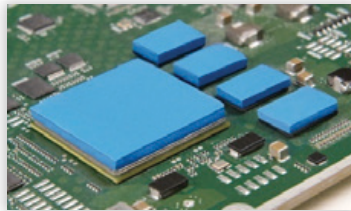


## Solutions Across the Board

### GAP PAD®



GAP PAD® provide an effective thermal interface between metal module housings and components where air gaps and rough surface textures are present.

### GAP FILLER and LIQUI FORM



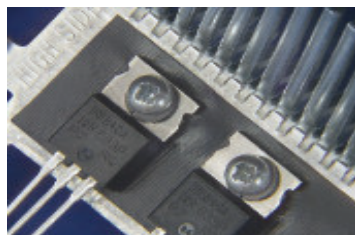
BERGQUIST® Gap Fillers are low stress, liquid materials ideal for providing thermal control for fragile, dimensionally complex components and electronic structures. Gap Fillers are available in two-part and one-part versions.

### Phase Change Material



BERGQUIST phase change TIMs are solid at room temperature and, at elevated temperatures, change to liquid to fill gaps and deliver thermal control by providing excellent thermal impedance between components and the metal module housing.

### SIL PAD®



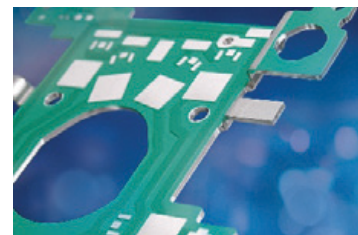
SIL PAD® are an effective thermal interface between metal module housing and components, providing a robust dielectric interface to help meet safety agency requirements.

### BOND PLY



BOND PLY thermal adhesives offer proven thermal and dielectric performance while eliminating the need for mechanical joining mechanisms such as clips and screws.

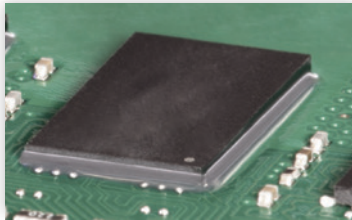
### TCLAD



TCLAD insulated metal substrates provide a wide range of constructions to meet thermal requirements for applications where conventional FR4 PCB substrates are not sufficient to manage the thermal load. TCLAD substrates are safety agency certified solutions and enable excellent heat transfer for surface mount power components.

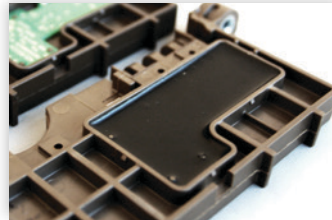
## Solutions Across the Board

### Circuit Board Protection – Underfill



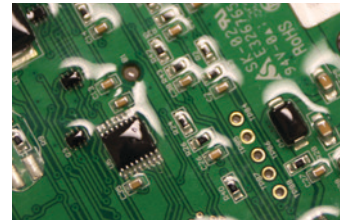
LOCTITE® brand underfills are low CTE materials designed to flow and encapsulate array interconnects such as those within CSP, BGA and flip chip components. Underfill solder joint protection significantly enhances reliability performance and reworkable formulations enable preservation of high-value PCBs.

### Circuit Board Protection – Potting



Henkel potting materials are available in low outgassing formulations and a variety of viscosities and thermal performance capabilities, offering encapsulation and protection of a broad range of substrates.

### Circuit Board Protection – Conformal Coating



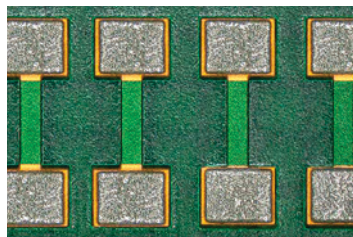
Henkel conformal coatings deliver rugged protection of circuit boards without limiting manufacturing throughput, protecting PCBs from moisture, corrosion and other harsh conditions.

### Circuit Board Protection – Encapsulant



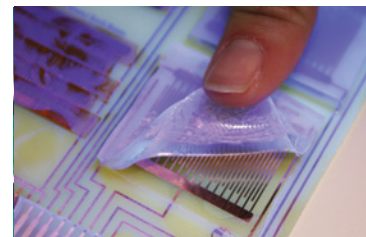
High-purity, ionically-clean glob top and dam and fill encapsulants offer protection for a components of varying sizes and heights.

### Solder



Henkel's LOCTITE solder pastes are best-in-class halogen-free, temperature-stable (GC series), RoHS-compliant formulations available in standard, water-washable, lead-free and tin-lead solutions.

### Peelable Mask

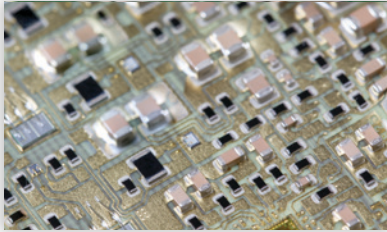


TECHNOMELT® peelable mask is an automated solution for replacement of costly, time-consuming manual masking operations. The material can be automatically dispensed to protect sensitive components during the conformal coating process. Following conformal coating, the mask peels off cleanly, leaving no residue.

## Solutions Across the Board

### Electrically Conductive Adhesives – Paste

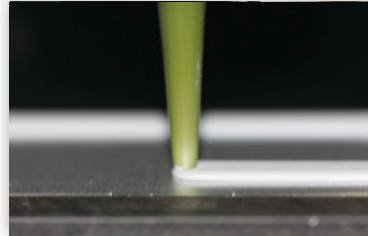
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Dispensable and screen printable pastes for the most demanding applications needing both excellent electrical and thermal performance.

### Electrically Insulating Adhesives – Paste

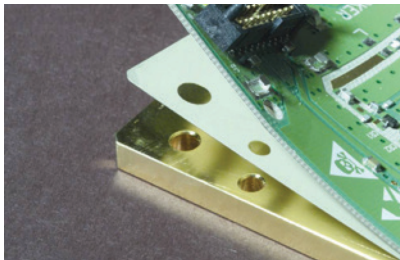
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Electrically insulating materials for chip attach applications that eliminate concerns of reliability and outgassing.

### Electrically Conductive Adhesives – Film

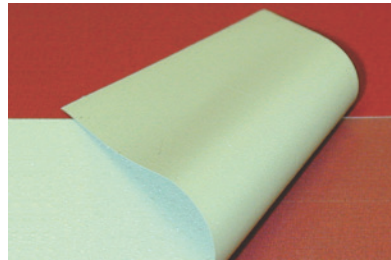
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High electrical and thermal performing adhesives in a film format cut exactly to meet your custom specifications.

### Electrically Insulating Adhesives – Film

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Electrically insulating adhesives in a film format for high strength requirements due to difficult to bond to substrates or CTE mismatch.