



NanoFoil®

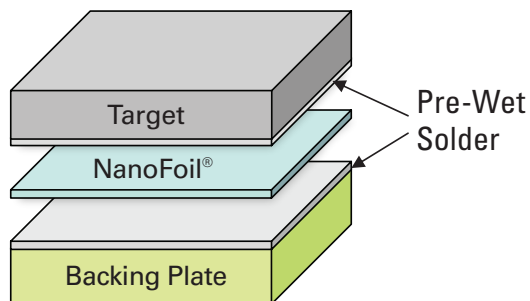
A reactive multi-layer foil that provides localized heat up to 1500°C in a nanosecond!



NanoFoil® consists of thousands of nanoscale layers of aluminum and nickel, which react exothermally when initiated with an energy pulse. The foil creates a self-sustaining reaction that acts as a rapid and controllable localized heat source to melt adjoining solder layers, bonding components together. This process is called the **NanoBond®**.

Features:

- Localized heating – components are not exposed to reflow temperatures; ideal for temperature-sensitive components
- Fluxless – rapid, flux-free soldering at room temperature
- Flexible – suitable for use with all solders
- Thermally conductive – 6x to 10x better than non-conductive adhesives
- Instantaneous – create stress-free bonds in milliseconds
- Easy ignition – easily ignites with an electrical pulse, heat pulse (soldering iron), or laser pulse
- NanoFoil® becomes a non-functional part of the solder joint, yet is thermally and electrically conductive



Packaging Options:

- Tape & reel
- Waffle pack
- Bulk

Packaging Options:

- Sn readily available

Applications:

- HB LED attach
- Concentrated PV (CPV)
- Power amplifiers/RF attach
- Component mounting
- Thermal management
- Post reflow of EMI shields
- Rework operations

...and more

Cutting Methods:

- Laser cut – ideal for high-precision complex shapes
- Stamping – economical choice for simple shapes
- Hand cutting – easy cutting for prototyping

Learn more: www.indium.com/solder-alloys

Contact our engineers: askus@indium.com

From One Engineer To Another®

All of Indium Corporation's solder paste and preform manufacturing facilities are IATF 16949:2016 certified. Indium Corporation is an ISO 9001:2015 registered company.

