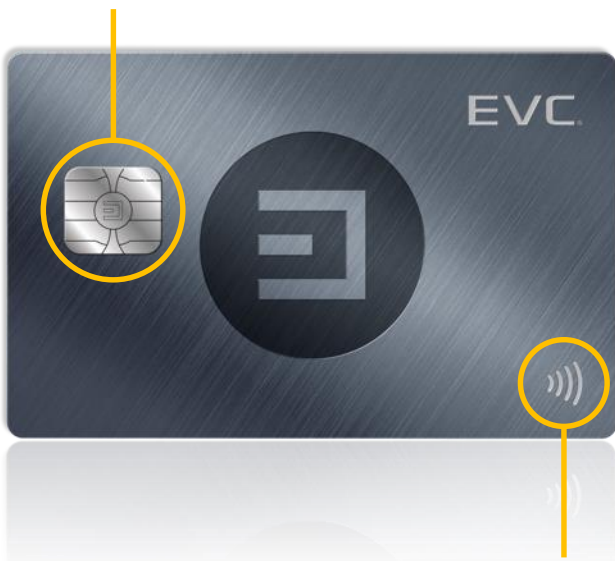# EXTENDING EMV PROTECTION TO E-COMMERCE

2023

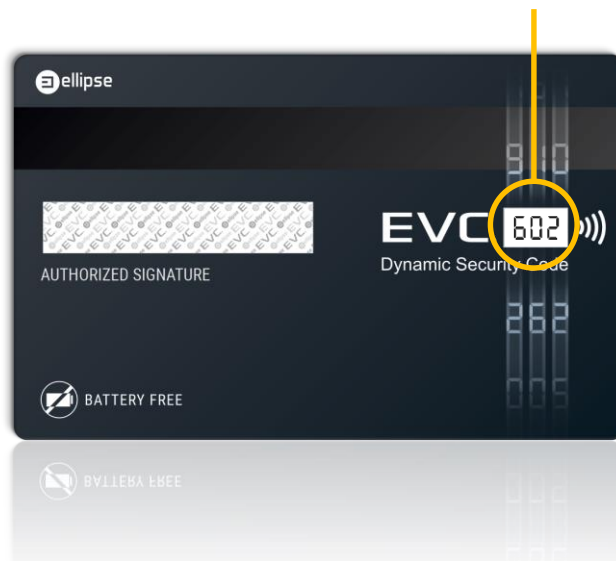# EVC® DYNAMIC CARD SECURITY CODE SOLUTION
## EXTENDING EMV PROTECTION TO E-COMMERCE

**CONTACT**

**E-COMMERCE**



**CONTACTLESS**

REFRESH YOUR CARD

# THE BIGGEST PAYMENT CARD UPGRADE EVER
## BUILT-IN PROTECTION FOR E-COMMERCE

**Cardholders can see their card working for them.**

With EVC, the Card Security Code **refreshes** automatically during every Card-Present **Contact** and **Contactless** EMV transaction

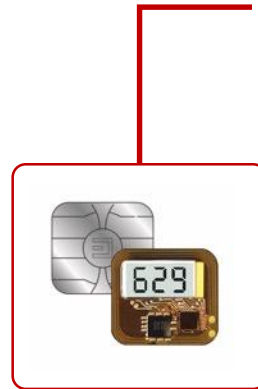- **POS**
- **ATM**
- **Mobile phone**

4

# EASY TO MANUFACTURE & INTEGRATE

**EVC® All-In-One**
**STANDARD MODULE STRIP -** 35mm reel



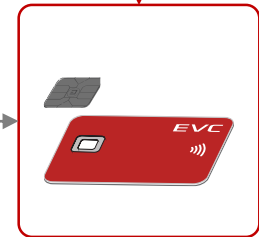**EVC® All-In-One**
CONTACT   CONTACTLESS   E-COMMERCE

