U-MAP Co., Ltd.
Ultimate Material and Processing

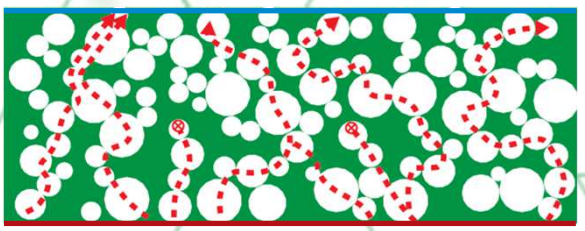
Samples Available

Hybrid Filler

Fibrous AlN Filler "Thermalnite®" Meets Spherical AlN Particles — First Collaboration!

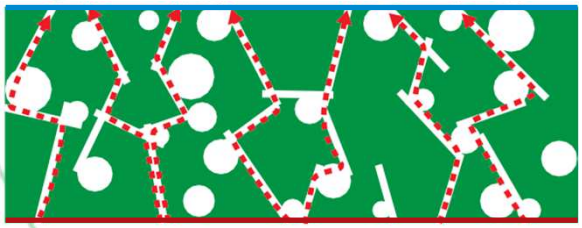
What Is a Hybrid Filler?

Conventional Spherical Filler — High filler loading required to form thermal pathways



Add Fibrous Filler

Fibrous + Spherical Fillers — Highly Efficient Thermal Path Formation



Usage Benefits

Feel Free to Contact Us

High Thermal Conductivity at Low Filler Loading

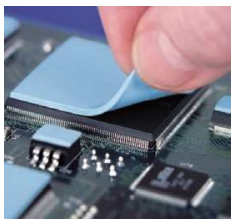
Challenge: Filler design optimization required
→ **No design required + Shorter development TAT**

Challenge: Need higher thermal conductivity
→ **Over 10 W/m·K achievable with high filler loading**

Challenge: Adhesion, tolerance absorption, and mechanical strength required
→ **Maintain base material properties with low filler loading**

Applications

TIM Sheet

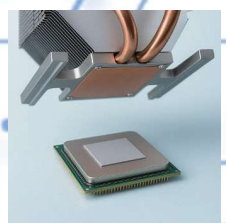


Thermal Grease

Gap Fillers

Adhesives

Phase Change Materials



Thermoplastics