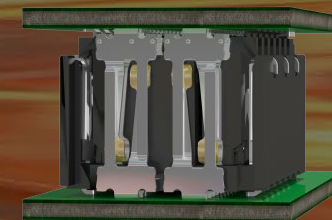
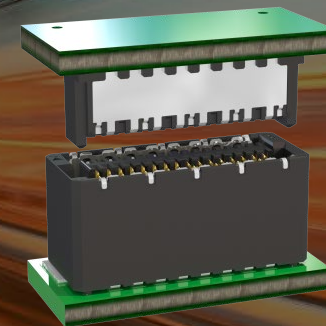
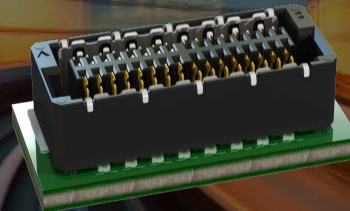
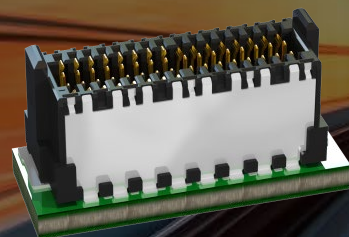


# ZERO8

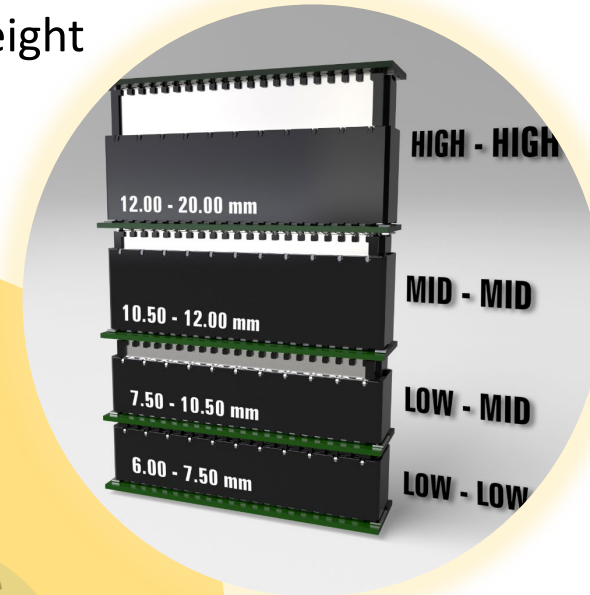


Board-to-Board Connectors with a Pitch of  
0.8 mm and Scale<sup>X</sup> Connection Technology

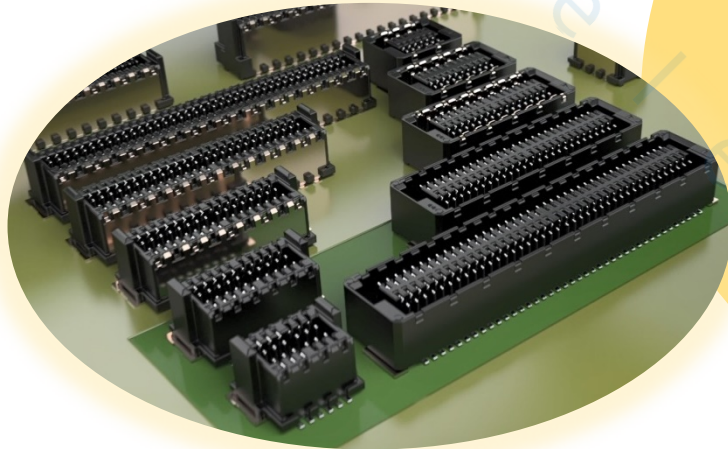
# “Zero Limits”

