

DDR5 Memory Module Sockets (SMT)

COMPLIES TO NEW INTERFACE STANDARD JEDEC SO-023

Vertical DDR5 DIMM sockets from Amphenol ICC provide 288 contacts on 0.85mm pitch and are designed to accept DDR5 memory modules that conform to JEDEC MO-329. The sockets facilitate convenient memory expansion in servers, workstations, desktop PCs, and embedded applications in communications and industrial equipment.

- Able to withstand high level system level shock and vibration testing module weight
- Easy to insert and extract the module card
- Supports thicker multilevel motherboard
- Optimizes airflow
- Meets environmental requirements



TARGET MARKETS



FEATURES

- Smaller pitch and lower operating voltage
- Supports faster data rates
- Reduced product width
- Lower insertion force
- Different color options for housing and latches
- Narrow latch option

BENEFITS

- Results in less energy consumption
- Faster transition
- Saves board space
- Easier for module card insertion and extraction
- Facilitates quick visual identification from PCB
- Facilitates good airflow

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TECHNICAL INFORMATION

MATERIAL

- Contacts: Copper alloy, Gold flash or 15 µin min. of gold or 30 µin min. of gold (Contact area), Tin or matte tin plating (Solder Area), Nickel plating over all (Underplate)
- Insulator: High temperature, thermal plastic (UL94V-0), color option
- Boardlock: Copper alloy, Tin plating (Solder Area), Nickel plating overall (Underplate)

ELECTRICAL PERFORMANCE

- Voltage Rating: 30V AC (RMS)/DC
- Current Rating: 1.0 Amps/pin max.

MECHANICAL PERFORMANCE

- Insertion Force: 106.8N max.
- Withdrawal Force: 19.77N min.
- Retention Force:
 - Contact: 300gf min. per pin
 - Boardlock: 13.3N min.
- Durability: 25 cycles
- Vibration, Mechanical Shock
- Latch Overstress Force: 3.5kg min. force held for 10s with no damage
- Reseating: No damage
- Latch Actuation Force: The force to fully actuate the latch open shall be 4.0kgf max. per latch
- Module Rip Out Force: 9.1kgf min. retention force of the module in connector with no damage
- Retention of Connector to PCB: No lifting of connector from applicable PCB
- Total Insertion Force: 35N max.

ENVIRONMENTAL

- Solderability: 95% min.
- Resistance to Soldering Heat: Visual-no damage or discoloration of connector materials
- Temperature Life, Thermal Shock
- Cycling Temperature and Humidity
- Temperature Rise: 30°C max.
- Mixed Flowing Gas, Thermal Disturbance, Salt Spray

APPROVALS & CERTIFICATION

- UL E66906

SPECIFICATIONS

- Amphenol Product Specification: S-DDR-005
- Amphenol Packaging Specification: PKSDDR5002
- Amphenol Application Specification: S-DDR-006
- JEDEC Module Outlines: MO-329
- JEDEC Socket Outlines: SO-023

PACKAGING

- Tray

TARGET MARKETS/APPLICATIONS



Routers
Switches
Wireless Infrastructure



Desktop PCs
Server and Storage Systems
Super Computers
Workstations



Embedded Systems

PART NUMBERS

Description	Type	Part Numbers
DDR5	Surface mount (SMT) termination with board lock	DDR504*

*denotes base part number. Please contact Amphenol ICC for complete part numbers.

SS10DDR51220EA4