

NEW PRODUCT INTRODUCTIONS

ANNUAL OVERVIEW



creating connections for life

molex



molex

Discover Molex

Collaborating with companies to solve complex challenges, innovate faster and accelerate time to market is the foundation on which Molex is built. We work with the world's most innovative brands to provide cutting-edge connectivity solutions for the challenges posed by highly dynamic environments and evolving technologies. New product introductions play an essential role in achieving these goals.

CONNECT WITH US





New Product Introductions

This overview summarizes each NPI package released in 2025, highlighting new additions to the Molex portfolio and enhancements to established product ranges, and provides a preview of the Q1 2026 product pipeline. The links on each product page will take you to resources on [molex.com](https://www.molex.com), including datasheets, videos and more.

USEFUL LINKS

Industries & Applications

Molex is driving innovation across a wide range of industries. View our industry pages to learn more about solutions for markets such as telecom, data centers, networking, industrial automation and more.

Trends & Insights

Get the latest insights on market shifts, trends and disruptive technologies that drive connectivity innovation in critical industry categories.

DISTRIBUTOR LINKS

Learning Locker

Learn more about our latest NPI releases with short online training videos, as well as a range of sales tools, presentations, videos and more.

MyMolex

Access our new self-service platform to find pricing information, a product catalog and shopping cart, as well as a helpful, real-time chat feature.

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NEW PRODUCT INTRODUCTION:

Program Categorization

The future is rapidly evolving, from consumer devices and artificial intelligence to industrial robotics. As industries deliver new functionality, innovation is found not only in the final product but also in the reinvention of the components within.

The Molex New Product Introduction (NPI) program is focused on releasing solutions that support the next era of applications. Over the last decade, we have launched and continue to enhance our NPI program that introduces new products for the general market. Each new release is categorized to show how it complements our product offerings, whether as an innovation, enhancement or extension.

Our Categories



INNOVATION

New to Molex or new to market



ENHANCEMENT

New variations of an existing product range



EXTENSION

Additions to complete an existing range





INNOVATION

Mini Cool Edge (MCIO) Connectors and Cable Assemblies

SERIES

217082, 217346, 215070, 215072, 215731,
215071, 215073, 215732, 216610, 216611,
216612, 221278, 217237, 217722, 216832,
216833, 216834



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The Mini Cool Edge (MCIO) connectors and cables offer options with 4, 8, 16 and 20 lanes, supporting high-speed data rates of 16, 32 and up to 64Gbps. MCIO cable assemblies meet PCIe standards in extremely flexible configurations.

FEATURES AND ADVANTAGES

Delivers improved flexibility in system design with straight, right-angle and side-exit options for multiple plug types.

Offers extendable and customizable differential signal (DS) pairs for high-speed channel applications by using sideband with DS pairs.

Prevents damage to the pins because of anti-slant, anti-reverse and pull-tab features with contact protection and enhanced mechanical design.

Permits high-speed data transmission that meets PCIe industry standards due to high-speed 64Gbps specifications.

Offers a wide range of pinout options, including 4, 8, 16 and 20 lanes because of pinout flexibility.

Provides the flexibility to pair with a variety of wire sizes, including 29, 30 and 32 AWG, due to its loose pair and ribbon cable features.

APPLICATIONS BY INDUSTRY



Telecommunications

Routers
Switches
Servers
Edge computing



Power for Data Centers

Data centers
Storage racks
Storage controllers
RAIDS (Redundant Array of Independent Disks Storage)
JBODS (Just a Bunch of Disks Storage)
HBAS (Host Bus Adapter Services)
Enterprise storage systems
Servers and high-performance computing



INNOVATION

MMC Connectors and Assemblies

SERIES

106114, 106292



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Helping data centers optimize space and density to meet AI-driven demands for increased capacity and performance, the MMC system leverages a very small form factor (VSFF) design to achieve higher density within the same footprint. MMC Cable Assemblies and Adapters are available with 16 or 24 fibers, providing higher cabling port density and low loss performance in a compact design to support high-bandwidth applications.

FEATURES AND ADVANTAGES

Offers higher port density than alternative optical connectors

The significant space savings due to the compact form factor and efficient design of the MMC connectors yield approximately three times the cabling port density over MPO formats.

Helps enable data centers to consolidate multiple MPO 8F transceivers into a single 16F MMC connector

The aggregation of multiple fiber connections into a single connector facilitates the efficient use of fiber optic infrastructure, maximizing bandwidth, optimizing space and enhancing overall network performance and reliability.

Helps allow data centers to achieve higher data rates

MMC connectors are designed to support higher fiber counts, typically up to 16 fibers or more in a single connector. This scalability allows for greater aggregation of data channels within a smaller physical space compared to base 12F or base 8F connectors.

Simplifies mating and unmating

The push-pull boot design provides an intuitive, quick and secure connection mechanism for faster mating and unmating of connectors.

Offers a complete line of EMI Adapters for MMC and various other form factors

The connectors address electromagnetic interference through a combination of shielded designs, grounding mechanisms, high-quality materials and careful engineering to ensure signal integrity.

APPLICATIONS BY INDUSTRY



Servers and Storage

VSFF devices
16F/24F applications
OptoConnect aggregation enclosures
Signal aggregation devices



Industrial Automation

Robots



Telecommunications

High-bandwidth transceivers



INNOVATION

MX-DaSH Connector System, Wire-to-Wire

SERIES

215958, 300091, 300092, 300158, 300159



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The MX-DaSH Connector System (Molex Data-Signal Hybrid) reduces weight, size and cost requirements; simplifies assembly operations; and supports zonal architecture by combining power circuits, ground circuits and high-speed data connections into one connector that can replace multiple traditional connectors in vehicle applications.

