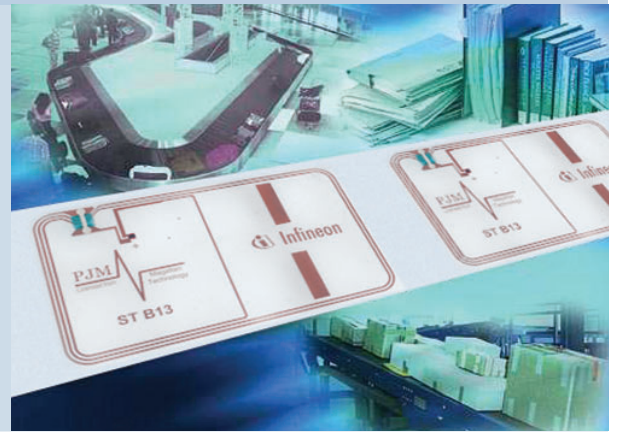# PJM Item Tag
# PJM Stack Tag

SRF 66V10IT

SRF 66V10ST

## PJM (Phase Jitter Modulation)
## Contactless Memory for High Speed and Zero Separation Applications

INTELLIGENT 10 KBit EEPROM with contactless interface
PJM IT (Item Tag): complying to ISO/IEC 18000-3 Mode 2
PJM ST (Stack Tag): an enhancment of ISO/IEC 18000-3 Mode 2
PJM IT and PJM ST: Transaction speed is approximately 25 times faster than typical RFID devices.
PJM ST: Inherent Zero Separation feature supports read/write to hundreds of closely stacked items.

PJM - A BREAKTHROUGH technology, a solution to current and new avenues of RFID application.

## Application Segments

- Track and Trace
- Authentication
- Product/SCM
- Operation Management

## Application Examples

- Document Management
- Pharmaceutical
- Gaming
- Postal services
- Electronic manufacturing
- Airline baggage handling
- Textile industry

## Features

- Operating frequency 13.56 MHz
- Contactless air interface and anticollision complying with ISO 18000 Part 3 Mode 2
  - Data transfer rate (to tag): 424 kbit/s
  - Data transfer rate (from tag): 106 kbit/s
  - Identification up to 1200 tags/s
  - Simultaneous tag responses up to 8 channels
- High transfer rate for Item Tag and Stack Tag
  - Data transfer rate up to 848 kbit/s
- Zero Separation for Stack Tag
  - Read/write of hundreds closely stacked items
- 48 bit password
- Lockable chip memory
- Application Group identifier
- Conditional identifier
- 10 KBit EEPROM
- Block organization of memory
- EEPROM updating time per block < 5 ms
- Endurance > 100,000 erase/write cycles
- Data retention > 10 years
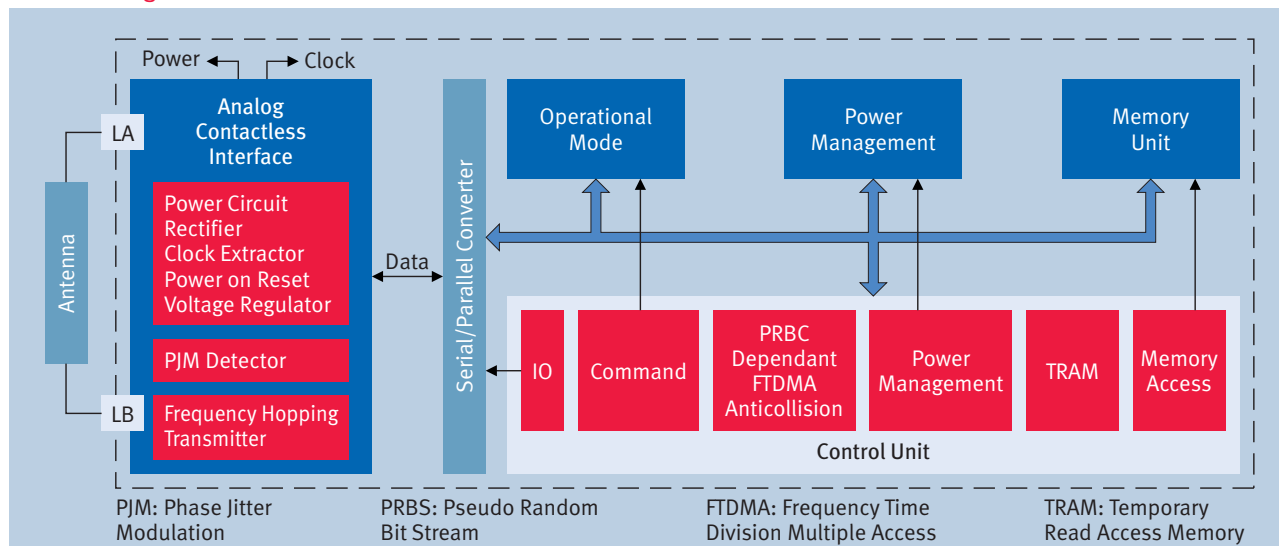- Ambient temperature: -25 ... +70°C (for IC)

