

## Plastic Card Glossary of Terms

**ABS:**

Acrylonitrile butadiene styrene, plastic material formed through injection molding, used for some smart cards

**Access Control Card:**

Magnetic or smart chip cards with or without photo used to enter restricted areas (e.g., ID badges)

**Affinity Card:**

Is a form of loyalty card where the co-branding partner is a charity or organisation that benefits financially from card use

**Barcode:**

Printed codes made from vertical lines of different thickness used for fast error free data entry printed somewhere on the face or reverse of a plastic card. The lines and spacing's are arranged in a specific way defined in international standards to represent letters, numbers, and other human-readable symbols

**Blank Cards:**

Cards with no printing, white base stock most common

**Chip:**

A piece of silicon etched with an electronic circuit

**Coercivity:**

A measure of the strength of a magnetic field. Fields are expressed as low or high by the terms Lo-Co and Hi-Co (Hi-Co being most secure)

**Combi-card:**

Holding both contact and contactless technology on one card

**Combo-card:**

Otherwise known as a 'combination card' it is a 2 or 3 part card allowing for separation after the printing process (3-up key tag)

**Contact:**

A point of electrical connection between a smart card and its external interface device (Wall mounted reader)

**Contact Card:**

Any card where information is transferred to a reader via a series of contact points located on the card (smart chip, SIM)

**Contactless Card:**

Smart card which transfers data using radio frequency technology via a transmitter and receiver (RFID)

**CR80 Card:**

This is the recognised description for a standard credit card size (3 3/8" x 2 1/8" x .030") or (85.6mm x 53.98mm)

**Degaussing:**

Magnetic strip data erasure

**Digitising:**

Conversion of non-textual data to digital form

**e-wallet:**

Is a small portable device that contains electronic money and is generally used for low-cost transactions

**EMV:**

(Europay, MasterCard, Visa) is a global standard or specification for inter- operation of integrated circuit cards (IC cards or 'chip cards')

**Electronic Purse:**

Smart card stored value program (Contained on the chip)

**Embossing:**

An impression of numerals or characters usually on the front surface of a financial card

**Encoding:**

Recording electronic information on to a magnetic strip

**Encryption:**

Transferring information based on a key to make it un-intelligible to unauthorised parties

**Financial Hologram Card:**

Financial cards using a hologram, 30 mil thickness, ISO cards, MasterCard/Visa and others

**Financial Other:**

Usually Debit, Gift, Charge, or ATM cards not using a hologram

**FIPS:**

Federal Information Processing Standards

**Gift Card:**

A retail prepaid card usually initiated at cash or checkout

**Hologram:**

A flat optical image which looks three-dimensional to the naked eye

**Holographic foil:**

The foil used to carry embossed holographic images

**Hybrid Card:**

Is a card that supports more than one technology, such as an IC (Integrated Circuit) card with a magnetic strip

**Initialisation:**

Programming a smart card chip with data that is the same for a batch of cards

**ID Card:**

Card that identifies both the bearer and the issuer. All financial transaction cards are ID cards

**ISO:**

(International Standards Organisation) Central body for formation and dissemination of industry standards for all national standards bodies

**Issuer:**

An individual or organisation that issues identification cards to individual or corporate cardholders

**Lithography or Offset Printing:**

Most common process for plastic card printing based on the concept that oil and water are not compatible. The ink represents the oil and the alkaline fountain solution represents the water. These are the two main components which must interact during the printing process, allowing the ink to adhere to the image area of a printing plate while the fountain solution repels the ink from the non-image area

**Lamination:**

Using plates on a press to fuse the various layers of a plastic card together

**Loyalty Card:**

Usually a retail frequent user card offering promotional benefits

**Magnetic Strip (Mag Strip):**

The strip of magnetic recording material on an ID card (3 tracks most common) with Hi-Co at 4000 Oe (Oersted) and Lo-Co at 300 Oe

**Membership Card:**

Usually a club member card for ID purpose

**Memory Card:**

A type of smart card, also known as a synchronous card. It features 256 bits or 32-byte memory and is suitable for use as a token or identification card. It is controlled only by fixed logic rather than by a microprocessor

**Microprocessor Card:**

A type of smart card, also known as an asynchronous card. Features 1 kilobyte to 64 Kbytes of memory and is suitable for portable or confidential files, identification, tokens, electronic purse or any combination of uses

**Mifare Card:**

A proprietary contactless smart card standard equivalent to ISO 14443 Type A  
This technology is widely used in contactless or proximity cards

