Molex offers a wide range of Microminiature Wire-to-Board and Wire-to-Wire interconnect products. They help design, develop and manufacture finished electronic and electrical products effectively by enabling modularization and miniaturization. All board side SMT connectors are packed in tape and reel to help enable automatic processing. Molex provides application tooling to support building wire assemblies using all of the wire side connectors. These products are used in a wide range of industries and applications listed below.

**APPLICATIONS**

**Transportation and Automotive**
- GPS Tracking Systems
- Various In-dash Units and Modules
- Interior and Door Mirrors
- Cameras
- Gear Shifters
- Radios and Navigations
- Rear-seat Entertainment and Infotainment Systems
- Steering Wheels and Key Locks
- Overhead Consoles
- Vehicle Lightings

**Consumer and Mobile**
- Tablets
- E-books
- NotePCs
- PNDs
- Flat TVs
- Printers and Copiers

**Appliance and Retail**
- Gaming and Amusements
- Fitness Machines
- Refrigerators
- Washers and Dryers
- HVAC
- Vending Machines
- Ovens
- Thermostats
- Smoke Detectors
- Kiosk Terminals and Screens
- POS Terminals
- ATM Machines
- Barcode Scanners
- Power Tools
- Garage Door Openers
- Water Heaters
- Electronic Water Fountains/Dispensers

**Industrial and LED Lighting**
- Security Systems
- Downlights
- Striplights
- Street Lights
- Utility Smart Meters
- Servo Motors
- Testers
- Robotic Systems
- 3D Printers
- Industrial Drives
- Room sensors

**Medical**
- Patient Monitoring Devices
- Glucose/Blood Pressure Devices
- Pulse Oximetry
- Wearable/Fitness Meters
- Handheld Surgical Devices
- Drug Delivery Systems
- Catheters
- Medical Imaging Applications
## DESIGN YOUR MICRO WIRE-TO-BOARD SOLUTION

### Pico-Clasp™ (1.00mm pitch, AWG 28 - 32)

- **Dual Row**
  - 20-, 30-, 40-, and 50-Circuit
  - Gold Plated
  - Positive Lock

<table>
<thead>
<tr>
<th>Vertical Header</th>
<th>Right-Angle Header</th>
<th>MATES TO</th>
<th>Housing</th>
<th>Terminal</th>
<th>Tooling</th>
</tr>
</thead>
<tbody>
<tr>
<td>501190-XX17</td>
<td>501571-XX07</td>
<td></td>
<td>501189-XX10</td>
<td>501193-3X00</td>
<td>63819-1500</td>
</tr>
</tbody>
</table>

- **Single Row**
  - 2- to 15-Circuit
  - Tin Plated
  - Friction Lock (2 - 5)
  - Positive Lock (6 - 15)

<table>
<thead>
<tr>
<th>Vertical Header</th>
<th>Right-Angle Header</th>
<th>MATES TO</th>
<th>Housing</th>
<th>Terminal</th>
<th>Tooling</th>
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<tbody>
<tr>
<td>501331-XX07</td>
<td>501568-XX07</td>
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<td>501330-XX00</td>
<td>501334-0X00</td>
<td>63819-1500</td>
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</table>

### Pico-EZmate™ (1.20mm pitch, AWG 28 - 30)

- **2- to 7-Circuit**
  - Right-Angle
  - Gold Plated
  - Z-axis mating

<table>
<thead>
<tr>
<th>Header</th>
<th>MATES TO</th>
<th>Housing</th>
<th>Terminal</th>
<th>Tooling</th>
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</thead>
<tbody>
<tr>
<td>78171-000X (for 2- to 5-pin)</td>
<td>78172-000X (for 2- to 5-pin)</td>
<td>78172-041X</td>
<td>63823-0100 (AWG 30)</td>
<td>63819-4800 (AWG 28)</td>
</tr>
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<table>
<thead>
<tr>
<th>Header</th>
<th>MATES TO</th>
<th>Housing</th>
<th>Terminal</th>
<th>Tooling</th>
</tr>
</thead>
<tbody>
<tr>
<td>78171-500X (for 6- and 7-pin)</td>
<td>78172-500X (for 6- and 7-pin)</td>
<td>78172-041X</td>
<td>63823-0100 (AWG 30)</td>
<td>63819-4800 (AWG 28)</td>
</tr>
</tbody>
</table>

Contact your local Molex authorized distributors for crimped wire leads.
Contact your Molex sales engineer about supplying custom or standard jumpers using the above components.
## DESIGN YOUR MICRO WIRE-TO-BOARD SOLUTION

### PicoBlade™ (1.25mm pitch, AWG 26 - 32)

<table>
<thead>
<tr>
<th>Features</th>
<th>Vertical Header</th>
<th>Right-Angle Header</th>
<th>MATES TO</th>
<th>Housing</th>
<th>Terminal</th>
<th>Tooling</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single Row</td>
<td>53398-XX71</td>
<td>53261-XX71</td>
<td></td>
<td>51021-XX00</td>
<td>50079-8X00 (AWG 26 - 28)</td>
<td>50058-8X00 (AWG 28 - 32)</td>
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<tr>
<td>2- to 15-Circuit</td>
<td></td>
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</tr>
<tr>
<td>Tin Plated</td>
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<td></td>
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</tr>
<tr>
<td>Friction Lock</td>
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For PCB wafers and housings, X or XX indicates circuit count for the component. For terminals, different numbers come in to the location of X to indicate packaging style, applicable wire size or material difference.

