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Product News 2017

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MicroBridge

The MicroBridge connector in a 1.27 mm pitch expands the product range of compact and reliable connectors. The MicroBridge product family has been designed specifically with the requirements of customers from the automotive industry in mind. The cable-to-board connectors have been developed on the basis of the LV214 and USCAR automotive test specifications. The MicroBridge variants satisfy the high requirements of the automotive industry, particularly in terms of mating reliability. Koshiri security and an electrical, optional CPA (connector position assurance) also go to ensure a reliable and robust connection. Despite the compact 1.27 mm pitch, the MicroBridge is extremely robust and withstands the vibrations in vehicles thanks to double-sided interlocking. The compact design is perfect for use in compact installation spaces.

The MicroBridge female connectors will be available with IDC and crimp terminations. The modular family comprises single and two-row versions with 2 to 40 pins. The single-row IDC female connector is available with a 90° and 180° cable outlet, the two-row version with a 180° cable outlet. The male connector designed for SMT is available as both a straight and angled version as well as single and two-row versions. Thanks to their modular design, female connectors can be mated with their male counterparts having the same number of pins irrespective of the termination technique (IDC or crimp). The crimp contacts in the female connector housing feature primary and secondary interlocking, whereas with the IDC versions, the contacts are already assembled in the housing. The new closed crimp contact ensures enhanced reliability during processing. Thanks to the two froms of IDC termination and an additional strain relief, the MicroBridge is ideal for meeting the exacting requirements posed by the harsh environments encountered in the automotive industry. The colour and mechanical coding optionally available for every number of pins facilitates assignment and prevents improper mating.

The high temperature resistance of up to 150 °C allows the connectors to be used in areas exposed to demanding temperature conditions, e.g. close to LEDs in the headlights. The current rating is specified according to the number of pins and the conductor cross-section with up to 8.5 A per contact and the voltage rating with up to 70 VAC/DC. The connectors are suitable for both manual and automatic assembly.

- Wire-to-Board connections
- 1.27 mm pitch
- single-row versions 2 - 20 pins
- dual-row versions 4 - 40 pins
- female connectors with IDC or crimp termination
- male connectors with SMT termination
- up to 8.5 A per contact
- operating voltage up to 70 VAC/DC
- temperature resistance up to 150 °C
- developed on the basis of the LV214 and USCAR automotive test specifications
- optional CPA (Connector Position Assurance)

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MiniMez Right Angle

The addition of right angle male and female connectors to the popular MiniMez product family extends the applications to extension card application and backplane and daughter card applications. Now engineers could have a comprehensive board to board solutions from one connector system. The robust male housing and blind mate feature with its dual beam contact design make the MiniMez connectors well suited for use in highly demanding systems that require reliability and robust connections. It is especially suitable for telecommunications and data-transmission devices.

These dual row MiniMez connectors could be used in a wide application temperature range from -55 °C to +125 °C. Engineers could select between two termination options depending on the application: SMT for maximum PCB real estate usage or DIP solder for extra mechanical strain relief.

- 1.27 mm pitch
- wide range of pin count from 10 positions to 100 positions in step of 2
- reinforced side walls for rugged applications
- blind mate feature for polarization and easy mating
- high temperature LCP insulator material (UL94 V-0)

Shielded M12 Female

Nowadays, devices need to perform and withstand more than ever before. Bearing this in mind, robust M12 connectors are a suitable solution for preventing faults caused by external influences from affecting a device's electronic components. IP protection prevents the field from becoming dirty and moist, for example. Different protection is necessary for faults caused by electrical activity. Metallic shielding is required for the signal lines in order to provide proper protection from these kinds of faults. When metal housing is used, the shielding potential can be realized for the housing, since the cable shield is located on the locking screws. When plastic housing is used, however, the shielding is ineffective. The solution to this problem is establishing a shielding connection between the locking screws and the printed circuit board, made possible through the new ERNI sockets with an integrated shielding plate. The shielded connectors are compatible in layout with the unshielded versions, and available in various codings and pin counts.

