



Excellent Uniformity Viafill Electroplating Technology on IC Substrate

应用于IC载板上 高均匀性的盲孔 填孔解决方案

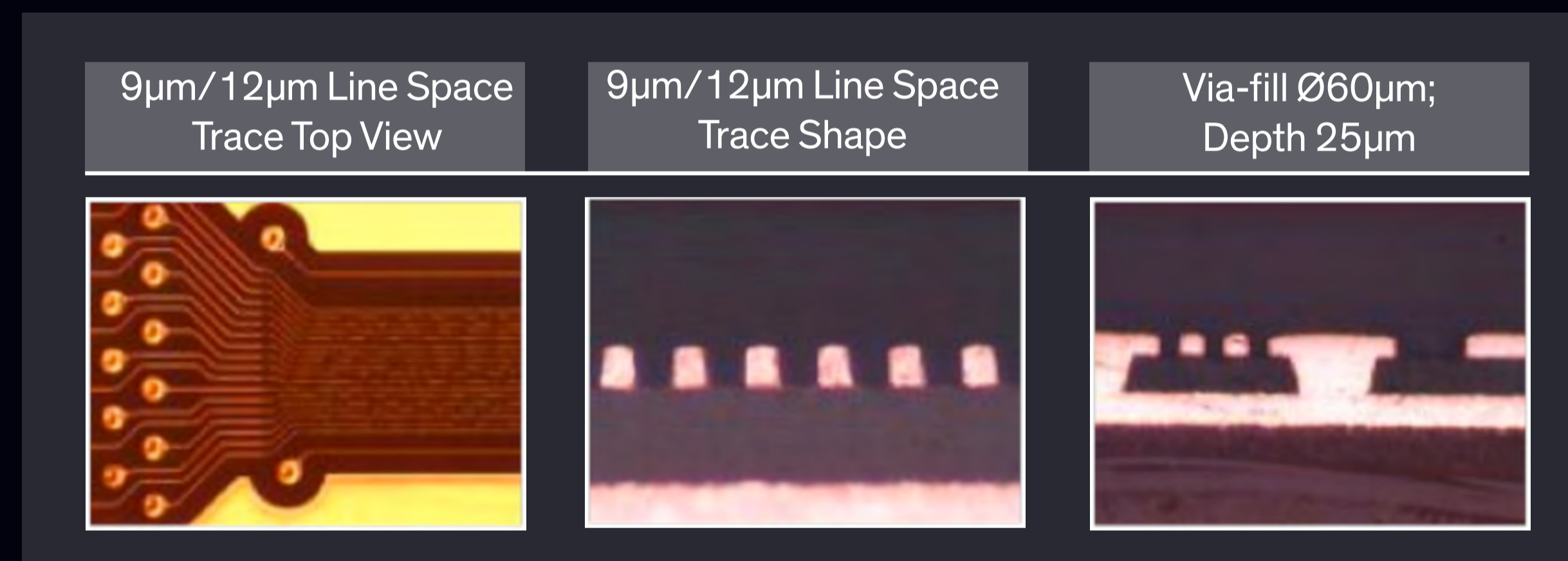
MICROFILL™ LVF IV Acid Copper

In IC substrate territory, manufacturing shops are seeking for better microvia plating solution which can demonstrate excellent uniformity on Flip-Chip pattern plating, since minor uniformity change may easily cause short-circuit or other severe reliability issue under fine-line trend. To meet customers' demand, Dow launched the new formulated MICROFILL™ LVF IV Acid Copper to the market which apply with insoluble anodes and direct current (DC). This chemical can offer our customers excellent panel uniformity, also perform exceptional production flexibility in both panel and pattern plating.

在IC载板领域中，陶氏电子材料了解我们的客户正在找寻应用在覆晶基板上，盲孔填孔电镀技术更佳解决方案，用以克服细线路趋势下，轻微全板均匀度变异可能造成短路或相关品质问题。我们理解客户的需求，因此推展 MICROFILL™ LVF IV酸铜镀液，该产品搭配不溶性阳极与直接电镀设备使用，可在展现卓越盲孔填孔表现的同时，达到绝佳的全板平整性。无论在全板电镀或二次铜电镀都有极高的生产灵活性。

Advantages 优点

- Exceptional microvia filling performance with superior panel uniformity
卓越的盲孔填孔表现，并展现优异的全板平整性
- Designed for pattern and panel plate applications on Flip-Chip substrate
可同时应用于覆晶基板全板及二次铜电镀
- Bright, highly ductile, leveled deposits
镀铜表面具高亮度，高延展性以及平整性
- DC process with insoluble anodes for simple operation and minimization of idle time effects
药水在搭配不溶性阳极与直流电镀设备下操作容易，产线闲置重启后的稳定度高
- Easily analyzed and controlled by conventional CVS
所有化学药液都可采用CVS分析控制
- Highly tunable process for different end user requirements
具备弹性的生产流程



Excellent viafill performance in both isolated and dense area
线路独立与密集区域皆展现良好的填孔平整性

Top View	Isolated Area			Dense Area		
	Panel Top	Panel Middle	Panel Bottom	Panel Top	Panel Middle	Panel Bottom
1.0ASD, 12LPM						
	0.9µm (dimple)	1.4µm	0µm	0µm	0.8µm	0.3µm
1.0ASD, 20LPM						
	1.3µm	1.2µm	1.4µm	0.5µm	0.5µm	0µm

