TEGRION™ SLC26TDx280G7

SOLID FLASH™

Description

- The TEGRION™ SLC26TDx280G7 is a high-performance, powerful 32-bit Arm® dual-interface security crypto controller fully compatible with the Arm ® v8-M instruction set including the Main Extension and Security Extension, referred to as Arm TrustZone for Arm ® v8-M
- SOLID FLASH™ NVM Technology with strong IP protection and EEPROM emulation support
- Integrity Guard 32 security concept
- Strong integrity support by mathematically modelled techniques
- Strong confidentiality support by sophisticated cryptographic techniques, including extensive protection for the memory, caches, buses and registers
- High speed coprocessor for symmetric and asymmetric cryptography with certified symmetric library (AES and 3-DES) and certified asymmetric library (RSA and ECC)
- Random Number Generator (RNG) supporting true random number generation to fulfil the quality criteria of the BSI AIS20/31 for the functionality class PTG.2
- Family concept for the TEGRION™ SLC26TDx and TEGRION™ SLC27TDx products saves development effort across all security applications
- Support of CL protocols: ISO/IEC 14443 Type A/B with HBR and optionally NRG™ (ISO/IEC 14443-3 type A/B with CRYPTO1)

Features

- Up to 280 kByte SOLID FLASH™ NVM and 20 KB RAM and 4 KB instruction cache, 1 KB data cache
- 32-bit Arm® v8-M Mainline extended by the Arm TrustZone
- Supported interfaces: UART, ISO/IEC 7816, ISO/IEC 14443 A (106 kbit/s)
- Cryptographic support: RNG, RSA, ECC, AES, 3-DES
- Standard operating temperature (ambient) -25°C to +85°C
- Certification level: CC EAL6+

Applications

- Transport ticketing
- Global Platform / Java Card / Native
- ePurse
- New form factors like passive wearables devices

Parametrics

Product name	TEGRION™ SLC26TDx280G7
Product description	Dual-interface and contactless security crypto controller Unique input capacitance 56pF for all delivery forms TEGRION™ SLC26TDx[1]280G7: [1]L with NRG; [1]A no NRG
Interfaces	ISO/IEC 7816, ISO/IEC 14443 A/B, ISO/IEC 18092 (NFC passive mode) Optionally NRG™ (ISO/IEC 14443-3 type A/B with CRYPTO1)
Memory	Up to 280 kByte SOLID FLASH™ NVM and 20 kByte RAM 4 KB instruction cache, 1 KB data cache
Architecture	Integrity Guard 32: architectural concept based on the Arm ® v8-M instruction set, enhanced by Infineon security technology
Symmetrical cryptography	DES, 3DES, AES up to 256-bit
Asymmetrical cryptography	RSA up to a bit length of 4096, ECC up to a bit length of 521
Ambient temperature	-25°C to +85°C
Delivery forms	Wafer, dual interface and contactless modules
Typical applications	Transport and ticketing
Certification level	CC EAL6+: Certification BSI-DSZ-CC-1229; certification identifier IFX_CCI_0000 $7H_H$

For further information on technology, delivery forms and conditions please contact your nearest Infineon Technologies sales representative (www.infineon.com)

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