Infinite connection options

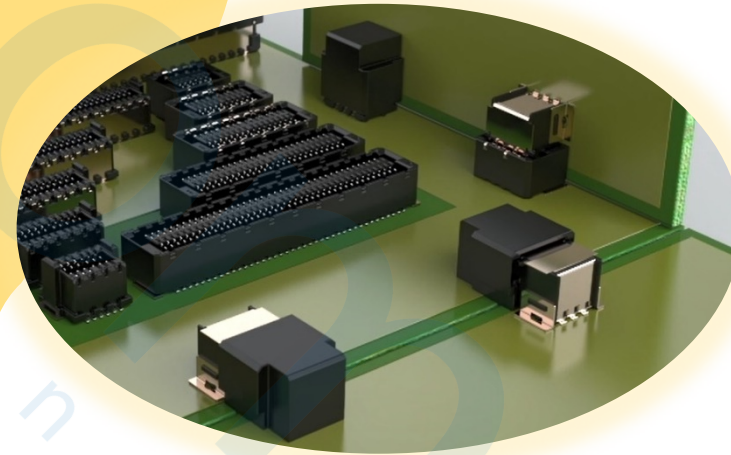
Height



Pin counts

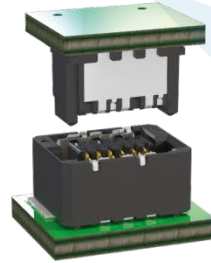


PCB orientation



# Zero8

## Stack heights



6.00 - 20.00 mm








Board-to-Board distances of 6.00 to 20.00 mm can be achieved using Zero8 connections – whether you decide on a shielded or unshielded version.

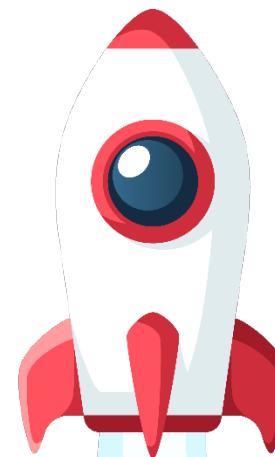
<b>PCB distance</b> (min. - max.)	6.00 - 7.50 mm	7.50 - 9.00 mm	9.00 - 10.50 mm	10.50 - 12.00 mm	12.00 - 20.00 mm
<b>Plug height</b>	low-profile 1.15 mm	mid-profile 2.65 mm	low-profile 1.15 mm	mid-profile 2.65 mm	high-profile (coming soon)
<b>Socket height</b>	low-profile 4.85 mm	low-profile 4.85 mm	mid-profile 7.85 mm	mid-profile 7.85 mm	high-profile (coming soon)

# Zero8

Availability

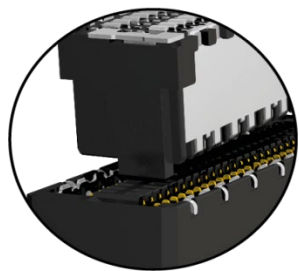


Type		
 6–7.5 mm	2019	New
 7.5–12.5 mm	2019	New
 12.5–20 mm	2021/2022	2021/2022
 	2021	New



