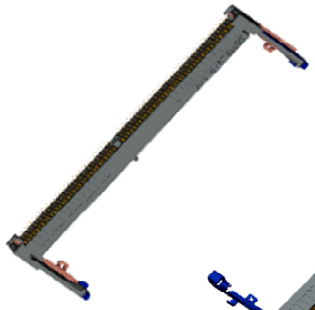
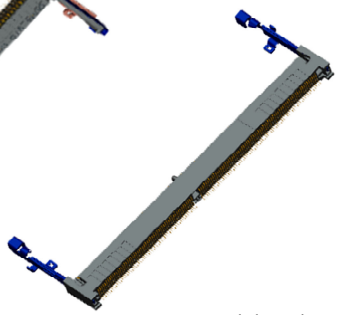
CARD EDGE PRODUCT FAMILY
DDR SO DIMM

DEREN

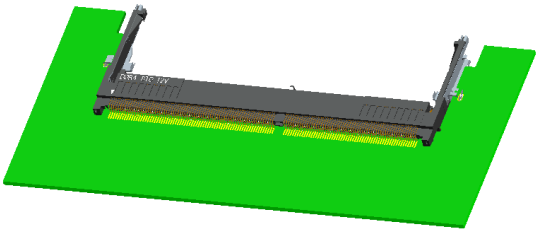
DDR SO DIMM Connectors meet JEDEC industial specification. Support diverse generations of connectors with data rate transfer up to 6.4GT/s. Modules can not be compatible detween different generations. Modules variations differ by voltage key and PCB thickness. The voltage key location in connetor housing distinguishes the orientation of module insertion. There are four kinds of connector height: 4H/5.2H/8.0H/9.2H. In order to save space, the lower connector and higher connector can be stacked together. As the module thickness is 3.6 mm max., the height variation between the lower and higher connectors should be 4mm at least. Hence, the match height should be 4H and 8.0H, 5.2H and 9.2H. Customer can chose different height connectors to meet their own applications. The metal latch optimized design delivers more robust strength and better soldering coplanarity.



Plastic latch



Metal latch



Offset type

- Floating latch design to optimize the latch soldering coplanarity.
- Blanking contact design to ensure the contact force against electrical discontinuity.
- Optimized contact structure design to improve the signal integrity performance, especially for the insertion loss and return loss.
- Optimized housing structure design to improve the housing warpage. After reflow, the connector coplanarity can be kept within 0.1mm max and the tendency of housing warpage is “U” shape.
- DDR SO DIMM product family is offering industrial standard packaging options, including tape & reel and soft tray.

TARGET MARKET

- Note book computer
- All in one computer

FETURE

- Data rate transfer up to 6.4GT/s.
- Single end signaling with 50Ω nominal impedance
- Skew between up & low contact is 20±7ps.

- Right angle SMT type connector, capable to 260° C peak temperature reflow process
- 25 degree Angled module insertion & extraction.
- Polar key design for standard & reverse types.
- Diverse connector heights

- Auto lock latch design
- Latch design against module inadequate installation
- Unique latch design to prevent latch over bent

BENEFIT

- Meets JEDEC Spec.
- Minimizes impedance discontinuities
- Optimizes PCB routing.

- Fits for customer process

- Lower insertion & withdraw force.
- Error proof.
- Meets different customer applications

- Easy for module installation
- Prevent incorrectly module installed
- Much more robust latch

