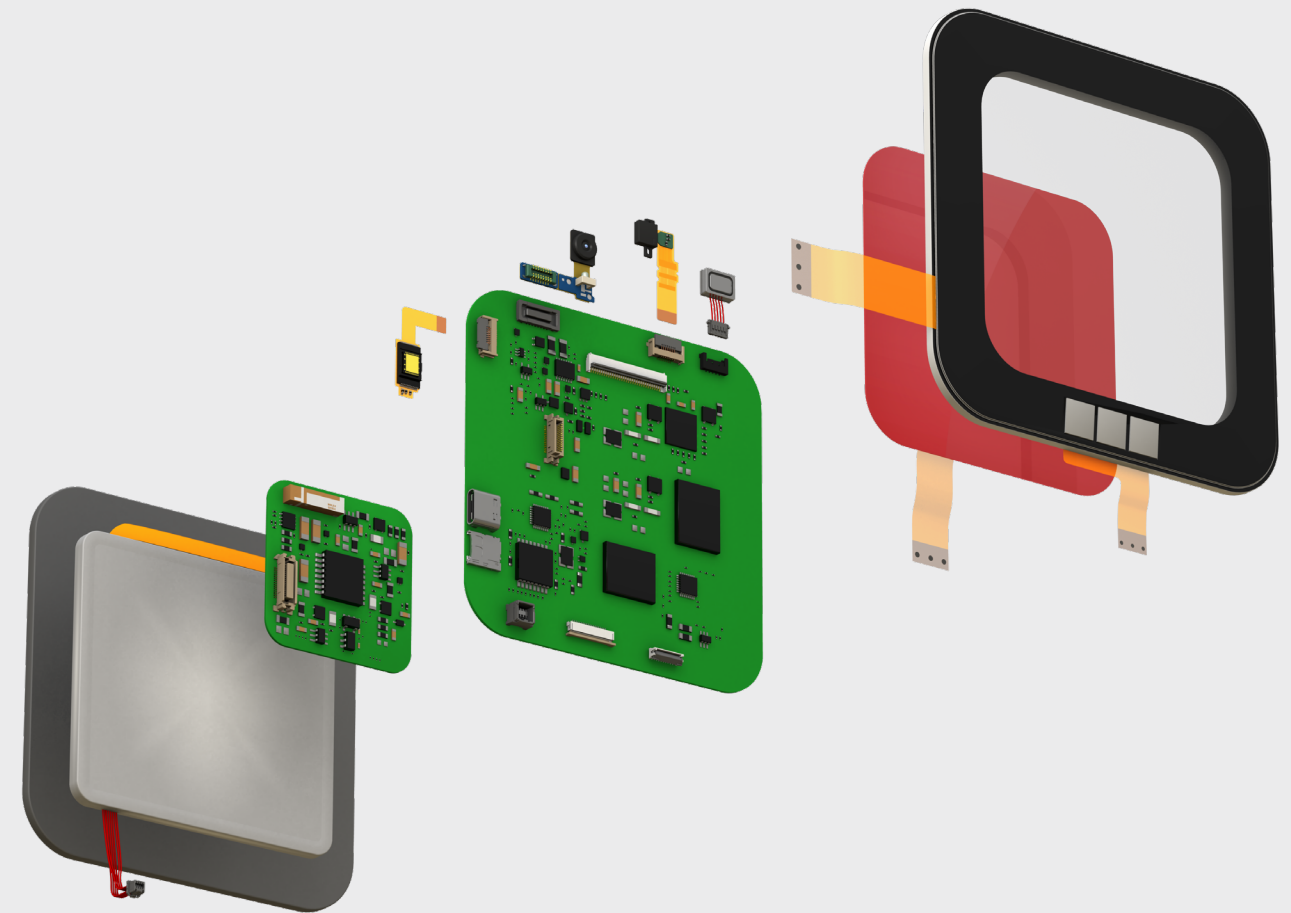