# Zero8

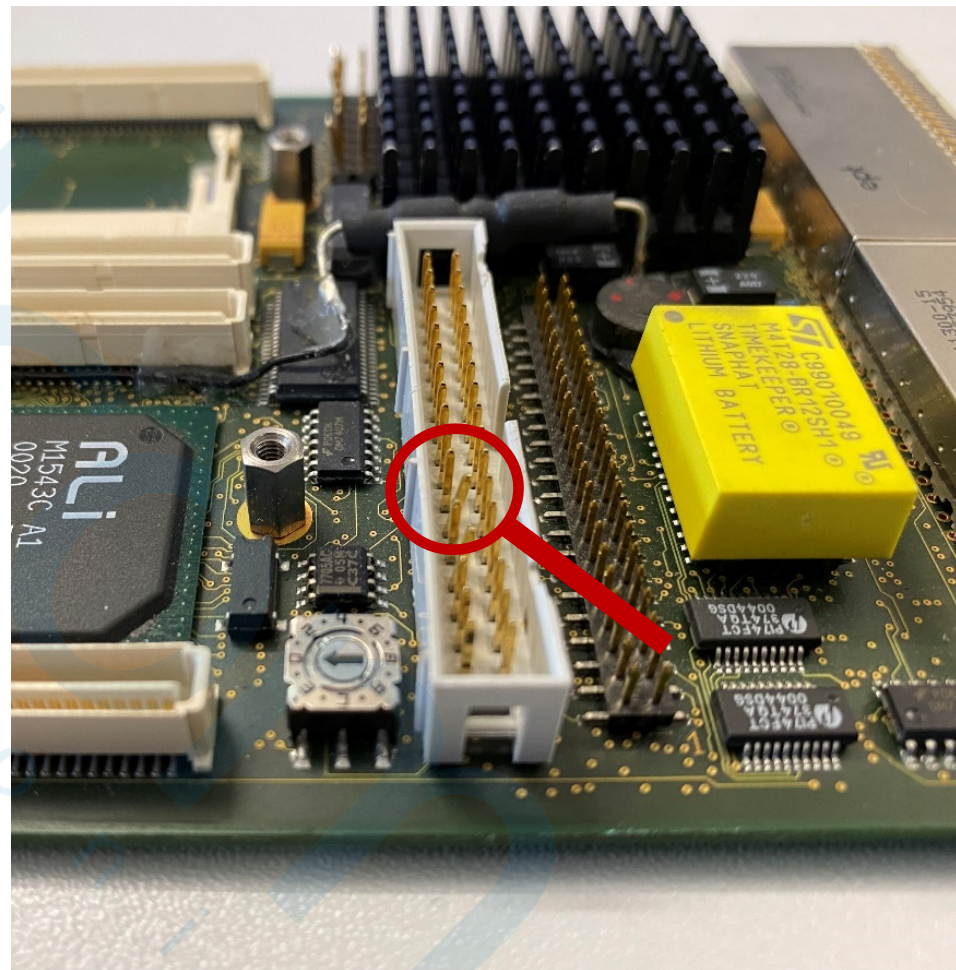
Robustness



**protected contacts**

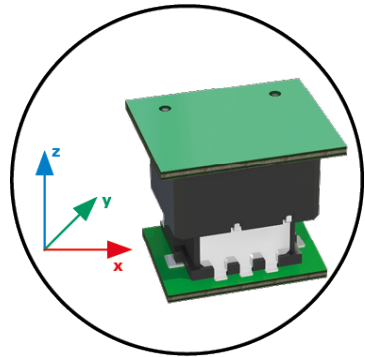


**double sided contact system**



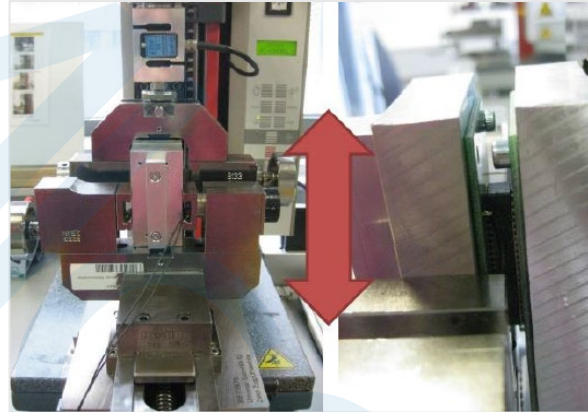
# Zero8

Robustness

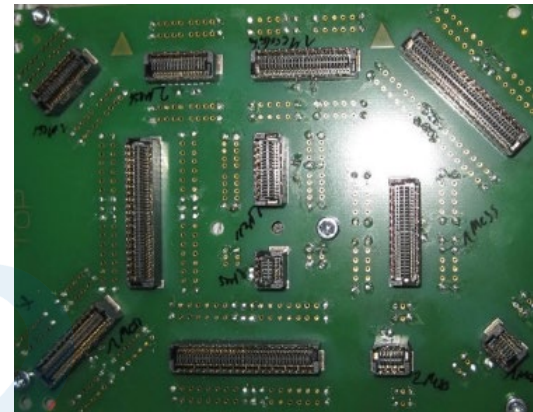
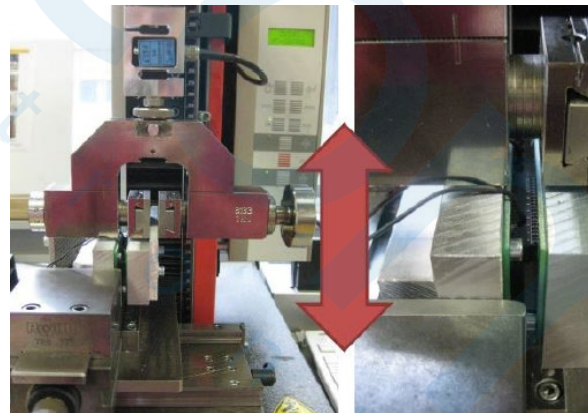
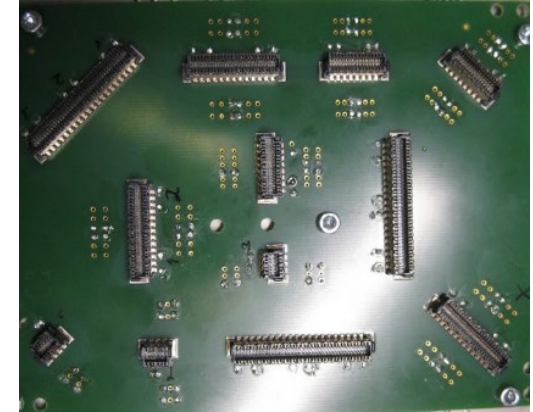


