

# SmartCard Technologies

As a leading and independent full service provider for testing and certification of SmartCard, RFID and NFC related solutions, cetecom advanced's worldwide operating division SmartCard Technologies offers a wide range of DEBUG and TYPE APPROVAL services for BANKING & FINANCE and eIDENTIFICATION.



## **TEST SCHEMES & ACCREDITATIONS**

#### **ePAYMENT**

Banking/Mobile Payment/mPOS Solutions/eCommerce

- EMVCo
- · American Express
- Discover
- Mastercard
- Visa
- JCB
- UnionPay
- · Girocard Die Deutsche Kreditwirtschaft (GBIC)
- NEXO

# eHEALTH

• gematik

# **eIDENTIFICATION**

## ePassport, (German) eID

- BSI TR-03105
- ISO/IEC 18745-2

## **eTICKETING**

- VDV-KA
- CEN/TS 16794
- BSI TR-03150

#### **BIOMETRICS**

· Mastercard/Visa/Google

## **CCC (Car Connectivity Consortium)**

- · Digital Key Applet
- E2E IOP for Vehicle

# COMPLIANCE TESTING FOR CONTACTLESS TECHNOLOGIES

• ISO/IEC 10373-6 (based on ISO/IEC 14443)

## STANDARDISATION ACTIVITIES

Member of DIN/NEXO/CCC (Car Connectivity Consortium)

## **TESTING SERVICES**

- Type Approval and Compliance Testing
- · Pretest / Debug Testing
- Consultancy

## RFID/NFC

Whether RFID technology is used for ePassport, Contactless or NFC applications, cetecom advanced supports customers in setting and evolving the performance, ensuring that products meet the expectations for regulatory, quality, health, environmental and safety standards for almost any market around the world.

# **SUPPLEMENTARY TESTING SERVICES**

cetecom advanced offers a broad portfolio of testing and certification services for your device:

- EMC/Electrical Safety/Health (SAR)
- Environmental Simulation
- Battery Testing
- Radio Testing: DECT, LTE/UMTS/GSM, Bluetooth®, Wi-Fi™, SIGFOX, LoRa, LPWAN
- Network Access
- International Type Approval



# SmartCard Technologies

The following overview shows our accreditations and other services for different payment schemes:

## **EMVCO**

## **Terminals**

- EMVCo Contact Terminal Level 1 & 2
- EMVCo Contactless Terminal Level 1 & 2
- · EMVCo Contactless PCD L1 Reduced Range (RR)
- · EMVCo COTS Level 1
- EMVCo Terminal ESD Evaluation

#### Cards / Wearables

- EMVCo Contact Card Level 1
- · EMVCo Contactless Card Level 1
- EMVCo CCD & CPA Card

#### Mobile

- · EMVCo Mobile Level 1 (Phase II)
- PPSF

#### 3-D Secure

- · 3DS Server
- · Access Control Server
- · Directory Server

#### **VISA**

#### **Terminals**

- Acceptance Devices (Contactless Terminal Level 2)
- Cross Testing
- Tap to Phone (SoftPOS/COTS)
- Fleet

## Cards / Wearables

- · VIS (Contact)
- · VCPS (Contactless)
- · Multi Access
- · VPCS (Prepaid)
- · VBSS (Biometric)
- · VISA Seccos (VCPS in Europe)

#### Mobile

- · Visa Mobile Payment (incl. HCE)
- · Visa Mobile Payment Application (VMPA incl. UICC/SE)

## **Biometric Product Testing - Sensor & Algorithm**

- Sensor Characteristics
- · PAD Performance
- FAR / FRR
- · Timing Performance

# DK-DIE DEUTSCHE KREDITWIRTSCHAFT/ GERMAN BANKING INDUSTRY COMMITTEE (GBIC)

## **Accreditations for**

- GiroCard and Network Components
- · GeldKarte & Secoder
- Payment Network Host Systems
- · GBIC ATM System (GA 20xx)
- DC-POS 3.x/TA 7.x

## cetecom advanced Test Tool

Web based Test Tool - "cetecom advanced Online Host"

## **JCB**

## **Terminals**

- Acceptance Devices (Contactless Terminal Level 2)
- SoftPOS (Tap on Mobile/COTS)

## **UNIONPAY**

## **Terminals**

• Acceptance Devices (Contactless Terminal Level 2)

## **MASTERCARD**

#### **Terminals**

- · Acceptance Devices (Contactless Terminal Level 2)
- Tap on Phone (SoftPOS/COTS)

#### Cards/Wearables

- M/Chip Card
- · Contact & Contactless Testing

#### Mobile

- M/Chip Mobile
- · Mastercard Cloud Based Payments (MCBP)
- · Mastercard Mobile Payment (incl. HCE/SE)
- Mastercard Mobile Payment Application (MPA)

## **Formal Approval Service Provider**

- M-TIP
- GICC-TIP
- CPV

## **Biometric Product Testing - Sensor & Algorithm**

- PAD Performance
- FAR / FRR
- Timing Performance

# **AMERICAN EXPRESS (AMEX)**

#### Terminals

- · Expresspay Terminal Level 2 Contactless
- · SoftPOS/COTS

## Cards / Wearables

- · Level 1 Contact and Contactless (ID1)
- · Card Functional (AEIPS & XPAY)

#### Mohile

· Level 1 Mobile Handset (UICC & HCE)

## **DISCOVER**

## **Terminals**

- Contactless D-PAS Terminal Application
- Contactless D-PAS Terminal Cross Testing
- · SoftPOS/COTS

## Cards / Wearables

- Contact D-PAS Connect Card Application
- Contactless D-PAS COnnect Card Application & Cross Testing
  Mobile
- Mobile D-PAS Card Application (SE)

#### GOOGLE

- Biometrics Product Testing Fingerprint Sensor
- Biometrics Product Testing Face Recognition coming soon

## **NEXO**

POI Terminal

