



Version: 15 April 2019

# AURUNA<sup>®</sup> 530

## GOLD COBALT ELECTROLYTE



### Electrolyte for Abrasion-Resistant, Low-Corrosion Hard Gold Layers

AURUNA<sup>®</sup> 530 is a weakly acidic hard gold electrolyte with high current efficiency. Its essential property is its high resistance to abrasion and corrosion.

By choosing advantageous operating conditions (pH-value and temperature), printed circuit boards can be treated in a way which is particularly friendly to resists and lacquers, thus avoiding the lifting of masking materials.

With a gold content of at least 3 g/l, the desired high current efficiency can be reached even with sensitive resists. The plating speed is approx. 0.29  $\mu\text{m}/\text{min}$  at 1 A/dm<sup>2</sup> and 35 °C.



### Advantages

- Weakly acidic hard gold electrolyte based on gold-cobalt with high current efficiency
- Good compatibility with resists, like dry film and soldermask
- Low contact resistance
- High abrasion resistance
- Good thickness distribution
- Easy maintenance and high stability of the electrolyte
- Low-pore layers with good corrosion resistance

### Applications

- Contacts on plug-in cards
- Printed circuit boards

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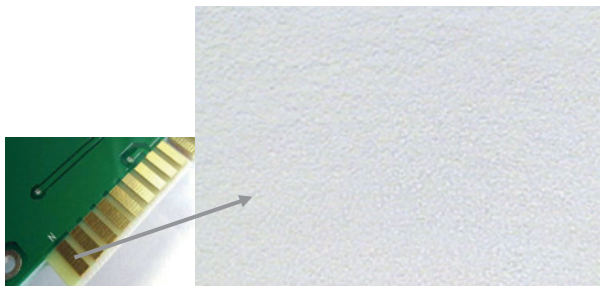
### TECHNICAL SPECIFICATIONS

Electrolyte characteristics	
Electrolyte type	Weakly acidic
Metal content	4 (3 - 6) g/l Au
pH value	4.0 (4.0 - 4.4)
Operating temperature	35 °C
Current density range	0.8 A/dm <sup>2</sup>
Plating speed	0.1 - 0.5 µm/min
Anode material	Pt-Ti (type PLATINODE® Pt/Ti)

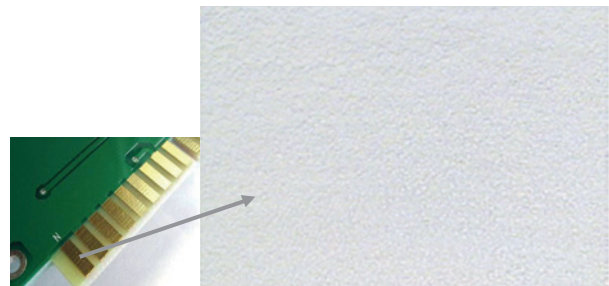
Coating characteristics	
Coating	Gold-cobalt
Alloy composition	99.7 wt.% Au 0.3 wt.% Co
Colour of deposit	Yellow
Brightness	Semi-bright
Layer hardness HV 0.015 (Vickers)	approx. 170 HV
Density of the coating	Approx. 18 g/cm <sup>3</sup>

#### Corrosion Resistance Test AURUNA® 530

##### Before test



##### After test



NAV-Test, 1 h, 25 °C on production board. No pin holes found.

### YOUR CONTACT

Do you have a specific question or would you like a no-obligation quote calculation? Our specialist will be happy to help you with any technical questions you might have.



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