Contactless Smart Cards: Market Research Report

https://marketpublishers.com/r/C1D9B77C0F0EN.html

Date: July 2009
Pages: 582
Price: US$ 3,950.00 (Single User License)
ID: C1D9B77C0F0EN

Abstracts

This report analyzes the worldwide markets for Contactless Smart Cards in Millions of US$.

The report provides separate comprehensive analytics for the North America, Europe Middle East & Africa (EMEA), Asia-Pacific, and Latin America.

Annual forecasts are provided for each region for the period of 2006 through 2015.

The report profiles 58 companies including many key and niche players worldwide such as ActivIdentity Corporation, Advanced Card Systems Ltd., American Microdevice Manufacturing, Inc., ASK, Austria Card GmbH, CardLogix Corporation, CPI Card Group, Eastcompeace Smart Card Co., Ltd., FNMT-RCM, Fujitsu Microelectronics Limited, Gemalto N.V., General Information Systems Ltd., Giesecke & Devrient GmbH, HID Global Corporation, Infineon Technologies AG,. Inside Contactless, International Business Machines Corporation, IRIS Corporation Berhad, Micromodule Pte Ltd., NBS Technologies, NedCard B.V., NOVACARD INFORMATIONSSYSTEME GmbH, NXP Semiconductors, Oberthur Card Systems SA, On Track Innovations Ltd., Sagem Orga GmbH, Samsung Electronics Co., Ltd., Silicon Storage Technology, Inc., Sitronics JSC, Sony Corporation, STMicroelectronics, Incard SpA, Toppan Printing Co., Ltd., Watchdata System Co.Ltd., and Zetes Industries.

Market data and analytics are derived from primary and secondary research.

Company profiles are mostly extracted from URL research and reported select online sources.

Contents

Contactless Cards Gain Popularity

Growing Confidence in Contactless Smart Card Technology

Financial Institutions Move Towards More Secure and Convenient Cards

Hybrid Cards on the Rise

Access Control Application to Benefit from Near Field Communication

Multi-Application Cards Gain Momentum

ICAO Compliance Boosts e-Passports Program

Consolidation – Growth Through Shrinkage

High Security Java Cards Gain Popularity

Biometrics Offer Significant Growth Potential for Security Applications

4. INTRODUCTION TO SMART CARDS

Smart Cards – An Introduction

Concept & Functional Definition

A Historical Perspective

Smart Cards Vs Magnetic Stripe Cards

Constituents of a Smart Card Chip

Central Processing Unit (CPU)

Read-Only Memory (ROM)

Random-Access Memory (RAM)

Application Memory (EEPROM)

Card Operating System (COS)

Multos

Microsoft Smart Cards for Windows

Java Card

Types of Smart Cards

Based on Type of Integrated Circuit (IC) Technology Used

Integrated Circuit (IC) Microprocessor Cards

Integrated Circuit (IC) Memory Cards

Optical Memory Cards

Based on Interface

Contact Card

Contactless Card

Combi-Card or Dual-Interface Card

Based on Number of Applications Supported By Card

Single Application Cards

Multi-Application Cards

Standards

Hardware Standards

Application Standards

Local Standards

Network Computing Standards

Electronic Purse Standards

Payment Standards

Mobile Communications

Standards Governing Smart Cards & Their Applications

ISO/IEC Standards

ISO/IEC 7816

ISO/IEC 10536

ISO/IEC 14443

ISO/IEC 15693

ISO/IEC 7501

Personal Computer/Smart Card (PC/SC) Workgroup Specifications

EMV (Europay, MasterCard, VISA) Specifications

Comite Europeen de Normalisation (CEN) Standards

GSM – SIM / UIM Standard

STK

WIM (WAP Identification Module)

S@T

GSC-IS Version 2.1 Specifications

SEIWG Specification

Federal Information Processing Standards (FIPS)

Global Platform (GP)

International Airline and Transportation Association (IATA)

