

THE EMVCO COMMON PAYMENT APPLICATION (CPA)

FIVE IMPORTANT REASONS TO CONSIDER CPA IN YOUR FUTURE TECHNOLOGY STRATEGY

WHAT IS CPA?

The Common Payment Application (CPA) is the only EMV Card specification, recognized and accepted by all International Card Schemes that can be used by issuers of multiple brands for both international and domestic payment applications.

CPA defines a common payment application that supports, in a flexible and configurable way, the national and international card scheme requirements and this within a single EMV-based chip application. The specification has been developed in cooperation with EMVCo. Its design is based on extensive experience with chip implementations, especially on the European markets. It fully answers to the demands of the most advanced markets, and at the same time it is well adapted to implement simple configurations for less demanding multi brand card issuers. It is the first card application that is fully compliant with the EMVCo CCD specifications. Very recently the CPA was also extended for use in a contactless mode.

The CPA specifications are available since 2007 on the EMVCo website together with a proven Card Type Approval process. Various vendors already offer CPA-compliant products and different markets have started to issue cards using the CPA-platform.

It is assumed that around 50 million CPA cards will be issued in Europe until the end of 2010.

FIVE STRONG REASONS FOR BANKS TO CONSIDER CPA

Issuers of EMV chip cards benefit from using the CPA-platform in many ways

- 1. CPA improves card-to-terminal interoperability**
Interoperability between the ICC and the terminal is a main concern. Since EMV implementation specifications are loosely regulated, errors occur regularly, resulting in an increased terminal complexity and more complicated unit testing. CPA provides implementers with less diversity and better card predictability behaviour while still leaving sufficient implementation freedom for individual requirements.
- 2. CPA simplifies testability of EMV cards**
Testing a fully specified item is easier safer, and has better coverage. Testing an item against a specification that allows extensive implementation freedom is more difficult. Also, certain hidden implementation features cannot be tested. CPA makes card testing easier, ultimately resulting in increased quality at a lower cost.



3. CPA facilitates interpretability of Card-to-Issuer interfaces

While the card-to-issuer interface does not affect interoperability between cards and terminals, a benefit lies in recommending a specific implementation of this interface. A common card-to-issuer interface improves card testability by third parties and facilitates added value services e.g. e-Commerce and Chip-on-behalf services. The CPA and standardisation of chip processing in authorisation systems helps optimize processing costs and enables off-the-shelf solutions.

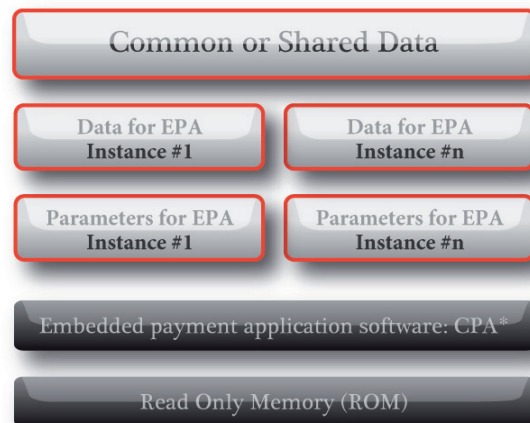
4. CPA creates potential to reduce chip card and back-office component costs

With the CPA, chip card costs can be reduced, since vendors have a single application development and compliance testing to meet the majority of issuer requirements. CPA allows for a consistent risk management across card schemes, reducing complexity of managing card personalization as well as authorization processing and back office card management. Therefore, opportunities increase for off-the-shelf, back-office and personalisation system components, making chip issuing easier, simpler, faster and potentially more cost effective.

5. CPA allows independence from manufacturers and payment schemes

CPA is the only card scheme independent EMV-application specification on the market. Issuers can rely on CPA for any EMV-based payment scheme without needing to adapt to specific scheme requirements. Investments in cards and back-office systems are safeguarded, even in the case of a change in the product policy of an issuer, since the underlying technology remains unchanged.

ARCHITECTURE OF CPA CHIP CARD



*The CPA is recognized and accepted by all International Card Schemes to support their branded card products and it can be used by issuers of multiple brands for both international and domestic payment applications.
EPA: Electronic Payment Application

WHY WAS THE CPA DEVELOPED?

The EMV specification for ICC Payment systems was initiated about ten years ago. Since then, two major versions of these specifications have been published (EMV'96 and EMV2000).

The EMV specification has a sufficient framework, but International Card Schemes noticed that additional requirements and specifications were needed to fulfil business needs. Therefore new specifications and/or requirements were added on top of the general EMV Specifications.

Issuers and acquirers – implementers of EMV – had to comply with these additional specifications when dealing with specific International Card Scheme products. Developing cards based on a single platform that comply with multiple scheme requirements became especially difficult for multi-brand issuers.

It is undisputed that off-the-shelf card products based on the specifications of just one International Card Scheme may be helpful for regions where chip migration is in an early stage. However, this approach is less suitable if an issuer wants to support multiple scheme products on the same technical platform.

Since many markets were already in the midst of migration projects when CPA was developed, it was not intended to replace current investments, but to allow a long-term technical convergence.