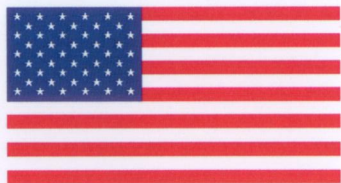


# FIPS 140-2 Validation Certificate



The National Institute of Standards  
and Technology of the United States  
of America



The Communications Security  
Establishment of the Government  
of Canada

Certificate No. 1239

The National Institute of Standards and Technology, as the United States FIPS 140-2 Cryptographic Module Validation Authority; and the Communications Security Establishment, as the Canadian FIPS 140-2 Cryptographic Module Validation Authority; hereby validate the FIPS 140-2 testing results of the Cryptographic Module identified as:

**Sm@rtCafé Expert 3.2 by Giesecke & Devrient with ActivIdentity Digital Identity  
Applet Suite V2 for Extended PIV by Giesecke & Devrient and ActivIdentity Inc.**  
(When operated in FIPS mode)

in accordance with the Derived Test Requirements for FIPS 140-2, Security Requirements for Cryptographic Modules. FIPS 140-2 specifies the security requirements that are to be satisfied by a cryptographic module utilized within a security system protecting *Sensitive Information* (United States) or *Protected Information* (Canada) within computer and telecommunications systems (including voice systems).

Products which use the above identified cryptographic module may be labeled as complying with the requirements of FIPS 140-2 so long as the product, throughout its life cycle, continues to use the validated version of the cryptographic module as specified in this certificate. The validation report contains additional details concerning test results. No reliability test has been performed and no warranty of the products by both agencies is either expressed or implied.

This certificate includes details on the scope of conformance and validation authority signatures on the reverse.

FIPS 140-2 provides four increasing, qualitative levels of security: Level 1, Level 2, Level 3, and Level 4. These levels are intended to cover the wide range and potential applications and environments in which cryptographic modules may be employed. The security requirements cover eleven areas related to the secure design and implementation of a cryptographic module. The scope of conformance achieved by the cryptographic modules as tested in the product identified as:

**Sm@rtCafé Expert 3.2 by Giesecke & Devrient with ActivIdentity Digital Identity Applet Suite V2 for Extended PIV  
by Giesecke & Devrient and ActivIdentity Inc.**

**(Hardware Versions: P5CD080 [1] and P5CD144 [2]; Firmware Versions: CPDlxJC\_RSEFI-025CD080V402 [1] and CPDYxJC\_RSEFI-025CD144V503 [2], Applet Versions [1,2]: ACA applet package v2.6.2B.4, ASC library package v2.6.2B.3, PKI/GC/SKI applet package v2.6.2B.4, PIV End Point Wrapper module v2.6.2B.4, PIV End Point Extended module v2.6.2B.4, SMA applet package v2.6.2B.3; Hardware)  
(PIV Card Application: Cert. #17)**

and tested by the Cryptographic Module Testing accredited laboratory:  
is as follows:

**Atlan Laboratories, NVLAP Lab Code 200492-0  
CRYPTIK Version 7.0**

<i>Cryptographic Module Specification:</i>	Level 2	<i>Cryptographic Module Ports and Interfaces:</i>	Level 2
<i>Roles, Services, and Authentication:</i>	Level 3	<i>Finite State Model:</i>	Level 2
<i>Physical Security:</i> (Single Chip)	Level 3	<i>Cryptographic Key Management:</i>	Level 2
<i>EMI/EMC:</i>	Level 3	<i>Self-Tests:</i>	Level 2
<i>Design Assurance:</i>	Level 2	<i>Mitigation of Other Attacks:</i>	Level 2
<i>Operational Environment:</i>	Level N/A	<i>tested in the following configuration(s):</i>	N/A

The following FIPS approved Cryptographic Algorithms are used: **AES (Certs. #745 and #746); DSA (Certs. #277 and #278); RSA (Certs. #350 and #351); RNG (Certs. #433 and #434); SHS (Certs. #760 and #761); Triple-DES (Certs. #662 and #663); Triple-DES MAC (Triple-DES Certs. #662 and #663, vendor affirmed)**

The cryptographic module also contains the following non-FIPS approved algorithms: **DES; DES MAC; DSA (512-bits and 768-bits, non-compliant)**

**Overall Level Achieved: 2**

Signed on behalf of the Government of the United States

Signature: Donna F. Rodson

Dated: December 7, 2009

Chief, Computer Security Division  
National Institute of Standards and Technology

Signed on behalf of the Government of Canada

Signature: [Signature]

Dated: December 3, 2009

Director, Industry Program Group  
Communications Security Establishment Canada