G-8 Health Standards

Technology Used in Smart Cards

Java Card Technology Supports Multiple Applications

Biometric Technology – A Boon for Identification Markets

Prominent Features/Capabilities

Internal Memory

Multiple Function Capability

Bi-Directional Identification and Authentication

Benefits

Enhanced Storage Capacity

Security

Convenience

Economic Benefits

Customization

The Technology Evolution

Increased Windows Compatibility

Multiple Applications

Availability of Smart Card Readers as Standard Equipment

Increased Memory Requirements

Generation of Asymmetric Keys on Card

Shorter Delivery Turn-around and Lead-times

USB Interfaces, Higher I/O Speeds

Dual Interface

Faster Processor Speeds and Improved Battery Capabilities

Price Competitiveness

New Specifications To Become Standard Requirements

5. CONTACTLESS SMART CARDS – AN OVERVIEW

Introduction

Current Scenario

Product Overview

Constituents and Special Characteristics of Contactless Smart Cards

Contactless Smart Card Technology

Better than Contact Smart Card Technology

Compatibility with Other Technologies

Data Privacy & Security Crucial for Contactless Smart Cards

Difference Between Contactless Smart Card and RFID Technology

Need for Compatibility Among Standards

Benefits

Technical Breakthroughs in Contactless Technology

HID's iCLASS® Contactless Smart Card Technology

MIFARE Contactless Smart Card from Philips

6. SMART CARDS - COMPETITIVE SCENARIO

Potential Favors Growth in the Intensely Competitive Market

Table 1. Leading Players in the World Smart Card Market (2007): Percentage Breakdown of Shipments for Gemalto NV, Giesecke & Devrient GmbH, Oberthur Card Systems, Sagem Orga, Incard SpA, and Others (includes corresponding Graph/Chart)

Leading Smart Card Players – An Analysis of Competitor Strategies

7.END-USE MARKETS

Mass Transit/Public Transportation Sector

Transit Applications Gaining Acceptance

Smart Card-Based Transit Applications Implemented in Various Regions

Payment Applications

Banking on Smart Technology

Current Financial Sector Scenario

Factors Favoring Adoption of Smart Cards in Finance / Banking Applications

Multi-Application Cards to Drive Penetration in Financial Sector

Impact of EMV Compliance

Electronic Payments Simplify Cash Transactions

Benefits of Using Payment Cards

High Implementation Costs & Legacy Infrastructure Obstruct Growth

Access Control Applications

Contactless Technology Drives Security Applications

Rising Security Concerns Aid Smart Card Growth in Various Sectors

Biometrics Technology Boosts Identification & Security Markets

Network Security Offers Immense Potential for Growth

Countering Hacker Attacks

Government/ Institutional Applications

Governments as Users

Institutional Applications Gaining Prominence

Factors Driving Government Applications

Government Sector in India Boosts Smart Card Implementation

Lack of Smart Card Infrastructure in India Hinders Growth

Security: Role of Government ID Programs

Multifunctional Identification Cards to Enhance Inland Security

Smart Cards Replace Conventional Paper-Based Institutional Systems in India

Healthcare Sector

Smart Cards Facilitate Efficient Healthcare System

Global Healthcare Card Scenario

Benefits of Using Smart Cards in Healthcare Industry

Key Applications of Healthcare Smart cards

Storage of Patient's Medical Information

Patient Identification and Monitoring

Prescription Management

HIPAA Compliance Drives Healthcare Sector

Health Insurance Portability and Accountability Act (HIPAA) of 1996

8. PRODUCT LAUNCHES/INNOVATIONS

Toppan Develops World's Smallest Felica type IC Card, 'SMARTICS-cFe'

Honeywell Introduces OmniAssure Biometric Reader

Athena Releases ASEDrive IIIe CL

HID Global Unveils bioCLASS RKLB57 Smart Card Field Enroller

Texas Instruments Introduces RF-HCT-WRC5-KP221 Chips

HID to Extend Access Control Product Line with Logical Access Control Products

LEGIC Unveils Latest Products and Applications

Sagem Launches Biometric Reader to Comply with MorphoAccess 521 TWIC

LEGIC Unveils New All-in-One Contactless Smart Cards

HID Global Introduces New Crescendo Line of Smart Cards

Sagem Launches New GSA-Approved PIV Reader for FIPS 201

LEGIC Expands Contactless Smart Card Technology Capability

HID Extends multiCLASS™ Reader Line

HID Global Introduces HID Identity

9. RECENT INDUSTRY ACTIVITY

VDV-Kernapplikations Selects NXP's SmartMx for German transport Ticketing

Gemalto Completes Acquisition of Keycorp's Smart Cards Business

HID Teams up with MAXxess

LEGIC Inks Partnership Agreement with APK-ID

LEGIC Signs Deals with Electronica Meysh and Inplastor

SmartMetric Adopts MULTOS for Fingerprint Activated Cards

LEGIC Identsystems and Nortech Control Systems Enter into Licensing Agreement

NEOWAVE Strikes Distribution Agreement with ASK

Garanti Bank Selects Gemalto's EMV Contactless Credit Cards for Deployment in Turkey

