

Electroless Copper Plating (ELP)

Deposition of thin layer of copper on the whole panel, including the laser-drilled holes, by catalytic chemical reaction (no external electricity needed – electroless), that will be used as based conductor for the succeeding electrolytic copper plating.

Tool Overview:

- Process Name : Electroless Copper Plating



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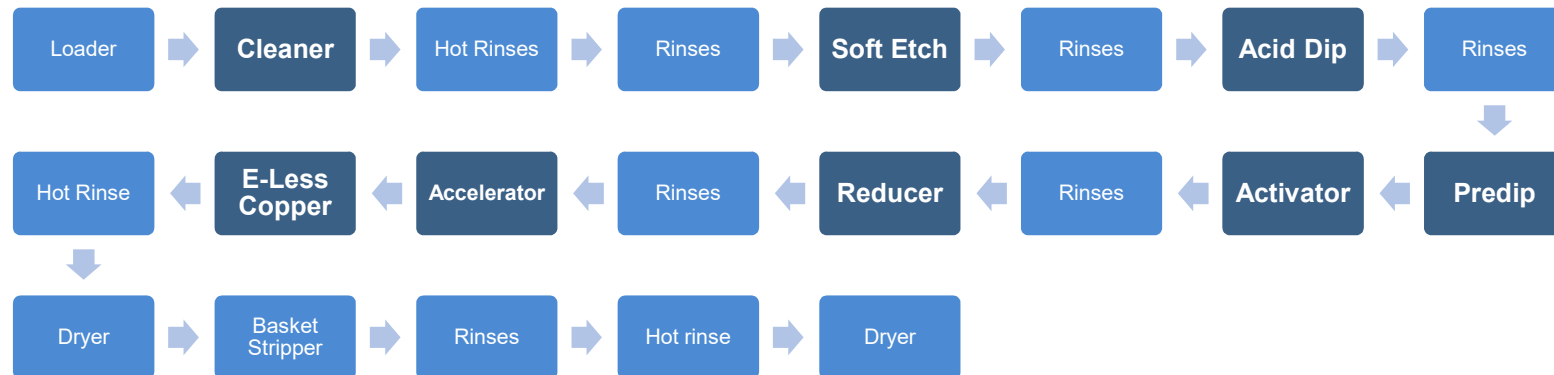
Module Name	Function
Cleaning	Removes the slight oxide of holes and contamination on the substrate and holes. Improve Pd adsorption.
Soft Etching	Roughens the surface of Cu substrate, Remove the oxide on the surface of Cu substrate
Acid-dip	The acid-dip rinse serves as buffer solution between etching cleaner and activator and as protection against carry over.
Predip	It is used to ensure an optimum and uniform amount Activator MAT-SP on the substrate. Improves wetting of the material.
Activator	Absorb Pd ²⁺ on ABF substrate and as catalytic agent for E'less copper between ABF substrate.
Reducer	Converts palladium ions (Pd ²⁺) to metallic palladium (Pd ⁰) especially on the non-copper surfaces.
Accelerator	It is used to activate the Pd layer created in the reducer bath
Electroless Copper	Deposits a low internal stress Cu layer



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ELP501



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ELP Layout

