



# StarSign<sup>®</sup> FIPS 201 Cards

Interoperability, security,  
reliability

## FIPS 201 Cards are designed to meet U.S. Federal standards. Enterprises now have the opportunity to benefit from governmental high-security features.

G+D StarSign FIPS 201 Cards meet the most advanced requirements for dual interface smart cards. They can be used for PKI contact-based (ISO 7816) authentication as well as for contactless applications (ISO 14443).

StarSign FIPS 201 Cards are designed to provide secure logical access to IT networks as well as secure physical access to facilities. The robust card body solution in conjunction with FIPS 140-2 and PIV applets Level 3 certified security modules from G+D helps to fulfill strong PIV requirements of employees of governmental agencies, defense contractors, and private sector companies. All G+D smart card solutions are based on Sm@rtCafé<sup>®</sup> Expert using the latest Java Card operating system from G+D. FIPS 140-2 Level 3 and PIV applet certification for the chip module ensure that the most advanced security protects sensitive data.

Multiple printed security features such as guilloches, optical variable inks, microprinting, laser engraving, etc. are available for the card body to protect against counterfeiting. G+D antenna technology embedded in a FIPS 201 compatible card body creates a robust and longer lasting card.

### What is PIV?

A Homeland Security Presidential Directive was announced by the US government to address the problems of inconsistent and potentially insecure forms of identification that have been used to access Federal buildings and information systems.

The directive's goals are to reduce identity fraud and to increase security and efficiencies within the government.

The FIPS 201 standard from NIST provides the structure needed for Federal agencies to realize the critical security vision, and specifies smart cards as the device that will be used to implement this vision. FIPS 201 specifies personal identity verification (PIV) requirements.

So the PIV card was created out of the Homeland Security Presidential Directive 12 (HSPD-12) during the Bush's presidency. PIV has been successfully deployed to all U.S. Federal Agencies.

PIV-I (Interoperable) provides a standards-based implementation of a physical and logical access credential in the form of a smartcard. PIV-I is based on the same standards of vetting and issuance developed by the U.S. government for its employees, but it has been tailored for non-federal use (e.g. for government contractors).

## StarSign FIPS 201 Card benefits at a glance

### TOP-LEVEL SECURITY

FIPS 201 Cards are strongly resistant to identity fraud, tampering, counterfeiting and terrorist exploitation. They are issued based on sound criteria for verifying an individual employee's identity.

### MAXIMIZES YOUR INVESTMENT

Sm@rtCafé Expert PKI cards are available in a range of memory sizes. StarSign FIPS 201 Cards offer the largest memory storage available on a FIPS 201 compatible card – until 144 KB.

### EASY, EFFICIENT & FLEXIBLE

StarSign PKI Cards offer a plug-and-play solution for any platform supporting smart cards (Windows, Windows Vista 8, 10, Windows 7\*, 32 and 64 bit, and Mac OS as well as Linux Redhat and Ubuntu).

### USER-CENTRIC

Higher security without any hassle, nonintrusive for users.

### APPLICABLE TO ALL MARKET SEGMENTS

Since the solution is based on Sm@rtCafé Expert (version 7.0 or higher) it is possible to integrate further applications at any time.

### BEST SOLUTION

Use the G+D StarSign PIV Applet to fit best the FIPS 201 requirements.

\*discontinued by Microsoft

## Technical data of StarSign FIPS Cards

	Sm@rtCafé Expert 7.0
Hardware Chip EEPROM Interfaces	SLE78CLFX4000P 80 / 144 KB Dual Interface (T=CL Type A) Contact-based (T=0 / T=1)
Packages	T-M8.4-8-1; P-M8.4-8-3; VQFN 32
Cryptography	4096 bit RSA, AES 512 bit, DSA up to 1024 bit, Triple-DES 3-key, ECDSA up to 256 bit, ECDH up to 256 bit, SHA-224, SHA-256, SHA-384, SHA-512, RNG: according to NIST SP 800-90
Certifications Chip Operating System	Common Criteria EAL 5+ FIPS 140-2 Level 3
Standards	- Java Card 3.0.4 Classic - GlobalPlatform 2.2.1 + Amendment D (SCP03) - ISO 7816, ISO 14443A
Available Applets / applications	- PIV and different PKI applet and middleware - StarSign Security Domain Applet
Feature Overview	- Multiple security domains - Multiple DAP (DES, AES and RSA) - Delegated management - RMI
Standards Support	PKCS11, Base CSP, X.509 certificates

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