





Presentation materials and video replay will be provided within one week.

Have questions? Use the questions panel  – we'll field them as we go and during the Q&A recap at the end of the call. Click "Raise Hand"  to ask your question by phone.

EMV Conversion Made Simple

Today's Speakers



Greg Kuyava

Senior Product Manager, Card Services, Harland Clarke

Experienced speaker on a variety of card services topics, including:

- Creating an efficient, cost-effective program
- Marketing and brand awareness
- Instant card issuance
- Obtaining primary financial status with cardholders
- Enhancing cardholder engagement

Agenda

EMV – Trends in the Market

EMV – A Card Overview

Your EMV Conversion Journey Made Easy

Q&A

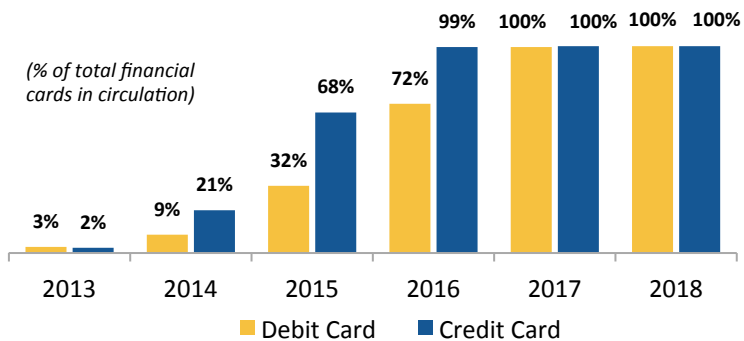
EMV – Trends in the Market



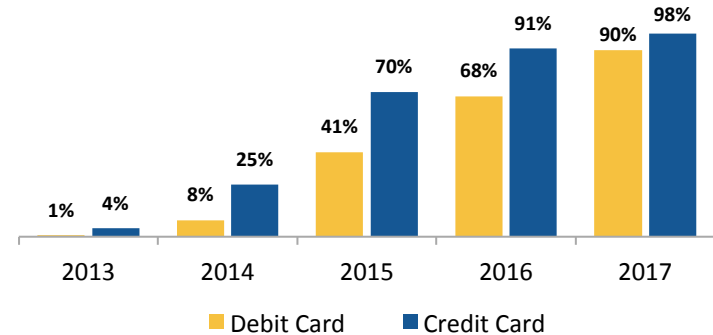
Rate of U.S. EMV Conversion

The U.S. will be quickly migrating to chip cards over the next three years

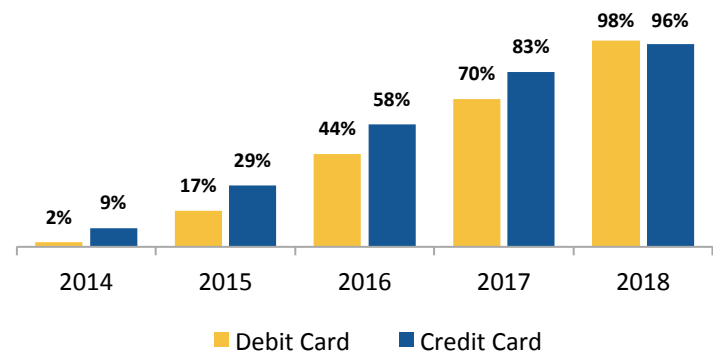
First Annapolis Industry Research⁽¹⁾



Aite Group Industry Research⁽²⁾



Javelin Industry Research⁽³⁾



- (1) First Annapolis Industry Research (April 2014).
- (2) Aite, EMV: Lessons Learned and the U.S. Outlook (June 2014).
- (3) Javelin Strategy & Research, EMV in USA: Assessment of Merchant and Card Issuer Readiness (April 2014); debit cards include prepaid.

