

## Reverse pulse plating with insoluble anodes for HDI and MLB

### Excellent conformal copper plating for HAR

DC technology does not even come close to the throwing power performance achieved with Cuprapulse® IN. This holds true for the whole range of board thickness from 1-6 mm and any aspect ratio. Cuprapulse® IN can be operated in VCP systems as well as in hoist type equipment and offers a very wide working range of organic additives.

The new process is designed for pulse plating with insoluble anodes to keep the surface thickness variation within a narrow range. It is therefore possible to produce circuit boards with pattern plating at approx. 3 A/dm<sup>2</sup> and to achieve excellent copper distribution. Compared to DC plating this is an improvement of approx. 50%. The throwing power into the hole (2.4/0.2 mm) is approximately 100%. The high applicable current density together with the improved performance allows for increased productivity and output.

### Features and benefits

- Wide operating window and easy control
- Capable for panel and pattern plating
- Much better surface distribution in tracks and line shapes than in DC mode
- Applicable for VCP and hoist type equipment with insoluble anodes
- Productivity is increased with simultaneous quality improvements
- No change in surface appearance over wide working window
- Meets solder shock reliability requirements according to industry standards
- Excellent plating results for Automotive and HDI applications

> 90 %

throwing power for HAR boards