

DDR2 MEMORY MODULE SOCKETS

DESCRIPTION

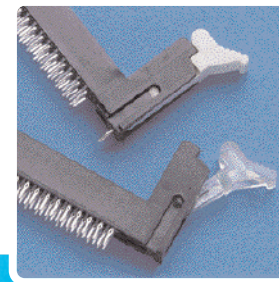
DDR2 memory module sockets from FCI accept industry-standard FB-DIMM, DIMM, or SO-DIMM assemblies. The sockets allow convenient memory expansion in servers, workstations, desktop PCs, mobile PCs and embedded applications in communications and industrial equipment.

The 240-position vertical connectors for DDR2 Fully Buffered DIMM accept modules that conform to JEDEC MO-256. The dual-row edge contacts at the module interface are on 1.0mm pitch. Through-mount solder tails are offset to form four rows with 1.9mm spacing between rows and 2.0mm contact spacing within each row for easy wave soldering.

The 240-position vertical sockets for DDR2 dual in-line memory modules (DIMM) accept assemblies that conform to JEDEC MO-237. Edge contacts at the module interface are on 1.0mm pitch. Options are available for either through-hole solder or press-fit termination.

The 200-position right-angle sockets accept DDR2 Small Outline DIMM per JEDEC MO-224. The dual-row edge contacts at the module interface are spaced on 0.6mm pitch. SO-DIMM connectors utilize surface-mount termination to the host PCB.

The 144-position right-angle SO-DIMM socket for 16b/32b peripheral applications accepts DIMM assemblies compliant with new JEDEC registered outlines. This socket is comprised of a dual-row interface with contacts staggered on a 0.8mm pitch.



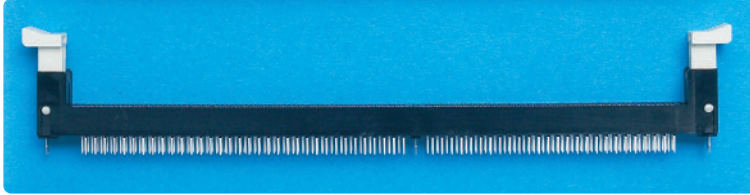
FEATURES & BENEFITS

- Connectors provide mechanical voltage keying and end latches for module retention and ejection.
- 240-position FB-DIMM and 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 DDR2 DIMM 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 FB-DIMM.
- DDR2 SO-DIMM connectors offer keying options for standard and reverse module orientation.
- RoHS-Compliant and "Lead-free" process-compatible options are available to aid compliance with lead elimination initiatives.

TARGET MARKETS / APPLICATIONS

- Data
 - Servers
 - Workstations
 - Desktop PCs
 - Notebook PCs
- Communications
 - Routers
 - Switches
 - Base Stations
- Industrial
 - Embedded systems

240-POSITION VERTICAL DDR2 FB-DIMM SOCKETS

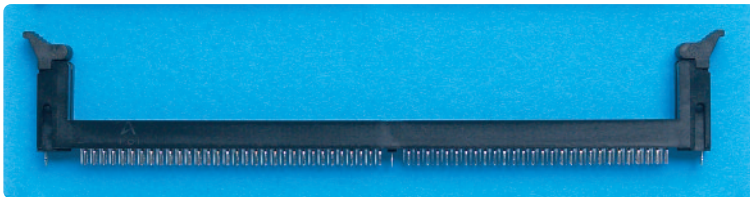


| Part series | Description |
|-------------|--|
| 10037402 | solder termination with metal forklocks and ergonomic latch design |
| 10057443 | solder termination with metal forklocks and slim-line latch design for improved air flow |

FEATURES & BENEFITS

- Designed for differential data rates extending to 4.8 Gb/s
- Tail length options for PCB thicknesses from 1.47mm (0.058") to 3.18mm (0.125")
- Contact area finishes: 3μ inches, 15μ inches, or 30μ inches gold
- Housing color options: Black, Blue
- Ejector color options: Ivory, Black
- Lead-free, RoHS compliant versions available

240-POSITION VERTICAL DDR2 DIMM SOCKETS

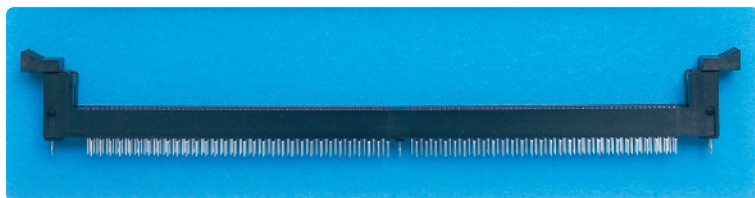


| Part series | Description |
|-------------|--|
| 10005639 | solder termination with metal fork locks |
| 10023061 | solder termination with molded orientation/alignment posts |
| 10034542 | press-fit termination with molded orientation/alignment post |