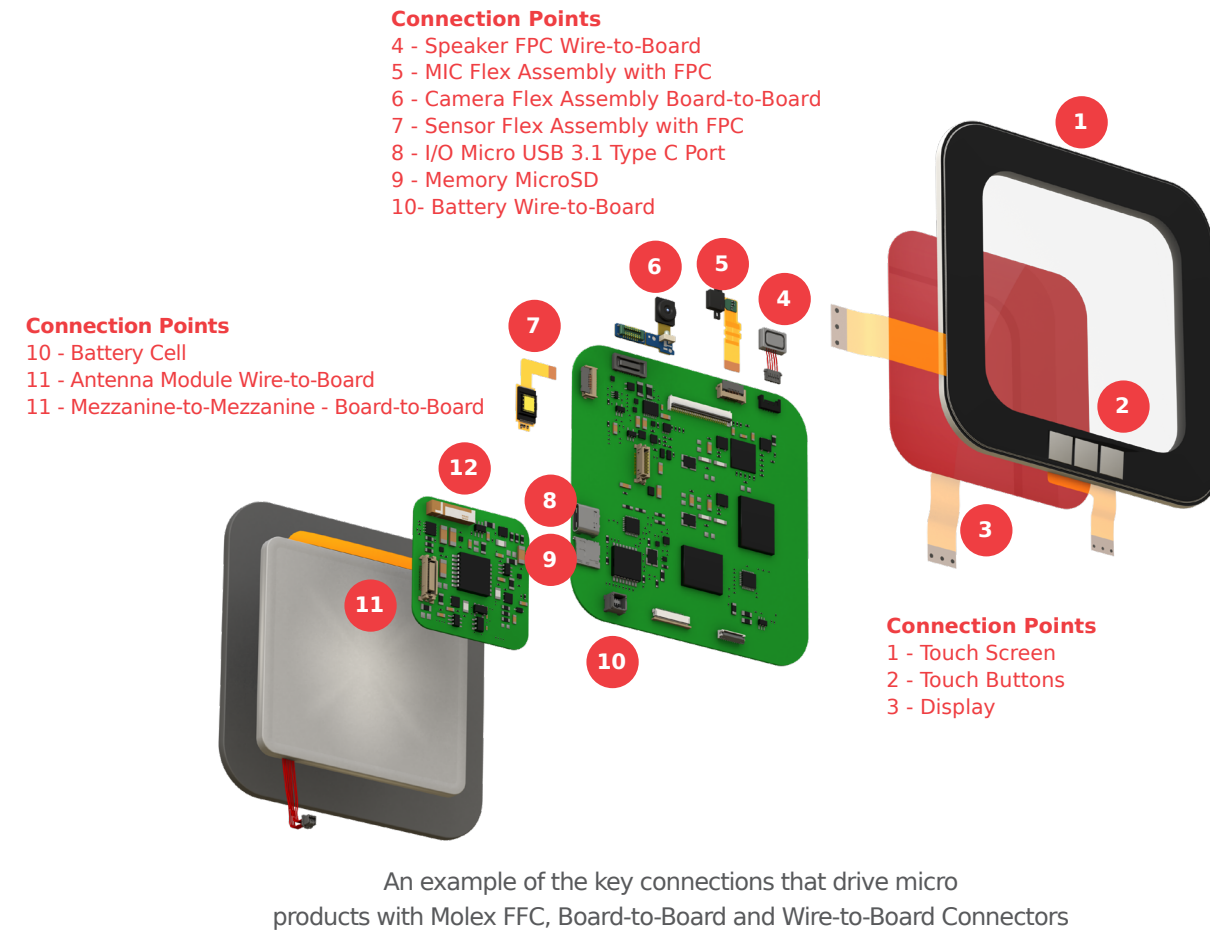


