



## 3D keyless entry/start PCF7952

# The compact solution for keyless entry/start and vehicle security

NXP's leading car security portfolio includes the new, highly integrated 3D keyless entry/start active tag IC with processor solutions. Ideal for today's compact key designs, the PCF7952 is the second device in this multi-functional IC family and provides a cost-effective answer for vehicle access applications requiring entry, start and theft prevention via immobilization.

### Features

- ▶ Single chip 3D LF and RISC controller chip
- ▶ PCF7936 family compatible transponder operation
- ▶ Low power RISC programmable device operation
- ▶ Excellent LF sensitivity (< 2.5 mVPP)
- ▶ Ultra low power consumption (5  $\mu$ A)
- ▶ Fast RSSI with 12-bit resolution per LF input
- ▶ Up to seven command button inputs
- ▶ Programmable battery low detection
- ▶ Full suite of on-chip memory
  - 4 Kbytes E-ROM, 8 Kbytes ROM, 512 bytes EEPROM, 196 bytes RAM

- ▶ Factory programmed serial number (32-bit)
- ▶ Single lithium cell operation (2.1 to 3.6 V)
- ▶ 24-pin TSSOP package (SOT355-1)

### Benefits

- ▶ Cost-efficient solution with low Bill of Materials
- ▶ Ultra low power consumption for long battery lifetime
- ▶ Easy system upgrade via software
- ▶ Fully aligned with NXP's product family

In the drive to provide greater driver and passenger convenience and vehicle security, NXP has developed the highly integrated PCF7952.

Combining multiple functions on a single chip, it offers a cost effective solution to car manufacturers for all compact vehicle key designs used in vehicle access applications featuring keyless entry, keyless start and vehicle immobilization.

Incorporating security transponder, very highly sensitive 3D LF interface and RISC controller in a compact 24-pin package, it requires a minimum of external components to deliver a complete solution. Powered by an external single-cell lithium battery, the device features programmable 'battery low' detection, as well as a power down mode to minimize quiescent current.

