

Final Finishing – ENEPIG Technology

表面處理 – 化学镍钯金技術

PALLAMERSE™ SMT2000 Electroless Palladium

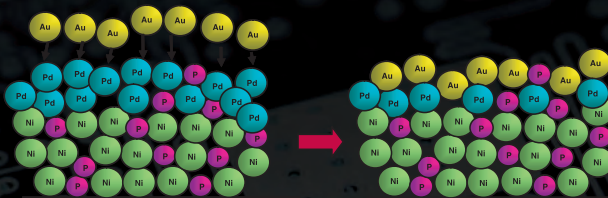
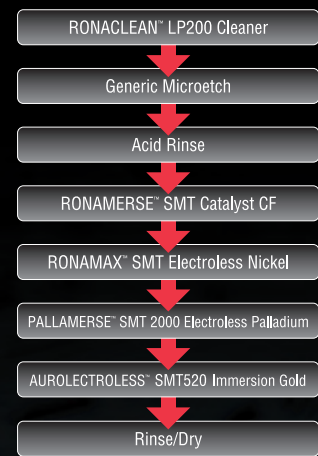
The Palladium layer protects the Nickel layer from corrosion and inhibits the phosphorous rich layer growth to provide outstanding reliability.

钯层保护镍层并抑制富磷层增生，表现出优异的焊点可靠度。

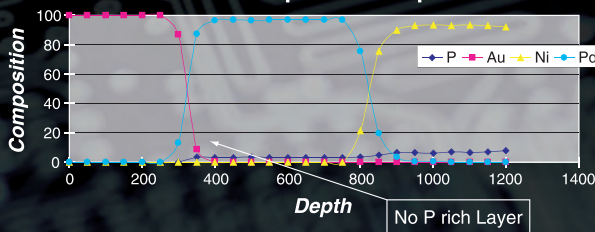
Advantages 优点

- Electroless palladium layer prevents attack of Cu/Ni substrate
化学钯层防止铜与镍层被攻击
- Excellent wire bondability with thin gold deposit
配合薄金镀层表现出优越之打金线接合能力
- Well buffered system and easy maintenance procedure for bath solution
优异及简易的槽液控制系统
- Excellent selectivity of deposition eliminate outer growth problem
高度选择性沉积
- Outstanding Pd/Au plating on both copper and nickel
在铜及镍层有优异的钯金沉积能力

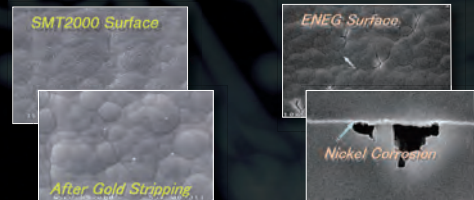
ENEPIG Process 流程



Ni/Pd/Au Depth vs. Composition



| | Nickel Outer Growth Issue | Fine Line Design | Ball Bonding Ability | Wire Bonding Ability | Cost | Bath Stability |
|--|---------------------------|------------------|----------------------|----------------------|------|----------------|
| PALLAMERSE EL-Ni/EL-Pd/IM-Au | ○ | ○ | ○ | ○ | ○ | ○ |
| ENIG EL-Ni/IM-Au(Thin) | △ Boundary Corrosion | ○ | ○ | X | ○ | ○ |
| ENIG EL-Ni/IM-Au(Thick) | △ Boundary Corrosion | ○ | ○ | ○ | X | △ |
| Direct Au | ○ | ○ | ○ | ○ | X | X |
| Electro Ni/ Electro Au | ○ | X | ○ | ○ | X | ○ |



Electronic Materials