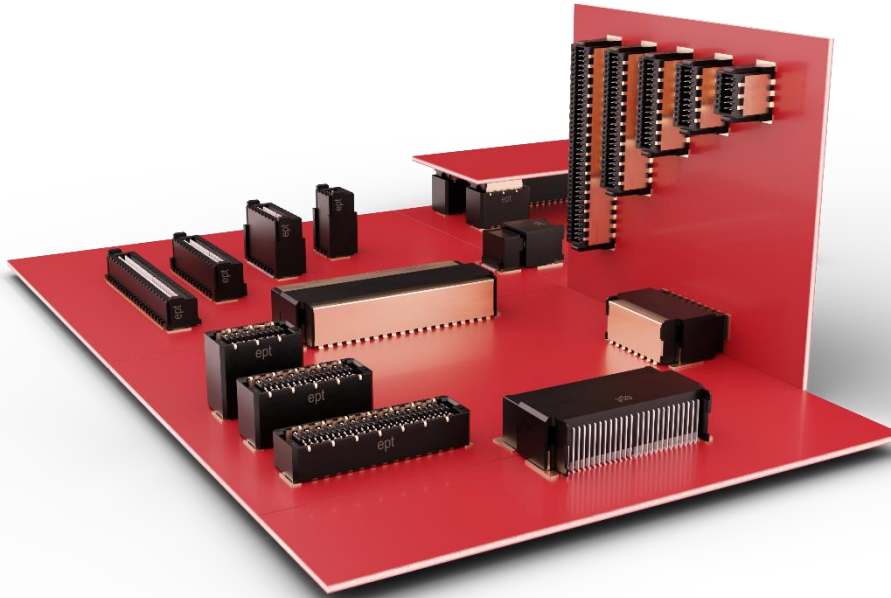


Zero8 – Zero Limits

Now even More variability with the all-rounder among BTB connectors



In times of increasing miniaturization, maximum flexibility in electronics design is more in demand than ever. Straight and angled connectors of various heights and with various numbers of pins enable different PCB connections. The Zero8 product group from ept is regarded as the all-rounder among connectors – and now, to an even greater degree.

Maximum flexibility

The four different height profiles of the Zero8 family allow for board-to-board distances between 6 and 21 mm. For the developer, the newly added socket height in the high profile now means even more flexibility and the possibility of using the version of this connector with an 0.8 mm pitch to make optimal use of installation space. This makes it possible to bridge even larger board-to-board distances, such as those caused by capacitors or inductances in frequency converters. Both connector halves – plug and socket – are currently available as both straight and angled versions, which allows for horizontal, vertical, and mezzanine connections. They are also available with different numbers of pins (from 12 to 80) and thus represent the entire wealth of variants, with all of the connectors being compatible and having the ability to be combined with one another as desired.

High speed without a drop in quality

Simulations run with the connector system also show that all connectors in the Zero8 family have excellent signal integrity and, at 16 Gbps, are ideally suited for PCIe 4.0 and Industrial Ethernet. The optional EMC shielding featured in the shielded Zero8 guarantees a high-speed signal flow without a drop in quality.

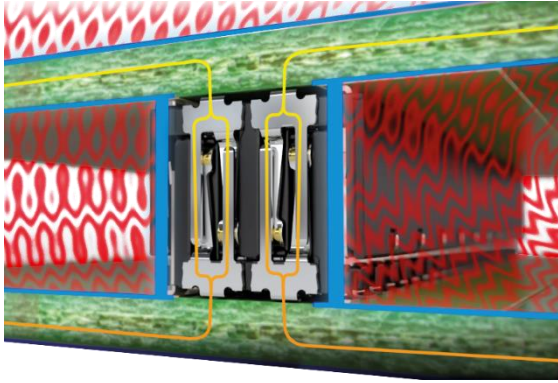


Fig. 1: Shielded Zero8 for uninterrupted signal flow

Miniaturized and robust

Many connectors get damaged during the assembly process due to mistakes such as touching the external contacts or accidentally plugging in the two connector halves the wrong way around. With the Zero8, damage such as this is out of the question. This is due to various reasons, of which include the internal contacts, which are protected in accordance with the Koshiri principle, and the inclined insertion surfaces at the edge of the insulator material.

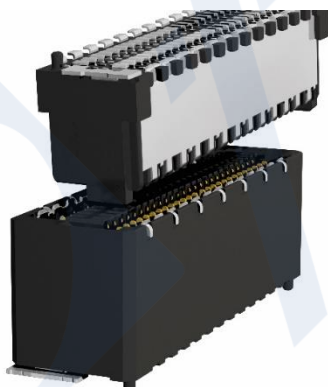


Fig. 2: Internal contacts and inclined insertion surfaces of the Zero8

The socket and plug can tolerate a mutual displacement of up to 0.4 mm during operation. This creates room for play when considering an application's tolerances and makes it possible to place multiple connector pairs on a single PCB without running the risk of experiences losses in contact reliability. In addition, this contact

reliability remains stable even in the event of vibration and shock – thanks to the innovative ScaleX connection technology.

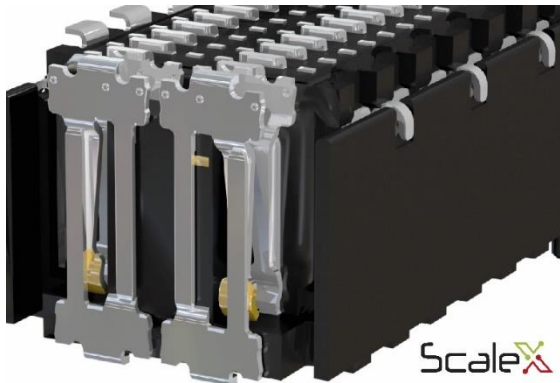


Fig. 3: Gender-neutral ScaleX connection technology of the Zero8

Zero8 – Zero Limits

Anyone who relies on a scalable connector system for their application not only avoids time-consuming and costly release cycles, but with the Zero8, they also obtain the maximum degree of variability and thus the maximum degree of freedom in how they design their electronics.