

# PackageBond

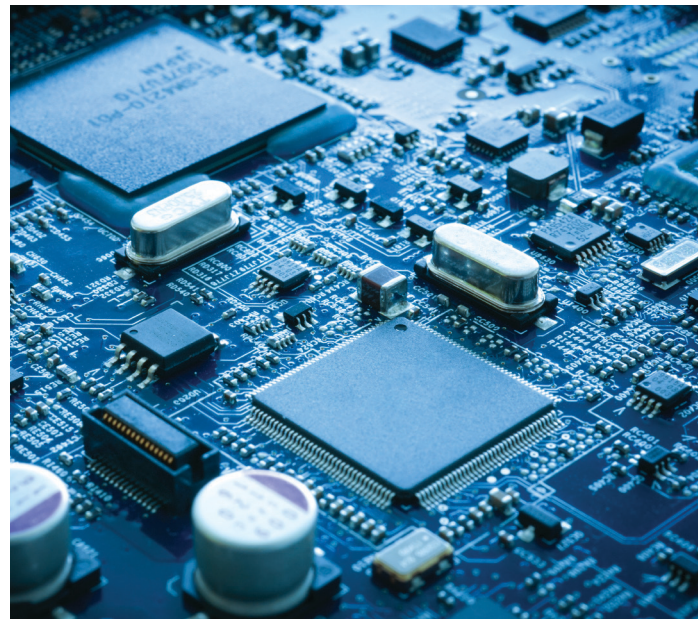
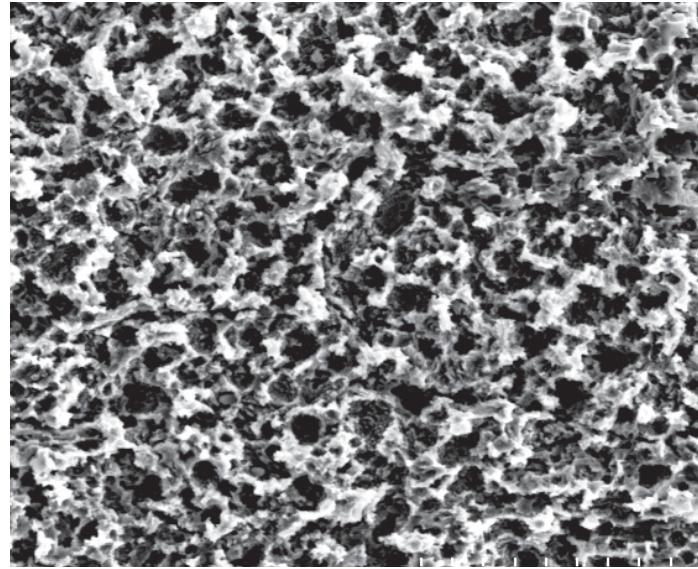
Adhesion Promotion for Lead Frame Based Packaging

## Proven Reliability at MSL-1 Without Delamination

MacDermid Enthone's **PackageBond** is the no risk adhesion promotion system specifically engineered for reliability at today's intense lead-free circuit assembly temperatures. Production proven in high-volume at premier semiconductor manufacturing facilities, our advanced laboratory innovations deliver extreme heat tolerance.

PackageBond features patented chemistries that prevent delamination failure of molded packages due to moisture/reflow sensitivity. The process roughens copper alloy leadframes to maximize resin and encapsulant adhesion, plus deposits a thin adhesion booster for long-term delamination protection. PackageBond does not degrade Ag or Ni/Pd/Au plated leadframes, leaving these surfaces clean for predictably strong wire bonds. Production results confirm consistent compatibility with die attach adhesives and no adverse effects on resin bleed.

For exceptional reliability at all moisture sensitivity levels without delamination and the risk of damage to leadframe platings, choose PackageBond.