www.infineon.com/contactless
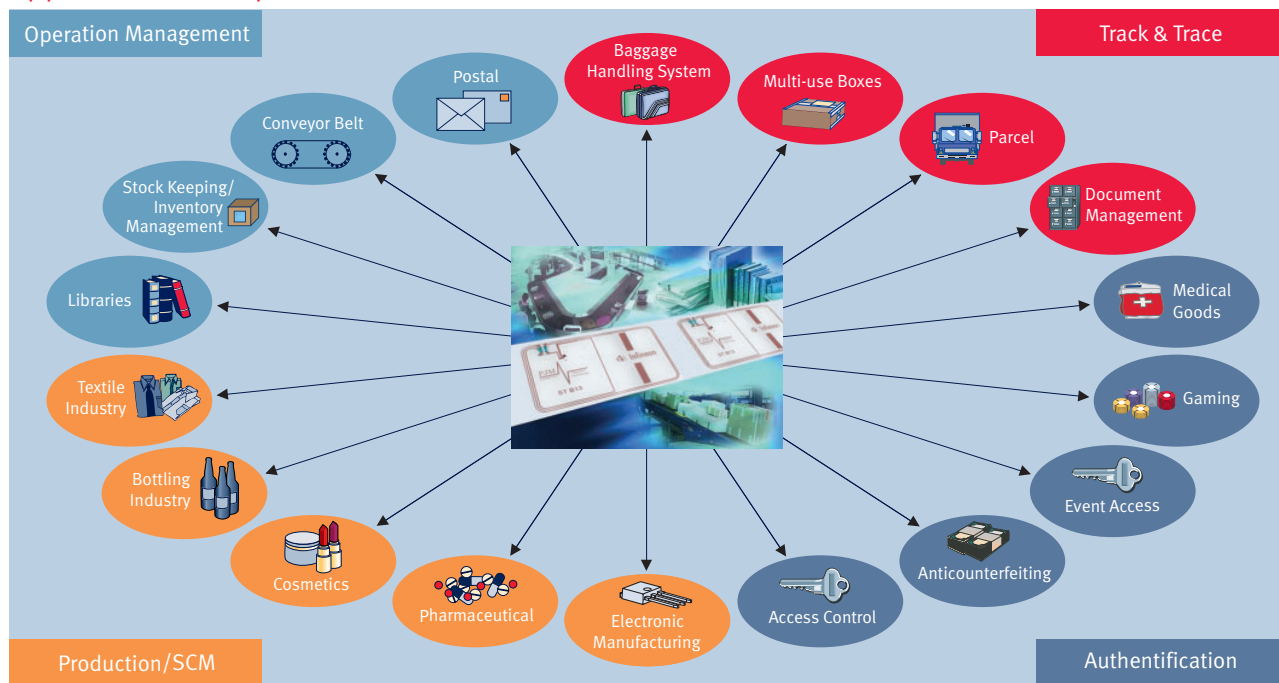
## Chip Card & Security ICs

Never stop thinking

## Block Diagram

Power ← → Clock

**Analog Contactless Interface**

Power Circuit
Rectifier
Clock Extractor
Power on Reset
Voltage Regulator

PJM Detector

Frequency Hopping Transmitter

LA

LB

Antenna

Serial/Parallel Converter

Data

**Operational Mode**

**Power Management**

**Memory Unit**

**Control Unit**

IO | Command | PRBC Dependant FTDMA Anticollision | Power Management | TRAM | Memory Access

PJM: Phase Jitter Modulation

PRBS: Pseudo Random Bit Stream

FTDMA: Frequency Time Division Multiple Access

TRAM: Temporary Read Access Memory

## Product Summary

| Type | Sales Code | Package |
|------|-----------|---------|
| SRF 66V10IT | on request | die, inlay, module |
| SRF 66V10ST | on request | die, inlay, module |

## Application Example

Operation Management

Track & Trace

Postal

Baggage Handling System

Multi-use Boxes

Conveyor Belt

Parcel

Stock Keeping/ Inventory Management

Document Management

Libraries

Medical Goods

Textile Industry

Gaming

Bottling Industry

Event Access

Cosmetics

Anticounterfeiting

Pharmaceutical

Electronic Manufacturing

Access Control

Production/SCM

Authentification

For further information, please contact:
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