EASY-ON FFC/FPC, SLIMSTACK BOARD-TO-BOARD AND WIRE-TO-BOARD CORE PRODUCTS >

Get customized insights at: molex.com



Key Microminiature Connection Points



Microminiature connectors initially designed for consumer handheld devices, are now in applications across many industries. Furthermore, companies are looking for new ways to use technology to reach customers and engage with them. These new application features have translated into more modularity and increased flexible printed assemblies for key features.

Why more applications across industries are using microminiature connectors:

- Increased user interface
- Feature-rich options
- Profile changes

In turn, feature-rich options and increased user interface result in:

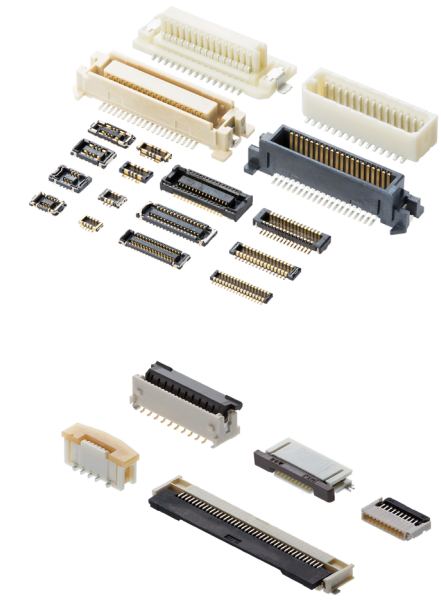
- Increased flexible print assemblies
- Modular design (multiple PCB designs)

All of the above increase the amount of microminiature connection points in applications.

Key Microminiature Connection Points

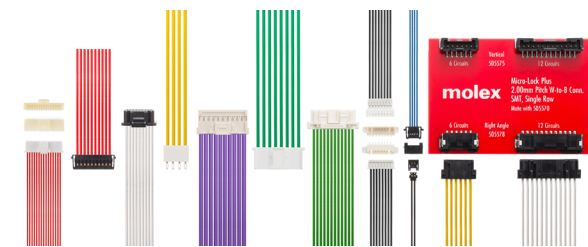
SLIMSTACK BOARD-TO-BOARD CONNECTORS

SlimStack Board-to-Board Connectors offer a wide selection of low-profile, narrow width options in various mated heights and circuit sizes.



EASY-ON FFC/FPC CONNECTORS

Super-fine pitch and small-size FFC/FPC Connectors with ZIF, non-ZIF, slider, flip actuator and FPC-to-board styles and a variety of circuit sizes deliver both high reliability and speedy data rates.




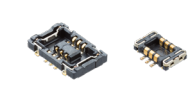
SIGNAL WIRE-TO-BOARD CONNECTORS

Feature a wide variety of available wire-to-board signal connectors that provide excellent design flexibility and cost-savings.


















Easy-On FFC/FPC Connector Core Products

| Pitch (mm) | Orientation | Contact Position | Circuits | Series Name | Series No. | Image | |
|------------|-------------|------------------|----------|-------------|------------|--------|--|
| 0.50 | Right-Angle | Dual | 4 to 32 | FBH1 | 503480 | | |
| | | Bottom | 4 to 80 | FD19 | 505110 | | |
| | | Top | 4 to 20 | Slider | 52745 | | |
| | | | 21 to 30 | | 52435 | | |
| | | | 30 to 50 | | 54104 | | |
| | | Bottom | 4 to 20 | 52746 | | | |
| | 21 to 30 | | 52437 | | | | |
| | 30 to 50 | | 54132 | | | | |
| | Vertical | | | 4 to 70 | V-Flip | 501951 | |
| | | | | 6 to 42 | Slider | 52559 | |
| 1.00 | Right-Angle | Bottom | 4 to 30 | FD19 | 200528 | | |
| | | Top | 3 to 34 | Slider | 52207 | | |
| | | | 4 to 30 | | 52271 | | |
| | Vertical | | 5 to 30 | | 52610 | | |

