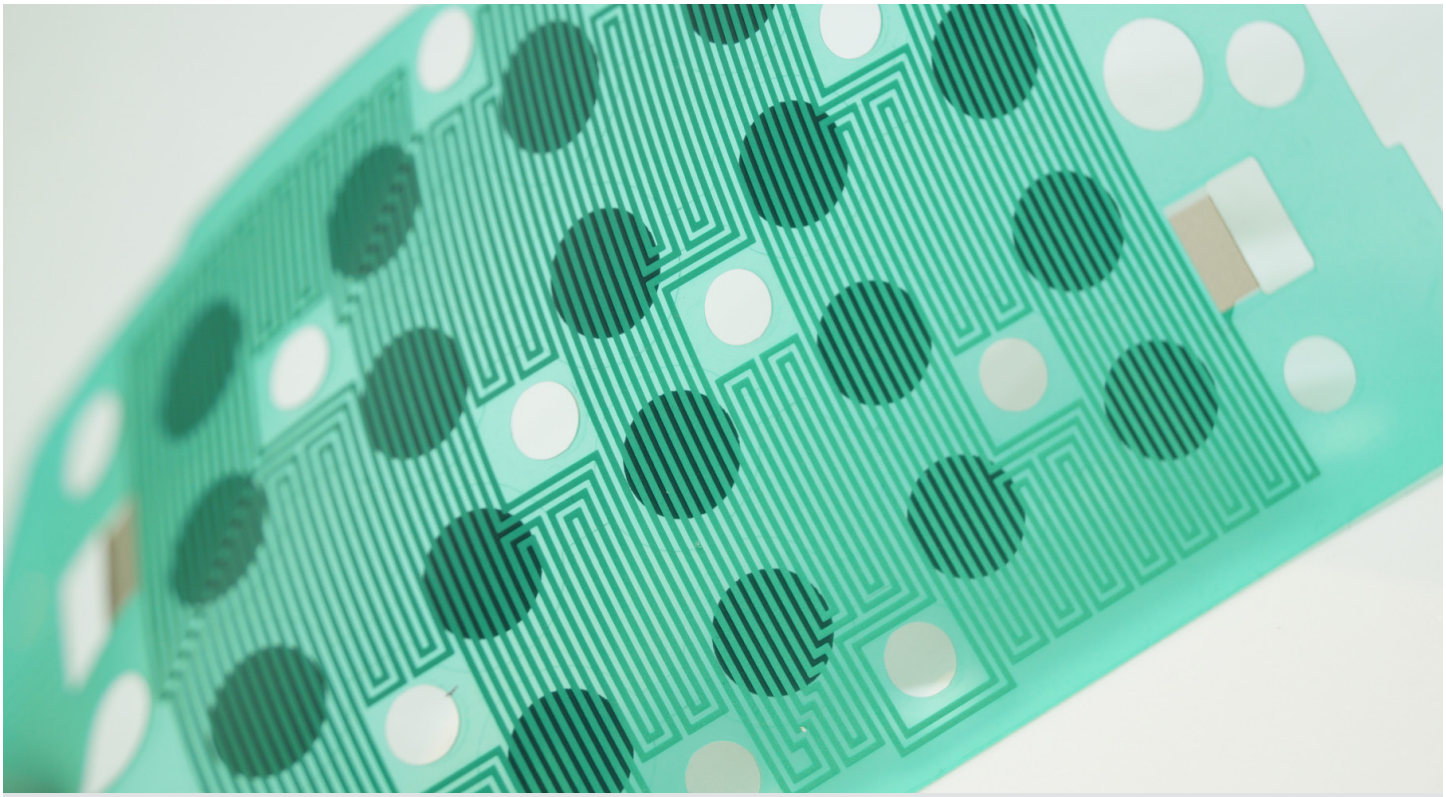
# Tamper Proof Circuits



## The only real way of protecting your customers, is by protecting their data.

$e_2$ip's Tamper Proofing Circuits are a data protection solution designed for human-machine interface (HMI) scenarios where sensitive data are stored in electronics chips. The success of this technology is the unique pattern design: closely-spaced traces are printed on a serpentine circuit with thin, flexible PET film.

