

PackageBond

Adhesion Promotion for Lead Frame Based Packaging

Proven Reliability at MSL-1 Without Delamination

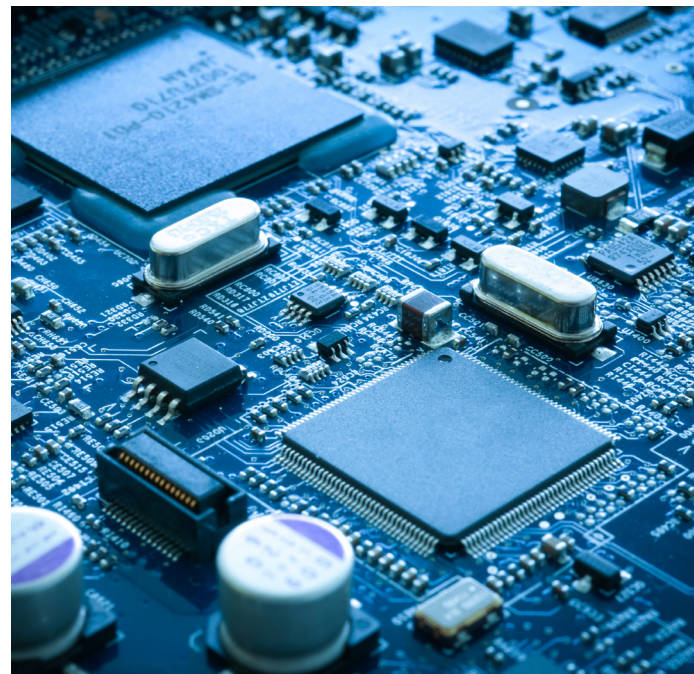
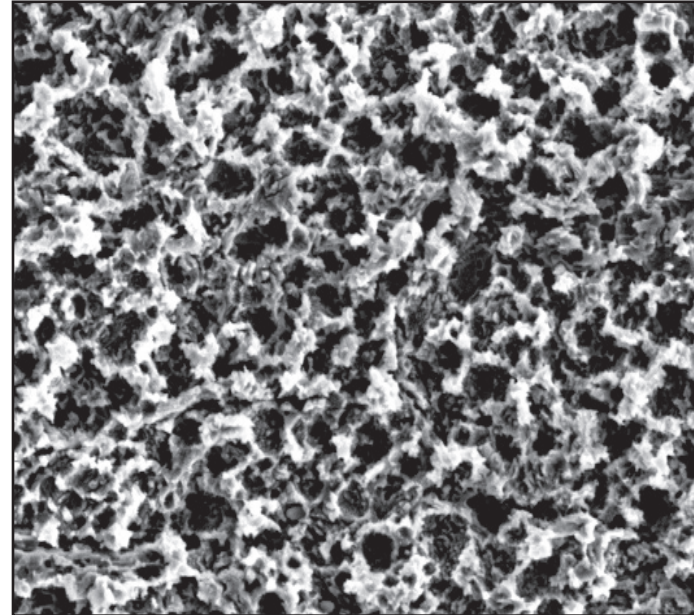
MacDermid Alpha's **PackageBond** is the no risk adhesion promotion system specifically engineered for reliability at today's intense lead-free circuit assembly temperatures. Production proven in high-volume at premier semiconductor manufacturing facilities, our advanced laboratory innovations deliver 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 features, and is compatible with wirebond, flip chip, and copper clip die attach technologies. 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 reliability 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 conveyORIZED or batch mode
- Approved equipment suppliers can be provided upon request
- Backed by MacDermid Alpha's comprehensive customer and technical support



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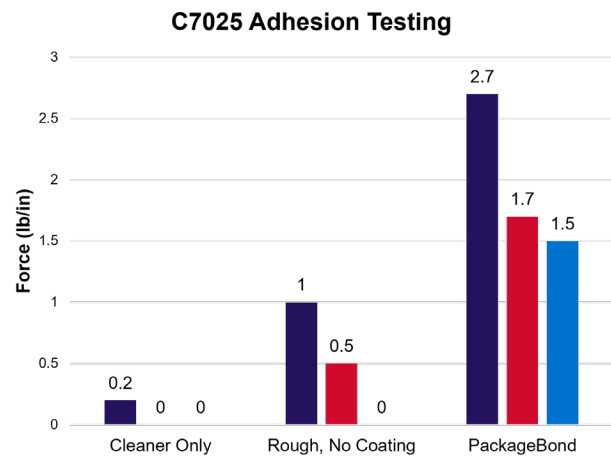
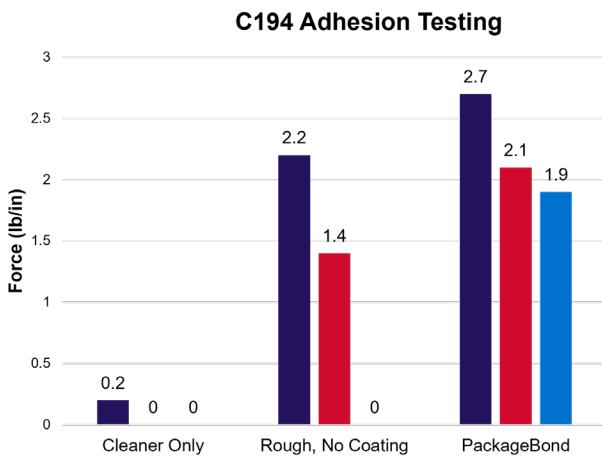
Adhesion Promotion for Lead Frame Based Packaging

Precision Bonding. Guaranteed Service and Support

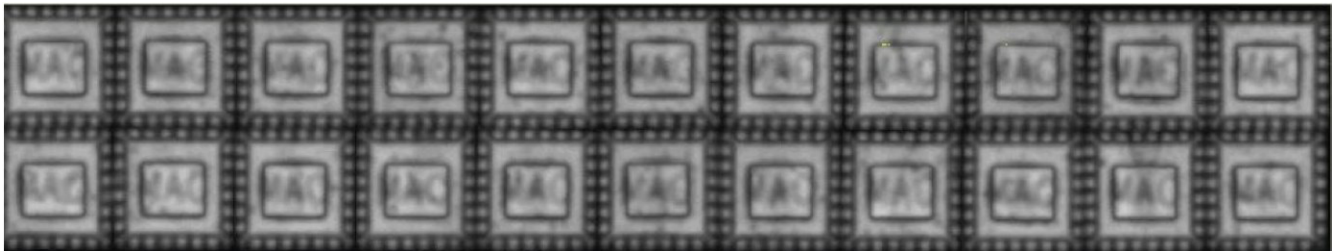
PackageBond is the advanced leadframe adhesion technology that is designed to overcome delamination problems to achieve MSL-1 reliability. The result of rigorous testing with consistent in-market success, PackageBond is the optimum choice for high density, complex packages and can be run in conveyORIZED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

MacDermid Alpha, 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.

