

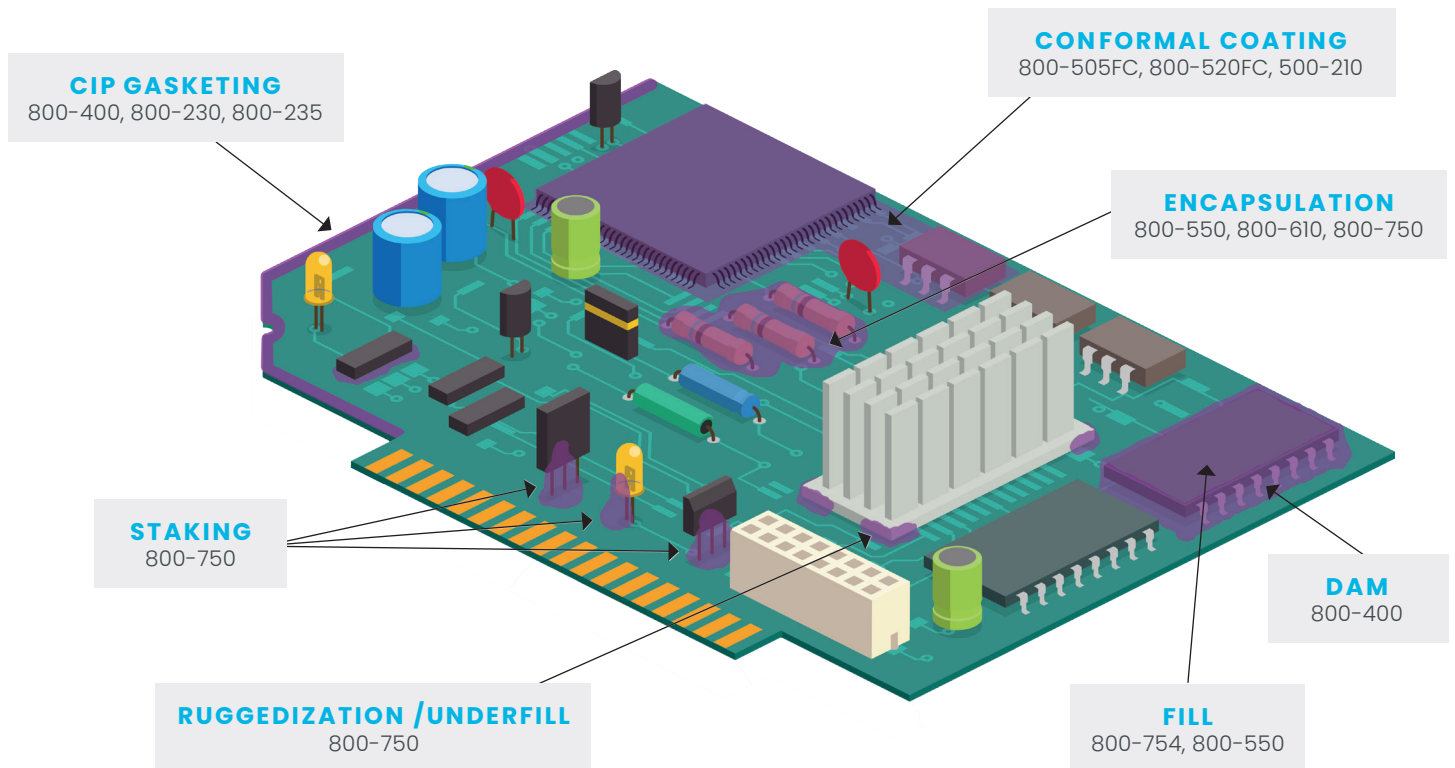
Electronics Assembly

FAST CURE | EXTENSIVE PRODUCT LINE | UL CERTIFIED

The evolving world of electronics demands smaller, faster, and more durable printed circuit boards (PCBs). Novagard rises to this challenge with non-corrosive silicones that combine increased flexibility and high temperature resistance with enhanced performance and reliability. Novagard’s electronics grade silicones allow more versatility in the design and assembly process, and our broad portfolio of fast UV cure silicones reduce total manufacturing cost by increasing throughput. Novagard’s UL 746E certified conformal coatings maintain dielectric integrity, are flame rated, and resistant to high humidity and extreme temperatures. Our silicones reliably coat, encapsulate, bond, and seal to protect sensitive components and extend the useful life of your product.

