



ELECTRONIA



DRIVING LICENSE

Electronia's Smart Driving License Card design allows much more secure use of the existing personal ID and fingerprint information already on the old cards. New card products and applications can be loaded to a card, using the post-issuance process, without the necessity of reissuing the card.

The smart card revolution has been propelled by the innate security the technology provides. Multi-application smart cards have demonstrated they can deliver highly secure transactions and enforce true protection between applications held within the card itself. Their powerful encryption and digital signature capabilities are ideal for the emerging new technology sectors. Smart cards have built-in tamper proof qualities, and PKI (public key infrastructure) incorporating digital signatures functionality embedded in their chip - all of which are essential to creating a totally secure environment for transactions.

A robust, large-scale implementation of a Smart Driving License program will depend on such factors as management of card issuance, customer service, acceptance infrastructure and transaction processing, and the choice of applications to be incorporated in the cards. These areas include selection of appropriate card technology, development of card applications, card personalization set up, card and application life cycle management, complex issuance and re-issuance processes, and the management of the card life cycle and business rules between applications.

Electronia's Smart Driving License solution constitutes the most cost-effective, reliable, secure, and fully integrated identification Smart Card system, capable of expanding to multiple applications as the need arises in the future.

Benefits

- State-of-the art, highly secure architecture, durable 4KB Contactless Smart Card, capable of future enhancement and upgrades
- USB read/write devices with Secure PIN pad compliant to open standards and supporting bilingual user interface
- Smart card supports contactless interfaces
- Data Card Centralized Printer capable of double sided printing at 3000 cards/day including lamination
- Envelope and form printer (1000 cards/hour) that prints an envelope and KMS PIN
- Card delivery system inserts card, creates audit trail and tracks rejected cards
- Middleware custom designed for data integration
- Open platform framework CMS including a personalization manager for the personalization preparation process
- Multi-application, centrally controlled system
- EISmart Kiosk that integrates a high-end Pentium PC, touch sensitive screen, Windows OS, Smart card reader, application software, fingerprint verification module and the connectivity option such as Ethernet TCP/IP or dial-up modem
- Branded Pentium PC with 17" LCD monitor
- Digital camera with tripod assembly and PC based Control
- Flatbed scanner
- Electronic signature capture and verifier pad

Technical Specifications

Type: Multi-application smart card compliant to ISO/IEC 7816 Contact card and

ISO/IEC 14443 Contactless card standards

EL-CSC8KB, EL-CSC16KB and EL-CSC32KB

Memory capacity: 4/8Kbyte (64Kbits), 16Kbyte (128Kbits) or 32Kbyte (256Kbit) based on the card type

1 Kbyte (8Kbits) through the Contactless interface in all types

Security block: One 128-bit system block for each sector indicating access rights and holding two secret keys and unique serial number

Security features: Data encryption based on DES, Triple-DES standards; Secure Hash Algorithm (SHA-1) On-card Key generation Hardwired cryptographic algorithm for read/write operation.

Anti-collision: Identify multiple cards in the Terminal antenna field

Application feature: Multi application, ID card, Health card, Driving License card, E-Purse card and Secure Access card for Computer networks/ buildings

Number of read: Unlimited (Contactless) Antenna

Number of writes: 100,000 (Contactless)



Contact Communication

Transmission Protocol: ISO/IEC 7816-3, Bi-protocol T=0 and T=1

Communication Standard: ISO/IEC 7816-4

Communication speed: 9.6K to 38.4Kbaud chip

Contactless Communication

Operating Frequency: 13.56 MHz

Power supply: Magnetic Induction

Communication speed: 106Kbaud

Communication integrity: CRC16 and parity bit

Operating range: 0-25mm with EISmart Smart card Terminal (standard) 0-100mm with higher range Terminal (available)

Physical Characteristics

Size: 85.6 mm (length) 54 mm (width) 0.7mm (thickness) (<+/- 0.5% for length & width)

Card body: White glossy finish with contact pads on one side

Card Printing: Full color one side, Black on the reverse Duraguard® protection layer

Hologram: (option available for the non-pad side only)

Durability

Mechanical stress: 250 bending cycles per side

Chemical: ISO10373 compliant (resistant to alcohol, Fuel B, sweat...)

Temperature: -20°C to +50°C, Retains functionality and visual aspect