**DROP-IN**
- EMV MODULE REPLACEMENT -



**EVC® All-In-One**
- MODULE -
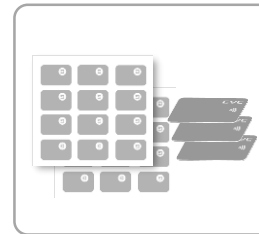
**REGULAR DI INLAY**
- CARD MANUFACTURING -

**EVC® All-In-One**
- MODULE EMBEDDING -

5

# EVC® All-In-One MODULE EMBEDDING

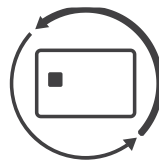# BENEFITS OF THE **EVC®** SOLUTION

Eliminates
CNP fraud

Eliminates
false declines

Maximizes
card lifespan

Ecologically
friendly

## FIS CARDHOLDER SURVEY 2022

**55%**

Would switch to
an EVC card

**68%**

Would pay $1/mo
(DEBIT cardholder)

**60%**

Would pay $2/mo
(DEBIT cardholder)

(2000 participants, USA, all zip codes)

www.ellipse.la

Follow us

# IDEX Biometrics

US Payment Summit

March 1, 2023

**IDEX**

**No CVM**
for in-store credit card transactions

**$3.4 billion**[1]
card present fraud
in the US in 2022

**85%**[2]
of US consumers
expect higher security

**Would you want to authenticate credit transactions...**

*...without compromising speed and convenience?*

# IDEX Biometrics at a glance

We develop ***biometric authentication*** technologies and

solutions ***on smart cards*** providing

absolute proof of identity

and deliver next level of ***convenience and security***

**Payment & Banking**

**Public & Private Services**

**Enterprise/Gov't Security**



**IDEX**

- Headquartered in Boston, London, Oslo

- 200+ patents and 100+ engineers with leading biometrics expertise

- Listed on Nasdaq and Oslo Stock Exchange

www.idexbiometrics.com

# The seamless customer journey of biometric payment cards

**IDEX**

## 01
### Enroll Fingerprint

Onetime fingerprint enrollment with sleeve or mobile phone

## 02
### Activate

Card activation through secure banking channels

## 03
### Pay

Secure and convenient payments in less than a second with biometric authentication