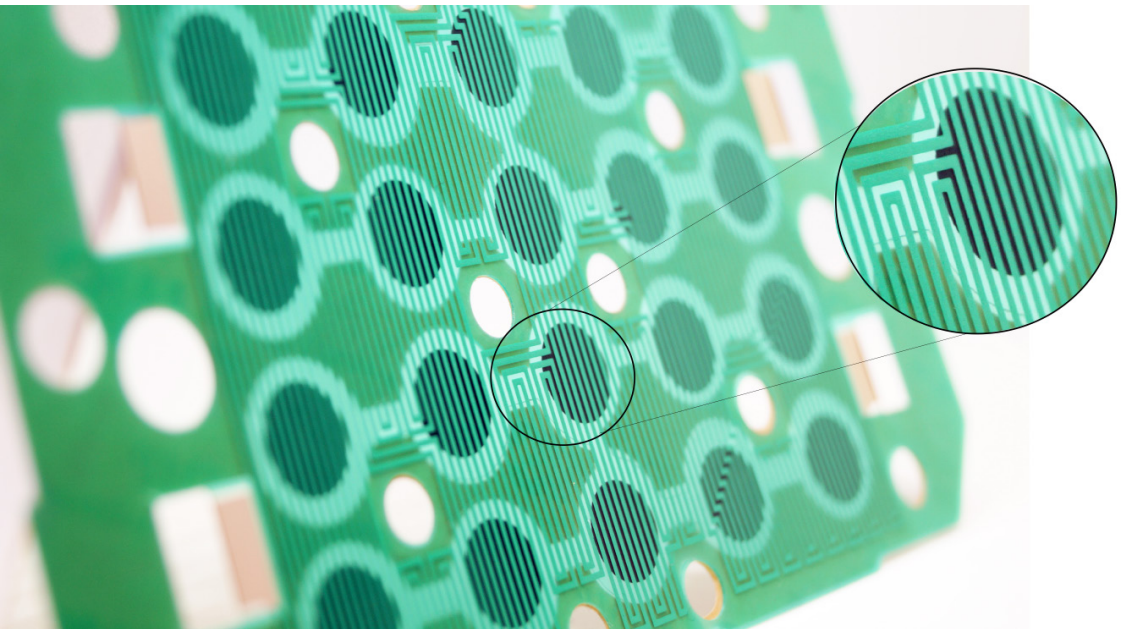
Attempts to breach the circuit will in turn break the circuit continuity. Any physical intrusion, attempt to open the device, or chemical attack is immediately detected, with critical data remaining safe and protected.

## Applications

- Defense electronics
- Aerospace devices
- Bank Crypto Keys
- ATM Machines
- Public Services

## Key Features & Benefits

- Highly secure
- Thin and flexible
- Cost-effective
- Entirely customizable



Example of a serpentine circuit

## Technical Specifications

| | |
|---|---|
| **Printing Process** | Silk-Screen printing |
| **Available inks** | Silver flake, silver molecular, PEDOT |
| **Substrates** | Films (0.13 mm – 0.51 mm): PET (polyester), PEN, PC, Polyimide<br>Sheets: (0.51 mm & up) PET, PEN, PC |
| **Maximum circuit size** | 56 cm x 82 cm |
| **Line width and spacing** | Min 0.13 mm width / 0.13 mm spacing<br>Recommended: 0.25 mm / 0.25 mm |
| **Interface** | Contact pads, ZIF tail and other options available on request. |

# Transforming the surfaces we touch in our everyday lives.

**For more information, speak with a specialist at e$_2$ip technologies.**

**We're always looking forward to hearing from you!**


info@e2ip.com

1 866-631-6662

750 Marcel-Laurin, Suite 375
St-Laurent, Québec
H4M 2M4
Canada


**e2ip.com**

e$_2$ip TECHNOLOGIES