FEATURES AND ADVANTAGES

Optimizes wiring harness by combining multiple connectors into one connector

The design incorporates power, signal and data connections using 1.20, 1.50 and 2.80mm terminals as well as High-Speed FAKRA Mini (HFM) modules for high-speed data transmission.

Delivers reliable operation in harsh conditions through the available T2/ V1/S3-rated sealing and the mat seal

The mat seal eliminates the need for individual cable seals, providing reduced package size and reducing the cost of connectors subject to harsh conditions inside or outside the cabin.

Ensures secure mating and reliable connectivity

Features include an available independent secondary lock (ISL), pin protection plate (PPP) and blade protection.

Eases implementation and incorporation into designs

Using complete assemblies for male and female housings minimizes assembly operations.

Prevents mis-mating and minimizes assembly errors

Four unique keyways are available to ensure proper orientation.

APPLICATIONS BY INDUSTRY



Automotive

- VSFF devices
- Autonomous driving modules
- Computing modules
- Camera systems
- Gateway/switch modules
- GPS devices
- High-resolution displays (4K displays)
- High-speed cable networking
- Sensor-device connectivity
- Surround-view cameras LiDAR devices



Commercial Vehicle

- GPS Devices
- Infotainment devices



INNOVATION

MicroBeam Connectors and Cable Assemblies

SERIES

219030, 221633, 221635



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Delivering low-profile and high-performance connectivity for high-density, near-chip applications, MicroBeam Connectors and Cable Assemblies deliver up to 112Gbps with exceptional signal integrity (SI) and 12 or 16 differential pairs (DPs). The compact design, with a low overall mated height of less than 7.00mm, reduces interference with other components while improving airflow and thermal management.

FEATURES AND ADVANTAGES

Optimizes thermal management

The low-profile mated height of less than 7.00mm enables the conductor to sit underneath heat sink components, maximizing airflow to improve cooling.

Ensures stable performance

With a robust design featuring a metal cage and cover, the connector can withstand high mechanical forces to help prevent damage and maintain consistent operation.

Simplifies assembly and maintenance operations

The easy and intuitive design can be inserted, mated and unmated without tools or specialized training, reducing system downtime and helping eliminate mis-mating errors.

Delivers high data rates and excellent signal integrity

Data rates of up to 112Gbps, supported by twinax cable that optimizes SI, enable customers to meet market demands with BiPass cabled connectivity.

APPLICATIONS BY INDUSTRY



Networking

- Ethernet switches
- AI hardware
- High-speed cabling to the panel



INNOVATION

High-Speed FAKRA-Mini (HFM) Interconnect System

SERIES

207911, 207912, 208241, 208242, 208244, 208246



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Designed to provide high-speed data connectivity for advanced automotive systems including cameras and telematics, High-Speed FAKRA-Mini (HFM) Connectors deliver data rates of up to 28Gbps at frequencies up to 20 GHz in a compact, lightweight form factor optimized for rugged reliability and space efficiency.

FEATURES AND ADVANTAGES

Optimizes space and weight

The compact design is up to 80% smaller than FAKRA connectors, significantly reducing weight and saving installation space.

Enables real-time communication with high-performance devices

The HFM system provides reliable, fully shielded coaxial cable connections, enabling high-speed communication with high-resolution cameras, telematics and infotainment devices.

Prevents accidental disconnection in high-vibration applications

The integrated secondary lock (ISL) and available connector position assurance (CPA) provide robust terminal and connector retention.

Improves flexibility and supports future upgrades

The versatile, modular system aids in future-proofing vehicle architectures with single, dual, dual-stack and quad connectors for wire-to-wire, wire-to-module and wire-to-device solutions.

APPLICATIONS BY INDUSTRY



Automotive

- Advanced driver assistance systems (ADAS)
- Autonomous driving systems
- Camera systems (including surround view, driver monitor, lane assist and other systems)
- High-resolution (4K) displays
- High-speed cable networks
- Infotainment systems
- Internet connections
- Radar systems
- Rear-seat entertainment devices
- Sensor-to-device connections
- Telematics solutions, including:
 - 5G
 - Bluetooth
 - Global position satellite (GPS)
 - Satellite radio
 - Vehicle-to-everything (V2X)
 - Wi-Fi and WiGig

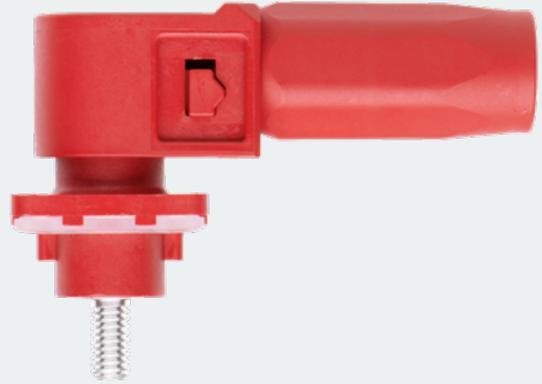


INNOVATION

SideWize High-Voltage Connectors

SERIES

223985, 223987, 223988



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Maximize performance by leveraging SideWize High-Voltage Connectors, designed for space savings in power distribution applications. These connectors offer easy mating, increase operator safety and meet low-halogen global compliance requirements. Providing high-current and high-voltage connections, SideWize connectors are designed to transfer power across a range of applications, including data center servers, battery energy storage systems and electric vehicle charging stations.