- shielded versions
- SMT or THR termination
- 3 - 17 pin
- A, B, D and X-coding
- locking parts
- IP65/67
- automatic assembly

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SMC Hot Swappable

SMC with late mate contacts

The ability to replace devices in electrical systems without shutting down the operations or with applied electric voltage is becoming increasingly important in industrial and automotive applications.

The “hot swapping / hot plugging” principle pursues the objective of reliably protecting electronic components by maintaining a defined sequence of signal, ground or power contacts during mating and unmating of the connector.
This ensures, for example, that during mating, a reliable system ground is established before sensitive circuitry is connected (“first mate - last break”).

The success story continues

The SMC connector range now fulfils this requirement, thanks to the addition of late mate contacts. Right angled male connectors with SMT termination can individually be loaded with late mate contacts at any position.

This provides design engineers with maximum flexibility for customized contact layouts in keeping with the “first mate - last break” concept.
The proven dual-beam female contact design also ensures reliable and secure connection for customers, even under difficult industrial conditions.

- Board-to-Board and Wire-to-Board connections
- 1.27 mm pitch
- 12 to 80 pins
- right angle SMT male connectors with late mate contacts
- individual contact loading

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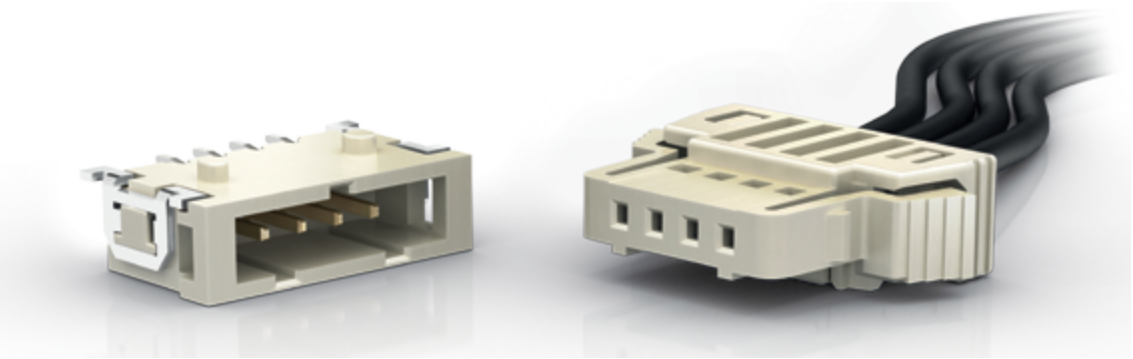
iBridge Ultra



The iBridge Ultra is the new extension of the popular 2 mm iBridge interconnect solution that accepts crimp cable of AWG 22 and AWG 24. It provides higher contact retention force above 50 N per contact for AWG 22 cable. The increased in contact retention is achieved by the secondary locking system that is provided by the retainer. It ensures better reliability of the connection for abusive environment with high vibration. The iBridge Ultra is especially suitable for use in highly demanding systems that require reliability and robust connections. It is well suited for automotive, LED, telecommunications and data-transmission devices.
The iBridge Ultra connectors prevent incomplete crimp contact insertion as well as wrong orientation of crimp contact assembly.
The iBridge Ultra interconnect system comes in single-row version and dual-row version. It could be used in a wide application temperature range from -55°C to +125°C. Engineers could select between two PCB termination options depending on their applications: SMT for maximum PCB real estate usage or DIP solder for extra mechanical strain relief. To take advantage of maximum PCB real estate usage while not compromising on the PCB retention force, the SMT version features solder brackets.

- pitch:
  - single-row: 2 mm
  - dual-row: 2 mm x 2.5 mm
- number of positions:
  - single-row: 1x2 to 1x12
  - dual-row: 2x2 to 2x20
- right angle and vertical male and inline female
- current carrying capacity: up to 5 A per contact at 20°C
- dual locking system for secure contact retention
- crimp contact accepts discrete stranded wires of AWG 22 and AWG 24
- solder brackets for SMT version for higher PCB retention force
- polarized contacts and housing for fool-proof mating
- latches on both sides of female connectors to provide positive locking
- high temperature insulator material (UL94 V-0)

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