MS6003 Secure USB MCU With FIDO 2 & U2F Applications

Many secure USB tokens are built by adding a USB bridge to a PKI Smart Card chip because of the lack of an integrated solution. MS6003 offers that unique USB interface integration:



Optimized BoM No need for crystal, ESD protection nor RTC



Highest Security certification CC EAL5+

Flexible 1MB Flash, up to 1024 Credentials Certified FIDO 2 (CTAP 2.1) FIDO U2F Ref Design Available

High Performance

32-bit ARM

SC300 CPU



The FIDO Alliance, bringing together major players such as Google, Microsoft and Apple, encourages the adoption of FIDO2 for passwordless authentication using passkeys based on cryptographic keys, as well as FIDO U2F for enhanced second factor authentication.

Technical Features

Key features:

- 50MHz 32-bit SC300 ARM SecureCore
- 1MByte Flash, 24kB RAM
- TDES, AES, RNG, PKI co-processors and libraries
- 8 Endpoints USB 2.0 Full Speed Interface with Clock Recovery
- ISO 7816, I2C, SPI, 8 GPIOs
- Nano Power RTC (<300nA)

- 8kV contact IEC 61000-4-2 ESD protection
- 2.7V to 5.5V
- -40°C to 105°C Operating Ranges
- Available in Wafers & 4x4mm QFN20 package
- Optional provisioning & personalization in CC EAL5+ secure environment

