

DDR3 MEMORY MODULE SOCKETS

DESCRIPTION

Memory module sockets from FCI are designed to accept most industry standard memory types (DDR, DDR2, DDR3) and form factors such as DIMM, SO-DIMM or VLP DIMM. The sockets allow convenient memory expansion in servers, workstations, desktop PCs, mobile PCs and embedded applications in communications and industrial equipment.

DDR3 memory sockets accept 240-position DDR3 memory modules as per JEDEC MO-269. Low contact resistance versions support the use of RDIMM (registered DIMM) which is becoming more and more popular in use because it helps further reducing power consumption in data communication systems such as servers.

DDR3 memory sockets from FCI are available in various form factors including VLP (very low profile) providing an overall connector height of less than 20.6mm and comply to JEDEC SO-007 specifications.



FEATURES & BENEFITS

- Connectors provide mechanical voltage keying and end latches for module retention and ejection
- DIMM connectors feature a low insertion-force socket design that requires less than 24 pounds force for module installation
- Available solder tail options for vertical DDR3 connectors support use on 1.58mm (.062") or 2.36mm(.093") thick motherboards, while press-fit options extend use to thicker motherboards
- Contact design protects against stubbing and supports high-speed serial differential signaling at data rates extending to 4.8 Gb/s for DDR3
- RoHS-Compliant and "Lead-free" process-compatible options are available to aid compliance with lead elimination initiatives

- Low Level Contact Resistance (LLCR) featured on DDR3 sockets accept RDIMM DDR3 modules
- VLP form factors provide connector heights of less than 21mm above the board, while accepting modules with a seating height of less than 2.4mm
- Slim latch and connector body designs facilitate optimized airflow

TARGET MARKETS / APPLICATIONS

- Data
 - Servers Communications
 - Routers
 - Switches
 - Base Stations
- **Industrial**
 - Embedded systems



Standard height, through hole solder



Part series	Description
10081530	Through mount and metal clip
10081531	Through mount and plastic post



FEATURES & BENEFITS

- Low LLCR; 20 milliohms maximum
- Typically used with 30mm tall DIMM
- Provides 3.12mm module card seating height (standard height)
- ≥ 23.1mm connector height above the board
- ➤ Various solder tail options for 1.58mm (0.062") to 2.36mm (0.093") PCB thickness
- Contact area: 3μ inches, 15μ inches, or 30μ inches gold plating
- ► Housing color options: Black, Ivory and Blue
- Additional colors available for through hole type
- Ejector color options: Black, Ivory and Amber
- Lead-free, RoHS compliant available

TECHNICAL INFORMATION

MATERIALS

- ► Housing: high performance thermoplastic, UL94V-0
- Latch: high performance thermoplastic, UL94V-0
- Contact Base Metal: copper alloy
- Contact Area Finish: gold over nickel
- Solder Area Finish: tin over nickel
- Fork Lock: copper alloy

MECHANICAL PERFORMANCE

Durability: 25 cycles minimum

ELECTRICAL PERFORMANCE

- Initial contact resistance: 10 milliohms maximum
- Current rating: 0.75 A DC current (De-rated) in consecutive 10 pairs

SPECIFICATIONS

- ► FCI
 - GS-12-486: VLP DDR3 R-DIMM 240P 1mm pitch socket product specification
 - GS-14-899 DDR II 240P sockets packaging spec
- JEDEC
 - Through Hole: SO-007

PACKAGING

Tray

Use web link www.fci.com/ddr to obtain product drawings and additional technical information



Very Low Profile (VLP), through hole



Part series	Description
10079192	Through mount and metal clip

FEATURES & BENEFITS

- Low LLCR; 20 milliohms maximum
- Typically used with 18.75mm tall DIMM
- Provides 2.3mm module card seating height (very low profile)
- ≥ 20.6mm connector height above the board
- ➤ Various solder tail options for 1.58mm (0.062") to 2.36mm (0.093") PCB thickness
- Contact area: 3μ inches, 15μ inches, or 30μ inches gold plating
- ► Housing color options: Black and Ivory
- Ejector color options: Black, Ivory and Amber
- Lead-free, RoHS compliant available

TECHNICAL INFORMATION

MATERIALS

- Nousing: high performance thermoplastic, UL94V-0
- Latch: high performance thermoplastic, UL94V-0
- Contact Base Metal: copper alloy
- Contact Area Finish: gold over nickel
- Solder Area Finish: tin over nickel
- Fork Lock: copper alloy

MECHANICAL PERFORMANCE

Durability: 25 cycles minimum

ELECTRICAL PERFORMANCE

- Initial contact resistance: 10 milliohms maximum
- Current rating: 0.75A DC current (De-rated) in consecutive 10 pairs

SPECIFICATIONS

- ► FCI
 - GS-12-486: VLP DDR3 R-DIMM 240P 1mm pitch socket product specification
 - GS-14-899 DDR II 240P sockets connector packaging spec
- JEDEC
 - Pending

PACKAGING

Tray

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Very Low Profile (VLP), surface mount



Part series	Description
10079248	Surface mount with metal hold down

FEATURES & BENEFITS

- Low LLCR; 20 milliohms maximum
- Typically used with 18.75mm tall DIMM
- Provides 2.3mm module card seating height (very low profile)
- ≥ 20.6mm connector height above the board
- Contact area: 3μ inches, 15μ inches, or 30μ inches gold plating
- ► Housing color options: Black and Ivory
- Ejector color options: Black, Ivory and Amber
- Lead-free, RoHS compliant available

TECHNICAL INFORMATION

MATERIALS

- ► Housing: high-temperature thermoplastic, UL94V-0
- Contact Base Metal: copper alloy
- Contact Area Finished: gold over nickel
- Solder Area Finished: tin over nickel
- SMT retainer: copper alloy

MECHANICAL PERFORMANCE

Durability: 25 cycles minimum

PACKAGING

• GS-12-486

SPECIFICATIONS

• Socket Outline: SO-009

• Module Outline: MO-269

Tray

► FCI

JEDEC

ELECTRICAL PERFORMANCE

- Initial contact resistance: 10 milliohms maximum (LLCR)
- Current rating: 0.75A/contact maximum

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