

# Electronics Buyers' Guide



# Key Application Solutions

Bonding & Joining	EMI/RFI Shielding	Printed Circuit Boards	Thermal Management
<p><b>ADHESIVE TRANSFERS</b></p> <p>Used for low profile direct bonding of components, often times as a conductive adhesive</p> <p><b>DOUBLE COATED FILMS</b></p> <p>Conductive and non-conductive low profile attachment and bonding for casings, components, and housings</p> <p><b>HIGH BOND FOAMED ACRYLICS</b></p> <p>Excellent for construction of external casings, components, and housings where viscoelasticity and sealing are essential</p>	<p><b>ALUMINUM &amp; COPPER FOIL TAPES</b></p> <p>Create reliable point-to-point electrical contact, grounding, and EMI protection</p> <p><b>CONDUCTIVE ELASTOMERS</b></p> <p>Provide both excellent shielding and sealing properties across a wide range of temperatures</p> <p><b>EMI ABSORBERS</b></p> <p>Absorbing materials remove the electromagnetic interference path to eliminate "crosstalk"</p> <p><b>METALLIZED FABRICS</b></p> <p>Highly conductive metals combined with lightweight fabrics meet a diverse range of EMI shielding requirements</p>	<p><b>FUME PROTECTION TAPE</b></p> <p>Non-silicone tapes protect large areas from chemical fumes and splashes</p> <p><b>HASL MASKING</b></p> <p>Polymeric layer that provides permanent protective coating for copper traces on PCBs, preventing solder from bridging between conductors</p> <p><b>POLYIMIDE FILM TAPE</b></p> <p>Used for electrical insulation and gold finger protection</p> <p><b>TIN/LEAD STRIPPING</b></p> <p>Protects printed circuit boards in tin/lead stripping and gold finger plating</p>	<p><b>FIRE-BLOCKING GASKETS</b></p> <p>Typically die-cut, these gaskets can withstand extreme temperatures</p> <p><b>THERMALLY CONDUCTIVE ADHESIVE TRANSFER</b></p> <p>Used for low profile direct bonding</p> <p><b>PHASE CHANGE THERMAL PADS</b></p> <p>Used for low profile direct bonding of components where thermal conductivity is necessary</p> <p><b>SILICONE</b></p> <p>Silicone sponge, rubber and foams provide gasketing, vibration damping and thermal insulation</p>