FEATURES & BENEFITS

- Typically used with 30.0mm tall DIMM; also accepts 18.3mm VLP (Very Low Profile) DIMM
- Soldertail options for PCB thicknesses from 1.58mm (0.062") to 2.36mm (0.093")
- Press-fit options for thicker motherboards
- Contact area finishes: 3μ inches, 15μ inches, or 30μ inches gold
- Housing color options: Black, Blue. Additional colors available on solder versions.
- Ejector color options: Ivory, Black. Amber ejectors for LED applications are available on press-fit versions
- Lead-free, RoHS compliant versions available

240-POSITION LOW-PROFILE VERTICAL SOCKETS FOR VLP (VERY LOW PROFILE) DDR2 DIMM ASSEMBLIES



| Part series | Description |
|-------------|--|
| 10052286 | solder termination with metal fork locks |

FEATURES & BENEFITS

- Typically used with 18.3mm tall VLP DIMM
- Less than 21.5mm combined overall height with 18.3mm module installed.
- Solder tail options for PCB thicknesses from 1.47mm (0.058") to 2.36mm (0.093")
- Contact area finishes: 3μ inches, 15μ inches, or 30μ inches gold
- Housing color options: Black, Blue.
- Ejector color options: Ivory, Black
- Lead-free, RoHS compliant versions available

TECHNICAL INFORMATION

MATERIALS

- Housing: high-temperature thermoplastic, UL94V-0
- Contact Base Metal: copper alloy
- Contact Area Finish: gold over nickel
- Solder Area Finish: tin over nickel or tin-lead over nickel
- Fork Lock: copper alloy

MECHANICAL PERFORMANCE

- Durability: 25 cycles minimum

ELECTRICAL PERFORMANCE

- Initial contact resistance: 30 milliohms maximum
- Current rating:
 - DDR2 FB-DIMM: 0.75A/contact maximum
 - DDR2 DIMM: 0.5A/contact maximum
- HSPICE and s-Parameter models for FB-DIMM available upon request

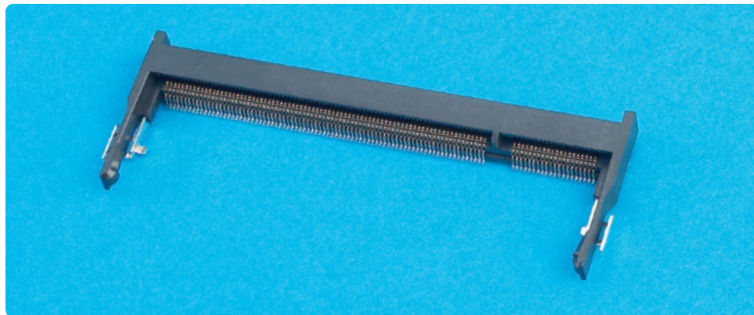
SPECIFICATIONS

- FCI
 - GS-12-300: DDR2 FB-DIMM Product Specification
 - GS-12-251: DDR2 DIMM Product Specification
 - GS-12-273: Press-Fit DDR2 DIMM Product Specification
 - GS-12-352: DDR2 Low Profile Product Specification
- JEDEC
 - FB-DIMM: Module Outline MO-256; Socket Outline SO-003
 - DIMM: Module Outline MO-237; Socket Outline SO-001

PACKAGING

- Tray

200-POSITION DDR2 SO-DIMM SOCKETS



| Part series | Description |
|-------------|-----------------------------|
| 10033853 | standard module orientation |
| 10033854 | reverse module orientation |

FEATURES & BENEFITS

- 5.2mm connector height; 3.3mm separation between host board and module
- Polarizing features on housing for proper orientation during placement
- Hold-downs provide additional mechanical strength after soldering
- Contact area finishes: gold flash, 12µ inches, or 30µ inches gold
- Housing color: Black
- Lead-free, RoHS compliant versions available

144-POSITION SOCKETS FOR SO-DIMM 16B/32B ASSEMBLIES



| Part series | Description |
|-------------|-----------------------------|
| 10062086 | standard module orientation |

FEATURES & BENEFITS

- 5.2mm connector height; 3.3mm separation between host board and module
- Polarizing features on housing for proper orientation during placement
- Hold-downs and latch stop feature provide additional mechanical strength and reliability after soldering
- Contact area finishes: gold flash or 10µ inches gold
- Housing color options: Black, Ivory
- Lead-free, RoHS compliant versions available

TECHNICAL INFORMATION

MATERIALS

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

ELECTRICAL PERFORMANCE

- Initial contact resistance: 30 milliohms maximum
- Current rating: 0.5A/contact maximum

MECHANICAL PERFORMANCE

- Durability: 25 cycles minimum

SPECIFICATIONS

- FCI
 - GS-12-195: DDR2 SO-DIMM Product Specification
 - GS-12-364: 144P SP-DIMM Product Specification
- JEDEC
 - DDR SO-DIMM: Module Outline MO-224
 - 144P SO-DIMM: Module Outline MO-XXX (JEDEC Module Outline number is pending)

PACKAGING

- Tray

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