1   GENERAL INFORMATION

1.1   Product description

The GemPC Pinpad is a smart card reader featuring a keypad and display, adding Secure PIN Entry (SPE) functionality to the Gemplus PC-Link readers range.

GemPC Pinpad provides a highly secure way to enhance your smart card-based application, by protecting the smart card PIN code from unauthorized access. The PIN code is entered locally and safely on the reader and is thus never transmitted to the PC.

This is especially relevant for:
  - E-commerce,
  - Access card to sensitive site
  - Online banking service…

GemPC Express supports all ISO 7816 class A, B and C cards (5V, 3V and 1.8V), all ISO 7816 TA1 parameters (up to 500kbps), reads from and writes to all ISO 7816-1,2,3,4 microprocessor cards.

The GemPC Pinpad 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 : 200604-3085C-R1-C-E

1.4   Test Methodology

Both conducted and radiated testing was performed according to the procedures in ANSI C63.4-2003, CISPR22-2005+A1 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 May 4th, 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
• 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
• 100,000 insertion cycles
• EMV Level 1 mechanically compliant
• Embossed Smart Cards supported

Human interface
• 2x16 alphanumeric display
• 2 LEDs: green for transparent mode, orange for Secure PIN Entry
• Tactile keypads with 16 (4x4) silicon rubber keys

Standards / Certifications
• ISO/IEC 7816-1,2,3,4: IC Cards with contacts
• EMV terminal Level 1 version 4.0 for GemCore Twin Pro IFM
• Microsoft Windows Hardware Quality Labs (WHQL), Windows Logo Program WLP 2.0
• CCID – Chip Card Interface Device 1.0

API
• Microsoft PC/SC environment with associated drivers

Operating Systems
• Windows 98, 98SE, Me, 2000, XP, Server 2003, Xp Pro 64
• Linux ReadHat WS3.0, Debian, Suze

Cable/Power Supply
• Power supply thru USB port
• Operating voltage 5V +/- 10%
• USB 2.0 type A connector

Environmental
• CE, FCC part 15 Class B
• EN 60950 / UL 950 / CSA 950
• Operating: +0 ℃ / +55 ℃
• Storage: -20 ℃ / +65 ℃

Physical Characteristics
• Tamper evident case with security marking
• LWH 121x79x49mm
• 292 grams.