Complexities of U.S. Migration

- Payments Market
 - Largest number of issuers, acquirers, merchants, ATM operators and cardholders
 - Two international and 16 debit networks
 - Transaction routing of debit cards governed by “Durbin Amendment”
 - requires U.S. issuers to participate in at least two unaffiliated debit networks
- Ambiguity
 - Every card will support a different set of features
 - All U.S.-issued EMV chip cards will contain both a chip and a magnetic stripe

A Game-Changing Plan for EMV

- EMV brings a new dimension to the card issuing process
 - Card manufacturing and personalization are linked
 - Each card needs its “own” personalization setup
 - Chips hold certificates and have expiry dates
- Card implementation projects can take longer
 - Choice of the EMV card product
 - Personalization infrastructure
 - Testing and approval process
- Procurement cycle will change to longer term contracts
- Late decisions could create a bottleneck in the industry

Poll Question #1



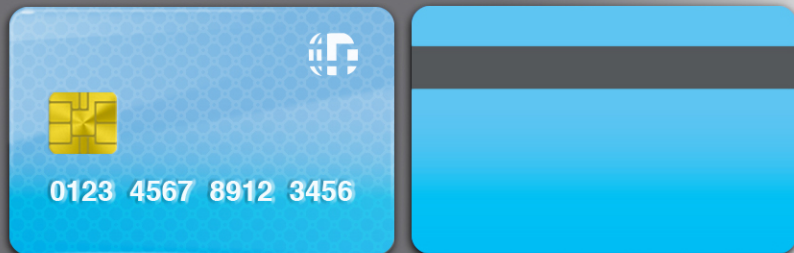
Please indicate when you will have EMV cards distributed to your card holders:

1. Currently in the market
2. 4 to 6 months
3. 7 months or longer
4. Undecided

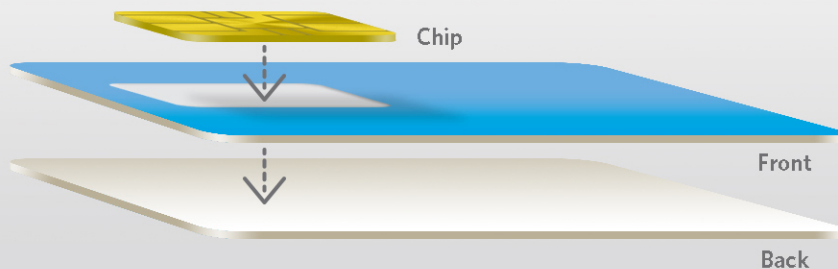
EMV – A Card Overview



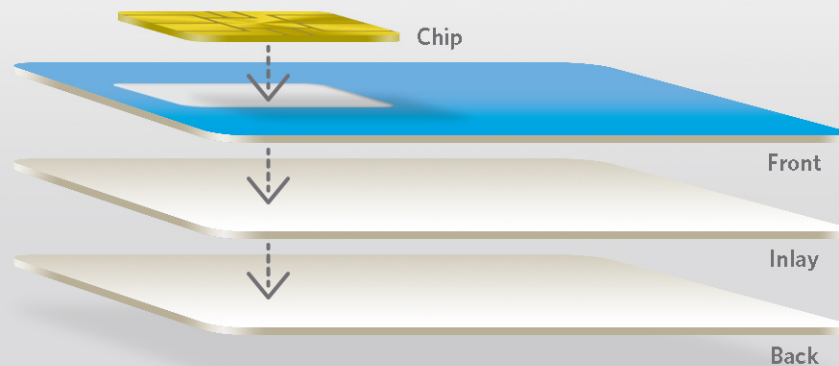
The EMV Card



Chip Only Card Construction



Dual Interface Card Construction



Card Platform


Native	JAVA	Multos
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Card Certification

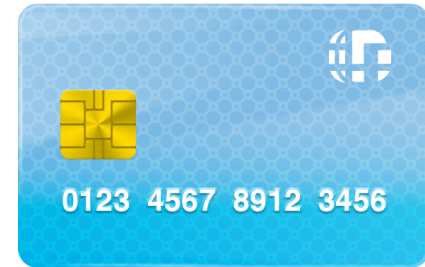


The Chip Holds

- Cardholder Data
- Keys
- Certificate



How Similar is a Smart Card to a Computer?



Hardware

PC from HP®, Dell®,
Apple®, ...

Chip from ST, Samsung,
NXP, Infineon, ...

Operating System

MS DOS, Windows,
Mountain Lion

Native, JAVA, Multos

Application

Excel, Safari, Word,
Lotus Notes, Outlook

Visa VIS 1.5, PIV, M/Chip
Advance, AEIPS, ...