FEATURES AND ADVANTAGES

Eliminates cable bend radius; ideal for space-constrained applications

Right-angle receptacles reduce the bending required to route cables, protecting them in tight spaces and mitigating cable strain that can degrade cable performance and durability.

Provides easy mating and cable assembly dressing

These connectors offer 360° cable assembly rotation during and after mating, reducing stress on solder joints.

Helps prevent risk of electric shock when handling connectors or cable assemblies

The touch-proof and finger-safe feature allows for safety enhancement, protecting operators from harm.

Accelerates system integration and reliability

Color-coded connectors minimize mis-mating the cable assembly with the bulkhead connector.

APPLICATIONS BY INDUSTRY



Energy Storage

Power distribution in energy storage system (ESS) racks



Servers and Storage

Power distribution in power shelves



Industrial Automation

Power distribution in articulated robots



Telecommunications

Power distribution in uninterruptible power supply equipment



INNOVATION

EXTreme PowerEdge Plus Card Edge Connectors

**SERIES
219476**



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As data centers consume massive amounts of energy, engineers are tasked with finding ways to enhance energy efficiency without compromising performance. EXTreme PowerEdge Plus Card Edge Connectors revolutionize data center power management by affording high current density and low-profile housing. This high-power card edge connector also meets the Modular-Common Redundant Power Supply (M-CRPS) mechanical standards and exceeds electrical requirements, offering customers extra performance margins for their designs. Experience superior efficiency and reliability with this state-of-the-art card edge connector technology.

FEATURES AND ADVANTAGES

Provides lower contact resistance, lower power loss and higher reliability

Each power circuit has eight independent points of contact (mating points to the PCB) ensuring multiple paths for current flow. This decreases overall contact resistance, thereby reducing energy inefficiencies and heat generation.

Meets M-CRPS mechanical requirements and exceed the electrical requirements

These connectors feature a 7.62mm pitch for power circuits and a 2.54mm pitch for signal circuits, ensuring compliance with M-CRPS standards to optimize efficiency and minimize the risk of downtime caused by power failures.

Higher current density than any edgcard connector in the market

These connectors use an innovative dual-layer terminal design delivering greater than 3,300W at 12V. Customers benefit by not having to compromise on size or efficiency.

Avoids overheating system

The low-profile housing allows for improved airflow enhancing system cooling and helping prevent thermal damage.

APPLICATIONS BY INDUSTRY



Data center

Power shelves
Power supplies



Telecommunications/Networking

Servers
Storage devices
Switches



INNOVATION

MMCX Power-over-Coax (PoC) Connectors

**SERIES
73230**



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MMCX Power-over-Coax (PoC) Connectors are tailored for applications requiring a compact radio frequency (RF) connection within the DC to 6 GHz range and provide the capability to deliver remote power over the same connection. These connectors offer a robust, reliable solution that simplifies the upgrade process and enhances performance in challenging environments, directly addressing the customer's need for stable connections and efficient integration.

FEATURES AND ADVANTAGES

Helps deliver remote power in dynamic environments

MMCX PoC Connectors enable single-cable data and power transmission, reduce installation complexity and are flexible enough for a wide range of applications.

Provides cost savings, time efficiency and simplicity

MMCX PoC connectors are backward compatible to IEC 61169-52 MMCX products and will not require PCB receptacle changes (connector or PCB footprint).

Ensures full compatibility with standard MMCX Jack connectors

The fully compatible feature enhances the snap-on mating mechanism by ensuring easy integration, providing a reliable connection and maintaining consistent performance across various applications.

Provides stable and reliable GND continuity

These connectors feature a full-locking mating mechanism with zero gap and a non-snap ring design.

APPLICATIONS BY INDUSTRY



Automotive

Digital rearview mirrors
Driver monitoring systems
Intelligent transport management systems
Centralized monitoring and control (CMC) panels
Telematics systems



Wireless infrastructure

Open-path gas leak detectors
Sensors
Video devices
GPS receivers
Consumer electronics devices
GPS surveying equipment
Vehicle-mounted GPS antennas



Industrial

RF industrial applications
Wireless meter readers



Agricultural machinery

Agricultural market GPS antennas



ENHANCEMENT

Quasar OptiX Field-Mountable Connector (FMC)

SERIES
106359



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Quasar OptiX Field-Mountable Connectors (FMCs) are new additions to the existing line of Molex outside plant (OSP) products, designed for use in optical connectivity applications subject to outdoor environmental conditions. FMCs enable installers in the field to quickly and easily install optical connectors on cables with minimal training and tooling.

FEATURES AND ADVANTAGES

Enables faster installations in the field while reducing downtime and maintenance costs

Assembling and installing the connector takes as little as two minutes and requires no curing or polishing steps.

Improves signal strength and network integrity

The high fiber retention force maintains constant connectivity while the factory-polished connector interfaces help reduce signal loss.

Simplifies requirements for on-site installation of fiber optic cables

Minimal operating skills are necessary with only strip, cleaving and visual fault locator (VFL) tools, reducing fixture costs when compared with expensive fusion splicers. Terminations can be done in exposed areas in bad weather, unlike fusion splicing operations where equipment damage can occur.

Supports use in protected outdoor environments

Reliable performance in a wide temperature range—from -40 to +75°C depending on cable type—enables outdoor installation in regions with extreme temperature variations.

APPLICATIONS BY INDUSTRY



Telecommunications

Broadband service provider installations
Fiber to the x (FTTX) architectures
Distributed access/remote PHY systems



Networking

Fiber to the home devices

Servers and Storage

Radio access network devices



ENHANCEMENT

PowerWize 3.40mm Interconnects

SERIES

221888, 221887, 221597, 221616



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Leveraging our COEUR socket technology, PowerWize Interconnects offer a 3.40mm size to deliver the power efficiency that is critical for cost management. These high-power connectors are designed for manufacturing flexibility and exceptional electrical performance.

