

Final Finishing – ENIG Technology

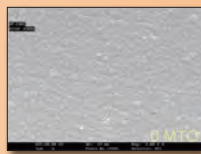
表面处理 – 化学镍金技术

DURAPOSIT™ SMT-88 Electroless Nickel/AUROELECTROLESS™ SMT 520 Immersion Gold

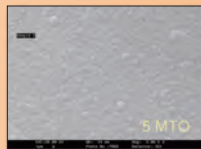
DURAPOSIT™ SMT-88 Electroless Nickel

Advantages 优点

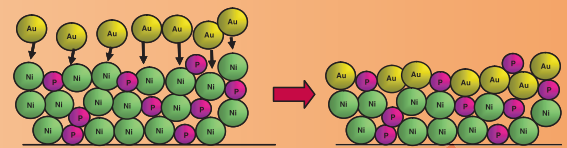
- Elimination of Black Pad and skip plating
降低“镍黑垫”及漏镀风险
- Deposit are highly durable and uniform
沉积厚度均匀可靠
- Excellent bath stability and consistency
槽液从新开缸到槽液寿命终止均保持镍层质量稳定
- Excellent solderability for tin-lead and lead-free solder joint
对于锡铅与无铅焊料具有优异的焊接性



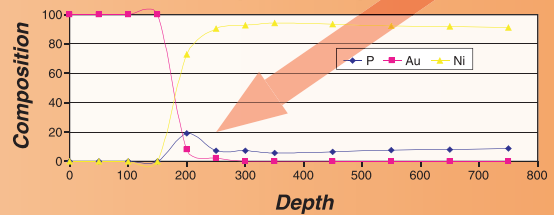
No "Black Nickel" was observed on DURAPOSIT™ SMT88 Electroless Nickel sample
未发现“黑镍”



SEM images of Au stripped ENIG surface
电子显微镜下退金后状况



Ni/Au Depth vs. Composition

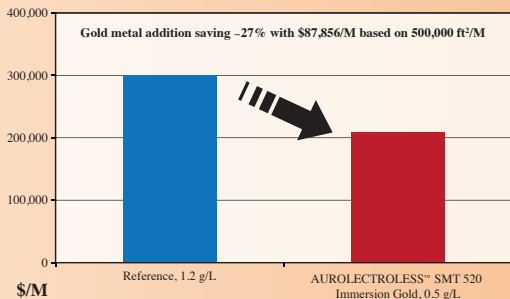


AUROELECTROLESS™ SMT 520 Immersion Gold

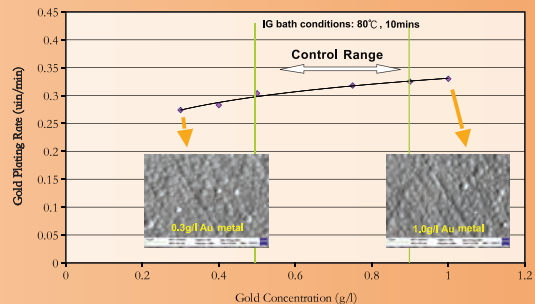
Advantages 优点

- Low gold content operation to save running cost
低金盐浓度(0.5g/L)操作 降低成本
- High concentration product concentrates to minimize solution volume growth
高浓缩药液减轻药水添加总体积, 降低操作复杂性
- Consistent solderability at high Ni/Cu ion contamination bath condition
高镍铜污染时仍可维持稳定的可焊性
- Stable gold deposition rate in wide range of pH range
在pH值变化下具有稳定的沉积速率
- Wider gold thickness control range based on requirement
可以依照客户需求弹性调整制程参数来满足较大范围的沉金厚度控制 (>3 micro inch)
- No significant performance effect under dry film leaching condition
对于膜有机物析出不敏感可用于选择性化镍金制程

Customer Example



Effect of Gold Concentration



Electronic Materials