# 1 o T eSIM

# **PLASTIC eSIM**

**TECHNICAL DATA SHEET** 

#### **Hardware Features**

- 30 Kbytes of User RAM
- Up to 1280 Kbytes of User Flash memory with OTP area
- Asynchronous receiver transmitter supporting ISO/IEC 7816-3 T=0 and T=1 protocols (Slave mode supported)
- Single wire protocol (SWP) interface for communications with NFC router (ETSI 102-613 compliant)
- Serial peripheral interface (SPI) master/slave interface
- Three 16-bit timers with interrupt capability
- Seven general-purpose I/Os enabling proprietary protocol implementation
- 1.8 V, 3 V and 5 V supply voltage ranges
- External clock frequency from 1 up to 10 MHz
- Current consumption compatible with GSM and ETSI specifications
- Power-saving standby state
- Contact assignment compatible with ISO/IEC 7816-2
- ESD protection greater than 4 kV (HBM)

#### Software features

- Secure Flash Loader
- Flash drivers



### **Security Features**

- Active shield
- Memory protection unit (MPU)
- Monitoring of environmental parameters
- Protection against faults
- 16- and 32-bit CRC calculation block (ISO 13239, IEEE 802.3, etc.)
- True random number generator
- Unique serial number on each die
- Hardware security-enhanced DES accelerator
- Hardware security-enhanced AES accelerator
- NESCRYPT coprocessor for public key cryptography algorithm

## **Applications**

- Mobile communications (GSM, 3G and CDMA)
- NFC mobile transactions
- Java Card applications
- Multimedia