# INSIGHTS

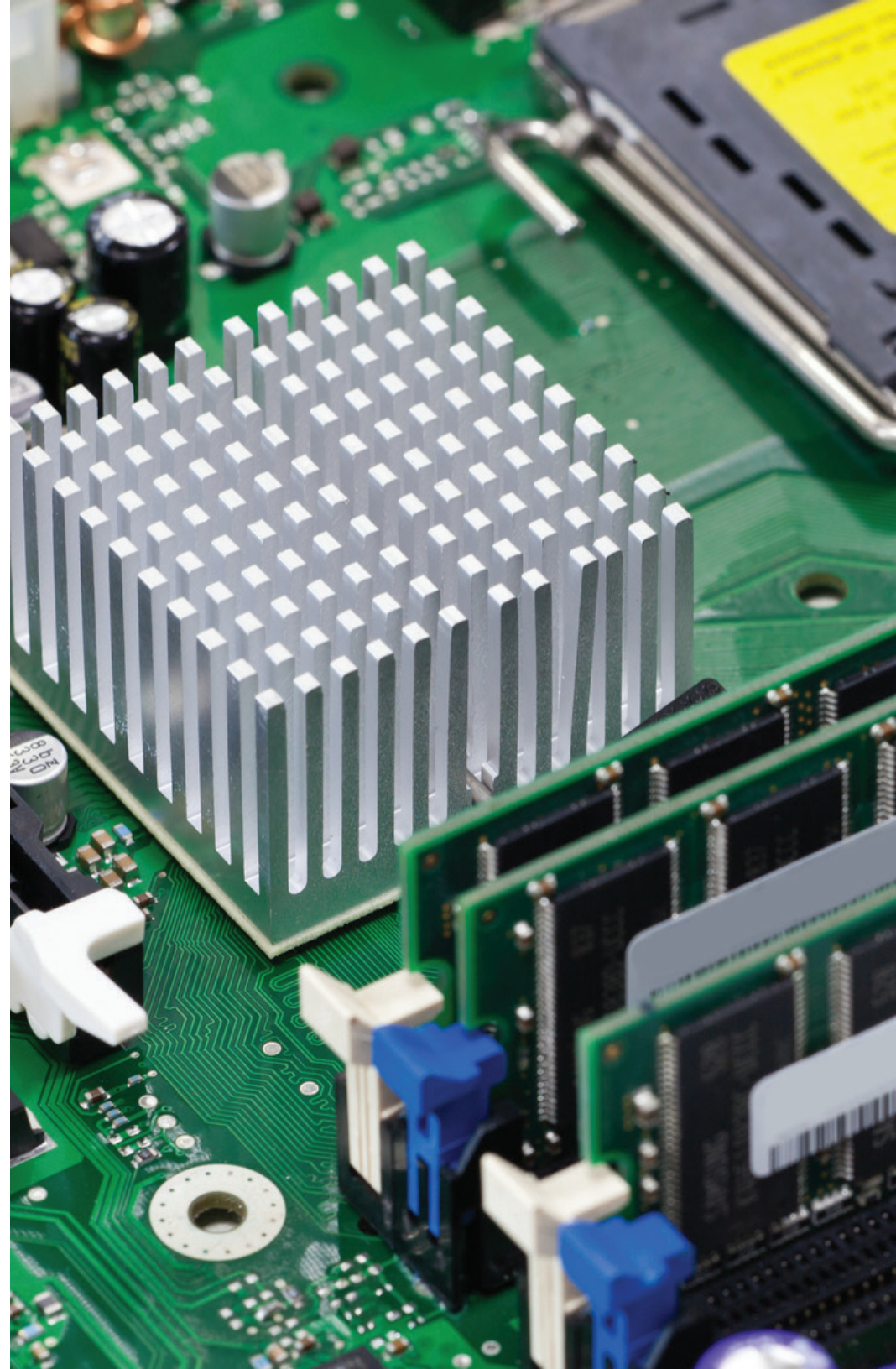
## THERMAL MANAGEMENT

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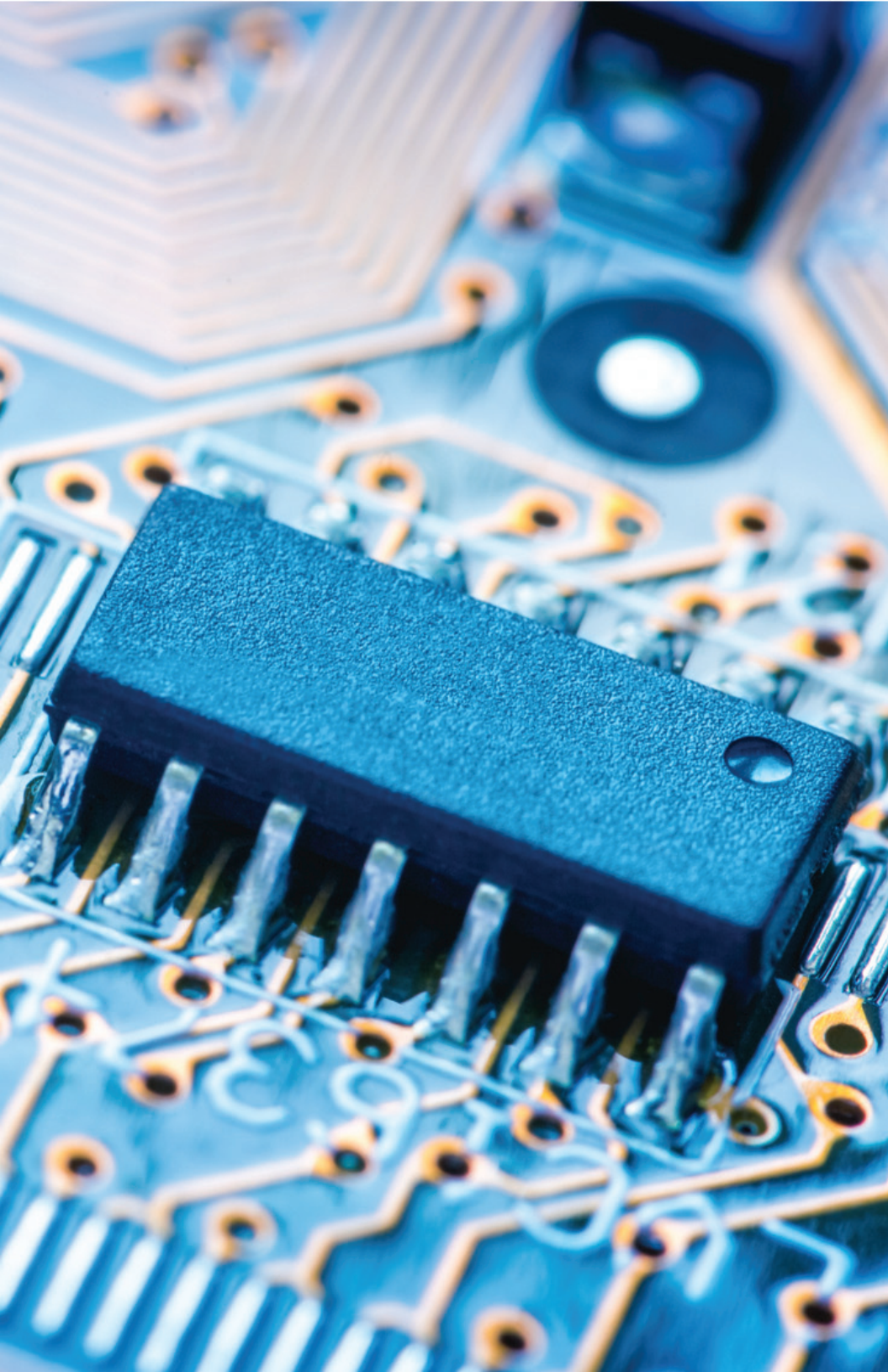
As electronic equipment becomes smaller, power sources are concentrated in tighter areas. This confinement creates heat problems that can be counteracted with thermally conductive material. These products dissipate heat away from power transistors and microprocessors to the ambient environment. Heat dissipation is critical to optimizing processing speed and expanding the life expectancy of modern processors.

