



Secure Element IC for V2X Communication

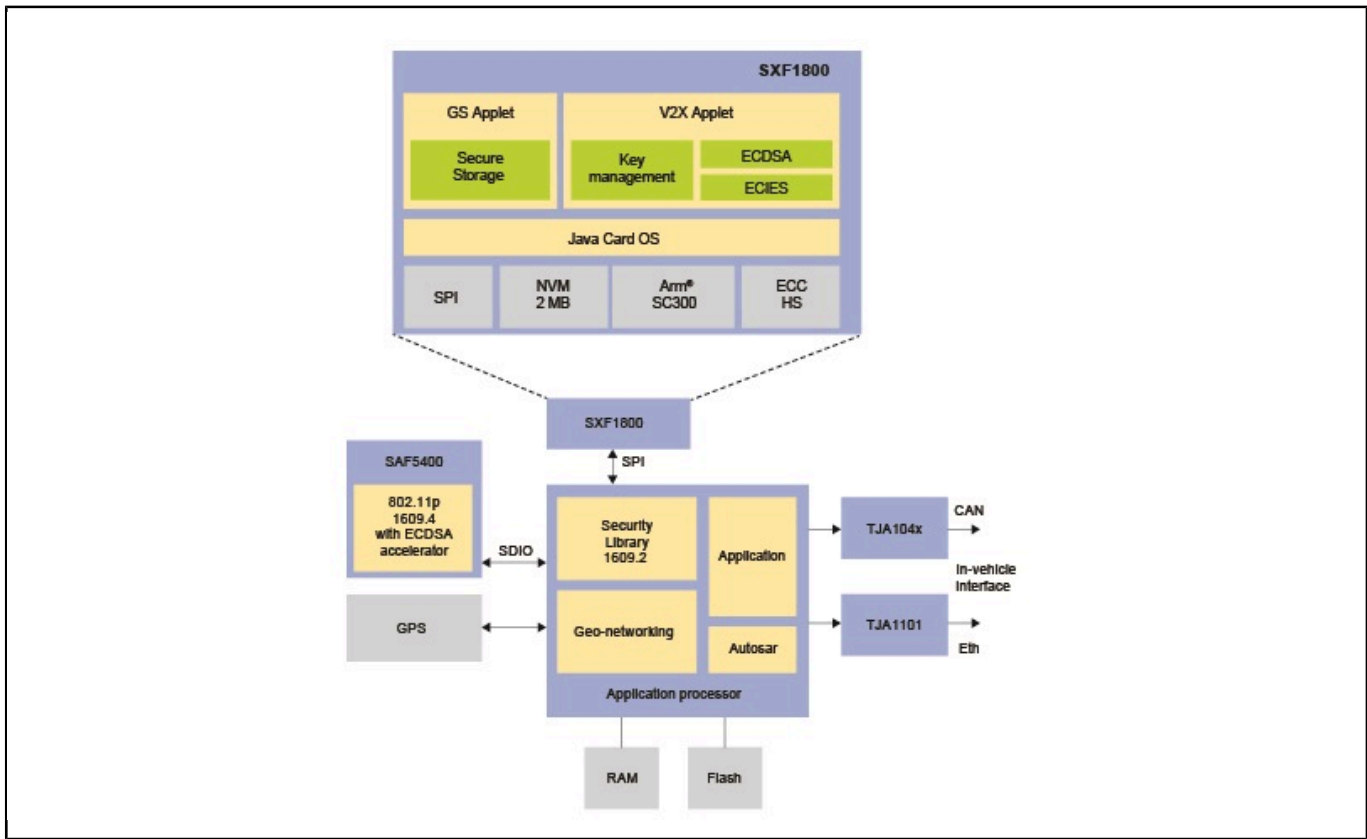
SXF1800

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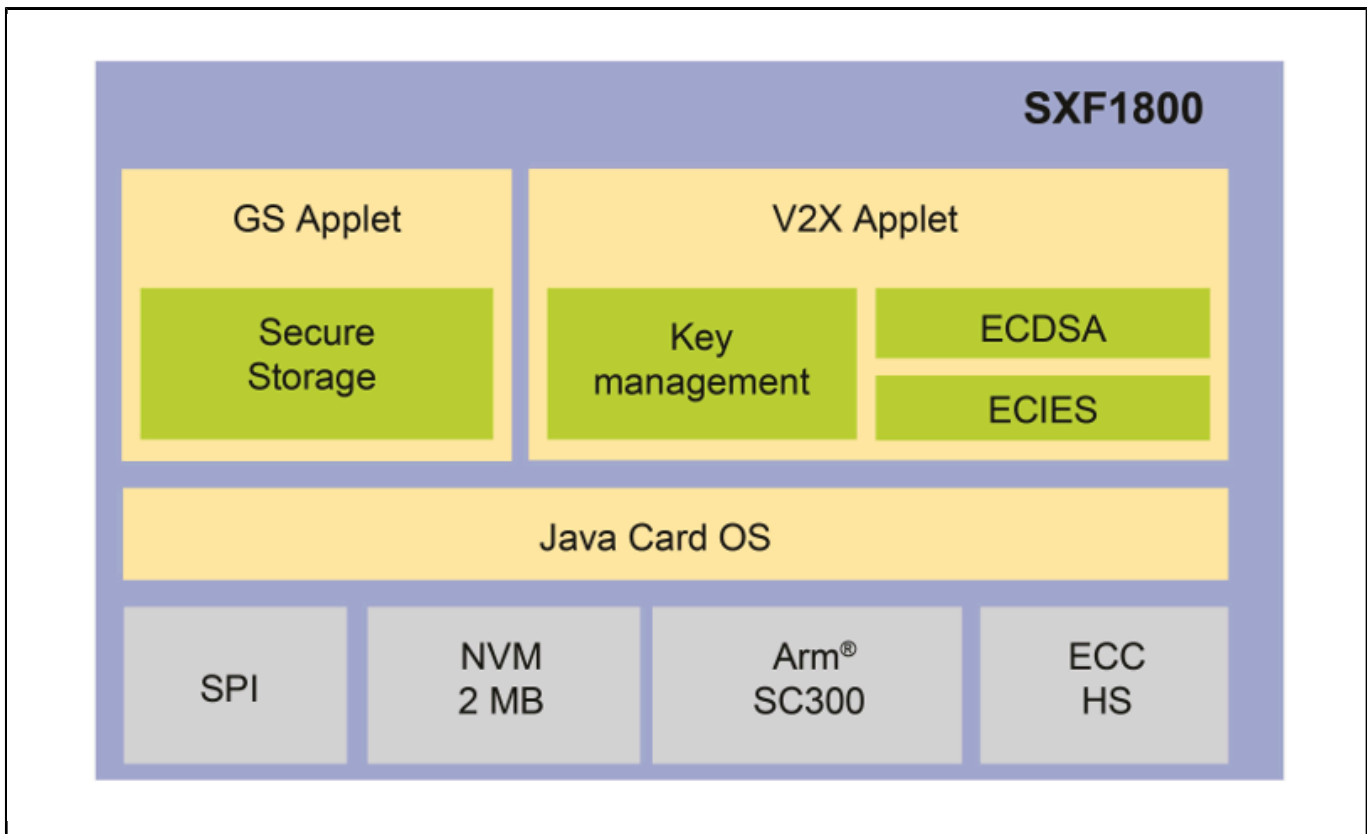
SXF1800 is based on highly secure microcontroller used also to protect mobile payments, providing highest proven assets protection. The hardware architecture is based on Arm SC300 core, along with the latest generation of public crypto hardware coprocessor, 2 MB flash module, and hardware SPI interface.

The device is programmed with NXP's Java Card Operating System (JCOP) allowing for running of Java applets. The V2X functionality is implemented with a combination of two applets - the V2X applet for V2X cryptographic operations and key management, and the GS applet for storage of generic data, e.g. certificates. The functionality comprises, ECC private key management (generation, derivation, deletion), ECDSA signature generation, ECIES encryption and decryption, storage of generic data, as well as getting information about the device. Complete software occupies half of the available flash space, leaving 1MB for user data.

V2X System: Combined view Block Diagram



V2X system Block Diagram



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