



# RFID Get Ready Tour

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# NXP Semiconductors

- ▶ Established in 2006 (formerly a division of Philips)
- ▶ Builds on a heritage of 50+ years of experience in semiconductors
- ▶ Headquarters: Eindhoven, the Netherlands
- ▶ Provides engineers and designers with semiconductors, system solutions and software that deliver better sensory experiences
- ▶ Net sales of \$6.32 billion in 2007 \*)
- ▶ Key focus areas:
  - Home
  - Automotive
  - **Identification**
  - Multimarket Semiconductors



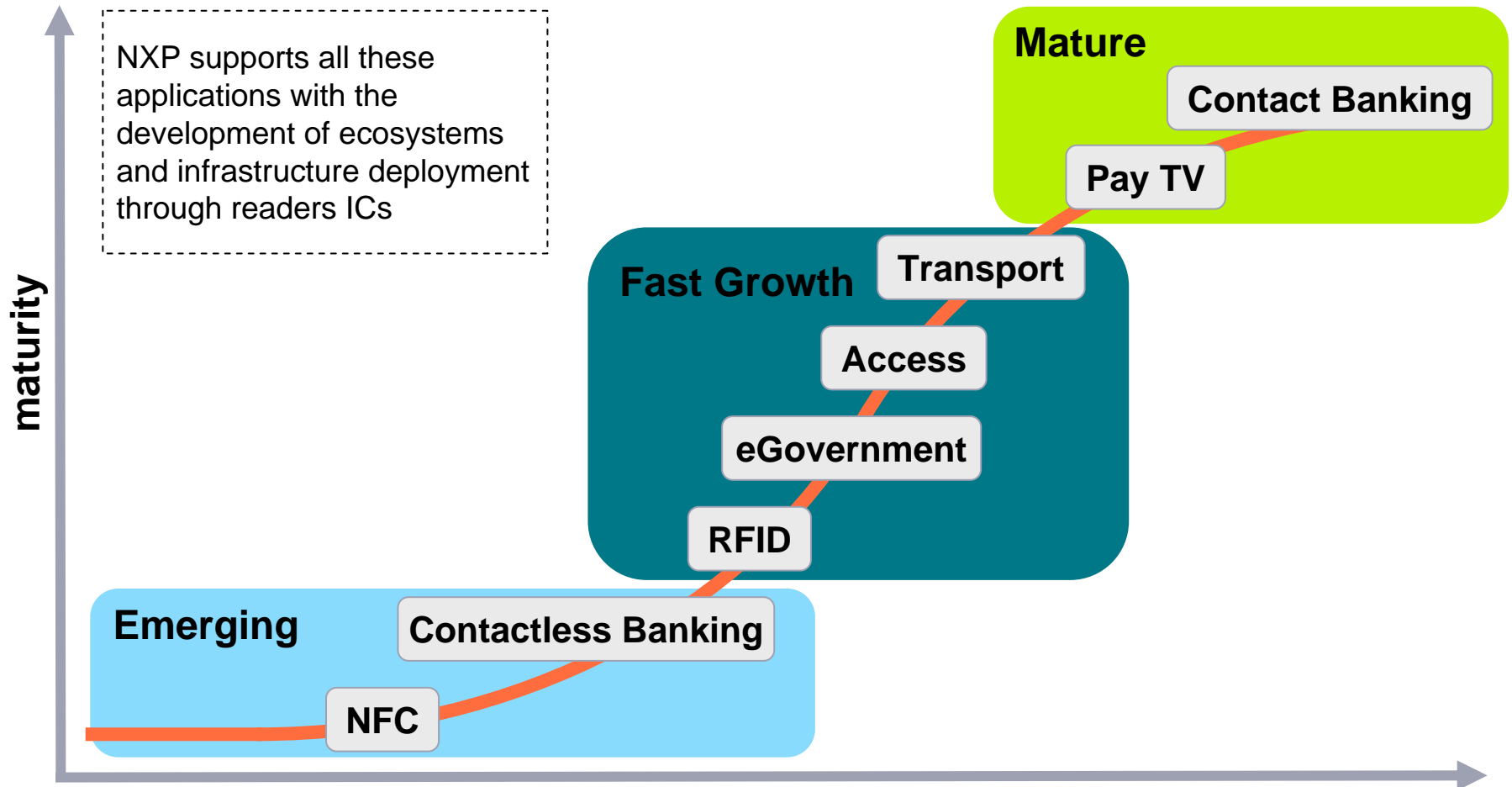
\*) These figures include the Mobile & Personal business which is largely part of the ST-NXP Wireless JV since August 2, 2008