### CLIK-Mate™ (1.25mm pitch, AWG 26 - 28)

<table>
<thead>
<tr>
<th>Features</th>
<th>Vertical Connectors</th>
<th>Right-Angle Connectors</th>
<th>MATES TO</th>
<th>Housing</th>
<th>Terminal</th>
<th>Tooling</th>
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<tbody>
<tr>
<td>Single Row</td>
<td>502382-XX70</td>
<td>502386-XX70</td>
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<td>502380-XX00</td>
<td>502381-0000</td>
<td>63819-4400</td>
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<td>2- to 15-Circuit</td>
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<tr>
<td>Tin Plated</td>
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<tr>
<td>Positive Lock</td>
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</tbody>
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### Duo-Clasp™ (1.25mm pitch, AWG 26 - 28)

<table>
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<tr>
<th>Features</th>
<th>Vertical Connectors</th>
<th>Right-Angle Connectors</th>
<th>MATES TO</th>
<th>Housing</th>
<th>Terminal</th>
<th>Tooling</th>
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</thead>
<tbody>
<tr>
<td>Dual Row</td>
<td>501931-XX70</td>
<td>502046-XX70</td>
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<td>503110-XX00</td>
<td>501930-1100</td>
<td>63819-4400</td>
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<tr>
<td>20-, 30- and 40-Circuit</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Gold Plated</td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Positive Lock</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

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**DESIGN YOUR MICRO WIRE-TO-BOARD SOLUTION**

### FEATURES

- **HEADER**
- **HOUSING** + **TERMINAL** + **HANDTOOL**

**MATES TO**

For PCB wafers and housings, X or XX indicates circuit count for the component.
For terminals, different numbers come in to the location of X to indicate packaging style, applicable wire size or material difference.

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**Pico-Spox™ (1.50mm pitch, AWG 24 - 30)**

- Single Row
- 2- to 15-Circuit
- Tin Plated
- Friction Lock

<table>
<thead>
<tr>
<th>Vertical Header</th>
<th>Right-Angle Header</th>
<th>MATES TO</th>
<th>Housing</th>
<th>Terminal</th>
<th>Tooling</th>
</tr>
</thead>
<tbody>
<tr>
<td>87437-XX43</td>
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<td>87439-XX00</td>
<td>87421-0000</td>
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**Pico-Lock™ (1.50mm pitch, AWG 24 - 32)**

- 4- to 12-Circuit
- Right-Angle
- Gold Plated
- Positive Lock

<table>
<thead>
<tr>
<th>Header</th>
<th>MATES TO</th>
<th>Housing</th>
<th>Terminal</th>
<th>Tooling</th>
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<tbody>
<tr>
<td>504050-XX91</td>
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<td>504051-XX01</td>
<td>504052-0X98</td>
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**CLIK-Mate™ (1.50mm pitch, AWG 24 - 30)**

- Single Row
- 2- to 15-Circuit
- Tin Plated
- Positive Lock

<table>
<thead>
<tr>
<th>Vertical Connectors</th>
<th>Right-Angle Connectors</th>
<th>MATES TO</th>
<th>Housing</th>
<th>Terminal</th>
<th>Tooling</th>
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</thead>
<tbody>
<tr>
<td>502584-XXX0</td>
<td>502585-XX70</td>
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<td>502578-XX00</td>
<td>502579-0X00 (AWG 24 - 28) 503429-0000 (AWG 26 - 30)</td>
<td>63819-4600 63825-1200</td>
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**CLIK-Mate™ (2.00mm pitch, AWG 22 - 26)**

- Dual Row
- 8- to 34-Circuit
- Tin Plated
- Positive Lock

<table>
<thead>
<tr>
<th>Vertical Header</th>
<th>Right-Angle Header</th>
<th>MATES TO</th>
<th>Housing</th>
<th>Terminal</th>
<th>Tooling</th>
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<tbody>
<tr>
<td>503154-XX90</td>
<td>503148-XX90</td>
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<td>503149-XX00</td>
<td>502579-0X00 (AWG 24 - 28) 503429-0000 (AWG 26 - 30)</td>
<td>63819-4600 63825-1200</td>
</tr>
</tbody>
</table>

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Get customized insights at: molex.com