SlimStack Board-to-Board Connectors Core Products

| Pitch (mm) | Mated Height (mm) | Mated Width (mm) | Circuits | Series Name | Series No. | | Image |
|------------|-------------------|------------------|-----------|-----------------|------------|--------|---|
| | | | | | Receptacle | Plug | |
| 0.35 | 0.60 | 2.00 | 6 to 60 | SSB RP | 505066 | 505070 |  |
| | 0.70 | | | | 505270 | 505274 | |
| | 0.80 | | | | 505413 | 505417 | |
| | 0.90 | | | | | | |
| | 1.00 | | | | | | |
| 0.40 | 0.60 | 2.00 | 8, 10 | Battery (10.0A) | 505473 | 505476 |  |
| | 0.70 | 2.60 | 20 to 60 | HRF (7L) | 503304 | 503308 |  |
| | 0.70 | 2.60 | 6 to 18 | HRF (7S) | 503548 | 503552 |  |
| | 0.75 | 2.50 | 8 | Battery (6.0A) | 505004 | 505006 |  |
| | 0.80 | 2.50 | 10 to 50 | B8 | 505550 | 505551 |  |
| | 1.50 | 3.40 | 10 to 100 | J-Bend | 51338 | 55909 |  |
| | 1.80 | 4.20 | | | 500913 | 501745 | |
| | 2.00 | 3.40 | | | | | |
| | 2.30 | 4.20 | | | | | |
| | 0.635 | 6.00 | 6.40 | 20 to 240 | 0.635 | 52885 | 55091 |
| 7.00 | | 53625 | | | | | |
| 8.00 | | 53647 | | | | | |
| 9.00 | | 53649 | | | | | |
| 10.00 | | 53627 | | | | | |
| 12.00 | | 55091 | | | 52901 | 53625 |  |
| 13.00 | | 53647 | | | | | |
| 14.00 | | 53649 | | | | | |
| 15.00 | | 53627 | | | | | |
| 16.00 | | 53627 | | | | | |


































Core Signal Connectors 1.00 to 2.50mm Pitch

| Pitch (mm) | Product Family | Terminal | Housing | Straight Plug Header | Right-Angle Plug Header | Plating | Lock Type | Circuit Sizes | Wire Gauge | Current (max.) | Voltage (max.) | Key Features |
|------------|--|--|---|----------------------|---|--------------------|--|---------------|------------|----------------|----------------|--|
| 1.00 | Pico-Lock 1.00mm |  503765 |  503764 | N/A |  503763 | Gold | Side Positive | 2, 3, 4, 5, 6 | AWG 28-30 | 2.5A | 150V | Space saving/ positive side locks/high current |
| | Pico-Clasp* |  501334-0000 |  | 501331 (SMT)* | 501568 (SMT)* | Tin | Friction (2, 3, 4, 5 circuits) Inner Positive (6, 7, 8, 9, 10, 11, 12, 13, 14, 15 circuits) | | | | | |
| | |  501193-3000 | | 504449 (SMT) | 202396 (SMT) | Gold 0.1µm | | | | | | |
| | |  501193-6000 | 6, 7, 8, 9, 10, 11, 12, 13, 14, 15 circuits | 203556 (SMT) | 203558 (SMT) | Gold 0.38µm | | | | | | |
| | |  501193-5000 | 501330 (Single)* | 203557 (SMT) | 203559 (SMT) | Gold 0.76µm | | | | | | |
| | |  501334-0000 |  | 501940 (SMT)* | 501953 (SMT)* | Tin | | | | | | |
| | |  501193-3000 | | 501940 (SMT) | 501953 (SMT) | Gold 0.1µm | | | | | | |
| | |  501193-6000 | | 501939 (Single)* | 203560 (SMT) | 203562 (SMT) | | Gold 0.38µm | | | | |
| | |  501193-5000 |  | 203561 (SMT) | 203563 (SMT) | Gold 0.76µm | | | | | | |
| | |  501193-3000 | | 501190 (Dual, SMT) | 501571 (Dual, SMT) | Gold 0.1µm | | | | | | |
| | |  501193-6000 | | 501189 (Dual, SMT) | 203564 (Dual, SMT) | 203566 (Dual, SMT) | | Gold 0.38µm | | | | |
| |  501193-5000 | 203565 (Dual, SMT) | | 203567 (Dual, SMT) | Gold 0.76µm | | | | | | | |