FEATURES AND ADVANTAGES

Provides optimal current-carrying capacity

Multiple contact beams help ensure low contact resistance, low voltage drop and minimal heat generation at the contact interface.

Offers finger touch-safe headers and receptacles

These connectors are designed per UL 60950 to isolate the crimp contacts and to prevent accidental contact with an energized circuit.

Helps ensure secure mating and helps prevent cable assemblies from disengaging headers due to shock, vibration, or mishandling

Positive-locking headers and receptacles afford Operators tactile and audible feedback during system integration.

Helps prevent mis-mating white/natural receptacles to black headers and the reverse

These connectors are mechanically keyed and color-coded connectors for geometric differences between the black and white/natural connectors; Ideal when multiple cable assemblies are used in the same application.

APPLICATIONS BY INDUSTRY



Networking

Copiers
Printers
Bluetooth equipment



Industrial Automation

Industrial equipment
Automation equipment
Food and beverage dispensers



Telecommunications

5G/6G Base Stations
Data storage units
Power distribution units (PDUs)
Digital cross connect switches
Network routers
Servers
Uninterruptable power supplies (UPSs)



ENHANCEMENT

PowerWize Blind-Mate Interface (BMI) 8.00mm Vertical Headers

SERIES
221991



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Enabling speed upgrades in space-constrained telecommunications and data center applications tuned for 100-Ohm impedance, NearStack 100-Ohm Connectors and Cable Assemblies deliver a dense, low-profile, near-ASIC cabled solution supporting jumper-type and I/O BiPass connections up to 56 Gbps PAM-4 for telecommunications and data center applications.

FEATURES AND ADVANTAGES

Allows the option for mating vertical headers to panel-mount receptacle when required

Vertical headers are available in 8.00mm connectors.

Allows the panel-mount receptacle +/- 2.00mm of radial float to mitigate tolerance stack-up issues

Self-aligning panel-mount receptacle flanges accepts either force-fit standoffs paired with bolts (used when the assembler only has access to one side of the panel) or shoulder screws paired with nuts (often used when the assembler has access to both sides of the panel).

Helps ensure right-angle headers are properly oriented on printed circuit board or busbar

Mechanical keying with crush/locating pegs are on the headers.

Provides terminal backout assurance

Two (opposed) positive locks hold the TPA retainer securely to the blind-mate receptacle housing silo with six beams robustly holding the crimp contact inside the TPA retainer.

APPLICATIONS BY INDUSTRY



Telecommunications/Networking

Servers
Data storage units
Power distribution units (PDUs)
Uninterruptible power supplies
Digital cross-connect switches
Network routers



Data Centers

Power for Data Center
Servers
Data storage units
Power shelves
Power distribution units (PDUs)
Uninterruptible power supplies
Environmental control equipment



Charging Infrastructure

Electric vehicle (EV) charging stations



ENHANCEMENT

MLX Coaxial Cable

SERIES
100063



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Featuring an innovative design that improves flexibility and reduces signal loss over long distances, MLX Coaxial Cable uses foam dielectric to increase velocity of propagation and incorporates superior shielding to better withstand electromagnetic interference (EMI), providing enhanced signal reliability and clarity.

FEATURES AND ADVANTAGES

Improves system performance over long distances

Precision engineering enhances reliability and signal integrity for high-performance applications.

Enables flexible routing in space-constrained installations

A single-time bend radius of 2.5 times the cable diameter enables use in tight spaces and makes installation work easier.

Resists EMI and RF leakage

Enhanced shielding helps withstand high levels of EMI and RFI in high-density systems and environments subject to high radio traffic.

Delivers long-term reliability for outdoor applications

The rugged design is resistant to ultraviolet light, moisture and temperature extremes, making it ideal for either indoor or outdoor use in harsh environmental conditions.

APPLICATIONS BY INDUSTRY



Wireless Infrastructure

- Cellular network base stations
- Cellular antennas and repeaters
- Emergency service communication systems
- RFID reader-to-antenna connections
- Two-way radio systems
- Wi-Fi system access points



Telecommunications

- Distributed antenna systems
- Public safety networks in buildings and tunnels
- Radio transmitters, receivers and antennas
- Satellite dish connections



Military/Aerospace

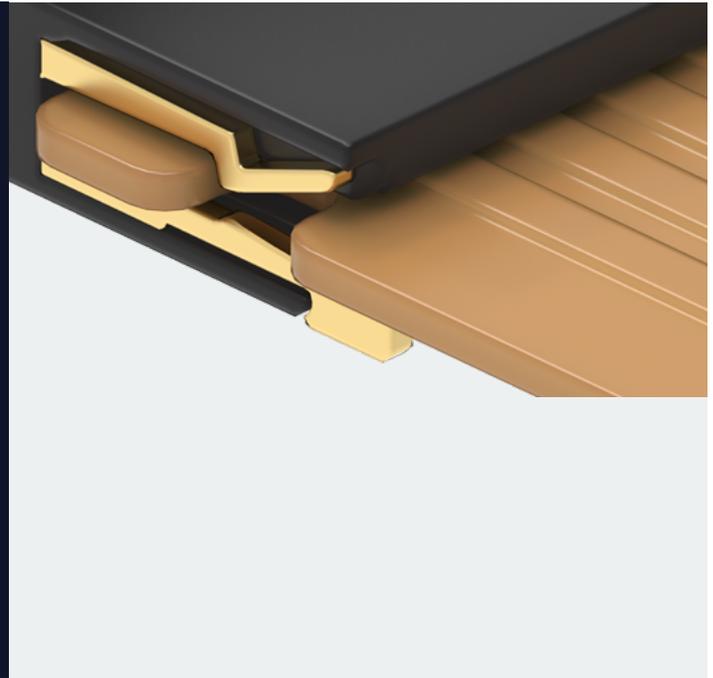
- Avionics
- Camera systems
- Ground-to-air communication systems
- Imaging system sensors and control units
- Navigation systems
- Shipboard systems
- Tactical radio communication systems