**tolerance compensation**

**0.4-mm offset  
when connected**



**500 mating cycles  
12 connectors**



# Zero8

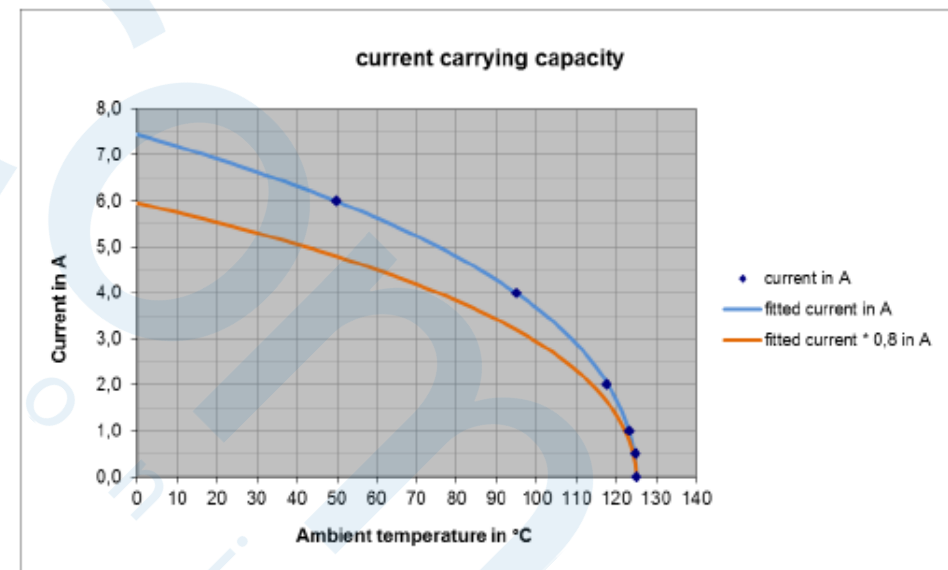
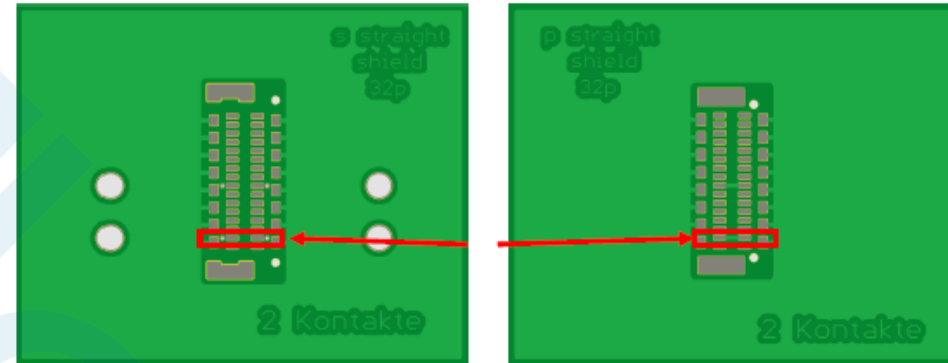
Current rating



