SLC39B

Short Product Overview

Description

- High-performance, powerful 32-bit Arm® SecurCore® SC300 dual-interface security cryptocontroller enhanced by Infineon's cache and security technology
- SOLID FLASH™ NVM technology with strong IP protection and EEPROM emulation support
- Digital Security concept. High speed coprocessor for symmetric and asymmetric cryptography with certified symmetric library (AES and 3-DES) and certified asymmetric library (RSA and ECC) and also SM4.
- Hybrid random number generator according to AIS.31 with physical noise source and built-in cryptographic post-processing (supporting the functionality classes DRG.2, DRG.3, DRG.4, PTG.2 and PTG.3)
- Memory Protection Unit, which controls access permissions to blocks of memory
- Supported interfaces: contactless interface (RFI), ACLB, NRG™ interface, I2C master, I2C slave, SPI master, Power Source, UART and GPIO
- Without external power source, SLC39B is fully capable to power supply and communicate with an off-chip fingerprint sensor for biometric card applications and other external components, such as MCUs, LEDs and displays.
- Full coverage of CL protocols: compliant with ISO/IEC 14443 Type A and B, interoperable with ISO/IEC 18092 passive mode for Type F and NFC and also supporting CIPURSE™ and optionally NRG™ (ISO/IEC 14443-3 Type A with CRYPTO1)

Features

- Up to 1 MByte SOLID FLASH™ NVM
- Up to 96 KByte RAM
- GPIO pins supplied by different power supply domains enabling the communication with an off-chip fingerprint sensor for biometric card applications and other external components such as LEDs, pushbuttons, displays, sensors.
- Cryptographic support : RNG, RSA, ECC, AES, 3-DES, SM4
- Operating temperature (ambient) -25°C to +85°C
- Targeting certification level: EMVCo, CC EAL 6+ high

Applications

- Biometric fingerprint card
- EMV CDA / DDA / SDA (online)
- Global Platform / Java Card / Native

Product name	**SLC39B** Solid Flash™
Product description	Dual-interface and contactless security cryptocontroller
Interfaces	contactless interface (RFI), ACLB, NRG™ interface, I2C master, I2C slave, SPI master, Power Source, UART and GPIO
Memory	Up to 1 MByte SOLID FLASH™ NVM Up to 96 KByte RAM
CPU	32-bit Arm® SecurCore® SC300
Symmetrical cryptography	DES, 3-DES, AES up to 256-bit
Asymmetrical cryptography	RSA up to 4096-bit, ECC up to 521-bit
Ambient temperature	-25°C to +85°C
Delivery forms	SMD package X2QFN-24-1, wafer sawn
Typical applications	Biometric card applications
Certification level	EMVCo and CC EAL 6+ high

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Document reference

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