



**CONNECTOR PERFORMANCE STANDARD
FOR OUTLINES OF SOLID STATE AND
RELATED PRODUCTS**

PS-002

**DDR4 288 Pin U/R/LR DIMM Connector
Performance Standard**

(Double Data Rate 4)

**JEDEC
SOLID STATE TECHNOLOGY ASSOCIATION**

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(From JEDEC Board Ballot JCB-15-30, formulated under the cognizance of the JC-11.14 Subcommittee on Microelectronic Assemblies.)

1 Scope

This standard defines the form, fit and function of DDR4 connectors for U/R/LR modules supporting channels with transfer rates as high as 3.2 GT/S. It contains mechanical, electrical and reliability requirements for a one-piece connector mated to a module with nominal thickness of 1.40 mm. The intent of this document is to provide Performance Standards to enable connector, system designers and manufacturers to build, qualify and use the DDR4 connectors in client and server platforms.

1.1 Connector overview

DDR4 U/R/LR DIMM connectors share the same mechanical definition and dimensions. The 288 pin, 0.85 mm pitch vertical connector is defined for applications where a 1.40 mm nominal thickness module card vertically enters the connector, perpendicular to the system board.

2 References

The following references provide normative requirements as specified in the body of this document:

- JEDEC DDR4 MO-309 Module Outline
- JEDEC DDR4 SO-016 (PTH), SO-017 (SMT), SO-019 (PF) Socket Outlines
- EIA-364-1000: Environmental Test Methodology for Assessing the Performance of Electrical Connectors and Sockets used in Controlled Environment.
- EIA-364-05: Contact Insertion, Release and Removal Force Test Procedure for Electrical Connectors
- EIA-364-13: Mating and Unmating Force Test Procedure for Electrical Connectors and Sockets
- EIA 364-23: Low Level Contact Resistance Test Procedures for Electrical Connectors and Sockets
- EIA-364-27: Shock Test Procedure for Electrical Connectors
- EIA-364-28: Vibration Test Procedure for Electrical Connectors and Sockets
- EIA-364-29: Contact Retention Test Procedure for Electrical Connectors
- EIA-364-31: Humidity Test Procedure for Electrical Connectors and Sockets
- EIA-364-32: Thermal Shock Test Procedure for Electrical Connectors and Sockets
- EIA 364-70: Temperature Rise Versus Current Test Procedure for Electrical Connectors and Sockets
- Agilent Application Note, "Agilent Network Analysis Applying the 8510 TRL Calibration for Non-Coaxial Measurements" Product Note 8510-8A
- JEDEC JESD22-B102 Solderability
- JS709A Defining "Low-Halogen" Electronic Products
- SPP-023 Standard Practices and Procedures - Module Insertion/Extraction Procedure for DIMM and Mini DIMM Connectors