

## **IC Packaging Materials**

Panasonic Offers a Wide Range of Semiconductor Encapsulation Materials and Advanced Substrates for Laminate-Based Packages.



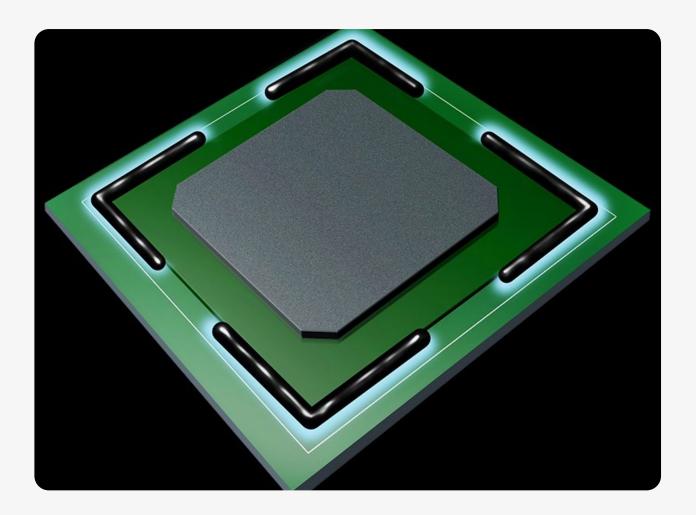
## **Circuit Board Materials**

Panasonic provides high performance products for Printed Circuit Board fabrication and Semiconductor packaging with industry recognized brands like MEGTRON, Felios, Hiper and ECOM. Widely used in networking, automotive, aerospace, mobile, industrial and other sectors where quality, reliability, and performance are paramount.



## **Developmental Stretchable Film**

Panasonic researchers are developing a novel, thermosetting stretchable film technology that has the potential to enable future generations of flexible, stretchable and conformable electronics for use in industries like health, medical, automotive, aerospace, sensors and IoT. This new material is being formulated to address many of the limitations of current thermoplastic films used for flexible-hybrid electronics (FHE) like polyethylene terephthalate (PET) and thermoplastic polyurethane (TPU). This film features high temperature resistance (>260C), low modulus, ultra-low hysteresis, good elongation, excellent moisture resistance and biocompatibility. The presentation will include an overview of the film properties as well as a review of some device constructions enabled by this technology using a variety of conductors (copper, Ag paste and liquid metals and combinations thereof) and hybrid designs assembled with conventional surface mount assembly processes and materials.



## **Electronic Assembly Materials**

Panasonic Electronic Materials provides a variety of high-quality Electronic Assembly Materials, including adhesives and Surface Mount Technology (SMT) reinforcement materials such as Underfills, Sidefills and Corner Bond Adhesives.