



▶ Special Treatment Name Plate

Special treatments or Processed are: Etching, Grinding, Anodizing (Original / Color) & Electroplating process (Gold / Silver) and etc.

By adding these kinds of special treatments, the appearance of the name plates can be more attractive or more Three-Dimensional.



▶ Metallic Name Plate

Main material used: Aluminum, Brass and Stainless Steel

Depending on different types of materials, we can do Silk-Screen or Offset printing, "hair-lines", Spin circular lines, Embossing, Diamond Cutting, Dispersion of Epoxy (Soft) / PU (Hard) lens, Multi-Punch forming, etc., on the name plates.



▶ Aluminum Die-Casting Name Plate

This kind of product boasts metallic material that can give an elegant touch of Three-Dimensions and thickness of words and logo.



▶ Plastic Name Plate

PVC, PC and PET are normally used in this category.

We also can do Silk-Screen / offset printings, Electroplating (Mirror / Rainbow effect), Dispersion of Epoxy (Soft) / PU (Hard) lens, etc.



▶ 2D/3D metallic Name Plate

By using aluminum or aluminum alloy, we can do several processes to form the materials into three-dimensional looks.

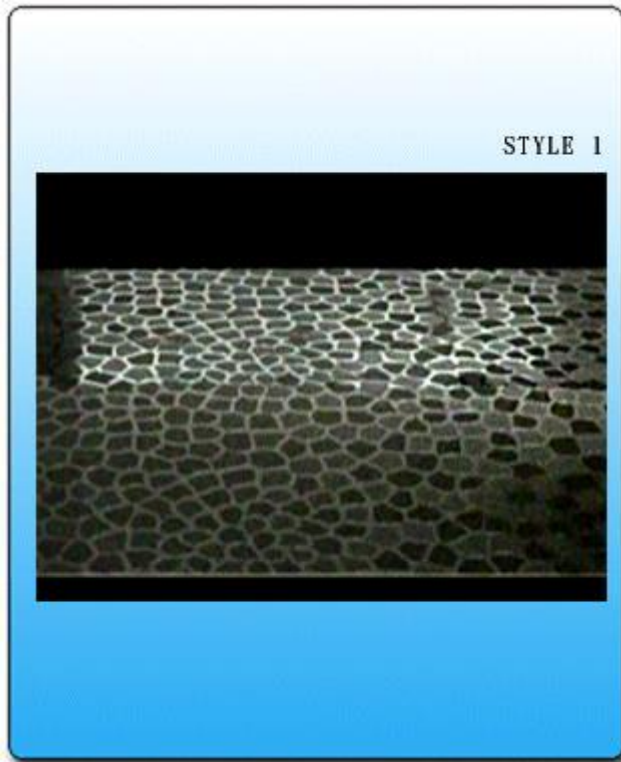
Application includes cover of PDA, mobile phone windows frames, and camera's lens hoods, etc.



▶ TNP MIRROR & TNP S-MIRROR

1. TNP MIRROR is a transferable metal seal, made by electroforming technology. It may be comprised of individual letters or almost any desired designs on different finishes, such as mirror effect, hairlines, diamond cut and variety of colors. Pressure sensitive and heat activated adhesive backings are available that allow the design to adhere to any smooth to rough surface.

2. TNP mirror and s-mirror nameplates have outstanding texture and can be widely applied on computers, cell phones, digital cameras, stereos, home appliances, precision apparatus, medical appliances, etc. Using TNP Mirror/S-Mirror nameplates brings your products an excellent appearance!



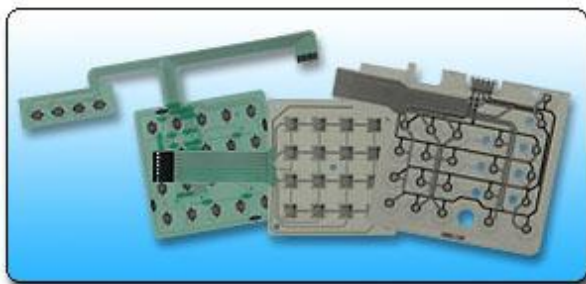
In Mold Decoration (IMD) Name Plate

The advantages of IMD Name Plate could enhance the product value, good appearance and increases the product's lifetime. IMD Technology is a kind of "Plastic Evolution" because the appearance of IMD is unlike the normal plastic products, it is more colorful with many different types of pattern effects and more customized styles. Thus, IMD technology could let the plastic products' appearance simulate to other materials. For example, it can turn the plastic material looks like metal / wooden / woof / stone / porcelain / chameleonic. IMD is the latest technology that the traditional treatment could not catch up which brings the product more valuable.



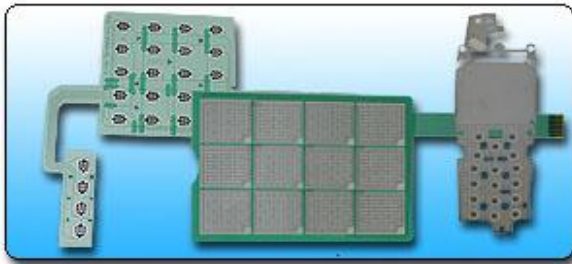
▶ Flat overlay or Foil

- **Material** :Polyester (PET), Polycarbonate (PC)
- A non-tactile or flat overlay is more sensitive to operators touch.
- The lower layer can be combined with two-layers or single layer silver printed circuits.