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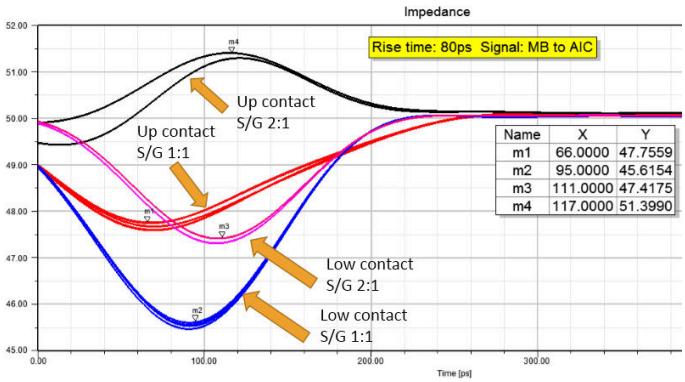
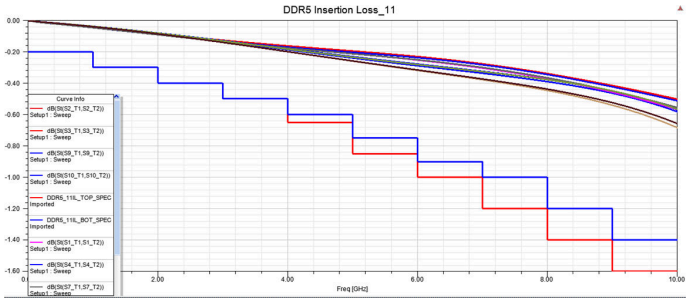
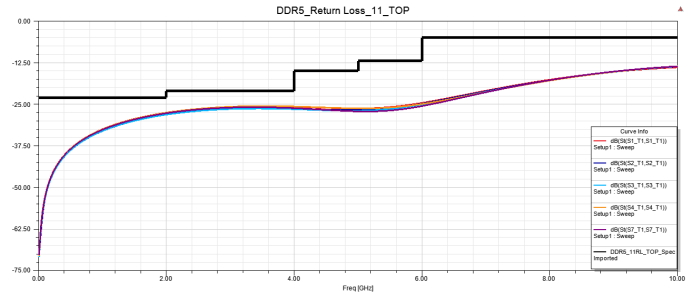
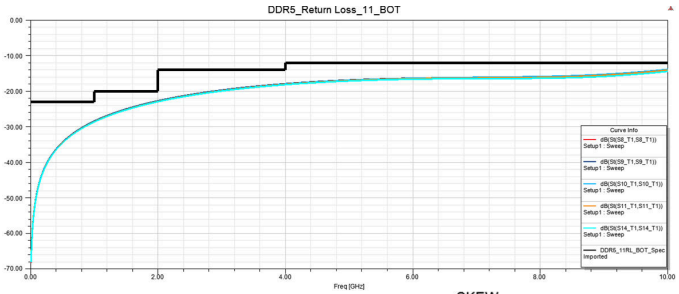
TECHNICAL INFORMATION

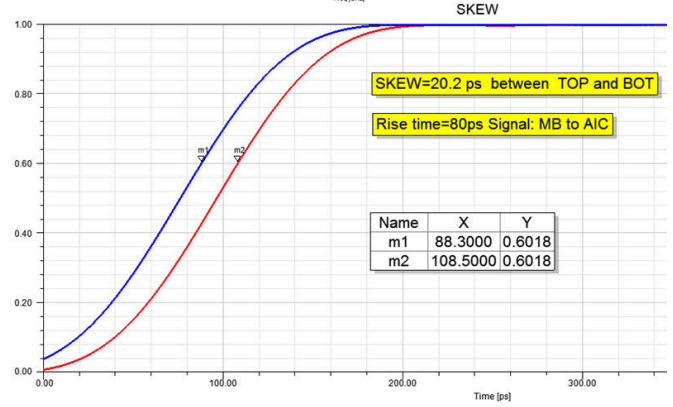
SIGNAL INTEGRITY PERFORMANCE











MECHANICAL PERFORMANCE

- Insertion force (module to connector): 59.8N max
- Terminal retention force: 100gf min.
- Durability: 25cycles.

ELECTRICAL PERFORMANCE

- Low level contact resistance: 30mΩ initial, △10mΩ
- Insulation resistance: 1MΩ min.
- Dielectric withstanding voltage: 250VAC.
- Current rating: 0.5A/pin De-rate

ENVIRONMENTAL

- Flammability: UL 94 V-0
- Low halogen: 1000ppm max. Cl, 1000ppm max Br.
- Compliant with RoHS directive 2011/65/EU
- Operating Temperature: -55° C to + 85° C