Poll Question #2

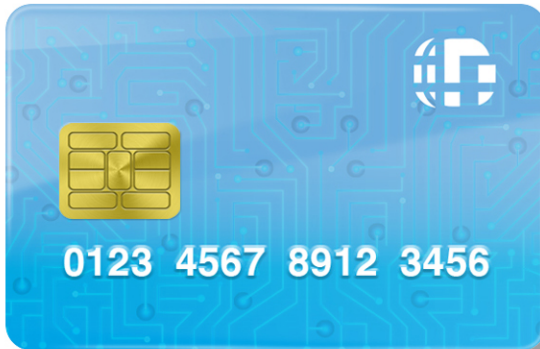


Please indicate which Operating System will your FI most likely use (or are currently using) when migrating to an EMV Card

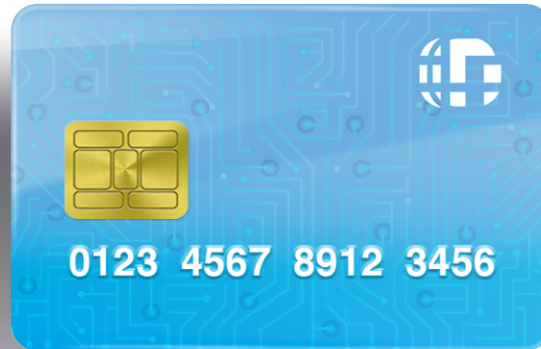
1. Java
2. Multos
3. Native/other
4. Undecided

EMV Card Types

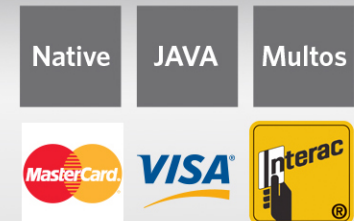
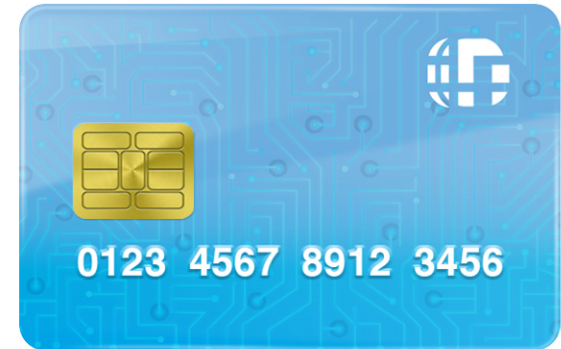
Eight Contact



Six Contact



Dual Interface



These cards are inserted into a reader. The communication happens through the chip's contact plate.

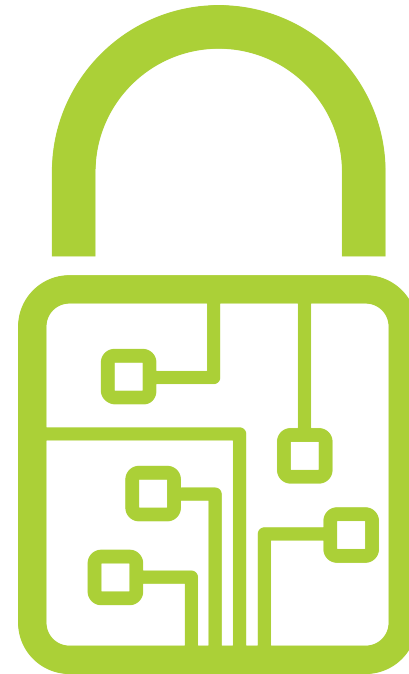
*Eight contact chip only

Card can function in dual modes, communicating both 'contact' and 'contactless' by means of an antenna (using RFID to communicate).

The Security of EMV Transaction

Why are EMV credit/debit card and EMV payments transactions secure?

