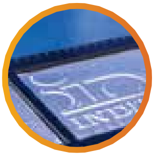
Metal
Thermal Interface Materials

Indium Corporation is the leader in metal thermal interface materials (TIMs).



Heat-Spring®

A compressible interface between a heat source and a heat-sink; the surface of a Heat-Spring® is patterned to optimize performance.

Indium TIM Solutions for Burn-In

Indium is used as a high-performance TIM because of its high thermal conductivity (86W/mK). A thin aluminum layer can prevent indium from adhering to the DUT surface.

Liquid Metal and Hybrid TIM Products

Indium Corporation offers multiple practical liquid metal or hybrid TIMs. They possess high thermal conductivity and low interfacial resistance against most surfaces.

Solder TIM Solutions

Reflowed solder joints are thermally conductive because of the intermetallic bond. A low-voiding joint has better thermal performance.

Common thermal interface material alloys: Indalloy® 4 (100In), Indalloy® 1E (52In/48Sn), Indalloy® 290 (97In/3Ag), Indalloy® 3 (90In/10Ag)

Contact our engineers: **askus@indium.com**
Learn more: **www.indium.com/TIMs**

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.

Proven Materials for Reliable Servers

PCBA Materials

Main Board

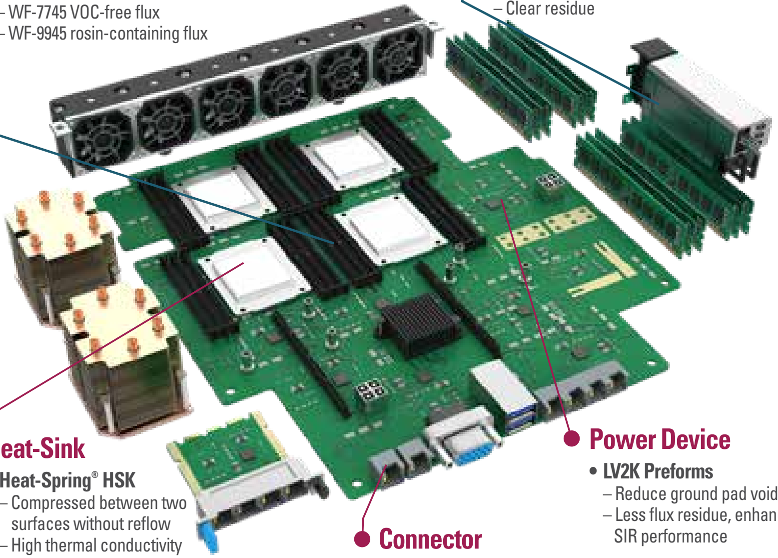
- **Indium10.8HF Solder Paste**
  - Eliminates HIP and NWO when BGAs warp
  - Excellent wetting on different surfaces
- **Indium10.2HFA Solder Paste**
  - Non-tacky residue with excellent ICT performance
  - Excellent HIP and NWO performance
  - Excellent conformal coating compatibility
- **Durafuse™ LT Low-Temperature Alloy**
  - More than two orders of magnitude better than Bi-containing low-temperature materials
  - TCT performance can be better than SAC305
- **Solder Fortification® Preforms**
  - Added solder volume to improve mechanical reliability
- **Wave Fluxes**
  - WF-7745 VOC-free flux
  - WF-9945 rosin-containing flux

Memory Module

- **Indium8.9HF Solder Paste**
  - Restricted flux residue
  - Excellent transfer efficiency
- **Durafuse™ LT Low-Temperature Alloy**
  - Improves drop shock resistance
  - Improves TCT performance
- **Indium5.7LT-1 Solder Paste**
  - Low-temperature
  - Clear residue

Graphic Card

- **Indium10.8HF Solder Paste**
  - Eliminates HIP and NWO when BGAs warp
  - Excellent wetting on different surfaces
- **Indium5.7LT-1 Solder Paste**
  - Low-temperature
  - Clear residue



Heat-Sink

- **Heat-Spring® HSK**
  - Compressed between two surfaces without reflow
  - High thermal conductivity
  - Excellent thermal cycling performance

Power Device

- **LV2K Preforms**
  - Reduce ground pad voiding
  - Less flux residue, enhance SIR performance

Connector

- **Solder Fortification® Preforms**
  - Added solder volume to improve mechanical reliability

Engineered Solders

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