HD Mezz Mezzanine Connector System

molex®

Designed for high-density, high-performance mezzanine applications, HD Mezz Mezzanine Connector System simplifies PCB routing and maximizes card-slot space while delivering 12.5 Gbps data rate

Features and Benefits

Data rates of up to 12.5 Gbps
Delivers excellent signal clarity with ample bandwidth for high-speed designs

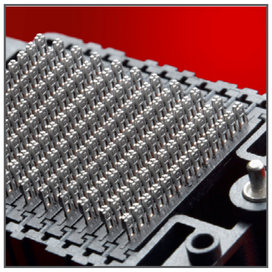
Stack heights ranging from 16.00 to 38.00mm and 91 to 351 circuits
Provides design flexibility. Supports applications with s pace constraints

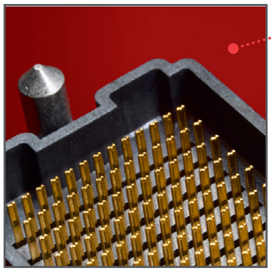
Reliable mating interface with 2.00mm wipe and 2 points of contact
Enables sufficient conductive wipe for clean signal transmission and enhanced durability

High durability
Endures 100 mating cycles

Guide pins
Supports robust mating alignment. Aids blind mating

SolderCharge: patented solder-attach method for PCB termination
Offers a termination method that is more cost effective and reliable than ball grid array (BGA)





High contact density with 14 differential pairs per square centimeter
Eases space constraints on PCBs

Applications

- Telecommunications/Networking
  - Base stations
  - High- and midrange-computing equipment
  - Networking equipment
  - Routers and switches
- Medical
  - Diagnostic probes
- Automotive
  - Infotainment
  - Autonomous driving modules

Diagnostic Probe

Datacenter Switches

Base Station

HD Mezz Mezzanine Connector System

Specifications

REFERENCE INFORMATION
Packaging: Tray
UL File No.: E29179
CSA File No.: LR19980
Designed In: Millimeters
RoHS: Yes
Halogen Free: Low-Halogen
Glow Wire Compliant: No

ELECTRICAL
Voltage (max.): 250V AC per Contact
Current (max.): 2.0A per Contact
Contact Resistance: 25 milliohms nominal
Dielectric Withstanding Voltage: 500V DC
Insulation Resistance:
  Across Wafers (min.) – 5000 Megohms
  Within Wafers (min.) – 1000 Megohms

MECHANICAL
Mating Force: 51g Nominal per Contact
Unmating Force: 25g Nominal per Contact
Durability (min.): 100 Cycles

PHYSICAL
Housing: Glass-Filled LCP, UL 94V-0
Contact: Copper Alloy
Plating:
  Contact Area (min.) — 0.75µm Gold
  Solder Tail Area (min.) — 2.50µm Tin
Underplating — 1.25µm Nickel
PCB Thickness: 1.600mm
Operating Temperature: -55 to +105°C

Ordering Information

Series No.	Component
45802	Receptacle
45830	Plug

Custom Product	Description
Contact Molex	Customized HD Mezz Connector System

www.molex.com/product/hdmezz.html

Order No. 987650-1132 Rev. 1 USA/0k/GF/2017.04