- Card Authorization – protects against counterfeit cards in card-present transactions
- Cardholder Verification – protects against lost or stolen cards
 - Online PIN
 - Offline PIN
 - Signature
 - No CVM
- Transactional Authorization
 - Online vs. offline



Your EMV Conversion Journey Made Easy



Chip Complete™

An EMV conversion solution for financial card issuers that is fast, easy to implement, cost-effective and supported by host/processor

Chip Complete provides support and guidance through every step of the conversion journey



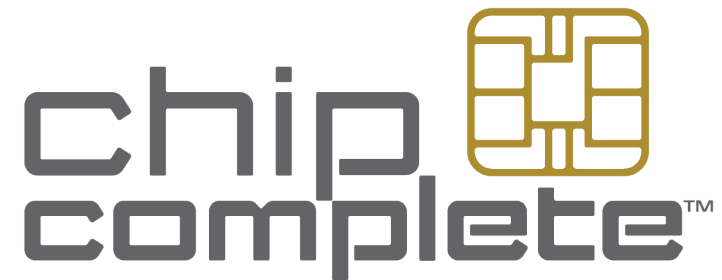
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EFTSOURCE |  **cpi**
A CPI Card Group Company

 **HARLAND CLARKE®**

Chip Complete

Added benefits designed to minimize internal and card user disruption

- Education
- Implementation
- Communication



Education & Training



- **Education**
- Implementation
- Communication

Harland Clarke Educational Support offers training solutions for your entire team:

- Informational webinars on topics related to the payments market
- EMV 101 and Communication Best Practices
- FAQ document for FI staff

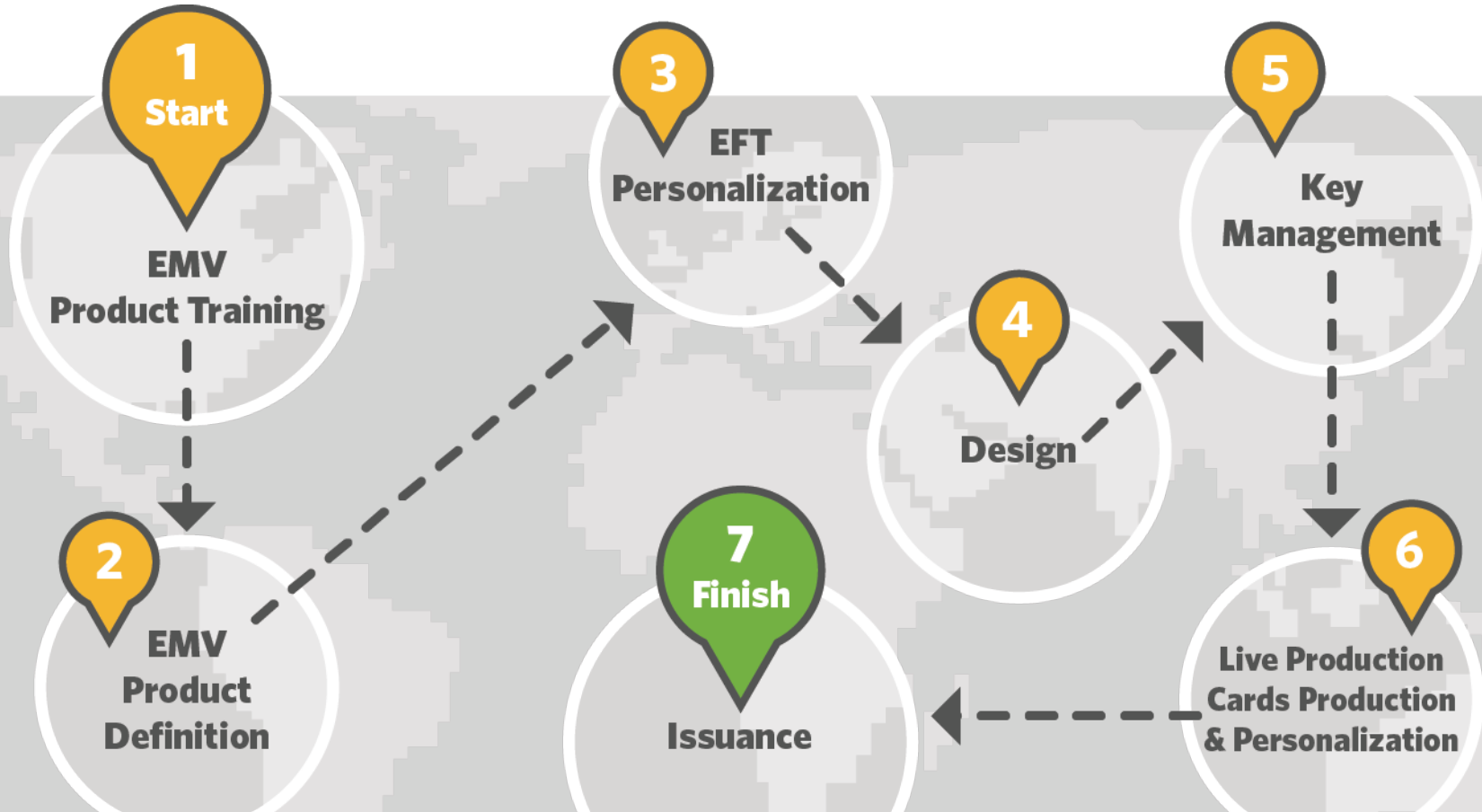
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EMV Project Plan & Support