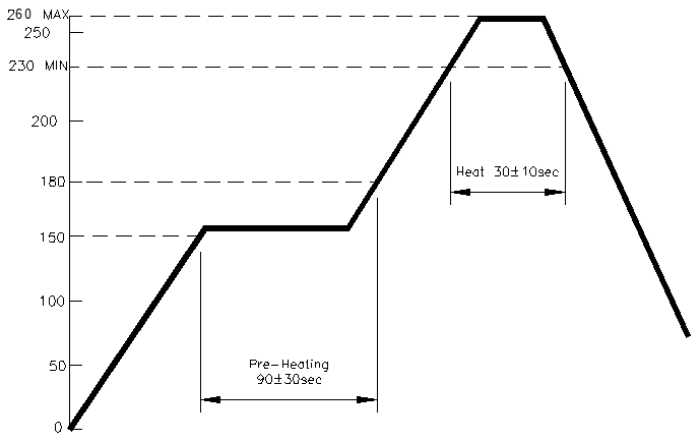
SPECIFICATION

- JEDEC SPEC:
  DDR2 200pin: SO-005 / MO-224
  DDR3 204pin: SO-006 / MO-268
  DDR4 260pin: SO-018 / MO-310
  DDR5 262pin: SO-024 / MO-337

- DEREN PRODUCT SPEC: DR-PS-0012

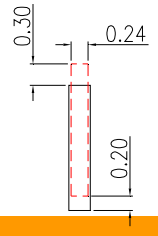
APPLICATION SPEC

- Reflow temperature profile:



- Recommended stencil thickness: 0.12mm
- Recommended stencil aperture:

PCB solder pad:
Stencil aperture:



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PART NUMBERS & STRUCTRUE

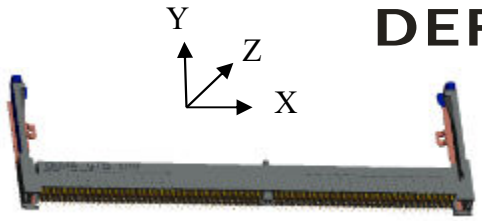
DDR SO DIMM Plastic Latch

Part Number Description:

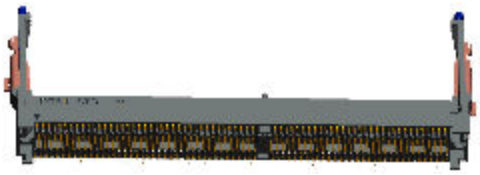
40-42261 -260***HF-**

Base Code

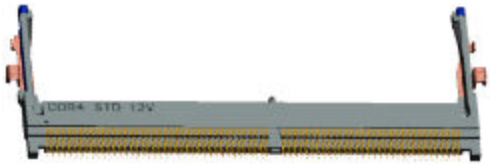
- Customer code
- RoHS code:
  - HF: Halogen free
- Package code:
  - R: TAPE & REEL
- Plating code:
  - 1: GF 2: Au5u”
  - 3: Au10u” 4: Au15u”
  - 5:Au30u”
- Reserved code: 0: default
- Pin number code: 260 pins



4H & 5.2H &6H STD &RVS



8H & 9.2H STD &RVS



4H STD Offset (2.75H)

DDR2 SO DIMM part number list:

- 4.0H STD: 40-42323-200**RHF
- 9.2H STD: 40-42368-200**RHF

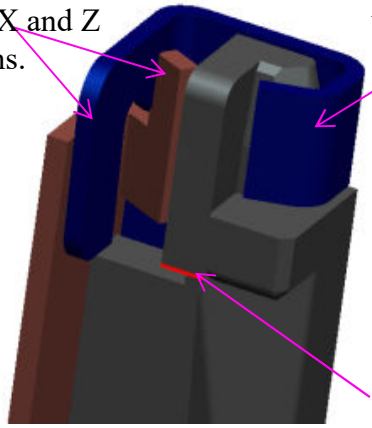
DDR3 SO DIMM part number list:

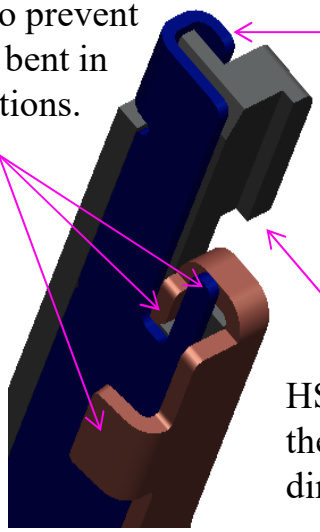
- 4.0H STD: 40-42042-204**RHF
- 4.0H RVS: 40-42043-204**RHF
- 5.2H STD: 40-42044-204**RHF
- 5.2H RVS: 40-42045-204**RHF
- 8.0H STD: 40-42046-204**RHF
- 8.0H RVS: 40-42047-204**RHF
- 9.2H STD: 40-42048-204**RHF
- 9.2H RVS: 40-42049-204**RHF