# IDEX Biometrics leading technology solution

**IDEX**

**Acceptance**
Compliant with Visa and Mastercard standards, accepted on all EMV terminals in the US and globally

**Fingerprint Processing**
Fingerprint image is tokenized into a non-reversible hashed key, and stored in the card chip

**Card Robustness**
IDEX design enables industry standard robustness, and no battery in the card

**Sustainability**
Also available on recycled PVC and sensor production in accordance with WEEE2 [1]

# Thank You

Hakan Acar, SVP Sales IDEX Biometrics

hakan.acar@idexbiometrics.com
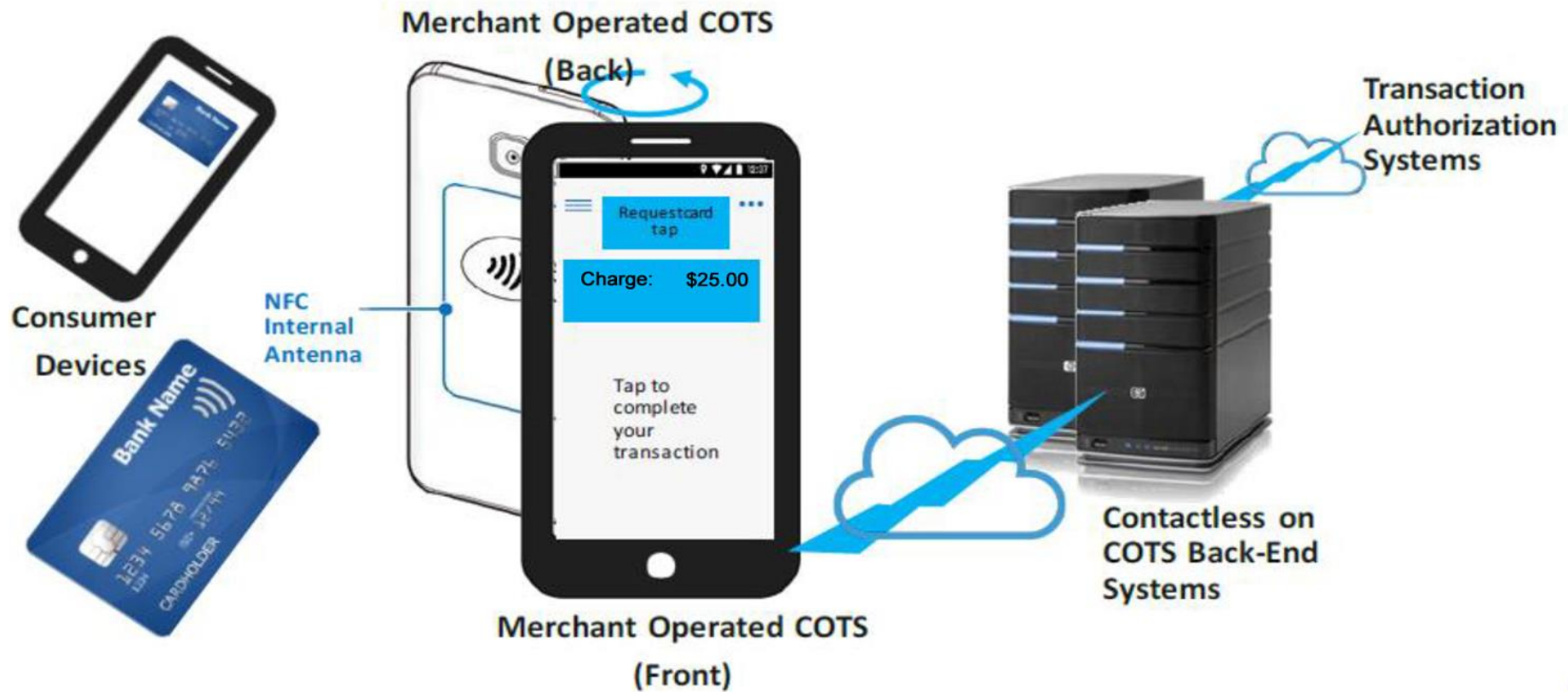
+90 533 7608149

**IDEX**

# Tap to Pay / MPoC Standard

How did we get here?



- PCI PTS (PIN Transaction Security)
- PCI SPOC (Software-based PIN Entry on COTS) - **Jan 2018**
- Visa & MasterCard Tap-to-Phone - **March 2018**
- PCI CPoC (Contactless Payments on COTS) - **Dec 2019**
- PCI MPoC (Mobile Payments on COTS) - **DRAFT May 2022**

# MPoC Solution Overview

# MPoC Definitions

**MPoC Solution**
The set of components and processes that supports the contactless read and protection of account data into a COTS device.  At a minimum, the solution includes the MPoC SDK, attestation system, and the back-end systems and environments that perform attestation, monitoring and payment processing.

**MPoC Application**
All parts of the code, regardless of the execution environment, that is installed and executed on the merchant COTS device for the purposes of accepting and processing account data associated with a contactless transaction.  The MPoC SDK, attestation component, and / or a payment application may be incorporated into the MPoC SDK or may be separate.

# Attestation and Monitoring

**<u>Attestation</u>**
The act of attestation in this standard is the interaction between a verifier (back end component) and a prover (application component) to determine the current security state/behavior of the prover based on predefined measurements and thresholds provided by the prover.

**<u>Monitoring System</u>**
Monitors and provisions security controls to detect, alert, and mitigate suspected or actual threats and attacks against the MPoC solution.