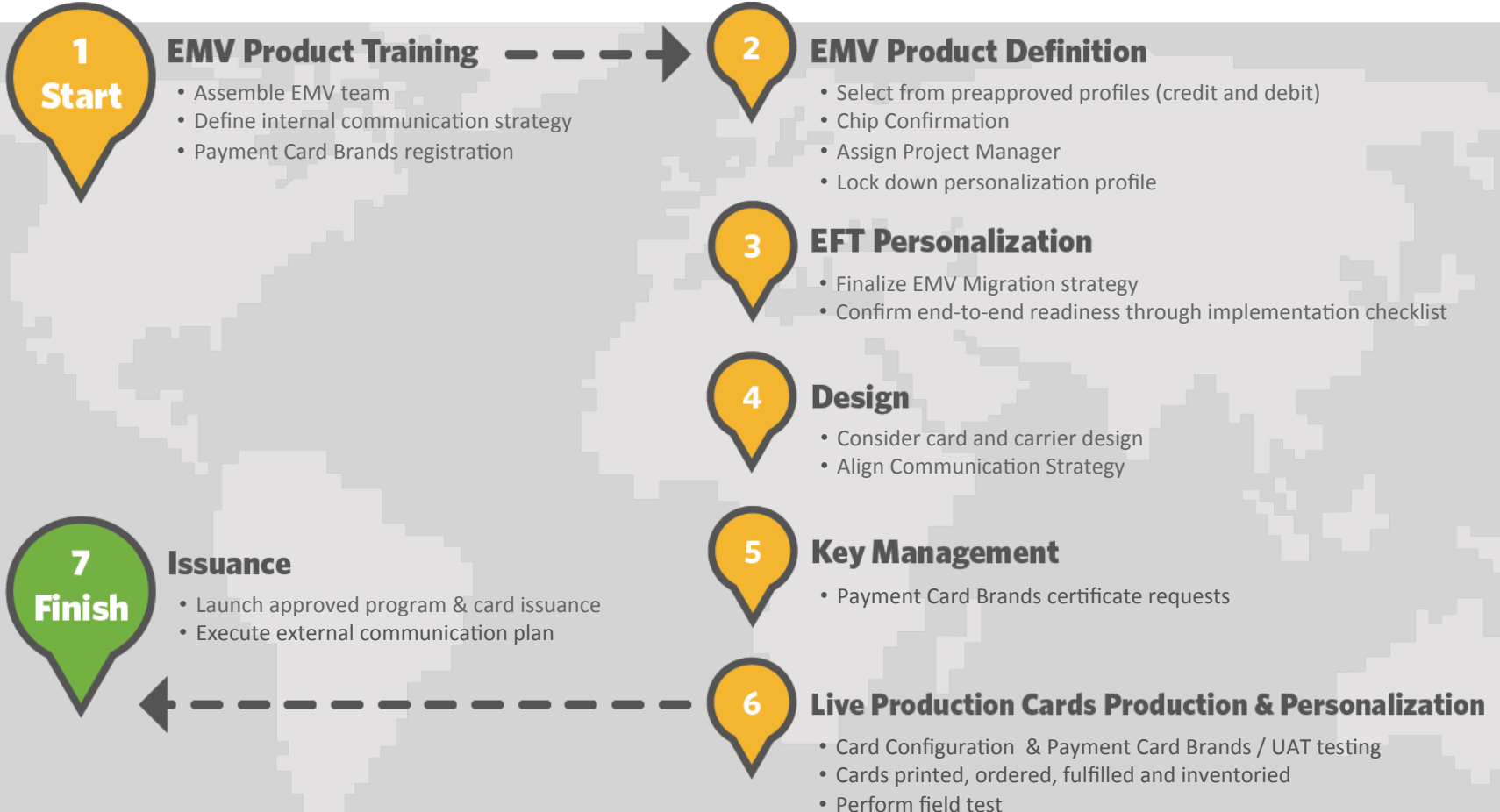
The Road to EMV Has Many Twists and Turns



