

# TechniPad

Immersion Silver IS 7070

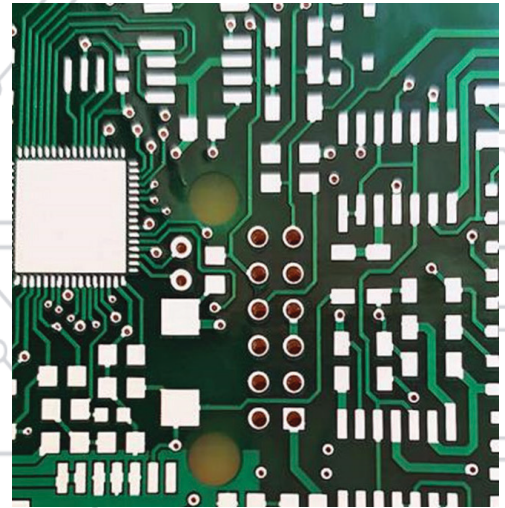


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## Immersion Silver for 5G

TechniPad IS 7070 is an extremely stable, nitrate free, slightly alkaline solution for immersion deposition of Silver onto Copper. By using a proprietary Silver Complex, Technipad IS 7070, has no nitrates in the formula and has a wide tolerance for Chlorides. The result is a controlled pore free deposit without excessive copper attack.

The deposit color and tarnish resistance are excellent, providing consistent solderability for electronic assemblies. Technipad IS 7070 meets IPC-4553A. It provides a solderable, flat, lead-free surface for all levels of interconnect technology. It is the best process for 5G with the lowest insertion loss, as GHZ increase.

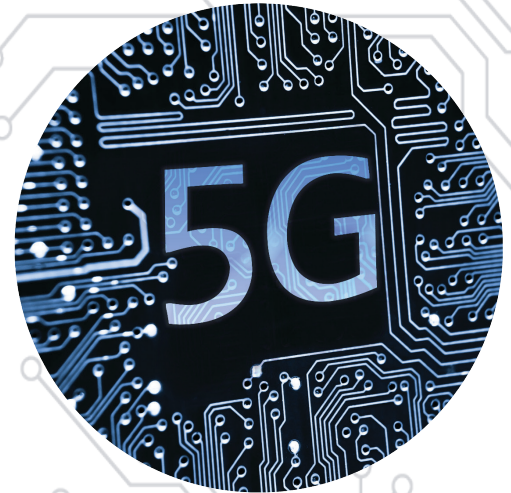


## Features

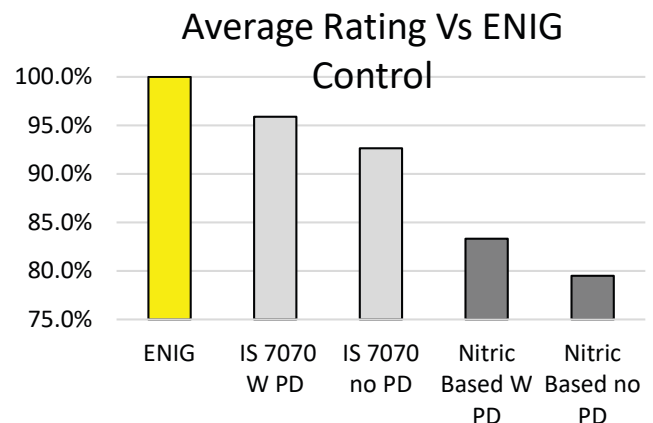
- Nitrate free formula
- High tolerance to chlorides
- Low insertion loss
- Nickel free deposit
- Excellent tarnish resistance
- Porous free deposit
- RoHS & WEEE compliant
- Economical final finish
- Simple operation
- Best in class for corrosion protection

## Benefits

- Eliminates excessive copper attack
- High resistance to creep corrosion potential
- Long solution life
- Suitable for 5G high speed applications
- Remain solderable
- Contribute to reduced cost
- Highest first pass yield



Multiple Corrosion tests such as, Nitric dip, Multiple horizontal micro-etch cycle and Creep corrosion Induced.



# TechniPad IS 7070

## Pre-Clean

### Techni X-Cell 318 and Technietch AT 2000

- Removes light soil, fingerprints, and residues
- Create a micro-roughen surface ideal for adhesion and high GHZ travel.

## Immersion Silver TechniPad IS 7070

Technipad IS 7070 is an excellent choice for 5G due to its low impact on insertion or signal loss. The challenge is 5G's mobility requires a finish with superior electrical properties and stability in a wide variety of environments.

Nitrate-based processes, historically, have failed to be stable in harsh environment.

Technipad IS 7070 has been designed with this in mind, overcoming these challenges through its unique immersion Silver formulation.

## Post dip Tarniban KSII

- Helps prevent Silver tarnish
- Improve Silver resistance to harsh environments.
- No negative impact with 5G insertion loss.
- Solderability remains excellent

## The Technipad IS 7070 process

Technipad IS 7070 is the the best alternative for:

- Solderability
- High-speed communication
- Harsh environment resistance.
- At a much lower cost than ENIG processes

## Improved Preclean for High GHZ performance

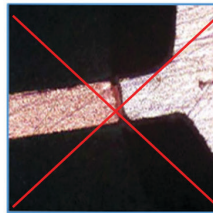


Figure 1: Hyper corrosion<sub>1</sub>

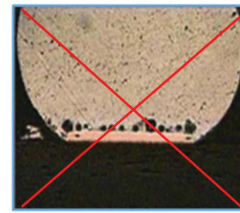


Figure 2: Champagne voids<sub>2</sub>

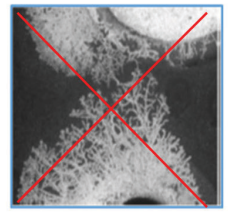
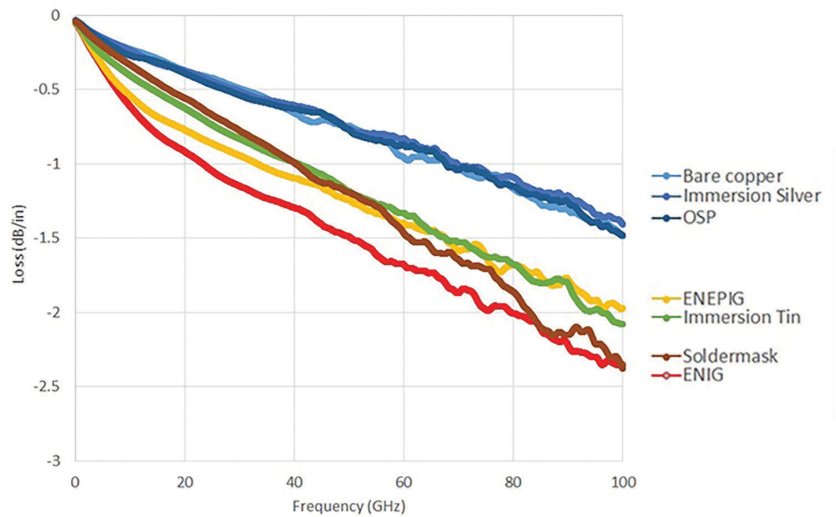


Figure 3: Creep corrosion<sub>3</sub>

**Below:** Microstrip wideband insertion loss (IL results), differential method using 5mil extremely low loss laminate with rolled copper



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