**double sided  
contact system**



**2 contacts: 5.5 A @ 20°C**



# Zero8

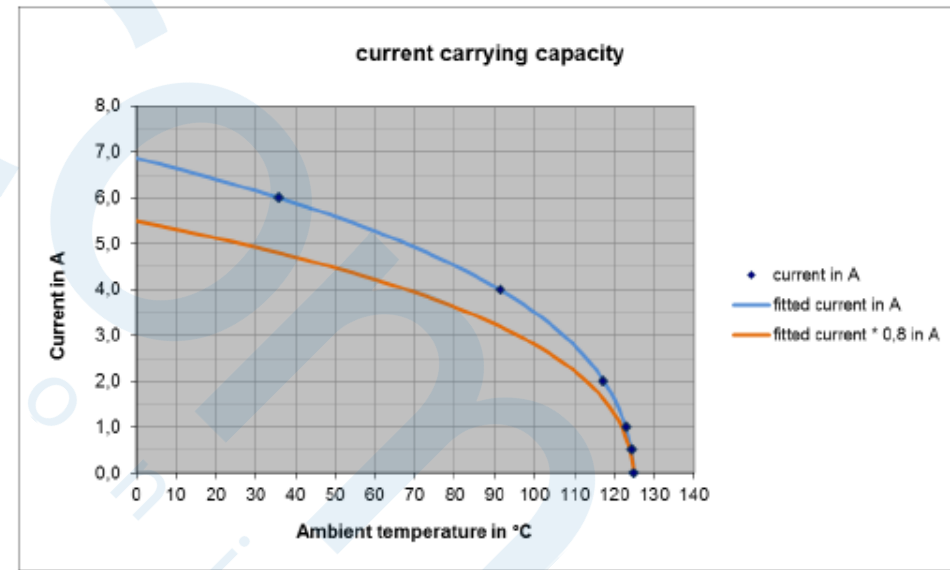
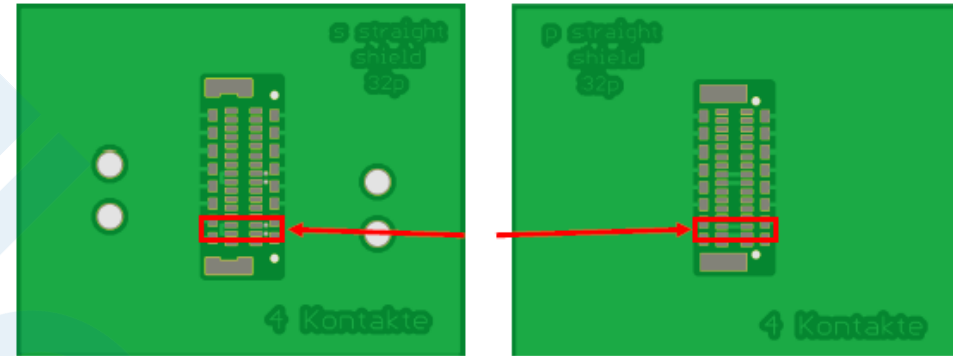
Current rating