ENHANCEMENT

Easy-On FFC/FPC Connectors, FlatLock Series

SERIES
221378



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Space savings and design flexibility are essential considerations for connectors and cables in small devices. The Easy-On FFC/FPC Connectors, FlatLock Series (0.50mm-pitch) offer a low profile and compact design with innovative features that deliver an efficient and reliable performance, including dual contact connection, pre-locking capability and a high mating cycle rating.

FEATURES AND ADVANTAGES

Includes backflip actuator with dual contact connection and pre-lock feature

Located on the anti-slip side, the actuator with its wide depth can connect top and bottom surfaces to offer dual-contact capability. The pre-lock feature helps prevent FFC/FPC cable from accidentally slipping out during assembly.

Endures up to 15 cycles of mating and unmating while maintaining reliability

This is essential for complex assembly procedures that require multiple mating/ un-mating instances, ensuring that the connector performs consistently and efficiently throughout its life cycle.

Offers a low-profile height of 0.90mm and dual contact connection

This enables the connector to fit into extremely compact spaces, making it ideal for modern electronic devices and applications with stringent space requirements.

Supports 0.50mm pitch configuration

This series of connectors utilize the general/common 0.50mm pitch in-line pad, which is essential for connectors and cables in small devices.

APPLICATIONS BY INDUSTRY



Mobile Devices

- Laptops
- Smartphones and tablets
- IoT and smart-home devices
- Gaming consoles and controllers
- AR/VR devices
- Drones

Wearables

- Smartwatches
- Healthcare devices
- Earbuds



Appliances

- Vacuum cleaners
- Refrigerators
- Washing machines
- Dryers
- Ovens



ENHANCEMENT

Mini-Fit Max Surface-Mount (SMT) Connectors

SERIES

224491, 224494, 224900, 224903



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The Mini-Fit Max Wire-to-Board Connector delivers 20.5A of current in a compact form factor, and provides a simplified and diverse array of mid-range power solutions. Available in both single- and dual-row configurations, these connectors offer versatile design options and durable features, making them ideal for both power and signal applications.

FEATURES AND ADVANTAGES

Reduces the cost of materials and labor, and allows customers to meet the European standard for electrical requirements

The 94 V-0 Glow Wire combination resin makes the connector both V-0 and Glow Wire-compatible in a single part number per component.

Saves PCB space

These connectors offer a slim profile design for space savings.

Allows for improved strength and reliability

These connectors are available in termination interface style SMT.

Helps prevent mis-mating; different from the standard Mini-Fit connector

Keying and polarization options allow for easy identification and accurate mating.

APPLICATIONS BY INDUSTRY



Telecommunications/Networking

Switches
Servers
Power supplies and distribution equipment
Network towers



Industrial

Commercial equipment
Commercial lighting
Industrial HVAC systems



Home Appliance

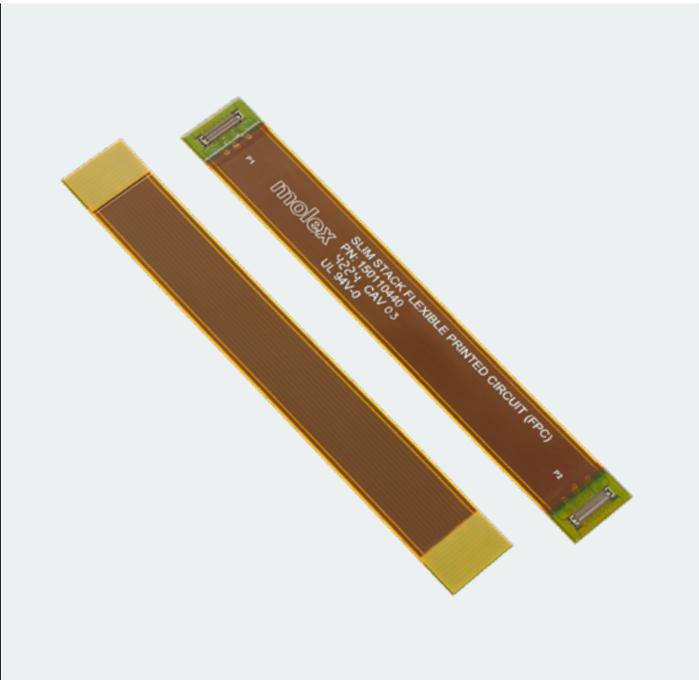
Heaters and air conditioners
Washers and dryers



ENHANCEMENT

Premo-Flex SlimStack FFC/FPC Jumpers

SERIES
15011



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Premo-Flex Flat Flexible Cable (FFC)/Flexible Printed Circuit (FPC) jumpers are designed to mate with SlimStack 0.35mm microminiature flex-to-board connectors. These off-the-shelf flexible circuits support data rates up to 30Gbps, provide superior signal integrity and enhance design flexibility for applications requiring compact, high-speed data transmission capability.