* Color Variations Available



Core Signal Connectors 1.00 to 2.50mm Pitch

























| Pitch (mm) | Product Family | Terminal | Housing | Straight Plug Header | Right-Angle Plug Header | Plating | Lock Type | Circuit Sizes | Wire Gauge | Current (max.) | Voltage (max.) | Key Features |
|---|--|---|--|---|---|--|-----------------------------|---|--|----------------|----------------|--|
| 1.20 | Pico-EZmate |  78172 |  78172 (Single) |  78171 (SMT) | N/A | Gold | Friction | 2, 3, 4, 5, 6, 7 | AWG 28-30 | 2.5A | 50V | High current (2P, AWG 28) |
| | Pico-EZmate Slim |  202655 |  202654 (Single) |  202656 (SMT) | N/A | Gold | Friction | 2 | | 3.2A | | High current (2P, AWG 28) |
| 1.25 | PicoBlade |  50058/50079 |  51021 (Single) |  53398 (SMT) |  53261 (SMT) | Tin Gold (R/A) | Friction | 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15 17 (53261, Tin) | AWG 28-32 (50058 Tin only) AWG 26-28 (50079, Tin/Gold) | 2.5A | 125V | Ultra small size, SMT and through-hole option wire-to-wire is also available |
| | | | |  53047 (Through-hole) |  53048 (Through-hole) | | | | | | | |
| |  50125/50133 (Plug terminal) | |  51047 (Plug HSG) | N/A | Tin | | 2, 3, 4, 5, 6, 7, 8, 9, 10 | AWG 28-32 (50133) AWG 26-28 (50125) | 2.5A | 125V | Wire-to-wire | |
| | Micro-Lock Plus 1.25mm* |  505431 |  505432 (Dual)* |  505565 (Single)* |  505568* |  505567* | Tin Gold (Contact Molex) | Outer Positive | Single-row 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16 | AWG 26-30 | 2.2A | 50V |
|  505433 (Dual)* | | | |  505448 (Dual)* | Inner Positive | Dual-row 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42 | | Small size, inner positive lock | | | | |
| Board-in 1.25mm |  50080 / 50061 |  51022 (Single) | N/A | N/A | Tin | N/A | | 2, 3, 4, 5, 6 | AWG 28-32 (50061) AWG 26-28 (50080) | 1.0A | 125V | Board-in |
| 1.50 | Pico-Lock 1.50mm |  504052 |  504051 (Single) | N/A |  504050 (SMT) | Gold | Side Positive | 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 | AWG 24-32 | 3.5A | 150V | Low profile and high current |
| | Pico-SPOX |  87421-0100 87421-0000 |  87439 (Single) |  87437 (SMT) |  87438 (SMT) | Tin | Friction | 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15 | AWG 24-26 (87421-0000) AWG 26-30 (87421-0100) | 2.5A | 250V | Ideal solution for higher current wire-to-board configurations in tight packaging applications |
|  87421-0102 87421-0002 | |  202705 (SMT) | |  202706 (SMT) | Gold | 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15 | | AWG 24-26 (87421-0002) AWG 26-30 (87421-0102) | | | | |

