

Printoganth[®] U Plus

Market leading electroless copper



Electronics

Desmear and metallization

atotech.com

Next generation horizontal electroless copper for high layer count PCBs

Outstanding reliability performance

Printoganth[®] U Plus provides excellent copper to copper interconnections resulting in best reliability performance even under severe thermal shock conditions. It is therefore perfectly suited for production of high layer count PCBs with multiple inner layers and advanced HDI any-layer / ELIC technology. As the successor of the famous Printoganth[®] U process (production capacity of over 25 million m²/year) Printoganth[®] U Plus has a remarkable reference list with leading HDI manufacturers especially from Taiwan and China.



Figure 1: Cu to Cu interconnect remains intact after extreme thermal shocking

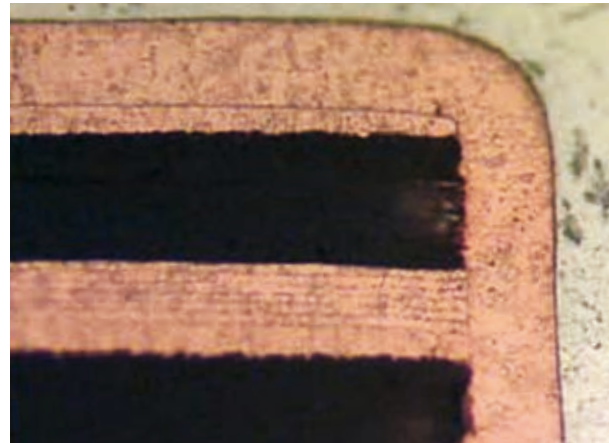


Figure 2: Very good Cu to Cu interconnection after 9 x 288 °C solder shock

Features and benefits

- Perfectly suited process for production of high layer count PCBs (anylayer / ELIC technology)
- Outstanding copper to copper interconnect, even under extreme conditions (9 x 288 °C solder shock)
- Favorable internal stress characteristics and fine grain deposit for good adhesion
- 0.35 µm copper deposition in 4 minutes dwell time

Horizontal electroless copper for most reliable HDI and MLB production

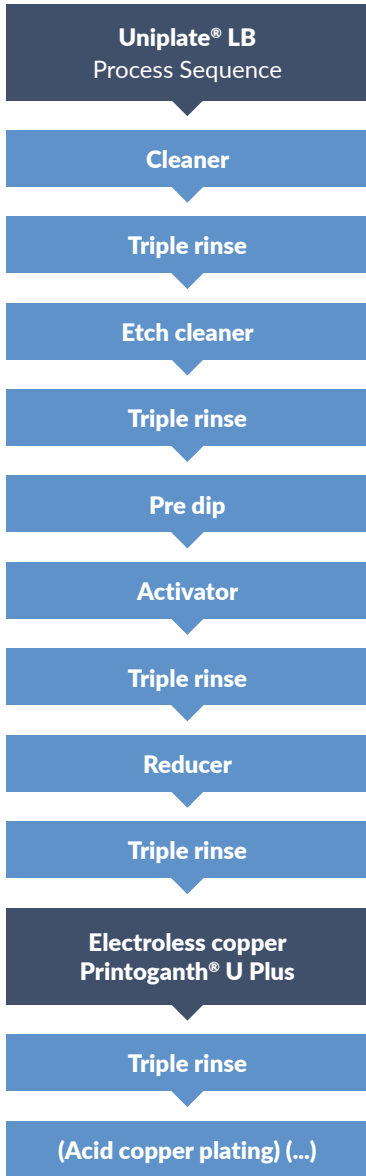
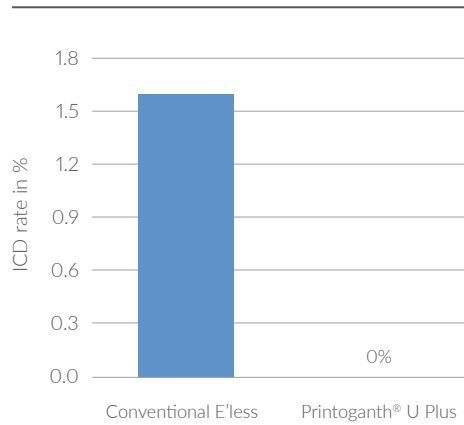
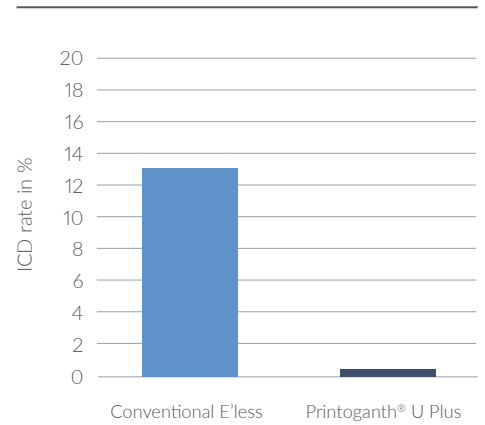


Figure 3: Uniplate® LB/Cu plating line

Defect rates for solder shock tests under IPC standard conditions (6 x 288°C)



Defect rates for solder shock tests under extreme conditions (9 x 326°C)



In terms of copper to copper interconnect Printoganth® U Plus is best in class.

