SLC38B

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
- Additional IOs: through GPIO port with 3 GPIO pins and separate power supply for these GPIO pins SLC38B can communicate with an off-chip fingerprint sensor for biometric card applications. They can also be used to connect any other external components, such as MCUs, LEDs, push-buttons, displays, sensors.
- 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) (option)

Features

- 800kByte SOLID FLASH™ NVM
- 24 KByte RAM
- 32-bit Arm® SecurCore® SC300
- Supported interfaces: UART, GPIO, I^2C slave, 2-wire SPI master functionality, ISO/IEC 7816, ISO/IEC 14443 A/B, ISO/IEC 18092 (NFC passive mode)
- Additional GPIO port with three GPIO pins and one separate power supply pin for the GPIO pins enabling the communication with an off-chip fingerprint sensor for biometric card applications, or any other external components, such as MCUs, LEDs, push-buttons, displays, sensors.
- Cryptographic support : RNG, RSA, ECC, AES, Triple DES, SM4
- Operating temperature (ambient) -25°C to +85°C
- Certification level: EMVCo, CC EAL 6+ high

Applications

- Biometric finger frint card
- EMV CDA / DDA / SDA (online)
- Global Platform / Java Card / Native
- ePurse, eSignature

Product name	**SLC38B** Solid Flash™
Product description	Dual-interface and contactless security cryptocontroller
Interfaces	UART, GPIO, I^2C Slave, 2-wire SPI master functionality, ISO/IEC 7816, ISO/IEC 14443 for both type A and/or type B, ISO/IEC 18092 (NFC passive mode)
Memory	800 kByte SOLID FLASH™ NVM 24 kByte RAM
CPU	32-bit Arm® SecurCore® SC300
Symmetrical cryptography	DES, Triple DES, AES up to 256-bit
Asymmetrical cryptography	RSA up to 4096-bit, ECC up to 521-bit
Ambient temperature	-25 to + 85 °C
Delivery forms	SMD package X2QFN-24-1, Wafer sawn
Typical applications	Biometric card applications, wearable devices
Certification level	EMVCo and CC EAL6+ high

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Email: erratum@infineon.com

Document reference

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