FEATURES AND ADVANTAGES

Enables flexible high-speed data and power connectivity

Dedicated power, ground and signal pins enable flexible operation with two different voltages in the same cable or a single voltage using both rails for higher current handling.

Provides high-speed data transmission

High-performance SlimStack Connectors and FFC jumpers deliver data rates up to 30Gbps, operating at 5 GHz, with an insertion loss of 10 dB per foot (30.5cm).

Minimizes space requirements

Miniaturized 0.35mm-pitch connectors and a low-profile mated height of 1.27mm (including cable) simplify design work for space-constrained applications.

Supports multiple data protocols

Controlled impedance of 50 Ohms (single-ended) or 95 Ohms (differential) with $\pm 10\%$ matching enables use with HDMI and USB protocols.

APPLICATIONS BY INDUSTRY



Servers and Storage
Servers



Automotive
Infotainment devices



Appliances
Washing Machines
Refrigerators



MedTech
Monitoring devices
Therapeutic devices
Surgical devices



Mobile Devices
Smartphones
Tablet computers
Wearables
Portable audio devices



ENHANCEMENT

USB Type-C Port-On Connectors

SERIES

221455, 204711, 217179



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USB Type-C Port-On Connectors include USB4, USB 3.2 and USB 2.0 standard products with various design options that support power delivery, high-data transmission rates and reliable connectivity. The new Spring Terminal Insertion and De-Insertion (TID) feature acts as a verification that the device has been tested and meets the USB4 specification, allowing users to trust its compatibility and functionality. Customers have the assurance that these products meet USB standards for reliability.

FEATURES AND ADVANTAGES

Provides protection against water ingress

With IPX5 and IPX8 ratings, USB connectors are durable in harsh environments.

Available with a TID number

These connectors have a USB certificate.

Enables fast charging and high-speed data transfer

These connectors support 5.0A/240W power and up to 10Gbps data rates.

Allows alignment for devices that need lower center line positions

The low-profile design helps facilitate better alignment in a confined space.

APPLICATIONS BY INDUSTRY



Mobile Devices

Smartphones
Wireless chargers
Power banks

Laptops
Video games
Graphic cards



Appliances

PCs
Television



Aviation

In-flight entertainment systems



MedTech

Glucometers
Electronic inhalers



Industrial and Commercial

Identity door-locking systems
Oscilloscopes
Projectors
Point-of-sale registers



Automotive

Vehicle infotainment
Navigation equipment



Wearables

Electronic watches
AR/VR devices



ENHANCEMENT

Micro-Fit+ OCP M-PIC 12V Connectors

SERIES

221591, 221626, 221751, 224179, 219197



[VIEW PRODUCT PAGE](#)

[VIEW PRODUCT RESOURCES](#)

As product miniaturization continues to rise, manufacturers require more power within a small footprint. Micro-Fit+ OCP M-PIC 12V Connectors meet this demand by supporting up to 864W to peripheral devices as defined within Open Compute Project (OCP) M-PIC specifications. This connector solution enables high-power delivery without increasing the connector size.

FEATURES AND ADVANTAGES

Eases assembly for decreasing operator fatigue

The mating force is reduced by 40% compared to standard Micro-Fit, due to its unique design.

Provides design flexibility

These connectors have a smaller PCB footprint for improved manufacturing designs.

Reduces labor costs and saves time and resources

Reflow options are available.

Helps prevent mis-mating

Using multiple color-keyed options and selective mating, these connectors help ensure operational safety and efficient assembly.

APPLICATIONS BY INDUSTRY



Automotive

Interior automotive devices
Non-sealed applications
Telemetrics



Consumer

3D printers
Copiers
Freezers
Pinball and slot machines
Refrigerators
Vending machines
Video poker and pachinko equipment
Washing machines



Networking and Telecommunications

Edge compute equipment (OCP)
Routers
Servers
Storages systems
Switches



Servers and Storage

DC-MHS servers (OCP M-PIC)



ENHANCEMENT

DuraClik Robust Dual-Row Connectors

SERIES

206583, 206584, 503116



[VIEW PRODUCT PAGE](#)

[VIEW PRODUCT RESOURCES](#)

Available in expanded 16- and 24-circuit options to meet the needs of more complex designs, DuraClik Robust Dual-Row Connectors provide an elevated level of performance. Offering a powerful 100 N retention force—significantly stronger than standard DuraClik versions—they ensure secure, stable connections even in harsh conditions filled with shock and vibration. These connectors are dependable choice for mission-critical applications where reliability cannot be compromised.

FEATURES AND ADVANTAGES

Ensures secure connector-to-PCB header retention

Robust secondary lock variants and wide solder tabs can withstand an upward pull force of 100N (10kgf) to meet automotive vibration requirements and help prevent accidental disconnections.

Offers greater design flexibility

Different header options of two to 24 circuits—in vertical, horizontal, single and dual-row configurations—are available, reducing design challenges.

Confirms correct and secure mating: durability + click (sound) = DuraClik

An audible click sound on mating and built-in inertia lock available in versions up to 15 circuits helps prevent mis-mating errors and ensure a reliable connection.

Provides secure mating and space savings; helps prevent latch breakage from wire tangling

An inner positive lock helps prevent unintended disconnection.