# PCI MPoC Modules
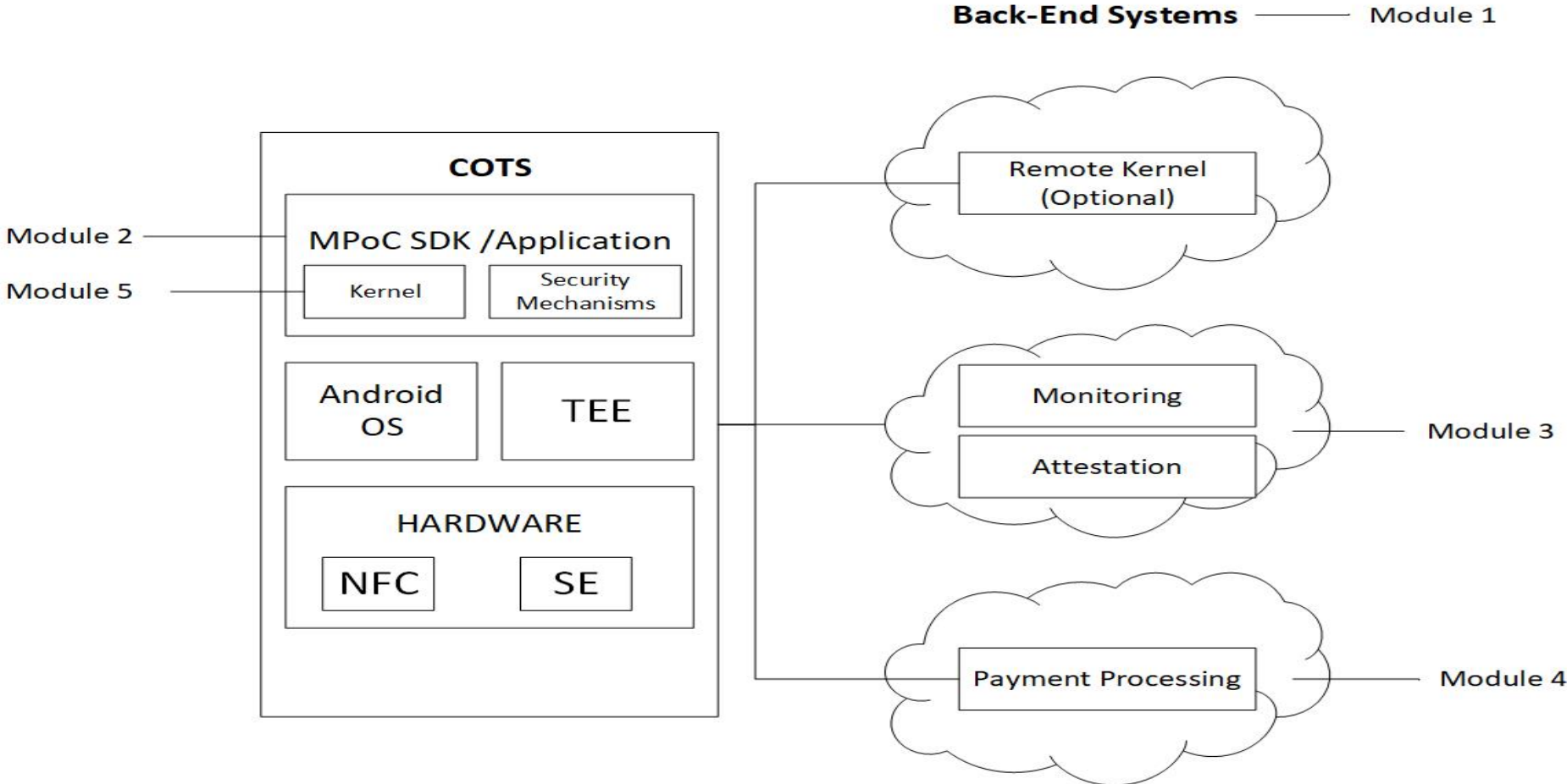
# MPoC Security Objective

The objective of the security requirements is:

- to reasonably ensure that the solutions provide adequate security mechanisms, controls, and mitigations to protect the consumer's account data and other assets, such as cryptographic keys.

- to ensure protection from unauthorized disclosure, modification, or misuse by restricting the available attack surface and make it cost prohibitive to attack.

- to ensure the integrity of the NFC interface and contactless kernel on the COTS device.

# DigiSec lab @ Mastercard– Sustainable card program

## 1

### Mastercard sets up the GPP

Setting up the **Greener Payments Partnership** in 2018 with the leading card manufacturers to draw attention to the problem.



## 2

### Sustainable materials directory

**Mastercard's sustainable materials directory** announced July 2020. Won 'Best Green Initiative' award at the Banking Tech Awards 2020.



## 3

### Mastercard certification program

Launched an "industry first" **certification program and badge,** June 2021. This enables us to certify claims on behalf of our customers and allow issuers to display a "certified badge" on card or in marketing materials.



## 4

### Recycling & future sustainability

Mastercard has now formed new partnerships to help our customers collect and **recycle** their cards enabling a circular economy and enhancing reputations.