Watchdata Executes Major Supply Contract with Shenzhen Tong Ltd

SCM and Sony Sign MoU

Sony and NXP Enter Into a Joint Venture to Form Moversa

HID Global Completes Acquisition of Integrated Engineering

Intrepid Global Imaging to Take Over Versacard

Soliton and AAIT Form Partnership for Contactless Security Smart Card Solutions

LEGIC Enters into an Agreement with G4S Security Systems Microraab

ASK and MasterCard to Work on Contactless Cards

10. FOCUS ON SELECT KEY PLAYERS

ActivIdentity Corporation (US)

Advanced Card Systems Ltd (Hong Kong)

American Microdevice Manufacturing, Inc. (US)

ASK (France)

Austria Card GmbH (Austria)

CardLogix Corporation (US)

CPI Card Group (US)

Eastcompeace Smart Card Co., Ltd (China)

FNMT-RCM (Spain)

Fujitsu Microelectronics Limited (Japan)

Gemalto N.V. (The Netherlands)

General Information Systems Ltd (UK)

Giesecke & Devrient GmbH (Germany)

HID Global Corporation (US)

Infineon Technologies AG (Germany)

Inside Contactless (France)

International Business Machines Corporation (US)

IRIS Corporation Berhad (Malaysia)

Micromodule Pte Ltd (Singapore)

NBS Technologies (Canada)

NedCard B.V. (The Netherlands)

NOVACARD INFORMATIONSSYSTEME GmbH (Germany)

NXP Semiconductors (The Netherlands)

Oberthur Card Systems SA (France)

On Track Innovations Ltd (Israel)

Sagem Orga GmbH (Germany)

Samsung Electronics Co., Ltd (South Korea)

Silicon Storage Technology, Inc (US)

Sitronics JSC (Russia)

Sony Corporation (Japan)

STMicroelectronics (Switzerland)

Incard SpA (Part of STMicroelectronics) (Italy)

Toppan Printing Co., Ltd. (Japan)

Watchdata System Co. Ltd (China)

Zetes Industries (Belgium)

11. GLOBAL MARKET PERSPECTIVE

Table 2. World Recent Past, Current & Future Analysis for Contactless Smart Cards by Geographic Region – North America, Europe Middle East & Africa (EMEA), Asia-Pacific and Latin American Markets Independently Analyzed with Annual Unit Shipments in Millions for Years 2006 through 2015 (includes corresponding Graph/Chart)

Table 3. World 10-Year Perspective for Contactless Smart Cards by Geographic Region – Percentage Breakdown of Annual Unit Shipments for North America, Europe Middle East & Africa (EMEA), Asia-Pacific and Latin American Markets for Years 2006, 2009 & 2015 (includes corresponding Graph/Chart)

Table 4. World Recent Past, Current & Future Analysis for Contactless Smart Cards by Geographic Region – North America, Europe Middle East & Africa (EMEA), Asia-Pacific and Latin American Markets Independently Analyzed with Annual Revenues in US$ Million for Years 2006 through 2015 (includes corresponding Graph/Chart)

Table 5. World 10-Year Perspective for Contactless Smart Cards by Geographic Region – Percentage Breakdown of Annual Revenues for North America, Europe Middle East & Africa (EMEA), Asia-Pacific and Latin American Markets for Years 2006, 2009 & 2015 (includes corresponding Graph/Chart)

Table 6. World Recent Past, Current & Future Analysis for Contactless Smart Cards by End-Use Application – Mass Transit, Access Control, Payment and Government ID Markets Independently Analyzed with Annual Unit Shipments in Millions for Years 2006 through 2015 (includes corresponding Graph/Chart)

Table 7. World 10-Year Perspective for Contactless Smart Cards by End-Use Application – Percentage Breakdown of Annual Unit Shipments for Mass Transit, Access Control, Payment and Government ID Markets for Years 2006, 2009 & 2015 (includes corresponding Graph/Chart)