APPLICATIONS BY INDUSTRY



Automotive

- Battery management systems
- Camera modules
- DC-DC converters
- Door modules
- Electric vehicle controllers
- Gear shifts
- Headlamps and tail lamps
- Heads-up displays
- Infotainment systems



Commercial Vehicle

- Cranes
- Industrial machinery
- Tractors



Consumer

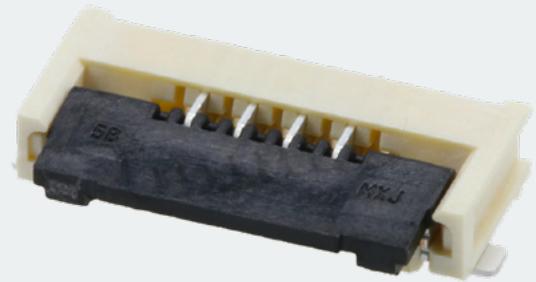
- E-bike battery management systems
- Energy storage systems
- Induction cooking heaters
- LED lighting
- Vending/gaming machines
- White goods



EXTENSION

Easy-On FFC/FPC FS19 - Adding Tin-Bismuth Series

SERIES
505278, 200529



[VIEW PRODUCT PAGE](#)

[VIEW PRODUCT RESOURCES](#)

Various applications require connectors to accommodate different types of cables and a wide variety of circuit sizes. Engineered to integrate seamlessly with a variety of cable types, the Easy-On FFC/FPC FS19 series with Tin-Bismuth plating offers an extensive range of circuit counts to meet the diverse needs of several applications. The FS19 series features a generously sized actuator that ensures effortless operation, making it the perfect choice for enhancing productivity and reducing strain on operators.

FEATURES AND ADVANTAGES

Facilitates Easy Operation

Easy-On FFC/FPC FS19 Tin-Bismuth Connectors have a large actuator, which provides ample space for the finger to open or close the actuator, allowing easier operation.

Enhances Design Flexibility

The connectors are designed to seamlessly mate with both eared and non-eared cables. Along with an extensive circuit range, these connectors effortlessly cater to a wide array of customer needs, ensuring maximum versatility and satisfaction.

APPLICATIONS BY INDUSTRY



Industrial Automation

Industrial controls
Robots



Consumer

Smartphones with multimedia/computing/connection functionality
Gaming devices



Appliances

LCD devices
Washing machines
Dryers Dishwashers
Refrigerators Microwaves
Ovens
Induction stoves



EXTENSION

Flexible Ground Straps - Adding 90° bend options

SERIES
207602



[VIEW PRODUCT PAGE](#)

[VIEW PRODUCT RESOURCES](#)

Molex has set a new standard in space-saving connections with the latest iterations of general market ground straps. Molex Off-the-Shelf Grounding Jumper solutions enable safe management of high-power distribution with 90° bends that allow customers to fit these grounding straps into space-constrained systems.

FEATURES AND ADVANTAGES

Helps ensure quality, safety and reliability

The Grounding Jumpers are UL-certified that enable safe management of highpower applications and customized versions offer variable lengths and terminations ensuring reliability.

Provides adaptability to varying environments and space constraints

Grounding Jumper solutions enable a 90-degree bend for a variety of orientations.

Offers increased cross-sectional contact area and pull-out strength

The fused terminations provide 93% solid termination throughout compression, providing rugged connectivity, reducing thermal resistance and increasing pull-out strength.

APPLICATIONS BY INDUSTRY



Networking

Servers
High-end computers



Industrial Automation

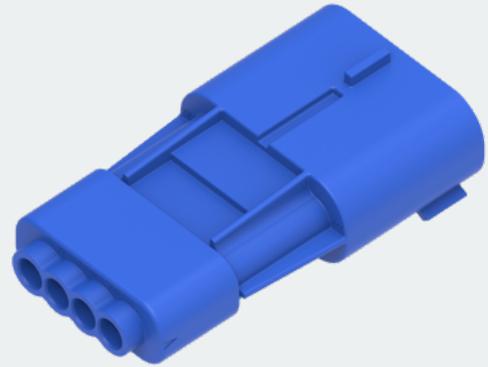
Mining utilities
Electrical enclosures
Electrical panel doors
Fences and gate jumpers
Generators and transformers
Power and utility boards
Other equipment used in static grounding
Factory automation equipment



EXTENSION

Squba 3.60mm-Pitch Sealed Wire-To-Wire Connector System - *Adding Additional Colors*

SERIES
207778, 207782



[VIEW PRODUCT PAGE](#)

[VIEW PRODUCT RESOURCES](#)

As the trend towards miniaturization continues to accelerate, the demand for compact connector solutions increases. Squba connectors offer significant space savings to meet this demand. Exposure to moisture poses a risk to connectors for reliable performance. Squba sealed connectors are designed to protect against ingress with an IP68-seal rating and carry 14.0A of current to deliver reliable power in a wide range of space-constrained applications.

FEATURES AND ADVANTAGES

Prevents wire from getting caught on latch and damaging it; minimizes latch size to prevent latch from adding to connector's package size

The positive latch has a protected, low profile.

Protects seals from damage during shipping and handling; aligns terminals to help prevent seal from being punctured during assembly

These connectors offer weather caps to provide optimal protection and terminal guidance for reliable connections and quality performance.

Reduces the cost of materials and labor and allows customers to the European standard for electrical requirements

This product uses V0 Glow-Wire combination resin.

Avoids seal punctures

The clean-body terminals have wraparound insulation crimp.