# NXP leads in Identification applications

- ▶ #1 In **RFID tagging & labeling** solutions
  - Supplying >50% of HF tagging market
  - Breakthrough in UHF cost effectiveness
- ▶ #1 in **eGovernment** solutions
  - Supplying 80% of ePassports projects worldwide
- ▶ #1 in contactless **banking** solutions
  - Supplied >500 million banking cards ICs in 35 countries
- ▶ #1 in **public transportation** & access management
  - MIFARE is used in >70% transport infrastructure
- ▶ #1 in **NFC** solutions
  - Creator of NFC technology together with Sony
  - NXP products used in >150 NFC trials worldwide
- ▶ #1 in **reader interface ICs**
  - Supplied >500 million contact ICs
  - Supplied >10 million contactless ICs



# Taking Identification on a journey through the application world



# NXP leadership in RFID

- ▶ In Identification we lead innovation and cost in RFID for supply chain management (BU Automotive & Identification Mission & Strategy 2010)
- ▶ Most comprehensive product portfolio,
- ▶ Covering all frequencies (LF-HF-UHF) recognised leader in technology development
- ▶ At the forefront in driving global standards
- ▶ Track record/ market share, we are in RFID since 1988
- ▶ Expertise and knowledge level
- ▶ Strong industrial capabilities to meet future mass market requirements
- ▶ Availability of test tools (ie RDC) & results,
- ▶ Strong partner network,
- ▶ Roadmap / our vision on the market

→ Your trusted RFID technology source  
→ 2 billion RFID ICs and counting



# RFID Product Offering, Market

## ► Products :

- RFID ICs (packaged and unpackaged) for smart labels and tags:
  - LF: Hitag
  - HF: ICODE
  - UHF: UCODE
  - Custom spec ICs
- Reader IC's for LF and HF



## ► Markets:

- Retail and Supply Chain Management
- Fashion
- Libraries
- CE & Media Management
- Animal ID
- Healthcare and Pharmaceutical



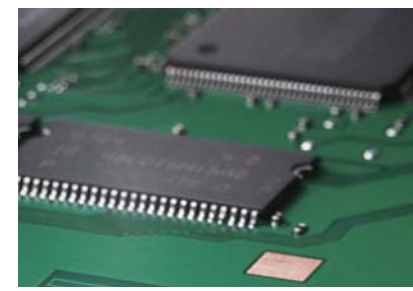
# UHF Products, Market

## ▶ UHF Product Offering: :

- HSL (ISO standard)
- EPC Gen2 (EPC standard)
- G2XL, G2XM (EPC Standard)

## ▶ Markets:

- Retail and Supply Chain Management
- Fashion
  - Airline baggage tagging
  - Automotive part tagging
  - Production control
  - PCB tagging



# NXP Support and Service Offerings

- ▶ World wide application support (CAS) team
  - Customer support and trainings



- ▶ Reference design center (RDC) to improve overall performance and reliability of RFID systems by supporting:
  - Label, tag and reader manufacturers
  - System integrators and end customers





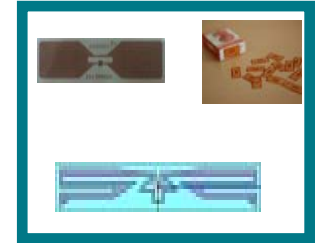
# The RFID industry needs the RDC concept

- ▶ RFID technology continues to evolve but still some system implementations are not plug&play and need to be optimized for specific applications/projects
- ▶ The RDC supports SI with advanced and proven methodology
  - Enabling factor – strong system know how gained in many successful implementation projects; strong IC background
  - Economic reward – **guaranteed successful RFID implementation**
- ▶ This model has proven to be successful with several partners

# Reference designs/tools available today

- ▶ Reference label antenna designs
- ▶ Label performance test platform
- ▶ Label tester
- ▶ Portable label measurement unit
- ▶ Reader evaluation platform
- ▶ RFID Portal for logistics
- ▶ UHF Tunnel reader
- ▶ UHF Point of Sale
- ▶ Field Strength Recorder
- ▶ Product Scanner
- ▶ Pallet evaluation SW
- ▶ Optimization of the application

➔ Label based



➔ Reader

+

➔ Read point based



➔ Application based



know how package available for purchase  
deliverable: report  
for internal purpose