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Chip Complete Simplifies Your Journey



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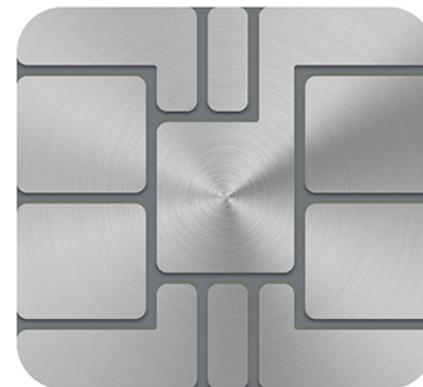
Technology



When it comes to choosing chip technology, two is all you need

Chip Complete offers two easy-to-understand chip options, saving you time without compromising quality

Provides choice and flexibility in memory size, authentication method and operation system to meet your EMV needs



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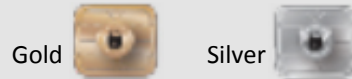


Two EMV Chip Options. Simplified.

Option 1

Chip Interface
Contact

Module Packaging



Compliant Associations
Visa | MasterCard

Operating System

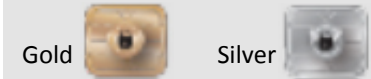
Java Version 2.1.1

Authentication Method
SDA

Option 2

Chip Interface
Contact

Module Packaging



Compliant Associations
Visa | MasterCard

Operating System

Java Version 2.1.1

Authentication Method
DDA

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EMV Profiles

Common personalization specifications for MasterCard® and Visa® used for greater speed to market

Chip Complete accesses basic U.S. standard profiles to simplify the personalization process without compromising quality

Close relationship with chip card processors supports a streamlined personalization process

Discover® and American Express® available upon request



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Implementation



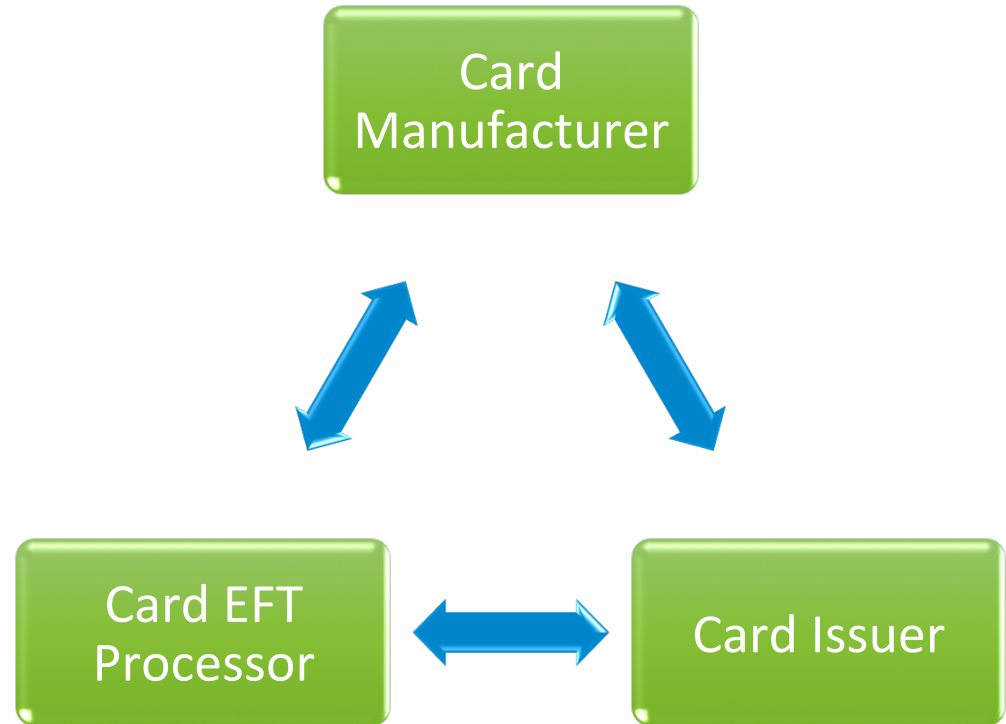
- Education
- **Implementation**
- Communication

