart card security chip with the operating system of your choice. With smart security interface<sup>©</sup> it is possible to use more than one smart card operating system on a single client at the same time. The middleware provides a single

CSP, PKCS#11 and tokenD module supporting multiple card profiles for literally any smart card related project. Digital certificates are made available for applications, like Outlook and Notes, as well as Firefox, Entourage, Mail.app and Novell. The smart security interface<sup>©</sup> supports all major operating systems, including Macintosh, Linux and Solaris.

## A Selection of our PKI Smart Card Platforms

	CardOS	JCOP	Oberthur Cosmo ID	jTOP	TCOS	SmartCafe Expert	Kona
<b>chip vendor</b>	Infineon	NXP	NXP Atmel	Infineon	NXP Infineon	NXP Infineon	NXP Samsung
<b>co-Processor</b>	yes	yes	yes	yes	yes	yes	yes
<b>delivery form</b>	wafer/ waflle/frame	wafer/ waflle/frame	wafer/ waflle/frame	wafer/ waflle/frame		wafer/ waflle/frame	wafer/ waflle/frame
	contact module	contact module	contact module	contact module	contact module	contact module	contact module
	contactless module	contactless module	contactless module	contactless module	contactless module	contactless module	contactless module
	dual interface module	dual interface module	dual interface module	dual interface module	dual interface module	dual interface module	dual interface module
<b>EEPROM Memory Size</b>	36kB/68kB	36kB/72kB/ 144kB	16kB/36kB 72kB/64kB/ 128kB/144kB	36kB/68kB	36kB/72kB	16kB to 144kB	36kB/72kB
<b>applets</b>	n/a	EMV, ICAO, PKI	EMV, ICAO, PKI	ICAO, PKI	n/a	EMV, PKI	EMV, PKI
<b>USB interface</b>	no	optional	optional	no	optional	optional	optional
<b>contactless operation</b>	optional ISO 14443b T=CL	optional ISO 4443a/b T=CL	optional ISO 4443a/b T=CL	optional ISO 14443a/b T=CL	optional ISO 14443a/b T=CL	optional ISO 14443a/b T=CL	optional ISO 4443a/b T=CL
<b>RSA</b>	up to 2048bit	up to 2048bit	up to 2048bit	up to 2048bit	up to 2048bit	up to 2048bit	up to 2048bit
<b>ECDSA</b>	up to 384bit	up to 256bit	up to 256bit	no	up to 256bit	up to 256bit	no
<b>SHA-2xx</b>	CardOS 4.4 only	yes	v5.4 and v7.0	no	no	no	no
<b>families</b>	4.2B/4.3B 4.2C/4.4	JCOP v21/31/41 J2A/J3A/J4A	v5.2/5.4/5.5 v7.0	jTOP v2 jTOP 15	v3.0	v3.0/3.1/3.2/ v5.0	v10 v25/26 v132
<b>product certifications</b>	chip EAL 5+	chip CC EAL 5+	chip CC EAL 5+	chip CC EAL 5+	chip CC EAL 5+	chip CC EAL 5+	chip CC EAL 5+
	software CC EAL 4+	software EAL 4+	software CC EAL 4+	software CC EAL 4+/5+	software CC EAL 5+	software CC EAL 4+	software CC EAL 4+
	SigG CWA 14169 Type3 IAS CNS	EMV certified (with NXP applets) ICAO	SSCD FIPS 140-2 level 3	VISA approval Mastercard certified ICAO	SigG ICAO	SSCD FIPS 140-2 level 3	VISA approval

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