



# ACOS6

Multi-Application  
Multi Purse (MAP)  
Smart Card



**Advanced Card Systems Ltd.**

Card & Reader Technologies

# Outline

1. Product Information
  - Product Overview
  - Product Features
  - Technical Specifications
2. Product Applications





# Product Information

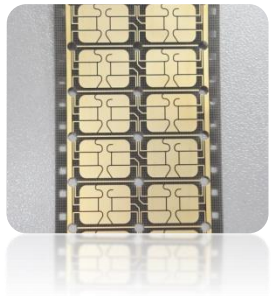


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# Product Overview

## ACOS6-C (64 KB EEPROM)



Module



Full-sized card



SIM-sized card



# Key Features of ACOS6

## Multi-Application and Purse Card

- High speed and flexible smart card offering cost effective solutions
- Specifically designed to address the requirements of having multiple applications and multiple e-purses in a single smart card

## Security Features

- DES/Triple DES support
- Hardware based random number generator compliant to FIPS 140-2
- Mutual authentication with session key generation
- Multi-level secured access hierarchy

## Compliance to Standards

- ISO 7816 Parts 1, 2, 3, 4
- ISO 7816 Part 4 file structures – Transparent, Linear fixed, Linear Variable, Cyclic

## Storage and other Features

- 64 KB EEPROM Size
- High Baud Rate of up to 223 Kbps
- Anti-tearing feature



# Technical Specifications

ACOS6	
Product Code	ACOS6-C
User EEPROM Memory	
User Memory	64 KB
Compliance to ISO Standards	
ISO 7816 – 1/2/3	✓
ISO 7816 – 4	✓
Communication Speed and Protocol: Contact Interface	
Protocol	T=0
Speed	223.2 kbps
Operating Conditions	
Temperature	-25 °C to 85 °C



# Technical Specifications

ACOS6	
File System	
Directory File	✓
Transparent (Binary File)	✓
Linear Fixed Record	✓
Linear Variable Record	✓
Cyclic File	✓
Cryptographic Capabilities	
DES/3DES	56/112 bits
Secure Messaging	✓
Mutual Authentication	✓
Random Number Generator	✓







# Product Applications



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# In what areas can the ACOS6 be used?



Customer submits e-Purse and Loyalty Card application form



Processes application in Card Registration Terminal



e-Purse and Loyalty Card (ACOS6) is issued



Information stored  
e.g.:

1. Customer Name
2. Gender
3. e-Purse Value
4. Points Earned



Customer makes purchases and presents ACOS6 card to purchase and earn points



At the terminal, the amount of the transaction is deducted from the prepaid value (e-Purse value) and card is updated with the accumulated points



At the Redemption Terminal, customer can check the accumulated points and convert those points to gift items or e-Purse value





## Related Software Products



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# Software Development Kits

## ACOS6 Software Development Kit (SDK)

Develop your own Multi-Application & Purse applications



### For Developers

To develop multi-application and purse applications in:

- ACOS6 Smart Card
- ACOS3 Smart card
- ACOS6 SAM card \*

*\*ACOS6-SAM supports various client cards, including ACOS6 and ACOS3*

For further details about the SDK, please visit:

ACOS6 SDK: <http://www.acs.com.hk/en/products/117/acos6-multi-application-purse-smart-card-software-development-kit/>





**Thank You!**



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