The growth of the Internet, electronic communication and e-commerce has resulted in a greater and wider expansion for security solutions. As enterprises become increasingly reliant on such communication methods, security remains a critical factor for any successful implementation. Solutions for access control, authentication, confidentiality, privacy and data integrity become core to the operation and therefore must be built upon a trusted platform.

NGSCB (Next Generation Secure Computing Base) is Microsoft’s answer to the issue of security. One of the four mandatory requirements necessary to create a complete NGSCB compatible solution is to provide a method for establishing Trusted Input. In order to ensure that SIDEN™TC4000 is incorporated into as many keyboard designs and PIN-pads as possible, the design incorporates an extensible set of features which not only meets all the requirements of a NGSCB keyboard controller device, it exceeds those requirements. Provided within the 64 Pin LQFP (low profile quad flat pack) device are all the features necessary to use the device in several modes; a USB smartcard (Key fob), a keyboard controller with smartcard interface, a keyboard controller with USB hub, or a standalone smartcard reader. These multiple uses increase the volume of devices fabricated by Comodo and therefore facilitate maximum cost savings across the whole range.

SIDEN™TC4000 Features

- Authentication & access control for networks / Internet
- 8-bit RISC 8051 uC
- Implemented on Chartered Semiconductor 0.18um silicon technology
- Individual power monitoring for each USB downstream port
- Support for 1.8volt, 3volt and 5volt smart cards
- HW accelerator for RSA up to 1024-bit or 2048-bit with CRT
- HW accelerator for DES/TDES and AES
- HW hash accelerator for SHA-1
- Random number generator
- Watchdog timer
- Remote wake-up
- EEPROM packaged in same device
- Configurable keyboard scan matrix based on Fujitsu's patented F-key rollover
- Direct drive for up to 5 LED's

SIDEN™TC4000 Compliancy

- EMV compliant
- PC/SC compliant
- NGCSB compliant
- USB interfaces compliant to USB 2.0 full speed specification
- Smart card interface compliant to ISO 7816 supports T=0 and T=1

SIDEN™TC4000 Availability

- Engineering Samples (FPGA basis) – Q2 2004
- Production Qty – Q3 2004

SIDEN™TC4000 Additional capabilities

- With the addition of a battery, the SIDEN™TC4000 offers features like Anti-Theft, Secure Identification.
- Native capabilities also include secure execution mode, Sandbox, Digital identity management and software protection.