Table 8. World Recent Past, Current & Future Analysis for Contactless Smart Cards by End-Use Application – Mass Transit, Access Control, Payment and Government ID Markets Independently Analyzed with Annual Revenues in US$ Million for Years 2006 through 2015 (includes corresponding Graph/Chart)

Table 9. World 10-Year Perspective for Contactless Smart Cards by End-Use Application – Percentage Breakdown of Annual Revenues for Mass Transit, Access Control, Payment and Government ID Markets for Years 2006, 2009 & 2015 (includes corresponding Graph/Chart)

III. MARKET

1. NORTH AMERICA

A. MARKET ANALYSIS

Current and Future Analysis
Overview
Key Trends and Issues
Adoption of Contactless Payment System Finds Greater Acceptance
Increased Interoperability and Standardization in Contactless Payment Platforms
Government Programs Continue to Offer Opportunities for Contactless Smart Cards
Delays in Rollout Plague Employee Card Implementation in the US
Proprietary and Sporadic Ticketing Systems Hinder Smart Card Adoption in Mass Transit
The US Perspective
Smart Card Industry Evolution
Smart Cards & the US – A Lackluster Affair
Contactless Smart Cards - Current Scenario
Contactless Leads the Charge in the US
Trends and Issues
US Market Moves Towards Contactless Technology
Contactless Smart Cards Making Headway into Payments Market
US Lags Behind in Adopting EMV Specifications
HSPD-12 Directive Fosters Smart Card-Based Security Sector
ICAO Compliance Boosts e-Passports Program
US Airport Authorities Use Smart Cards Based on Biometric Technology
Cyber Fraud & Identity Theft Crimes Provide Impetus for Smart Card Usage
FIPS Federal ID Standard & ANSI INCITS Standard for ID Sector
Healthcare Sector & Smart Cards
Product Launches
Strategic Corporate Developments
Key Players

B. MARKET ANALYTICS

Table 10. North American Recent Past, Current & Future Analysis for Contactless Smart Cards Market with Annual Unit Shipments in Millions for Years 2006 through 2015 (includes corresponding Graph/Chart)

Table 11. North American Recent Past, Current & Future Analysis for Contactless Smart Cards Market with Annual Revenues in US$ Million for Years 2006 through 2015 (includes corresponding Graph/Chart)

2. EUROPE, MIDDLE EAST & AFRICA

A. MARKET ANALYSIS

Current and Future Analysis
Contactless Smart Cards – A European Perspective
Contactless Payments Market Scenario in Europe
CVM Limits – the Major Driver of Contactless Smart Cards in Payments
Contactless Smart Cards – Unlimited Solutions
Standards
New Form Factors
Pilots and Rollouts
Outlook
Trends & Issues
Improved Revenues and Customer Loyalty Attract Retailers to Contactless Payments
Secure Access Control Capabilities Generate Demand for Contactless Smart Cards in EMEA
Multiple Applications Offer Greater Prospects for Contactless Smart Cards
High Speed Capability Spurs Adoption of Contactless Technology in New Applications
Introduction of Contactless Payments in US and Japan Drives European Market
Faster Payment Transactions Generate Interest on Contactless Technology
Europe Adopts Contactless Ticketing System to Minimize Costs
Electronic Identity Cards to Drive European Identity Market
Overview of Select Regional Markets
France
Electronic Passport Project Enhances Demand for Smart Cards
Belgium
Italy

United Kingdom

UK Smart Cards Market Holds Immense Potential for Growth

Convergence of Transport and Financial Applications in UK – A Key Implementation

Middle East & Africa

Security Market Gaining Prominence in Middle East

Product Launches

Strategic Corporate Developments

Key Players

B. MARKET ANALYTICS

Table 12. Europe Middle East & Africa (EMEA) Recent Past, Current & Future Analysis for Contactless Smart Cards Market with Annual Unit Shipments in Millions for Years 2006 through 2015 (includes corresponding Graph/Chart)

Table 13. Europe Middle East & Africa (EMEA) Recent Past, Current & Future Analysis for Contactless Smart Cards Market with Annual Revenues in US$ Million for Years 2006 through 2015 (includes corresponding Graph/Chart)

3. ASIA-PACIFIC

A. MARKET ANALYSIS

A Combination of Unique Regional Markets

Current and Future Analysis

Contactless Smart Card Market in Asia-Pacific

Select Applications of Contactless Smart Cards in Asia-Pacific (2008)

