Technical Specification: Smartcard

Our contact-chip smartcard range includes cards for payment applications, prepaid telephone cards to health cards and diversity of standard memory cards. Microprocessor cards with application specific operating system can be applied for ID cards and public-key infrastructure environments.

The range of card materials used in manufacturing ranges from PVC, ABS, PET and PC materials.

Operating System e-OS

e-COS (Smartcard Technology Chip Operating System) e-COS is a cost-effect general-purpose smart card which meets ISO7816 requirements for multi applications.

Application

Banking Solution : Internet Banking System
Small Sum Prepaid System : Electronic Purse
Identification : Driving License, Health Care, User Identification
Security : Data Encryption, PC & Network Security, Electronic Signature
Loyalty System

Standard

ISO 7816-1 : IC Cards with contacts Physical characteristics
ISO 7816-2 : IC Cards with contacts Dimensions and location of the contacts
ISO 7816-3 : IC Cards with contacts Electronic signals and transmission protocols(T=0)
ISO 7816-4 : IC Cards with contacts industry commands for interchange

Features

CPU : 8, 16bit Architecture CPU
Dimension : ISO 7816-1,2
EEPROM : 1K,2K,4K,8K,16Kbytes
ROM : 16Kbytes
RAM : 384Bytes
Algorithm: S/W SEED

e-Secure Technologies Pte. Ltd. | 71 Ubi Crescent #06-07 | Excalibur Centre | Singapore 408571
Phone: +65 6748 3618 | Fax: +65 6748 9278 | e-mail: info@esecure-technologies.com

Protocol : ISO 7816-3 T=0 9,600~38,400baud (Support Protocol Type Selection)
Others : Sleep Mode (Power Saving Mode)

Specification

Clock Frequency	1~5MHz
Power Supply	3V ~ 5V (±10%)
Transmission Protocol	ISO/IEC 7816-3 T=0, up to 38,400bps
Data Organization & Command Format	ISO/IEC 7816-4
Management	ISO 7816-4 File Structure
OS Command Format	ISO 7816-4 Proprietary Command for Bank Card.
Security	Key & PIN & Mutual Authentication SEED Cryptographic Algorithm
Number of Read	Unlimited
Number of Erase/Write	100,000 Times
Data Retention	10years (Normal use)