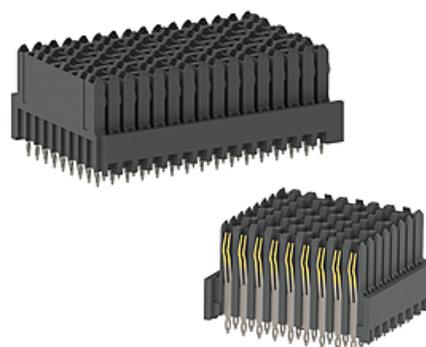


Velox Highspeed Backplane

Modular Backplane Connector System Velox® is a modular connector system for highspeed backplane applications. It was specifically designed for markets with high performance requirements. The Velox® product series meets the demanding requirements of VITA 46 systems. Four different types are available, and customized assembly is possible. This gives developers more flexibility when designing circuit board layouts. In addition, a 1.27- μm gold surface ensures the durability of the system.

Features

- 10 Gbps
- Robust design
- Tested in accordance with VITA 46
- High durability, 200 mating cycles
- “Heavy gold” plating
- Internal contacts
- Modular connector system
- Customized contact assembly

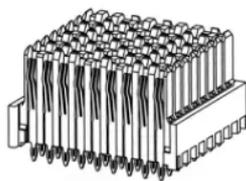


Applications

- Military
- Aerospace industry
- Systems for high loads
- Telecommunications/data transfer rate

The Velox®connectors feature a robust design including a gold surface of 1.27 μm (50 μin) thickness. The contacts are on the inside, giving them additional protection. All these features contribute to a very high durability of at least 200 mating cycles. For this reason, Velox® is particularly suitable for highspeed backplane applications with a data transfer rates of 10 Gbps. The high resistance of the connectors has already been proven in tests carried out in accordance with the VITA 46 standard.

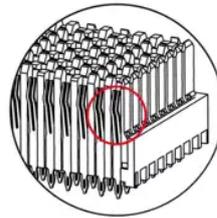




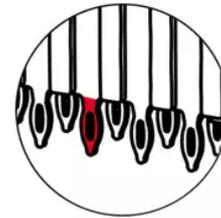
Velox 8-left
detail overview



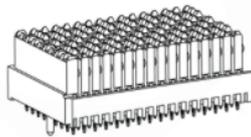
double beam contact



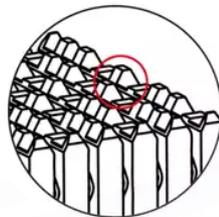
1,27µm Au over Ni



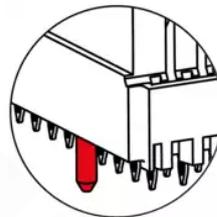
press-fit zone eye of the needle



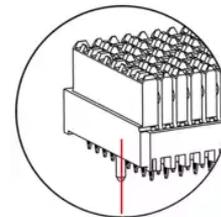
Velox 16-left
detail overview



pinless surface



guiding post



LCP

The VITA 46 Specification:

The VITA 46 specification (or VPX) describes a new highspeed connector system. It transfers Gigabit Ethernet, PCI Express, Serial RapidIO, and InfiniBand, among others. The well-known 6HE and 3HE European PCB form factors from VMEbus are supported in order to ensure maximum compatibility. This also makes hybrid systems a possibility. The VITA 46 standard was developed by VITA mainly for computer systems that need to be able to withstand high stresses, for example, military applications.

Four different designs can be combined with each other in a modular way. Velox® connectors are very flexible due to the different numbers of contacts. This feature is underlined by the possibility to equip the variants individually.