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Managing the Key Partners

- Card Manufacturer
 - Chip
 - Operating System
 - AID/Application
- Card Issuer
 - Chip
 - Operating System
 - AID/Application
 - Profiles
- Card EFT Processor
 - AID/Application
 - Profiles



Managing the Key Partners

	Manufacturer	Personalization	EFT Processor
Chip	X	X	
Operating System	X	X	
AID/Applications	X	X	X
Profiles		X	X
CVM		X	X

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EFTSOURCE
A CPI Card Group Company



Project Management

EMV is a complex process. We provide one-to-one project management support.

Project manager assigned to you to handle:

- Card manufacturing and personalization
- Payment and processor relationships
- Graphic design
- Key management
- Card configuration analysis

Weekly calls to provide status updates and ensure your project stays on track



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Key Management

Process simplification without compromising quality

- Secure and compliant generation
- Validation
- Storage
- Transfer



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Chip Lifecycle Management

Proprietary technology manages chip lifecycles¹ so you never have obsolete technology

- Alerts card issuer of chips with one year of remaining shelf life
- Timely conversion to new EMV chips
- Efficient inventory management to prevent obsolete stock

CHIPTRAC™

The System Tracks

- Chip Expiration Date
- CPI Job Number
- Job Order Description
- Quantity
- Detailed EMV chip description and the CPI facility in which the order was manufactured

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Instant Issuance

Issue EMV cards in your branch in just minutes with Card@Once®



Add Instant card issuance to your EMV conversion plan with Card@Once – it's EMV compatible!

- Requires no software, no fees and minimal training
- Affordable, secure and easy to use
- We provide support and software upgrades needed to print EMV chip cards

Don't wait for EMV — start issuing existing magnetic stripe cards right away



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Communication



- Education
- Implementation
- **Communication**

Turnkey Communication & Marketing Support

We can manage ALL your EMV communications, including:

- Building a multichannel communication plan to educate staff and card holders
- Developing all materials
- Creating design and messaging
- Building schedules
- Implementing the solution



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Cards and Collateral

EMV conversion is an opportunity for a card design makeover — let us help

Our card designers develop a range of cards and carriers to promote your brand and bring your ideas to life



We supply a clear card with an embedded chip so you can determine if you need to redesign your existing card

Contact Center EMV Conversion Support

Cardholder Inquiries and Education - how we can help

- Toll free inbound call support with extended hours
- High touch outbound calling
- Dedicated EMV specialists
- Explain features and benefits
- Encourage activation, utilization
- Weekly call volume reporting
- Monitor cardholders' questions



Poll Question #3



How comfortable are you with your existing Communication Strategy and Card Holder Messaging?

1. Our FI could write the “How To Manual” on EMV Communication Strategy and Card Holder Messaging
2. Holding internal discussions but nothing is set
3. Wait, there is more to this EMV project beyond getting the cards distributed?

Harland Clarke & Chip Complete

Fast, easy to implement, cost-effective EMV solution for financial card issuers

Value-added services to reduce issuer disruption
Chip management, design and marketing support

Unique instant issuance solution that's EMV capable
Card@Once

More than 140 years of financial industry experience
Harland Clarke

Effective and secure EMV conversion
Designed with simplicity in mind




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Q&A Wrap Up

Type your question in the questions panel 

Raise your hand to ask questions by phone 

Greg Kuyava

Senior Product Manager, Card Services, Harland Clarke

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Thank You



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