New Materials for AI Servers

AI servers consume thousands of watts under heavy loads, generating immense heat. PCBs must employ high-thermal-conductivity materials (e.g., metal substrates, ceramic fillers) while ...

PCB Materials for AI Data Centers and High-Performance Servers: MEGTRON Explained That was an incredibly thorough technical overview of why the Panasonic MEGTRON series has become the ...

Explore 2026 market trends, high-frequency materials, the shift to AI server PCB, and how to choose the right manufacturer. The NVIDIA M10 test is driving a PCB industry revolution.

High-frequency PCB and RF PCB solutions for aerospace, medical, and industrial applications. As Artificial Intelligence rapidly advances, the training of large models and edge ...

Amidst the intensifying competition for AI computing power, five critical types of PCBs within AI servers--featuring up to 44 layers and necessitating specialised M9 materials--are increasingly ...

Between 2024 and 2026, the TIM materials ecosystem for AI servers moved from incremental thermal-interface improvements toward platform-level solutions tuned for the next ...

Next-generation AI servers aren"t just heavier on layer counts. They demand better materials to handle the speed, heat, and signal integrity requirements of 400G, 800G, and even 1.6T ...

This article will begin with an overview of the current AI boom, and go on to explore in depth the characteristics of server PCB substrates, existing supply bottlenecks, and feasible ...

The average AI server PCB layer count rose from 18 in 2023 to 32 in 2025 -- a 78% increase in just two years. On March 13, 2026, supply chain analyst Guo Mingqi confirmed that NVIDIA and Wus Printed ...

As the AI boom reshapes global supply chains, materials have become the new geopolitical and economic leverage point. Taiwan"s PCB and CCL ecosystem, long known for its cost ...

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