## KEY FEATURES

- Proven reliable at MSL-1 with no "popcorning" delamination
- Dramatically improves adhesion performance in modern chip packages
- Leaves a clean Ag surface for wire bonding
- Can be run in strip-to-strip or reel-to-reel mode
- Approved equipment suppliers can be provided upon request
- Backed by MacDermid Enthone's comprehensive customer and technical support



**MacDermid Enthone**

CIRCUITRY SOLUTIONS

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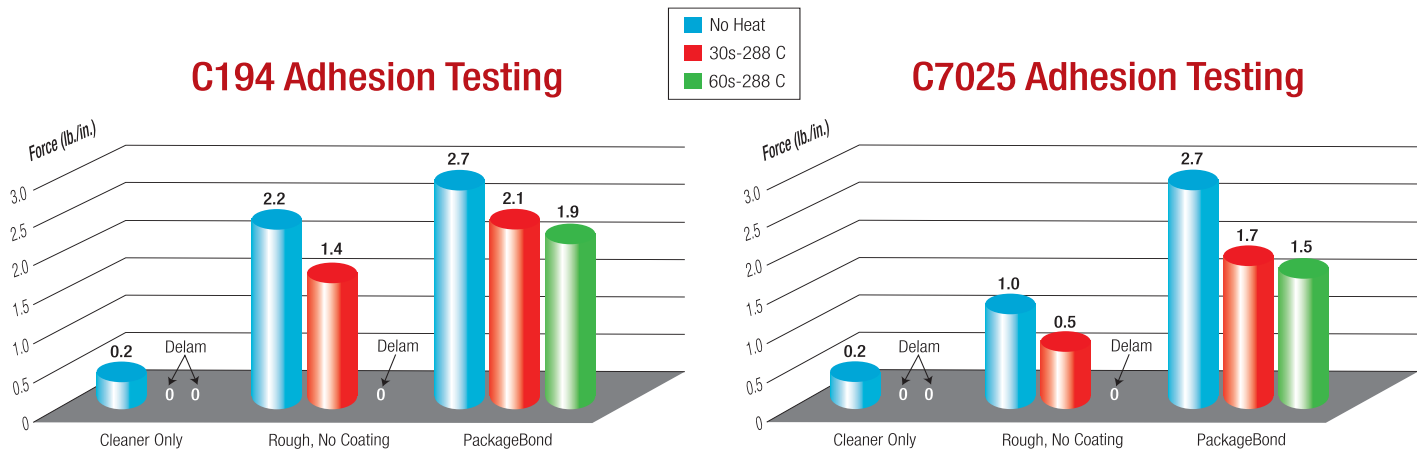
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## Precision Bonding. Guaranteed Service and Support

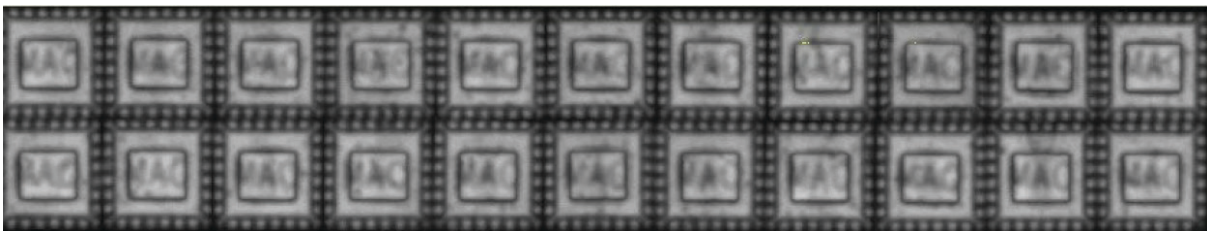
PackageBond is the advanced leadframe adhesion technology that is designed to overcome delamination problems to achieve MSL-1 reliability. The result of rigorous testing with consistent in-market success, PackageBond is the optimum choice for high density, complex packages and can be run in strip-to-strip or reel-to-reel mode.

MacDermid Enthone, a world leader in advanced surface finishes, is dedicated to satisfying the evolving needs of the semiconductor industry and continuing its tradition of providing benchmark customer and technical support.

## EMC Button Shear Adhesion Testing



## Meets MSL-1 Standard for Moisture Sensitivity Levels



No delamination as measured by C-SAM.



macdermidalpha.com  
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MacDermid Enthone is a product brand of MacDermid Alpha Electronics Solutions.