



ASSOCIATION CONNECTING
ELECTRONICS INDUSTRIES®

IPC-4552

Amendment 2

Specification for Electroless
Nickel/Immersion Gold
(ENIG) Plating for Printed
Circuit Boards

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September 2012

A standard developed by IPC

The Principles of Standardization

In May 1995 the IPC's Technical Activities Executive Committee (TAEC) adopted Principles of Standardization as a guiding principle of IPC's standardization efforts.

Standards Should:

- Show relationship to Design for Manufacturability (DFM) and Design for the Environment (DFE)
- Minimize time to market
- Contain simple (simplified) language
- Just include spec information
- Focus on end product performance
- Include a feedback system on use and problems for future improvement

Standards Should Not:

- Inhibit innovation
- Increase time-to-market
- Keep people out
- Increase cycle time
- Tell you how to make something
- Contain anything that cannot be defended with data

Notice

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Thank you for your continued support.

Specification for Electroless Nickel/Immersion Gold (ENIG) Plating for Printed Circuit Boards

Add new Section 3.2.3 as follows:

3.2.3 Reworking/Repair of ENIG Reworking of ENIG that involves either partial or complete stripping of immersion gold and/or electroless nickel **shall not** be permitted. Similarly, repair of skip plating defects with the use of electrolytic plating systems for nickel and/or gold **shall not** be permitted. Additional processing in immersion gold to meet gold thickness requirements **shall** be allowed, provided that subsequent adhesion testing is performed. Panels removed from the plating line after electroless nickel plating but prior to immersion gold plating may be plated with additional electroless nickel and then immersion gold, provided that the electroless nickel surface is reactivated prior to plating, and that both adhesion testing and solderability testing are performed prior to shipment of the printed boards. Note that any deviations from the requirements of this paragraph **shall** only be AABUS.