**Multi-application Card:**

Smart card that can handle a variety of applications

**Non-Magnetic Card:**

Cards without a magnetic strip (e.g., ID cards)

**Oersted:**

The unit of magnetic coercive force used to define difficulty of erasing of magnetic material

**Off-line:**

A transaction via paper or reader not connected to a central system

**On-line:**

A transaction on a terminal permanently connected to a network that is on-line to the card account

**Optical Card:**

Card with information recorded on an optical memory stripe, similar to compact disks

**Other Secure Card:**

Usually Retail , Oil/Gas, Telecom, Transit, Pay TV cards

**Payment Card:**

A card (Credit, Debit, Charge) that is used as an identifier when used to transact full or part payment of a bill. It enables the payees' details to be swiftly recorded automatically and credit

lodged against the account

**Personalisation:**

Printing, encoding and programming a card with data specific to an individual cardholder

**PIV Card:**

Personal Identity Verification card

**Polycarbonate Cards:**

Cards produced from a particular group of thermoplastics. These have the properties of high-durability, light in weight and flexible because they are polymers linked together by carbonate groups. Polycarbonate cards are stronger than Polyvinyl Chloride (PVC) cards and thus more expensive. However, for applications where longevity and higher security is prerequisite e.g. National ID, Passport and Driver's License cards, Polycarbonate cards are ideal. These cards are utilised where the virtually tamper-proof personalisation technique of laser engraving is required

**Prepaid Card:**

A card paid for at point of sale (POS) permitting the holder to buy goods and services up to the prepaid value

**Promotional Card:**

A card offering special benefits to users (Discount card)

**Protected Memory Card:**

A smart card that requires a secret code or PIN to be entered before the data can be sent/received from the chip

**Proximity Card:**

A contactless card whose presence and data can be sensed by an interface device not in physical contact with the card

**PVC:**

Polyvinyl chloride, the most widely used plastic material for ID cards

Radio Frequency Card (RFID):

A proximity card in which the coupling between the card and the interface device is by radio

**Secure Card:**

Cards with an intrinsic value (e.g., financial, other secure, etc.)

**Scratch Card:**

A card that is produced with special ink and usually applied as a panel that can be scratched away to reveal a number or message

**Screen Printing:**

Method in which ink is forced through a design-bearing screen made of silk or other material onto the substrate being printed

**Signature Panel:**

The area of an ID card where the cardholder enters a signature

**SIM:**

Subscriber Identification Module: the smart card necessary for the operation of GSM phones

**Single-Application Smart Card:**

A smart card issued to a single organisation for a singular purpose

**Skimming:**

Copying the magnetic strip encoding from one card to another

**Smart Card (aka Chip Card, IC Card):**

A plastic credit card sized card that contains one or more semiconductor chips. In the capability category, there are three types:

**Memory Card:**

Smart card that stores and retrieves serial "streams" of data that are sent to or received from the semiconductor chip

**Protected Memory Card:**

Smart card that requires a secret code or PIN to be entered before the data can be sent to or received from the semiconductor chip

**Microprocessor Card:**

Contains a microprocessor chip with a microcode that defines a command structure, a data file structure and a security structure in the card

**SET:**

*Secure Electronic Transaction*, a MasterCard/Visa backed standard to allow safe Internet trading via encryption certification of all parties involved in a transaction

**Stored Value Card (aka cash card, electronic purse, prepaid card):**

A financial card that is loaded with a certain amount of money with each purchase amount deducted from the card

**Substrate:**

Material upon which a plastic card is printed

**Transit Card:**

Magnetic or chip card used for transportation services (Subway card)

**Telecom Card:**

Magnetic or chip card used for telephone services (GSM card, prepaid card) It can be utilised for the payment of telephone calls. This type of card maybe a prepaid card, a credit card, or one that adds the cost of the call to a standard bill

**Traditional Card:**

A magnetic or non magnetic card not using chip card technology

**Triple DES:**

A triple Data Encryption Algorithm block cipher which applies the '3DES' cipher algorithm 3 times to each data block

**UV Printing:**

UV printing is used to print on plastic, foil, and specialty substrates. UV light is used to dry specially formulated inks that are printed on non-porous materials. In conventional printing, ink dries as it is absorbed into paper. Because plastic is not absorbent, the ink must be dried on the top surface using UV light

**Weigand Wire:**

Magnetic media embedded in as an aerial within cards for access control applications