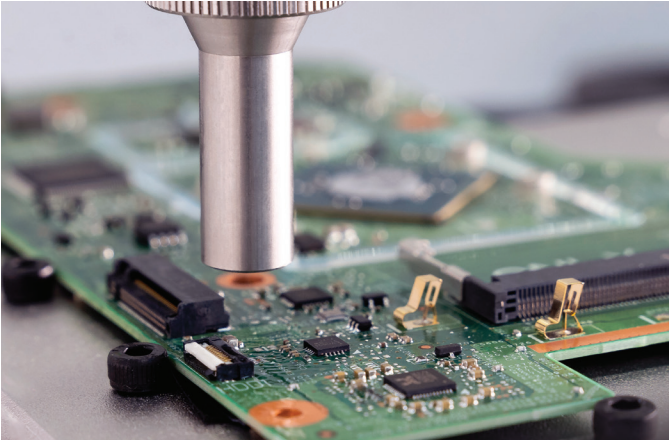
Why use Novagard alkoxy silicones on printed circuit boards?

- Non-corrosive: alcohol byproduct and no unreacted plasticizer
- Protection from vibration, shock, contaminants and chemicals
- UV tracer enables automated in-line inspection
- Superior dielectric performance
- Primerless adhesion to a variety of substrates
- Thermal stability (-40°C to 200°C)
- Broad viscosity range offers application ease for complex geometries



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CONFORMAL COATING

A sprayed, dipped, or brushed coating that conforms to PCB contours to protect against moisture, dirt, chemicals, and temperature fluctuations. These coatings offer excellent flexibility, vibration dampening, and electrical isolation, supporting increased component density and ensuring long-term reliability. Novagard's conformal coatings offer excellent spray lines, and can coat down to a thickness of 100 microns.

800-505FC: UV Alkoxy Dual Cure Sprayable Coating
*UL 746E, V-1, V-0**

800-520FC: UV Alkoxy Dual Cure Flowable Coating
UL 746E, V-1, V-0, ISO 10993-5*

500-210: Alkoxy Moisture Cure Conformal Coating
UL 746E, V-1

ENCAPSULATION

Pouring or injecting a protective layer around a PCB or specific components to shield them from extreme operating conditions, mechanical stresses, and electrical shock. Silicone encapsulants and gel materials are particularly effective, ensuring reliable performance and long term durability.

800-550: UV Alkoxy Dual Cure Flowable Silicone
UL 746E, V-1, ISO 10993-5

800-610: UV Cure Sprayable Silicone Encapsulant

800-750: UV Alkoxy Dual Cure Semi-Flowable
ISO 10993-5/10/23, V-1, UL 746E**

STAKING

Applying a material to reinforce and bond specific components, reducing pressure on leads and minimizing damage from vibration, shock, and handling. This method offers additional mechanical support for sensitive electronic parts.

800-750: UV Alkoxy Dual Cure Semi-Flowable
ISO 10993-5/10/23, V-1, UL 746E**

DAM & FILL

A selective encapsulation method where a wall of quick drying material, or "dam," is created around specific PCB components. After curing the dam, encapsulation liquid is poured into the confined area to protect targeted parts, minimizing additional weight while providing maximum protection.

800-400 Dam: UV Cure Silicone Thixotropic Paste
*V-1**

800-754 Fill: UV Cure Self-Leveling Soft Pottant/
Encapsulant

800-550 Fill: UV Alkoxy Dual Cure Flowable Silicone
UL 746E, V-1, ISO 10993-5

RUGGEDIZATION/UNDERFILL

Underfill involves injecting resin beneath electronic components to protect solder joints, enhancing mechanical stability and resistance to stress. As part of ruggedization, it offers comprehensive protection against extreme conditions, shock, and vibration, improving the durability and longevity of electronic devices.

800-750: UV Alkoxy Dual Cure Semi-Flowable
ISO 10993-5/10/23, V-1, UL 746E**

CURED-IN-PLACE GASKETING

Cured-in-place gasketing uses thixotropic or semi-flowable materials to create custom seals for complex housing geometries, protecting interior PCB components from contaminants, moisture, and electromagnetic interference (EMI).

800-230: UV Cure Self-Leveling Gasketing Silicone

800-235: UV Cure Semi-Flowable Silicone

800-400 Dam: UV Cure Silicone Thixotropic Paste
*V-1**

CLEAN & GREEN

Low odor, solvent free,
no harmful VOC emissions or outgassing,
no isocyanates, and PFAS free.



*Certification Pending