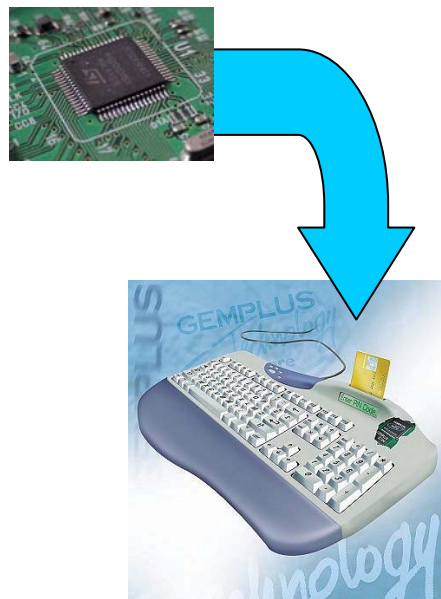


Core Keyboard

“Create your smart card reader in your keyboard!”



Overview

Core Keyboard is the most integrated solution for keyboards integrating smart card readers. It is based on the world-renowned **GemCore technology**. Core Keyboard has been chosen and widely deployed by the key players of PC market. It supports the smart cards interface, the keyboard management as well as the USB communication in **one single chip!**

Applications

Core Keyboard is therefore well-suited for many applications:

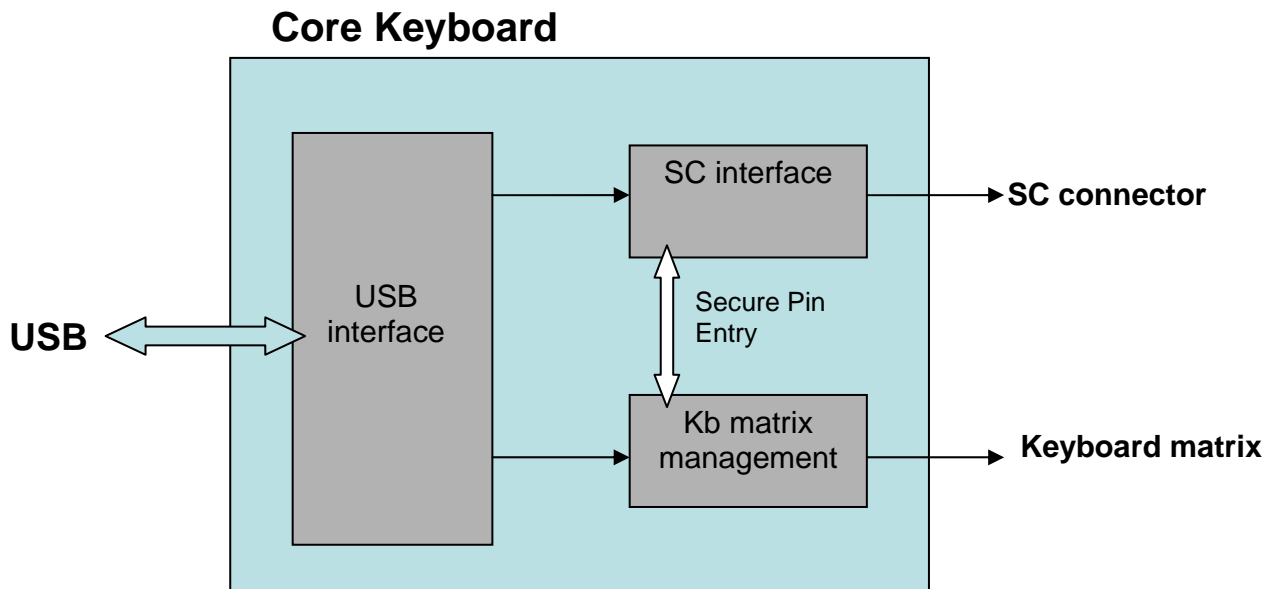
- Logical access control and secure logon
- Physical access control
- Home banking
- E-commerce
- Healthcare

... more than 4 million units deployed !

Main standard compliances

- ISO7816 and EMV2000
- PC/SC V2 and Microsoft WHQL
- USB 2.0 and CCID 1.0
- Secure pin entry (EAL3)

Product Architecture



Product Customization

As Core Keyboard manages the keyboard matrix, this part will be customized for each keyboard to take into account the specific key positions (row/column), the LEDs, the hot keys, the identifiers and the USB descriptors.

To make this customization very easy, Gemalto supplies a Customization Kit: the integrator just has to download its specific parameters. The customization average duration is less than 1 day!



Technical features

Communication interfaces	Smart Card	<ul style="list-style-type: none"> • Access to all ISO 7816 and EMV microprocessor cards (T=0, T=1) through PC/SC drivers • Synchronous cards through a comprehensive API • 5V/55mA, 3V/50mA, 1.8V/20mA smart card power supply • Full ISO7816 and EMV2000 compliances • Communication speed: up to 500Kbds • Short circuit protection • Card removal detection when powered on • ESD: 4 KV on card pins, Human Body Model
	Host	<ul style="list-style-type: none"> • USB 2.0 full speed • Hub less, composite device • USB powered
	Keyboard matrix	<ul style="list-style-type: none"> • Up to 160 keys and hot keys • Standard keyboard LEDs • PC/SC V2 Secure Pin Entry features, 1 led to indicate SPE is active
Drivers	Windows	PC/SC Drivers: <ul style="list-style-type: none"> • 2000, XP, Server 2003, Vista (32 & 64 bits), Server 2008 (32 & 64 bits) • Vista Microsoft CCID class driver compliant • Windows Seven ready • CE 4.1, 4.2, 5.0, 6.0 Bridges on top of PC/SC for 32 and 64 bit editions: <ul style="list-style-type: none"> • CT/API based on MCT/BCS specs • Synchronous API
	Linux	PC/SC Driver: <ul style="list-style-type: none"> • Compliant with number of Linux distributions • CCID class driver compliant (free software)
	Mac OS	PC/SC Driver: <ul style="list-style-type: none"> • 10.4 Tiger, 10.5 Leopard for PPC and Intel
	Other OS	<ul style="list-style-type: none"> • CILK library (free Gemalto CCID source code)
Temperature	Storage	<ul style="list-style-type: none"> • -40°C to +85°C
	Operation	<ul style="list-style-type: none"> • 0°C to +70°C
Environmental standards		<ul style="list-style-type: none"> • RoHS
Technical package		<ul style="list-style-type: none"> • Technical Specifications and Reference Manual • Support to hardware design and validation • Support to EMV approval and WHQL signature • Manufacturing test bench (PC Doctor) • Smart Diag for deployment diagnostic