*Color Variations Available



www.molex.com/link/wtb_signal.html

Core Signal Connectors 1.00 to 2.50mm Pitch

































| Pitch (mm) | Product Family | Terminal | Housing | Straight Plug Header | Right-Angle Plug Header | Plating | Lock Type | Circuit Sizes | Wire Gauge | Current (max.) | Voltage (max.) | Key Features |
|----------------|---|---|--|--|---|-----------------------------|--|---|--|----------------|--|--|
| 1.50 | CLIK-Mate* |  502579 (AWG 24-28) 503429 (AWG 26-30) |  502578 (Single)* |  502584 (SMT)* |  502585 (SMT)* | Tin | Inner Positive | 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15 | AWG 24-28 (502579) AWG 26-30 (503429) | 2.0A | 100V | Low insertion force, secure mating with audible click |
| | | |  503149 (Dual) |  503395 (Bottom entry, SMT) |  N/A | | | 3, 4, 6, 7, 8, 10 | | | | Bottom entry |
| | | |  503149 (Dual) |  503154 (Dual, SMT) |  503148 (Dual, SMT) | | | Vertical 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34 Right-Angle 8, 10, 12, 14, 16, 18, | | | | Low insertion force, secure mating with audible click |
| | | |  502578 (Single) |  505405 (SMT) |  N/A | | | 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15 | | | | Gold plating version |
| Spot-On 1.50mm |  201649 |  201647 (Single) |  201648 (SMT) (Single with nail) |  N/A | Tin | Inner Positive | Single 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16 | AWG 24-28 | 2.0A | 100V | Potting height: 5.0mm SMT type, center nail for additional mechanical strength | |
| | | |  201645 (SMT) (Dual w/o nail) |  201646 (SMT) (Dual with nail) | | |  201650 (Retainer) | | | | | Dual 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40 |
| 2.00 | Micro-Lock Plus 2.00mm |  505572 |  505570 (Single) |  505575 (SMT) |  505578 (SMT) | Tin Gold (Contact Molex) | Outer Positive | 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16 | AWG 22-26 AVSS 0.3 | 3.0A | 250V | Small size, outer positive lock |

*Color Variations Available































www.molex.com/link/wtb_signal.html

Core Signal Connectors 1.00 to 2.50mm Pitch

| Pitch (mm) | Product Family | Terminal | Housing | Straight Plug Header | Right-Angle Plug Header | Plating | Lock Type | Circuit Sizes | Wire Gauge | Current (max.) | Voltage (max.) | Key Features | | | |
|---|---|---|---|---|---|------------|----------------------|---|--|----------------|----------------|---|------|----------------------|--|
| 2.00 | Milli-Grid |  |  |  |  | Gold / Tin | Outer Positive | 2, 3, 4, 5, 6, 7, 8, 9, 10 | AWG 24-30 | 2.5A | 125V | Outer positive lock, audible click to ensure good mating | | | |
| | | | | 151062 (SMT) | 151064 (SMT) | | | | | | | | | | |
| | | | |  |  | Gold / Tin | Outer Positive | 2, 3, 4, 5, 6, 7, 8, 9, 10 | | | | | | | |
| | | | | 151063 (Through-hole) | 151065 (Through-hole) | | | | | | | | | | |
| | | | |  |  | Gold / Tin | Friction | 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44, 46, 48, 50 | | | | | | | |
| | | | | 151117 (Through-hole) | 151119 (Through-hole) | | | | | | | | | | |
| | | | |  |  | Gold / Tin | Friction | 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44, 46, 48, 50 | | | | | | | |
| | | | | 151118 (SMT) | 151120 (SMT) | | | | | | | | | | |
| | | | |  |  | Gold / Tin | Friction | 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44, 46, 48, 50 | | | | | | | |
| | | | | 87831 (Through-hole) | 87833 (Through-hole) | | | | | | | | | | |
|  |  | Gold / Tin | Friction | 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44, 46, 48, 50 | N/A | Gold / Tin | Friction | 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44, 46, 48, 50 | | | | | | | |
| 51110 (Dual) | 87832 (SMT) | | | | | | | | | | | | | | |
|  |  | Gold | N/A | N/A | N/A | Gold | N/A | 6, 8, 10, 12, 14, 16, 18, 20 | | | | Allow misalignment of up to 1mm in X and Y direction | | | |
| 151014 (Dual) (Cable not included) | 151013 (Through-hole) | | | | | | | | | | | | | | |
| 2.00 | iGrid* |  |  |  |  | Tin | Inner Positive | 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40 | AWG 22-26 (501647) AWG 26-28 (501648) | 2.0A | 250V | Compact design and anti-tangle internal lock | | | |
| | | | | 501647 (AWG 22-26) | | | | | | | | | | | |
| | | | |  |  | Tin | Inner Positive | 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40 | | | | | | | |
| | | | | 501648 (AWG 26-28) | 501646 (Dual)* | | | | | | | | | | |
| | | | |  |  | Gold | Inner Positive | 14, 28 | N/A | | | | Gold | Gold plating version | |
| 501645 (Through-hole)* | 501876 (Through-hole)* | | | | | | | | | | | | | | |
|  |  | Gold | Inner Positive | 14, 28 | N/A | Gold | Gold plating version | AWG 26-28 (503095) | | | | | | | |
| 503095 (AWG 26-28) | 503091 (Through-hole) | | | | | | | | | | | | | | |
| 2.00 | Spot-On 2.00mm |  |  |  |  | Tin | Inner Positive | Single 2, 3, 4, 5, 6, 7, 8, 9, 10 Dual 11, 12, 13, 14, 15, 16 | AWG 22-26 | 2.5A | 250V | Potting height: 7.0mm SMT type, center nail for additional mechanical strength | | | |
| | | | | 201200 (Single) | 201201 | | | | | | | | | | |
| | | | |  |  | Tin | Inner Positive | 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40 | | | | | | | |
| 201196 (Retainer) | 201197 | | | | | | | | | | | | | | |

