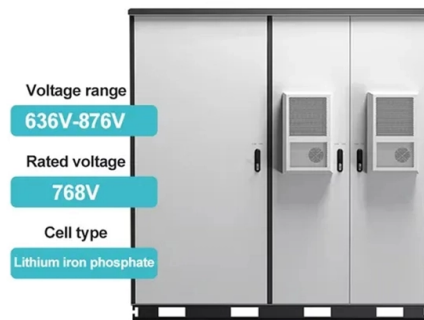


Orthogonal backplane connector



AI Overview

Orthogonal backplanes are designed to connect multiple electronic components at right angles, optimizing space and airflow, while backplane connectors facilitate communication between these components.

What are Orthogonal Backplanes? Orthogonal backplanes are a type of backplane where the connectors are arranged perpendicular to the plug-in cards. This design allows for efficient cooling and a compact system layout, making them ideal for high-density applications such as blade servers and modular data centers. The orthogonal arrangement improves airflow and reduces the overall footprint of the system, which is crucial in environments where space is limited.

Key Features of Orthogonal Backplanes:

- Improved Airflow:** The perpendicular design enhances cooling efficiency, which is vital for high-performance systems.
- Compact Design:** By allowing vertical and horizontal connections, orthogonal backplanes enable denser system architectures.
- High-Speed Performance:** These backplanes are engineered to support high data rates, making them suitable for modern applications that require rapid communication between components.

What are Backplane Connectors? Backplane connectors are specialized connectors used to link multiple printed circuit boards (PCBs) within a system. They serve as the backbone for connecting various modules, such as processors, memory, and other peripherals, allowing for centralized communication and data transfer.

Types of Backplane Connectors:

- Passive Backplane Connectors:** These connectors do not contain active components and simply provide electrical connections between plug-in cards.
- Active Backplane Connectors:** These include integrated circuits to manage data flow and improve signal integrity, often used in high-performance systems.
- Orthogonal Connectors:** Specifically designed to work with orthogonal backplanes, these connectors facilitate connections at right angles, enhancing system density and performance.

Applications of Orthogonal Back...

Article Content

Backplane Connectors

Impulse Backplane Connectors Delivering signal speeds up to 112Gbps, the Impulse Backplane Connector System provides a flexible, scalable and modular solution

Datasheet Archive: ACORN ENGINEERING MODEL 3331 datasheets

View results and find acorn engineering model 3331 datasheets and circuit and application notes in pdf format.

Impulse Backplane Connectors

Impulse Backplane Connectors The Impulse 112G Backplane Connector System provides a high-speed, scalable and modular solution for cable, conventional and

What Is an Orthogonal Architecture?

An orthogonal architecture — or to use its full name, a backplane-free orthogonal architecture — is a hardware structure that eliminates the need for a backplane by orienting a

SemiAnalysis: NVIDIA's Kyber NVL144 Rack Slips More Than a Year

The need for the orthogonal backplane, per the analysis, stems from the Rubin Ultra NVL144 rack's requirement to connect 144 GPUs within a single domain. Retaining a traditional

High Speed Connector-Luxshare

Intrepid backplane connector, ultra-high density with 2.0 mm spacing, 360-degree full shielding design, hidden contact design, good guide protection to ensure

STRADA Whisper High Speed Backplane Connectors

This channel utilized an integrated 112G PAM-4 SerDes chip driving and receiving traffic through the STRADA Whisper Absolute connector which is a next-gen

Board-to-Board | High-Speed Backplane

Board-to-Board | High-Speed Backplane Explore Amphenol's high-speed backplane connectors, delivering industry-leading density and

Backplane Connectors

Delivering signal speeds up to 112Gbps, the Impulse Backplane Connector System provides a flexible, scalable and modular solution with cable, conventional and orthogonal board-to-board connectivity

Power Backplane Connectors | BTB Power Connectors

Amphenol high power backplane connectors support high speed applications. Our board-to-board backplane connectors are available in right

Backplane Connectors | TE Connectivity

Our portfolio of backplane connectors features high-performance right angle, co-planar, and mezzanine interconnects, used for mating printed circuit boards together.

Backplane

A backplane or backplane system is a group of electrical connectors in parallel with each other, so that each pin of each connector is linked to the same relative pin

Midplane

Sort by Position Paladin ® 112Gb/s Backplane Connector XCede ® HD XCede ® Backplane Connector

High-Speed Orthogonal Connectors Optimize Signal

As data rates trend upward, electronic OEM design engineers need new strategies to push the speed-density envelope of backplane interconnects, without

Backplane Connectors | TE Connectivity

Backplane Connectors This type of connector is engineered to increase data rates and decrease signal rise, delivering a more reliable high-speed transmission with greater clarity. Our portfolio of

ExaMAX® HIGH SPEED BACKPLANE CONNECTOR SYSTEM

The ExaMAX® high speed connector system is offered in industry standard packaging options including a broad range of backplane, coplanar, mezzanine, cable-to-board, orthogonal midplane and

Paladin 112Gb/s | Backplane Connector | Amphenol

Paladin ® is designed for scalability and flexibility through use of a simplified connector construction. It also offers the broadest product platform in

Backplane Connectors: What They Are and How to Choose the Right

Backplane connectors are designed to decrease signal rise while increasing data rates. It delivers more dependable high-speed transmissions with enhanced clarity. Although these

Impact Backplane Connectors

Impact Orthogonal Direct eliminates the midplane, enabling customers to reduce cost, improve electrical performance and remove thermal barriers. Impact

Backplane Connectors, Micro Backplane Connector

High-speed, high-density backplane systems include ExaMAX® and XCede® HD in a variety of pair and column counts. ExaMAX® enables up to 56 Gbps

Amphenol CS

AccountSign In Connectors Board to Board High Speed Backplane Industrial Backplane Mezzanine Signal

High-Speed Orthogonal Connectors Optimize Signal

Keeping pace with demand, connector manufacturers are helping designers make the right choice with innovative backplane connector designs to reduce channel

Contact Us

For more information, pricing, or custom solutions, please contact us:

Website: <https://energy-powertools.eu>

Email: info@energy-powertools.eu

Phone: +49 172 6389472

Address: Musterstraße 12, 10115 Berlin, Germany

This document is for informational purposes only. Specifications subject to change without notice.