**double sided  
contact system**



**4 contacts: 5.1 A @ 20°C**





# Zero8

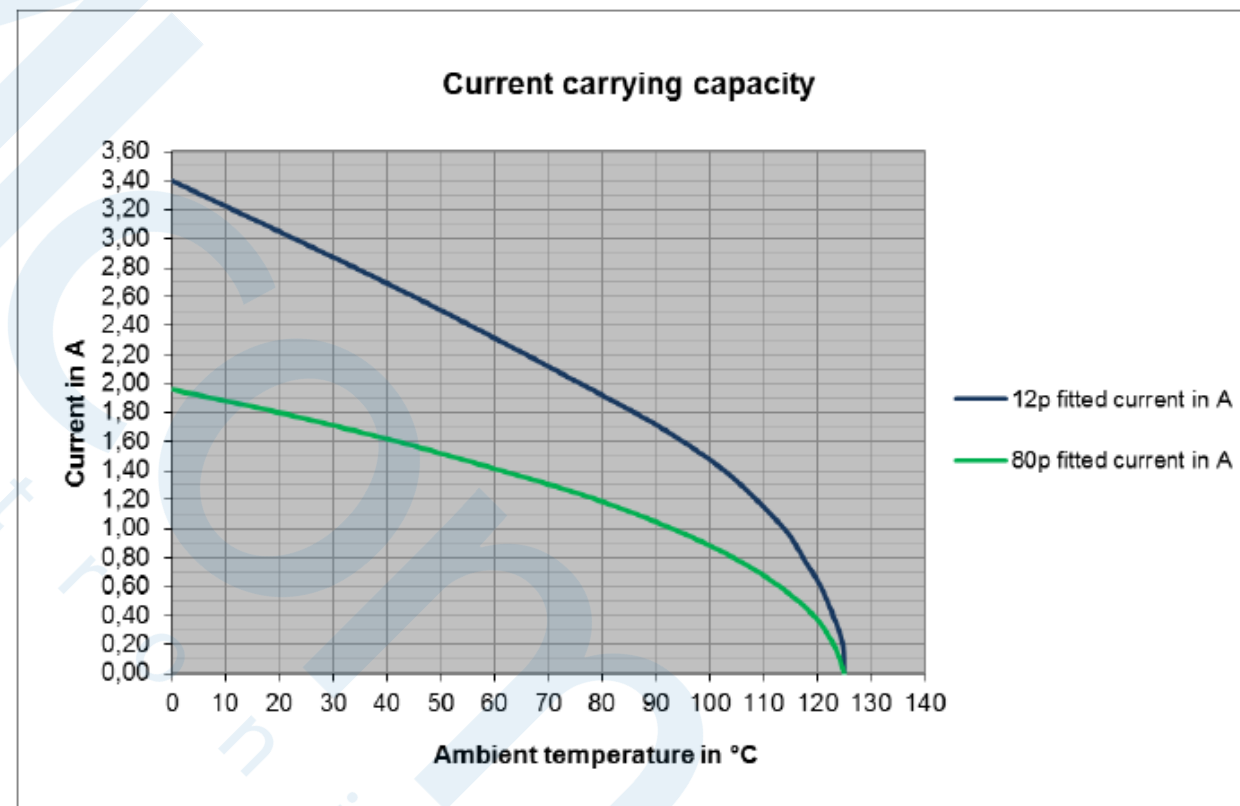
Current rating



**double sided  
contact system**



**All contacts in series**  
**12-pin 3 A @ 20°C**  
**80-pin 1.8 A @ 20°C**



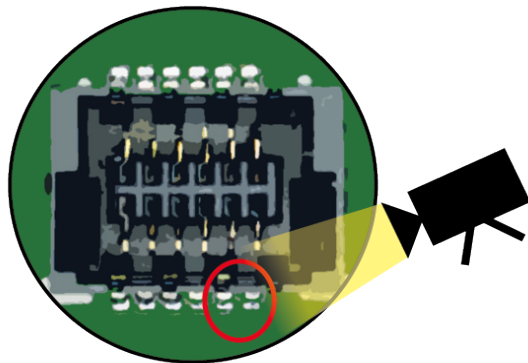
# Zero8

AOI-unshielded versions

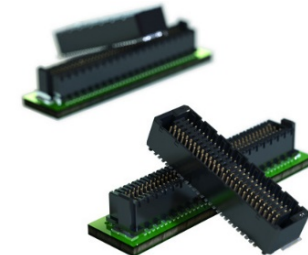
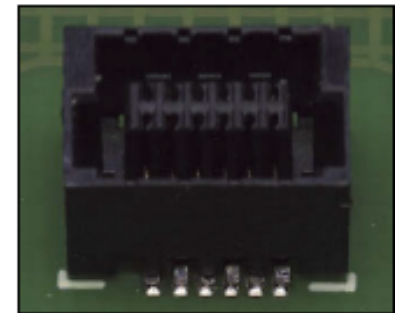
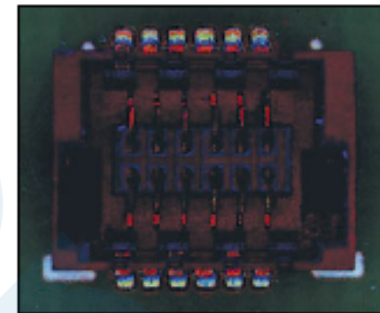
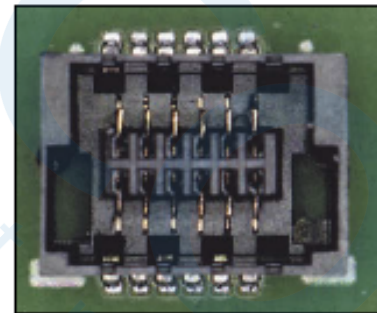
## AOI-optimiertes Design für miniaturisierte Steckverbinder

