DDR4 MEMORY MODULE SOCKETS

OVERVIEW

Vertical DDR4 DIMM sockets from FCI provide 288 contacts on 0.85mm pitch and are designed to accept DDR4 memory modules that conform to JEDEC MO-309. The sockets facilitate convenient memory expansion in servers, workstations, desktop PCs, and embedded applications in communications and industrial equipment.

The low-resistance contacts also support the use of RDIMM (registered DIMM), which helps to further reduce power consumption in datacenter hardware such as servers, storage and networking equipment. The low 2.4mm module seating plane and slim ejector designs reduce the overall profile of the connector and installed module to help optimize airflow.

Surface-mount (SMT), plated-through-hole (PTH) solder, and press-fit (PF) connector termination options are offered.

FEATURES & BENEFITS

- Sockets provide mechanical voltage keying and end latches for module retention and ejection
- Low insertion-force design requires less than 24 pounds force for module installation
- Available solder tail options support use on 1.6mm or 2.4mm thick motherboards
- Press-fit termination option supports use on 1.6mm min. host-PCBs
- Contact design protects against stubbing and supports high-speed serial differential signaling at data rates extending to 3.2Gb/s for DDR4
- Low contact resistance supports RDIMM modules
- Slim latch design optimizes airflow
- RoHS-Compliant and lead-free process-compatible options aid compliance with lead elimination initiatives

TARGET MARKETS/APPLICATIONS

- Data
  - Servers
  - Storage Systems
  - Supercomputers
  - Workstations
  - Desktop PCs
- Communications
  - Switches
  - Routers
  - Wireless Infrastructure
- Industrial
  - Embedded Systems

TECHNICAL INFORMATION

MATERIALS

- Contact : Copper alloy
- Contact finish:
  - Contact area: 15µin. , 20µin. or 30µin. Gold, 30µin. GXT or Gold flash over nickel
  - Termination area: Tin over nickel
- Forklock: Copper alloy
- Housing: High temperature thermoplastic, UL94V-0
- Ejector: High performance thermoplastic, UL94V-0

ELECTRICAL PERFORMANCE

- Contact resistance: ≤ 10mΩ initial, ≤ 10mΩ increase after environmental test
- Current rating: 0.75A/contact (De-rated) with ≤ 30 ˚C temperature rise above ambient

MECHANICAL PERFORMANCE

- Durability: 25 cycles

SPECIFICATIONS

- FCI
  - Product specification: GS-12-1092
  - Packaging specification: GS-14-2267
- JEDEC
  - Module Outline: MO-309
  - Socket Outlines:
    - PTH solder: SO-016
    - Surface-mount: SO-017
    - Press-fit: SO-019

PACKAGING

- Tray

APPROVALS & CERTIFICATIONS

- UL and CSA approvals pending

PART NUMBERS

Type	Color Options	Part References
Surface Mount (SMT) termination with forklocks or solder tabs	Housing: Black Ejectors: Black	10124677
Plated-Through-Hole (PTH) Solder-termination with forklocks	Housing: Black, Ivory and Blue Additional Colors available Ejectors: Black, Ivory and Blue	10124632
Press fit (PF) termination with molded post	Housing: Black, Ivory and Blue Additional Colors available Ejectors: Black, Ivory and Blue	10124806

For more information,
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