

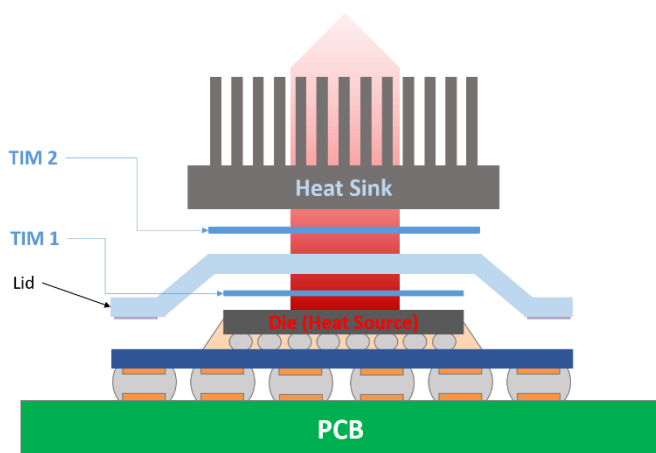
CONTACT

SHENMAO America, Inc.
Watson Tseng, General Manager
E-mail: watson_tseng@SHENMAO.us

FOR IMMEDIATE RELEASE

SHENMAO Unveils Low-Temperature Solder Paste for Reliable AI Server Cooling Assembly

SAN JOSE, CA — October 2025 — As artificial intelligence continues to reshape data centers and high-performance computing, server thermal management has become more demanding than ever. To support the next generation of AI hardware, SHENMAO TECHNOLOGY has introduced PF602-P241M-HS, a low-temperature Sn-Bi solder paste engineered specifically for assembling heat sinks and cold plates in AI server cooling systems.



AI servers generate intense heat during operation, requiring advanced cooling architectures to maintain stability and efficiency. Air-cooled systems, which rely on heat sinks and high-speed fans, remain common for mid-range servers due to their simplicity and ease of maintenance. For high-power applications, liquid-cooled systems use circulating coolant through cold plates and heat exchangers to remove large amounts of heat. In both cases, the quality of the solder joints connecting the metal components directly impacts the system's thermal performance and long-term reliability.

PF602-P241M-HS addresses these challenges with a low soldering temperature below 200°C, minimizing thermal stress and preventing warpage in delicate assemblies. Its lead-free, halogen-free formulation meets global environmental and RoHS requirements, while maintaining excellent wetting on copper, aluminum, and Ni-plated surfaces. The paste is suitable for both stencil printing and dispensing, allowing flexibility across various production processes.

Engineered for high-density fin-type cooling modules, PF602-P241M-HS delivers strong mechanical bonding and superior heat transfer. The result is low-void, uniform solder joints that enhance overall cooling efficiency and reduce thermal resistance—critical factors for maintaining consistent chip performance in AI workloads.

With proven adoption among major AI server cooling system manufacturers, SHENMAO's PF602-P241M-HS offers a dependable, low-temperature solution for building efficient and durable thermal management assemblies.

To learn more about SHENMAO's high-performance solder materials, visit www.SHENMAO.com.

###

About SHENMAO

SHENMAO is dedicated to the production of solder products including Water Soluble and No-clean Solder Paste, Laser Solder Paste, Solder Preforms, Cored Solder Wire, Wave Solder Bar Alloys, Wave Soldering Fluxes, Extremely Pure Solder Powder up to Type 8, BGA and Micro BGA Solder Sphere, Wafer Level Packaging Solder Paste and Fluxes, LED Die Attach Paste, High Performance Liquid Fluxes, Solder Preform, Solar Ribbon, Plating Anode used in PCB Fabrication, Assembly and Semiconductor Packaging Processes.