Hohe Fehlererkennbarkeit: Kriterien während der Entwicklungsphase erarbeiten

Um herauszufinden, welches Kontaktdesign sich optimal für die automatische optische Inspektion (AOI) anbietet, haben der Steckverbinderhersteller ept und Viscom bei der Entwicklung eines neuen Steckverbinders zusammengearbeitet. Die Einhaltung der daraus resultierenden Vorgaben vereinfacht nicht nur den Inspektionsvorgang. Es ist dadurch auch möglich, die Fertigungskosten erheblich zu senken. *Autoren: Olaf Szarlan, Wiebke Meyer*

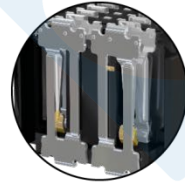


AOI-control



# Zero8

## Benefits



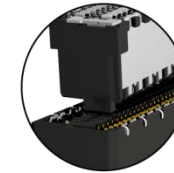
### double sided contact system

for a secure connection in the industrial environment (shock, vibration, thermal cycles, corrosive gas)



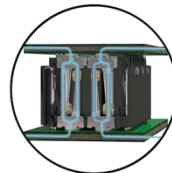
### smooth contact surface

the contact on the homogenous rolled side with high-end surface allows for up to 500 mating cycles



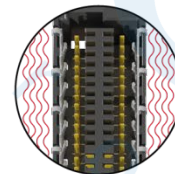
### protected contacts

optimized contact and casing geometry reduce damage to contacts



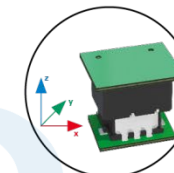
### data flow

HF optimized contact geometry ensures data transfer speeds of up to 16 Gpbs



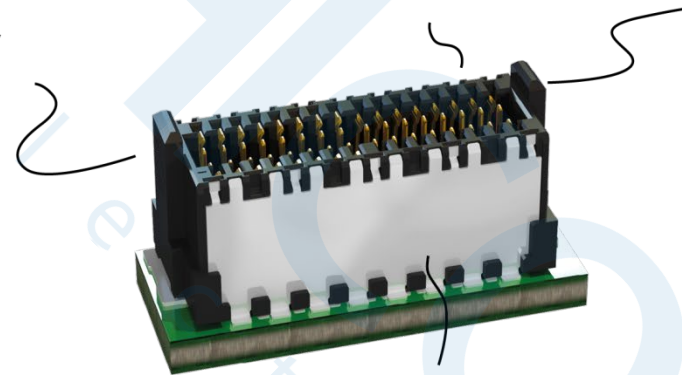
### EMC shielding

double sided shielding ensures a high electromagnetic compatibility for optimal signal integrity in the industrial environment



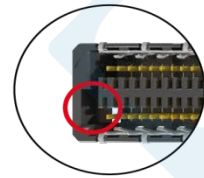
### tolerance compensation

high reliability through tolerance compensation

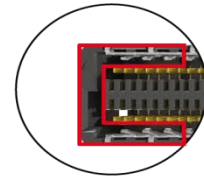


# Zero8

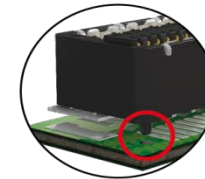
## Benefits



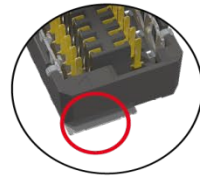
**twist guard**  
for correct connection of  
plug and socket



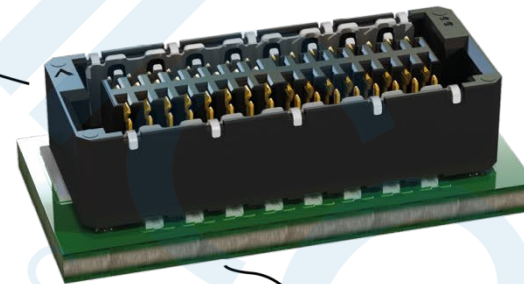
**insertion chamfer**  
for compensation of  
misalignment and  
angular inclination



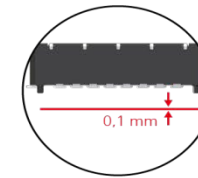
**positioning pins**  
optimal processing through  
precise positioning



**boardlock**  
absorbs mechanical stress and  
ensures a reliable connection  
to the PCB



**solder meniscus**  
guarantees a robust surfa-  
ce mount connection



**coplanarity**  
soldering under controlled  
process conditions