

TDIMM™ Module Product Brief

The Tachyum DDR5 DIMM (TDIMM) is a high-performance memory module designed to support 128-byte cache line processors. Built on Tachyum’s patented technology (Patent #12,211,577), this module delivers exceptional speed, efficiency, and reliability for next-generation computing systems.

The Tachyum DDR5 TDIMM™ is the ideal choice for organizations seeking cutting-edge memory technology to power next-generation computing environments.

KEY FEATURES

- Advanced DDR5 Technology: Utilizes a 1.1V (VDD) double data rate, synchronous DRAM for improved power efficiency and performance.
- High-Capacity Design: Features 18 x8 DRAM chips, providing robust memory capacity for demanding workloads.
- Error Correction Support: Integrated 128 data pins and 16 ECC pins to enhance data integrity and reliability.
- Custom Interface: Uses a 484-pin conductor with a 0.5mm pitch for optimized connectivity and signal integrity.
- Enterprise-Ready: Designed as a registered DIMM (TDIMM) for use in systems requiring stable and scalable main memory solutions.

FEATURES

- 484-pin connector
- Supports ECC error detection and correction
- On-DIMM SPD EEPROM with Hub function and integrated temperature sensor (TS)
- Two on-DIMM discrete temperature sensors
- On-DIMM power management integrated circuit (PMIC)
- Sideband access with I3C-basic/I2C support
- DDR command/address bus to RCD terminated clock, control and command/address bus
- DDR data buffer DB
- DDR5 functionality and operations supported as defined in the component data sheet
- Gold edge contacts
- Halogen-free
- Fly-by topology

APPLICATIONS



Data Centers and Cloud Computing



AI and Machine Learning Workloads

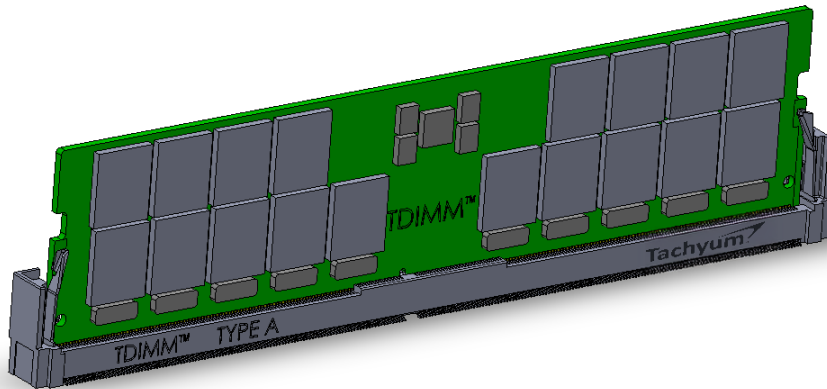


High-Performance Computing



Enterprise Servers Requiring Reliable, High-Speed Memory

TDIMM 3D Model



TDIMM Block Diagram