* Color Variations Available Natural Black Red Blue Green

Core Signal Connectors 1.00 to 2.50mm Pitch

| Pitch (mm) | Product Family | Terminal | Housing | Straight Plug Header | Right-Angle Plug Header | Plating | Lock Type | Circuit Sizes | Wire Gauge | Current (max.) | Voltage (max.) | Key Features | |
|------------|---|---|---|---|---|--------------|----------------|--|--|--|----------------|--|--|
| 2.00 | Micro-Latch |  |  |  |  | Tin | N/A | 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15 | AWG 24-30 (50212) AWG 22-26 (50372) | 2.5A | 125V | Low cost, longer market history | |
| | | 50212/50372 | 51065 (Single) | 53253 | 53254 | | | | | | | | |
| | Board-in 2.00mm |  |  | N/A | N/A | Tin | N/A | 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16 | AWG 26-30 | 2.0A | 125V | Board-in | |
| | | 50034 | 51015 (Straight) | | | | | | | | | | |
| | |  |  | N/A | N/A | Tin | N/A | 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16 | AWG 24-30 | 2.5A | 125V | | |
| | | 35021 | 35023 (Right-Angle) | | | | | | | | | | |
| 2.50 | Mini-Lock |  |  |  |  | Tin | Outer Positive | 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15 | AWG 20-26 | 3.0A (50351) (50837) 3.5A (50752) (50709) | 250V | Wide variety TPA version available, higher profile version available for potting treatment | |
| | | | | 53375 (H=11.5, Through-hole) | 53426 (Through-hole) | | | | | | | | |
| | | | |  |  | Tin | Outer Positive | 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15 | | | | | |
| | | | | 53517 (H=17.5, Through-hole) | 51164 (Retainer) | | | | | | | | |
| | | | |  |  | Tin | Outer Positive | 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15 | | | | | |
| | 50752 (AWG 20-26) with Retainer | 51164 (Retainer) | | | | | | | | | | | |
| |  |  | N/A | N/A | Tin | Wire-to-Wire | AWG 22-28 | | | | | | |
| | 50351 | 51103 (Single) | | | | | | | | | | | |
| |  | N/A |  | N/A | Tin | Wire-to-Wire | AWG 22-28 | | | | | | |
| | 50837 | | 51198 Plug Housing | | | | | | | | | | |
| 2.50 | Mini-SPOX |  |  |  |  | Tin | Friction | 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15 | AWG 22-28 | 3.0A | 250V | Low cost, longer market history | |
| | | | | 5267 | 5268 | | | | | | | | |
| | |  |  | N/A | N/A | Tin | N/A | 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 18 | AWG 20-24 | 4.0A | 250V | Board-in | |
| 50097 | 51035 (Straight) | | | | | | | | | | | | |
| | |  |  | N/A | N/A | Tin | N/A | 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 14, 15, 16 | AWG 22-28 | 3.0A | 125V | | |
| | | 35021 | 35022 (Right-Angle) | | | | | | | | | | |