Security Transponder, SECT

Features

- Programmable Security Transponder
- 48/48 bit challenge/response authentication
- Powerful security algorithm
- 128 bit Secret Key
- 32 bit device identification number
- 768 bit non-volatile user memory (EEPROM)
- EEPROM read/write protection capabilities
- Fully compatible with PCF7931/30 family
- 20 year EEPROM data retention
- Leadless stick shaped plastic package

General Description

The PCF7935, SECT is a programmable Security Transponder employing challenge/response authentication ideally suited for contactless authentication and memory access between a basestation and the transponder.

The SECT features a powerful security algorithm for vehicle immobiliser applications. The device is fully compatible with the PCF7931 read only and PCF7930 read/write transponder family, providing means for downward compatibility.
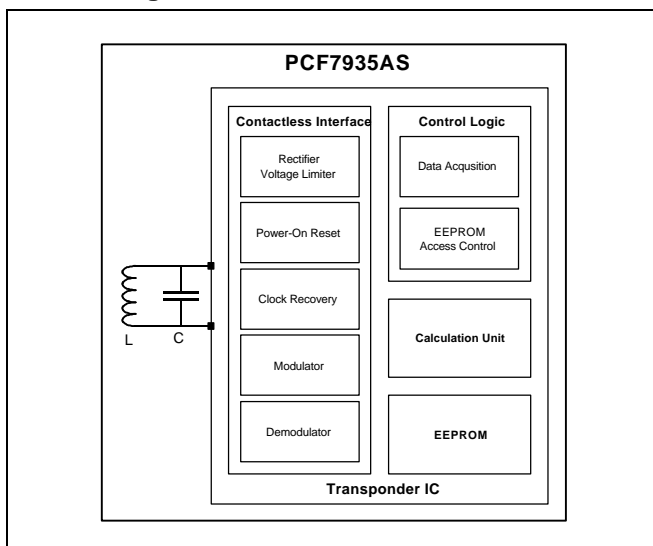
The transponder features 1152 bit of non-volatile memory (EEPROM) from which 768 bit are reserved for user data storage. User data and configuration data may be exchanged in password mode for advanced pre-personalisation techniques. Memory access flags and a 56 bit password enable read and/or write protection of data.

The SECT performs a 48 bit challenge/response authentication, employing a 128 bit Secret Key. In addition the SECT supports a 32 bit device identification number.

The transponder power supply and system clock is derived from the magnetic component of the RF field generated by the basestation.

The transponder is assembled in a small leadless stick shaped plastic package.

Block Diagram

Stick Package Outline