Government Applications

e–Passport

Outlook

Media Coverage

National ID

Select Countries to Implement the Project

Growth to Decline, Volume Generation to Continue

Driving License

Other Government Services

Other Types of Smart Cards

Contactless Payment, and Loyalty Cards

Contactless Payment Cards

New Projects Fail to Initialize

Loss of Momentum

Contactless Payments Not a Priority in Some Countries

Loyalty Cards

Other Applications

Education

Tourism/Travel

Theme Parks/Entertainment

Contactless SIM

Japan – the Most Advanced Market for Contactless Smart Cards

Japanese Smart Cards Market Gains Prominence

Evolution of Electronic Payment in Japan

Trends & Issues

Asia-Pacific Region Witnesses Growth in Contactless Smart Card Use

Mass Transit Applications Migrate Towards Contactless Mobile Devices

Taiwan Leads in Promotion of Contactless Payments Technology in Asia-Pacific Region

Smart Cards Integrate with Biometrics

Integration of Technologies Becomes Key Factor in Smart Card Business

Campus Smart Cards Rise in Popularity

Leisure Facilities Witness Early Stage of Adoption

Strong Government Control Fosters Growth

Identification Applications Provide Impetus for Government & Institutional Market

Smart Card – An Ideal Solution for Cyber Security Concerns

Data Privacy & Security Hinder Multi-Application Cards Implementation in Australia

Market Drivers

Interoperability to Fetch New Opportunities for Contactless Payment Programs

Government ID Projects to Drive Volume for Contactless Smart Cards in Asia-Pacific

Contactless Payments in Asia-Pacific to Thrive on Foray of Tier II Nations

Contactless Mobile Applications Expand in Asia

Market Restraints

Consumer Apprehension Deters Contactless Payment Programs

Merchant Apprehension Reduces the Number of Transactions

Infrastructure Barriers to Migration

Competing Technologies Vs Smart Cards Technology

Challenges in Integrating with Existing Processes and Systems

Cost Concerns

Security Concerns

Outlook

More Focus on Physical Access Control
Government Usage Drives Private Usage of Smart Cards
Product Launches
Strategic Corporate Developments
Key Players

B. MARKET ANALYTICS

Table 14. Asia-Pacific Recent Past, Current & Future Analysis for Contactless Smart Cards Market with Annual Unit Shipments in Millions for Years 2006 through 2015 (includes corresponding Graph/Chart)

Table 15. Asia-Pacific Recent Past, Current & Future Analysis for Contactless Smart Cards Market with Annual Revenues in US$ Million for Years 2006 through 2015 (includes corresponding Graph/Chart)

4. LATIN AMERICA

A. MARKET ANALYSIS

Current and Future Analysis
An Emerging Smart Cards Market
Low-cost Contactless MIFARE Cards
Market Drivers
Adoption in Key Cities Boosts Awareness on Contactless Smart Cards
Value-Added Services Drive the Adoption of Inexpensive Contactless Smart Cards
Entry of Major Financial Institutions and Brands Boosts Contactless Smart Cards
Market Restraints
Availability of Alternative Technologies Mars Access Control Market
Lack of Standards Restricts ROI
Unfavorable Political Scenario for Government Projects

B. MARKET ANALYTICS

Table 16. Latin American Recent Past, Current & Future Analysis for Contactless Smart Cards Market with Annual Unit Shipments in Millions for Years 2006 through 2015 (includes corresponding Graph/Chart)

Table 17. Latin American Recent Past, Current & Future Analysis for Contactless Smart Cards Market with Annual Revenues in US$ Million for Years 2006 through 2015 (includes corresponding Graph/Chart)

IV. COMPETITIVE LANDSCAPE

Total Companies Profiled: 58 (including Divisions/Subsidiaries - 64)
Region/CountryPlayers
The United States
Canada
Japan
Europe
France
Germany
United Kingdom
Italy
Spain
Rest of Europe
Asia-Pacific (Excluding Japan)
Middle East

I would like to order

Product name:	Contactless Smart Cards: Market Research Report
Product link:	https://marketpublishers.com/r/C1D9B77C0F0EN.html
Price:	US$ 3,950.00 (Single User License / Electronic Delivery)
	If you want to order Corporate License or Hard Copy, please, contact our Customer Service:
	info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page https://marketpublishers.com/r/C1D9B77C0F0EN.html