Budnick offers engineers the design freedom necessary to solve heat related problems. Our broad range of converting capabilities, from narrow width slitting to laser cutting micro parts, makes many design shapes and sizes a reality. Many parts that are impossible to produce with conventional tooling are now available through laser technology. With the advancement in thermal management products and Budnick's converting capabilities, system designers can provide efficient thermal interfaces without increasing assembly costs or processing time. Budnick works with you to find the most efficient converting method to create parts for your designs.

Budnick offers products such as thermally conductive graphite adhesive tapes, phase change thermal pads, thermally conductive silicone sponge gaskets and non-toxic, fire-blocking silicone foam gaskets.







# CASE STUDY

## Identifying the Best Products

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### Customer Need

Our customer, an EMI shielding manufacturer, manufactures conductive, semi-cured silicones. They reached out to Budnick with the hope of finding a solution for a new application. The customer was working with a new thermal interface material required a repositionable adhesive that would not interfere with the thermal conductivity.

### The Budnick Solution

Finding a tape that would bond to silicone without impacting any of the thermal conductivity proved to be a challenge. Typically, silicone is the only adhesive that bonds to silicone. Silicone tape was tested but interfered with the thermal conductivity. Fortunately our tape experts found a repositionable acrylic transfer tape that did not affect the thermal conductivity.

### Enhanced Productivity

The acrylic transfer tape was chosen because it is a very thin low tack adhesive (very similar to a Post-It Note). The tape's properties allowed us to laminate to the customer's material, making it repositionable. The acrylic adhesive allowed the heat to transfer through the interface material to the heat sink, as materials heated up on the circuit boards. It also bonded well enough to the silicone material that did not delaminate if the product required repositioning.



# WHY BUDNICK?

## WE'RE DOING THINGS OTHERS CAN'T

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### Custom Products and Services Enhance Your Productivity

The Budnick team partners with our customers to increase the performance of both the product and the process. We offer thousands of materials from dozens of manufacturers and convert to the most user-friendly form for each of your unique applications. These customized solutions can reduce your overall costs and simplify the application and/or removal of adhesive coated parts. With specialists in sourcing, engineering, prototyping, dispensing, and applying your tape, we work hard to identify your best solution.

### The Converting Experts

Our development specialists average more than 20 years of experience in the tape industry. With instant access to technical gurus at 12 major tape manufacturers and an internal support team of more than 20 people, we can quickly resolve challenging custom application issues, source the optimal material, engineer the ideal part, and convert your material to exacting tolerances.

### Your Satisfaction is Our Priority

Budnick is a customer focused organization. To fully understand your needs and drive value for your company, we partner with you to learn your business, the needs of your job function, and your unique applications.

### We're Easy to Work With

We realize that sometimes you have special circumstances and you just need some friendly help to get out of a jam, so we empower our associates to do what it takes to keep you running.



Budnick makes industrial manufacturers more productive when using adhesive tapes, foams, films, papers, foils, and other flexible materials. We utilize nearly 70 years of experience and more than 65 technologically advanced converting machines to custom slit, die cut, print, spool, laser and waterjet cut these materials into cost-efficient and labor saving custom parts.

## Services

Application Engineering

In-Line Laser Cutting

Rewind Slitting

Lathe Slitting

Rotary Die Cutting

Flatbed Die Cutting

Traverse Winding (spooling)

XY Axis Table Plotter

Sheeting

Laminating

Perforating

Waterjet Cutting

Flexographic Printing

Inkjet Printing

Sequential Numbering

Bar Coding

Island Placement

Adhesive Coating

Pattern Coating

Extended Liners

Private Labeling & Packaging

Custom Fabricating

Large Adhesives Inventory

Inventory Management

Contract Converting

Project Consulting

Prototyping

## Adhesive and Non-Adhesive Materials

Double Coated Tapes

Adhesive Transfers

Non-Woven Materials

Foams (adh. or no)

High Bond Acrylics

Masking Papers

Filament Tapes

Cloth Tapes

Laminates

UHMW material

Banner Ups®

SEGDesign™ (Silicone Edge Graphics)

Tensitized Polypropylene

Polyvinyl Chloride (PVC)

Unplasticized PVC

Polyimide

Polyester

Polypropylene

Paper

Foil

Polyethylene

Polyurethane

Polytetrafluoroethylene

Glass Cloth

Label Stocks

Gaskets

Films

Plastics

Rubber

Heat Activated Tapes

Water Activated Tapes

Sound Damping

Reclosable Fasteners

Rubber and Plastic Extrusions

Silicone Sponge and Rubber

Fabrics and Textiles

Magnetic Stocks and Tapes

Need Help with  
an Application?

Give us a call!

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