1 GENERAL INFORMATION

1.1 Product description

The GemPC express is a smart card reader for laptops and mobile users, fitting into an ExpressCard/54 slot.

Application:
- E-commerce,
- Access card to sensitive site
- E-signature of documents…

GemPC Express supports all ISO 7816 class A, B and C cards (5V, 3V and 1.8V), all ISO 7816 TA1 parameters (up to 344kbps) and extended PDU commands.

The GemPC express is a product developed by the Gemplus Company.

For more information, see product's data sheet at section 1.6.

1.2 Related Submittal(s) / Grant(s)

All host equipment used in the test configuration are FCC granted, when relevant.

1.3 Tested System Details

The FCC IDs for all equipment, plus description of all cables used in the tested system (including inserted cards, which have grants) are :

See test report file : 200604-3054C-R1-C-E

1.4 Test Methodology

Both conducted and radiated testing was performed according to the procedures in ANSI C63.4-2003, CISPR22-2003 and EN55022:1998+/A1:2000+/A2:2003.
Radiated testing was performed at an antenna to EUT distance of 10 meters. During testing, all equipment's and cables were moved relative to each other in order to identify the worst case set-up.

1.5 Test facility

Tests have been performed on April 24th, 2006.
The test facility used to collect the radiated and conducted data is the **LCIE** (Etablissement Voiron) facility, located ZI des Blanchisseries, 38500 VOIRON, France. This test facility has been fully described in a report and accepted by FCC as compliant with the radiated and AC line conducted test site criteria in ANSI C63.4 in a letter dated July 14, 2005 (registration number 94821).
This test facility has also been accredited by COFRAC (French accreditation authority for European Union test lab accreditation organization) according to NF EN ISO/IEC 17025, accreditation number 1-1633 as compliant with test site criteria and competence in 47 CFR Part 15/ANSI C63.4 and EN55022/CISPR22 norms for 89/336/EEC European EMC Directive application. All pertinent data for this test facility remains unchanged.

1.6 Data sheet of the product

Technical Specifications

Host Interface
- PCMCIA ExpressCard/54
- Plug and Play
- USB 2.0 full speed (12 Mbps)

Smart Card Interface
GemCore PRO hardware and firmware architecture:
- Supports ISO 7816 Class A, B and C cards (5 V, 3 V, 1.8 V)
- Supports all ISO 7816 TA1 parameters (up to 344 Kbps)
- Reads from and writes to all ISO 7816-1,2,3,4 microprocessor cards, T=0 and T=1 protocols
- Supports memory cards using "Memory Card API for GemCore Twin PRO"
- Short circuit detection

Smart Card Connector
- 8 friction contacts - ISO location
- Guaranteed for 100,000 insertion cycles
- EMV Level 1 mechanically compliant
- Embossed Smart Cards supported

Power Consumption
- Suspend mode: 1mA
- Typical operating: 55mA
- Maximum operating: 200mA

Standards / Certifications
- ISO/IEC 7816-1,2,3,4: IC Cards with contacts
- EMVCo terminal Level 1 approval for GemCore Twin Pro IFM
- Microsoft Windows Hardware Quality Labs (WHQL), Windows Logo Program WLP 2.0

API
- Microsoft PC/SC environment with associated drivers
- Other environments (OCF, CT-API) upon request

Operating Systems
- Windows 2000, XP, Server 2003, Xp 64bit editions, Vista 32 and 64 bits
- Linux

Power Supply

- Power supply thru ExpressCard port
- Rating 3.3V 1A primary supply voltage

Environmental
- CE, FCC part 15 Class B
- VCCI, c-Tick, BSMI
- EN 60950 / UL 950 / CSA 950
- Operating: +0 °C / +55 °C
- Storage: -20 °C / +65 °C
- ROHS compliant, WEEE marking

OEM
- Custom stickers for branding

Physical Characteristics
- 75 mm x 54 mm x 5 mm
- ExpressCard 54 format
- 30 g.