Next Generation of Pattern Viafill Plating Technology

新世代二次銅填盲孔電鍍銅技術

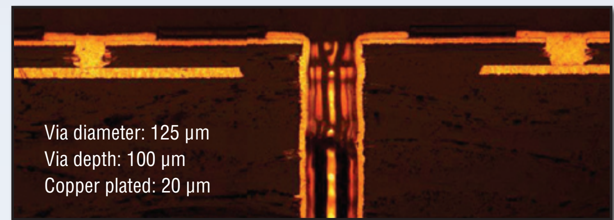
MICROFILL™ EVF Copper Via Fill

The latest generation technology developed by Dow Electronic Materials for advanced viafill plating, MICROFILL™ EVF Copper Via Fill provides enhanced via filling, with simultaneous through-hole plating, at surface thicknesses unattainable. Formulated to operate in existing equipment over a broad range of operating conditions, MICROFILL™ EVF Copper Via Fill is suitable for both HDI and IC Substrate applications. It is proved by sufficient experience that MICROFILL™ EVF Copper Via Fill could help to reduce 20% plating thickness and helps to improve varied plating defects.

MICROFILL™ EVF盲孔電鍍, 陶氏電子材料(原羅門哈斯電子材料)所發展最新一代高階填盲孔電鍍技術, 具備卓越的填孔表現, 並同時兼顧通孔貫孔以及盲孔填孔. 此系統可應用於現有的設備上並具備廣泛的操作範圍. MICROFILL™ EVF盲孔電鍍可應用於 HDI 與 IC Substrate 電鍍. 藉由相當的經驗顯示, MICROFILL™ EVF盲孔電鍍, 得以有效的降低20%的電鍍厚度並改善多種電鍍缺陷.

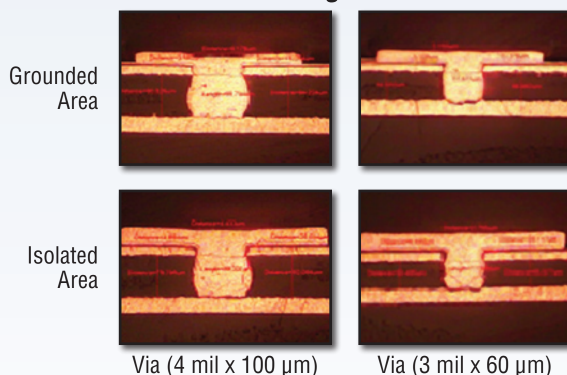
Features and Benefits 特性及優點

- Low plating thickness (20 µm)
  較薄的電鍍厚度 (20 µm)
- Exceptional microvia filling performances
  優越的盲孔電镀填孔表現
- Simultaneous microvia filling and through-hole plating at HDI application
  於HDI制程中, 可同時兼顧填孔表现及通孔貫孔能力
- Rectangle trace profile for W/B application
  線路形狀方正, 可搭配使用於打線製程
- Excellent reliability
  優良可靠性
- Easily analyzed and controlled by conventional CVS
  容易控制, 可用CVS测量
- Compatibility with both panel and pattern plating processing
  可適用於全板或二次銅電鍍流程



Through hole throwing power >80% (for 5:1 AR through hole at 1.8 ASD and 20 µm copper thickness

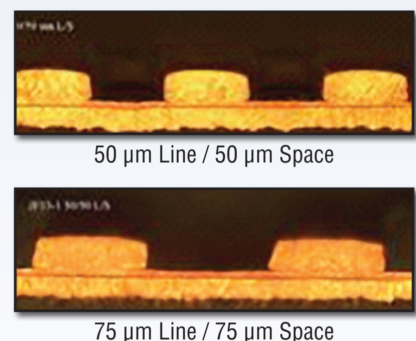
Pattern Filling Performances



Via (4 mil x 100 µm) Via (3 mil x 60 µm)

Current Density: 18 ASF
Flow Rate: 0.6 bar
Copper Plated: 20 µm
Plating Distribution: ±4 µm
Via diameter: 125 µm
Via depth: 100 µm
Dimple: <10 µm

Trace Profile



50 µm Line / 50 µm Space

75 µm Line / 75 µm Space

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