



High Speed Connectors

Mezzanine Connectors



HRS HIROSE
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CONNECTING THE FUTURE

A WORLD LEADER IN INTERCONNECT TECHNOLOGY

Hirose provides innovative, cutting-edge solutions for your interconnect requirements. We specialize in the design, development & manufacturing of high-performance interconnect solutions supporting the automotive, consumer, medical & industrial markets. With over 80 years experience, Hirose has established itself as a growing technology leader.

Positioned on the forefront of interconnect technology, Hirose works closely with its customers to develop innovations in miniaturization, high speed data transmission, signal integrity and robust mechanical design.

Hirose is a growing \$1.2 billion company, with approximately 5,000 employees worldwide. We utilize top-tier engineers to design high-quality, precision connectors, and we provide customer support through all stages of development.



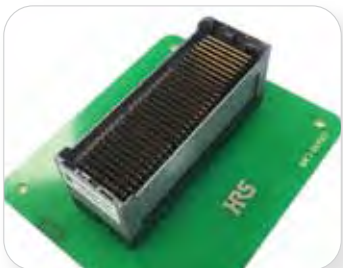
IT8 Series

IT8 was developed to enable 56+Gbps performance with the highest signal density in the market. Featuring Quasi-Coaxial Structure to prevent noise emission to adjacent lines and Polarity-Swap FEXT canceling technology, IT8 provides the most reliable and flexible solution for all current and future high speed system needs. Rated at 0.5A / pin (Signal), this series is available in both two-piece (56G+Gbs) and three-piece types (56G+Gbs). Rich in stacking height variations, the two-piece type boasts heights of 10 -13mm while the three-piece type excels with stacking height options of 14 – 46mm. Signal contact positions of 120, 192 and 288 are available for both types. IT8 features +/- 0.2mm of float in XY as well as +/- 1.5mm of mating alignment.



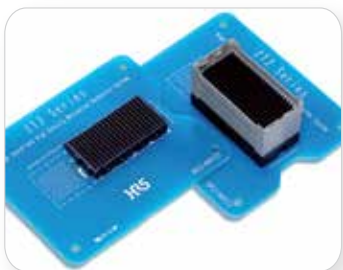
IT9 Series

IT9 is a high density (0.5mm pitch), multi-row, surface mount, 28+Gbps right angle connector. It is available in 224 positions (x24 channel) and 84 positions (x8 channel). The unique internal wafers feature a GSSG pattern for differential pair signals while an additional wafer is all signal (SSSS...) for single ended lines and power. It features 0.2mm of float to facilitate multi-connector mating as well as 1.6mm of mating alignment. Large metal retention pegs on either side enhance the mechanical robustness of the IT9 series.



IT5 Series

Further evolution from the success of the IT3, the IT5 incorporates FEXT cancellation technology along with additional rows of grounds that allow the connector to perform beyond 25Gbps. The three-piece mezzanine connector retains the float capability to facilitate multiple connector applications without compromising mechanical reliability. The IT5 is available in stack heights from 14-40mm and in 100, 200 and 300 positions +110% ground pins.



IT3 Series

The IT3 mezzanine performs in PCIE and XAUI 10Gbps systems. Transmit differential pair, single ended signal, and power through one package that can meet stack heights from 14mm to 40mm and in 100,200, and 300 positions.



IT-P Series

Rated at 40A / 60A, IT-P is suitable for mounting with IT3, IT5, IT7 & IT8. The unique floating structure of this series allows for mounting misalignments of +/-0.3mm in XY direction. This series features 3 different types depending on the stacking heights required. IT-PB allows for stacking heights of 10 – 13mm and is rated at 40A. IT-PA allows for stacking heights of 14 – 15mm and is rated at 40A. IT-P allows for stacking heights of 16–44mm and is rated at 60A.



Hirose is recognized around the globe as a leader in new technologies. We pride ourselves in anticipating the needs of our customers as they develop new and improved systems and strive to stay ahead in the highly competitive automotive industry. Our manufacturing facilities are located throughout Japan and Southeast Asia, and our rigorous quality control ensures optimal and consistent performance of products. Hirose's sales and engineering offices are located on three continents, serving customers worldwide.



FX18 Series

The Hirose Electric FX18 Series Hi-Speed B2B Connectors are headers and receptacles, right angle or straight, with a 0.8mm pitch for coplanar or vertical connection. The FX18 features high-speed transmission capability up to 10Gbps and multi-functional (MF) contact (ground contact, power supply contacts up to 12A, and 3-step sequential contacts). With a large mating guide for smooth insertion, the Hirose Electric FX18 Series Hi-Speed B2B Connectors mate with a signal contact of 2.0mm and offer a voltage rating of AC100V.



FX10-3 piece Series

Supporting 15+Gbps, this Mezzanine connector series employs a unique 3-piece floating system which allows for misalignment of up to $\pm 0.3\text{mm}$ in XY direction. Rated at 0.3A and with stacking heights of 8 – 13mm several position counts are available, 120, 144 & 168 (Includes ground pins). FX10 3-piece has several applications including servers, medical equipment and industrial machinery.



ER8 Series

This Board To Board High Speed transmission (10+Gbps) series comes in a wide variety of options. Rated at 0.5A, ER8 is available in both vertical and right-angle types. Vertical type options include stacking heights of 7, 9, 10 & 12mm and position counts range from 10 (10mm) – 120 (54mm). The right-angle type is available in a 120-position count. Hirose's ER8 device is a dual source of the Samtec Edge Rate® product line and has multiple applications including servers, medical devices and industrial devices among others.



IT11 Series

IT11 is a low stack height high speed compression connector. It is available in both 150 and 210 contacts and 1mm or 1.27mm pitch. The small 1mm height stack provides 40g of contact force at full deflection, handles up to 500mA per pin and performs above 28Gbps. This device is dual source of the Amphenol ICC's cStack™ product line.

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HIGH SPEED INNOVATION



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