DDR4 SO DIMM part number list:

- 4.0H STD: 40-42261-260**RHF
- 4.0H RVS: 40-42271-260**RHF
- 5.2H STD: 40-42272-260**RHF
- 5.2H RVS: 40-42273-260**RHF
- 8.0H STD: 40-42274-260**RHF
- 8.0H RVS: 40-42275-260**RHF
- 9.2H STD: 40-42276-260**RHF
- 9.2H RVS: 40-42277-260**RHF
- 6.0H STD: 40-42486-260**RHF
- 4.0H Offset STD: 40-42355-260**RHF

Plastic Latch Structure





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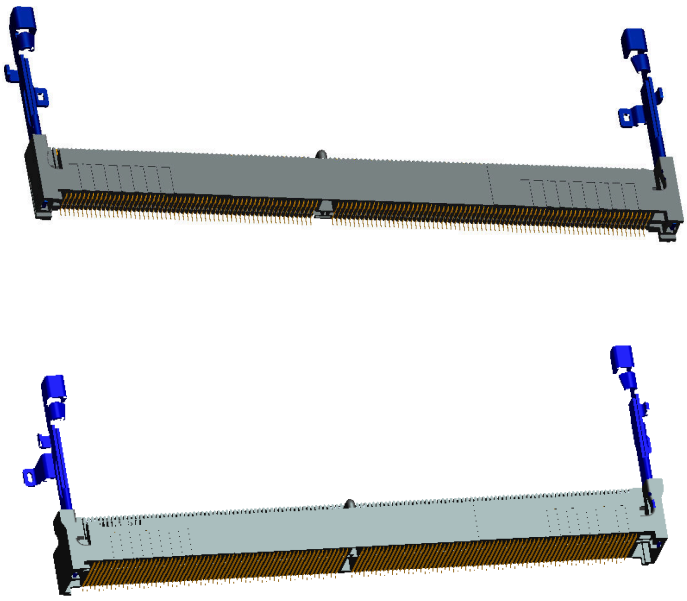
PART NUMBERS & STRUCTRUE

DDR SO DIMM Metal Latch

DDR4 Metal Latch P/N Description:

567U** - 00*H

- RoHS code:
  - H: Halogen free
- Plating code:
  - 1: AuGF
  - 2: Au5u”
  - 3: Au10u”
  - 4: Au15u”
  - 5:Au 30u”
- Product Type:
  - 10: 4.0H STD
  - 11: 4.0H RVS

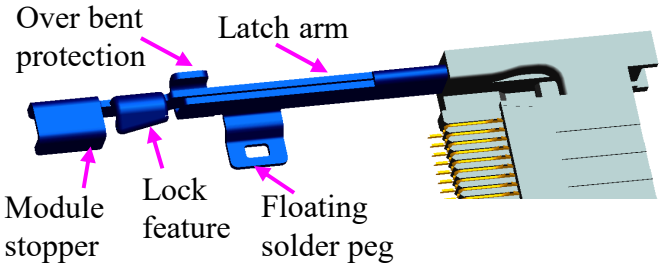


Metal Latch Structure

DDR5 Metal Latch P/N Description:

567YD2 – 0 0 * H * * * * R

- Packing code：
  - R： Tape & Reel
- Logo code:
  - 0: No Logo
  - 1: Deren Logo
- Housing Color:
  - 0: Black
  - 1: White
- Key code:
  - S: Standard type
  - R: Reverse type
- Plating code:
  - 1: AuGF
  - 2: Au5u”
  - 3: Au10u”
  - 4: Au15u”
  - 5: Au 30u”
- RoHS code:
  - H: Halogen free
- Product Height:
  - 1: 4.0H
  - 2: 5.2H
  - 3: 8.0H
  - 4: 9.2H



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