molex®

MEZZANINE CONNECTORS

Molex Mezzanine Connectors Bring Together Programmable Controllers and Main Boards for Advanced Computing in Automotive Applications

BUSINESS CHALLENGE

Automotive customers design motherboards with a generic interface programmed with a basic functionality. However, specific vehicle types require that unique personality cards programmed. Doing so means multiple systems need to be designed which can be costly and time consuming.

SOLUTION

Molex Mezzanine Connector Systems

With mezzanine connection systems from Molex, automotive engineers are able to design a generic motherboard and utilize a mezzanine connector system to add a small mezzanine board that has an FPGA or ASIC programmed for a customer's specific need. Mezzanine cards allow engineers to design a generic motherboard for all of their customers while giving them the freedom to program the mezzanine card for specific end customer applications. This saves on cost because there is no need to design completely new systems since the motherboard is common for all applications while the chip is adjusted based on the end customer's need.

SpeedMezz Mezzanine Connector System – An ideal solution when the personality card and main board are very close together. Features include:

- 56 Gbps
- Low-profile heights of 4.00 to 10.00mm
- 22-, 60-, 120-circuits
- 6 to 32 differential pairs to deliver a high-density signal solution with flexible pin counts

NeoScale High-Speed Mezzanine System – NeoScale connectors provide a robust and flexible solution with more pins and taller stack heights. Features include:

- 40+ Gbps
- Stack heights ranging from 12.00 to 42.00mm
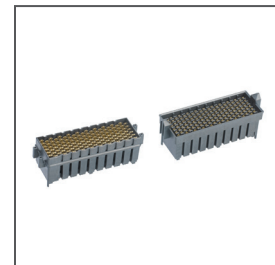- Circuit sizes of 8 to 300 triad wafers in 2-, 4-, 6-, 8- and 10-rows and 85 or 100 Ohm impedance

SpeedMezz and NeoScale connectors from Molex feature multiple height options and flexible pin counts to address the engineering challenges found in today's space constrained designs. Both connectors also provide optimal signal integrity, mechanical stability, efficient system cooling and durable housings for unmatched reliability.

NeoPress High-Speed Mezzanine System – NeoPress connectors provide a robust and flexible solution with the flexibility of a press-fit eye of needle (EON) termination. Features include:

- 32+ Gbps
- Stack heights ranging from 10.00mm to 45.00mm
- Circuit sizes of 8 to 300 triads in 2-, 4-, 6-, 8- and 10- rows and 85 or 100 ohm impedance

NeoScale

SpeedMezz

To learn more www.molex.com/ab/mezzanine2301.html