▶ Metal-dome and poly-dome keystroke

- Tactile feel.
- Can be combined with PET or PC overlay.
- **Key force**: 150~400gf
- **Life of embossed overlay**:
 PET material: min 500,000 cycles.
 PC material : min 200,000 cycles.



▶ **Double sides conducted printing circuits (through holes)**

- Reduce the probability of UV insulation jumper to avoid shorts.
- The distance between the keys will be shortened and the shape of overlays will be more flexible and have more choices.
- More flexible design of circuit layout.
- Conducting area of the circuit tail can be designed to print on the front side or the backside.



▶ **Special processed products**

Biochemical test strips

- Re-agents that measures the uric acid, blood glucose etc. contained in the body.
- Average thickness of the conductive printings make the test liquid easy to adjust.
- The printing is more insulated which does not affect the accuracy of the test result.

LED embedded inside Membrane switch

- Flat and embossed membrane switches are inlaid with LEDs of red, yellow, green, blue or multi colored etc.
- Low voltage and current, high brightness, long life.



▶ **Combi Card (Dual Interface)**

TNP created a multi-payment mode for a New Lifestyle

- Dual Interface card is a card with the chip designed for both in contact and non-contact interface.

Transparent use of contact and contactless data

- A hidden antenna, which has the function of electronic wave to send or to receive data.
- When the card is applied on a reader, the IC module will automatically verify and execute its contact or contactless function.

Scope of Application

- This type of card can be integrated with Pay Pass or Visa Wave function in one card and also could be used in various applications, like transport ticket, small payment (contactless), big payment(contact), ATM transaction (contact).etc.



▶ Contact IC Card

A kind of card that can protect its own data is called “IC Card” or “Smart Card”. Now, it is used in credit card, ATM card, Telephone card, campus card, member card and even could be integrated the access control system into ID card.

In 1998, in order to entering card market, TNP purchase the sophisticated IC Card Milling & Embodding Machine. Further to meet customer’s need, in 2002, we expanded the capacity of our production. At moment, the amount of cards that is made from TNP is more than 12 million pieces in the card market.

In order to match up the Bank Association Program, chip card with EMV specification instead of magnetic strip card, we obtain a lot of orders, because our technologies is most excellent among others and we are highly regard and recognized by ours customers.



▶ Contactless IC Card

1. Chips are not easily damaged with lifetime use of over 100,000 write cycles.
2. Averaged Speed for R/W: 100ms
3. Each application sectors can have different Key to protect the data. Data reading and writing can have separate authorization.
4. Unique serial number, higher security to prevent illegal Copy
5. A directory to search application quickly
6. Memory, 1024 Bits~4096Bits
7. Offline operation, reduce the online transfer loading

Transmission Protocol

1. Data Transfer : ISO 14443 type A specification
2. RF signal transfer/Frequency = 13.56HMZ

Scope of Application

1. No need of coins; Integrate various transport payment system, including parking ticket, MRT card
2. Integrated access control system into non-contact card, like Campus Card, ID card.



▶ Magnetic Stripe Credit Card

TNP is the largest card manufacturer and personalization Bureau in Taiwan and the first to be certified by VISA, MasterCard, JCB and American Express to produce credit card.

Taiwan Credit Card Market share: 60%

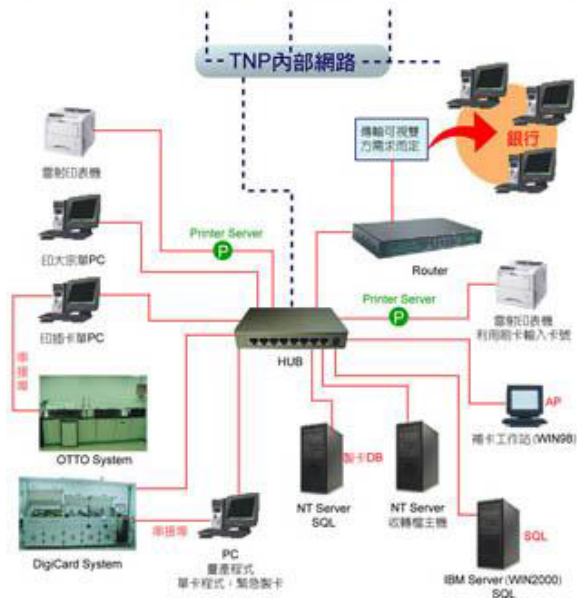
Produced and delivered Cards to countries like Japan, Korea, Indonesia, Malaysia, Vietnam, Russia, Ukraine, and others.



▶ ATM Card

We are the top professional card manufacturer in Taiwan certified by many International Organizations, with an integrated processing system from producing artwork to finished cards to delivery. Our cards are produced by the most advanced and precise printing equipment and under strict quality control to provide the highest satisfaction for both cards issuer and cardholders.

SB部門網路架構圖



▶ Card Personalization Service

With an experienced professional team together with the latest technology and security, this facility is certified as a personalization bureau by VISA Int'l, MasterCard Int'l, American Express Company and JCB International. We provide total personalization service with the highest quality, security and the most professional service.