APPLICATIONS BY INDUSTRY



Consumer

Liquid dispensing equipment
HVAC equipment
Home appliances
Landscaping equipment



Commercial Vehicle

ATVs
Marine: under-dash wiring, lighting
Trucks
Buses
Recreational vehicles



Industrial Automation

Robotics
Industrial machines and motors
Food processing equipment/facilities
Industrial controllers



EXTENSION

Mega-Fit, Nano-Fit and Ultra-Fit CPA

SERIES

217140, 217185, 228006



MEGA-FIT • NANO-FIT • ULTRA-FIT

VIEW PRODUCT RESOURCES

Adding a connector position assurance (CPA) option to the Mega-Fit, Nano-Fit and Ultra-Fit product families to address mating retention force concerns related to the angle of insertion and/or extraction. Wires and housing must be on the same plane for insertion and extraction – if the cable is slightly bent, the latch strength is weakened causing mating difficulties. The CPA option provides an effective, low-cost solution to help prevent faulty mating, which can lead to poor connections causing safety hazards, power loss and equipment damage. With the CPA option, customers can avoid system downtime and ensure their electrical connections are secure for enhanced reliability.

FEATURES AND ADVANTAGES

Connector Position Assurance (CPA) prevents faulty mating

By addressing mating retention force concerns related to insertion/extraction angles. Ensures secure connections, reducing the risk of power loss, safety hazards, and equipment damage.

CPA design requires wires and housing

To remain on the same plane for proper insertion and extraction, even if cables are slightly bent. Enhances mating reliability, avoiding difficulties caused by weakened latch strength due to misalignment.

CPA is an effective, low-cost solution integrated into the Mega-Fit, Nano-Fit, and Ultra-Fit product families.

Minimizes system downtime while providing durable and reliable electrical connections for enhanced operational efficiency.

APPLICATIONS BY INDUSTRY



Appliances

- Freezers
- Refrigerators
- Washing machines
- Dryers
- Microwaves
- Ovens
- Dishwashers



Automotive

- Lighting and automation systems
- Interior dashboards
- Power converters
- Unsealed electronic control modules
- Interior lighting and navigation
- EV chargers
- Batteries
- Mopeds
- Infotainment systems
- Mirrors



Telecommunications

- Power supplies and distribution
- Switches
- Servers



Datacom

- Servers
- Switches
- Graphics processing units (GPUs)
- Auxiliary power devices
- Compute boards
- GPU trays



EXTENSION

Nano-Fit Connectors - Adding 20 AWG

SERIES

226354, 226362, 226471



[VIEW PRODUCT PAGE](#)

[VIEW PRODUCT RESOURCES](#)

The typical signal wire type used in HVAC and appliance applications is UL 1569/1007. Nano-Fit Connectors now offer a 20 AWG UL 1569/1007 option, providing a more economical wire choice for customers designing for high volume and low cost. These connectors also comply with the voltage ratings that HVAC and appliance manufacturers require for their designs.

FEATURES AND ADVANTAGES

Allows same-circuit, multiple-connector use with virtually no chance of cross mating and provides visual indication of the properly mated connector for faster assembly

There are multiple mechanical keying and color-coded options for operational safety and efficient assembly.

Ensures mated connector assemblies will not accidentally disengage

The terminal position assurance (TPA) feature reduces assembly errors and ensures terminals are fully seated and will not back out. These connectors also offer a CPA option for additional locking security.

Offers design flexibility and ensures proper fitting in the terminated wire housing

The 20 AWG with UL 1569/1007 complies with the voltage ratings that HVAC and APL manufacturers need to meet within their designs.

Enables operators to mate connectors in hard-to-reach areas without a visual

Nano-Fit Connectors have a BMI option.

APPLICATIONS BY INDUSTRY



Appliances

- Dryers
- Freezers
- Microwave ovens
- Ovens
- Refrigerators
- Washing machines
- Water heaters/boilers
- Vacuum cleaners



Automotive

- Interior lighting and navigation
- EV chargers
- Batteries
- Mopeds
- Infotainment systems
- Mirrors



Datacom

- Servers
- Switches
- Graphics processing units
- Auxiliary power devices
- Compute boards
- GPU tray



HVAC

- Interior lighting and navigation
- EV chargers



EXTENSION

Squba Sealed Cavity Plugs

SERIES

224247, 224248, 224249



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[VIEW PRODUCT RESOURCES](#)

Squba Connectors enable designers to instantly reconfigure the number of active circuits they need, rather than waiting for new housing development or purchasing new parts. With built-in sealed cavity plugs, customers can safeguard unused cavities against moisture ingress, eliminating the risk of electrical failures. This level of design flexibility helps minimize delays and avoid additional expenses, making Squba Connectors an ideal choice for performance and cost savings.

FEATURES AND ADVANTAGES

Streamlines the bill of materials

These connectors convert even-circuit parts to odd-circuit parts allowing customers to avoid purchasing new components; ideal for cost savings.

Meets European standard for electrical requirements

This product uses a V-0/Glow Wire combination resin for compliance with international safety standards, facilitating greater market access.

Avoids seal punctures

The clean body terminals feature wraparound insulation crimps to help prevent punctures that can lead to electrical failures.

Helps ensure reliable HVAC performance; suitable for wet conditions

These connectors meet the UL 1230 standard for resistance to moisture effects, preventing electrical hazards and maintaining performance in wet environments.

APPLICATIONS BY INDUSTRY



Consumer

- HVAC equipment
- Home Appliances
- Landscaping equipment
- Liquid dispensing equipment
- Vending machines
- Washing machines



Commercial Vehicle

- ATVs
- Buses
- Forklifts
- Marine: under-das wiring, lighting
- Recreational vehicles
- Trucks



Industrial Automation

- Food processing facilities
- Food processing equipment
- Industrial controllers
- Industrial machines and motors machines
- Robotics



Connected Home

- Home automation systems
- Home health and wellness systems
- Security and surveillance equipment
- Smart appliances



EXTENSION

Squba 26 AWG Terminals

SERIES
204301, 204226



[VIEW PRODUCT PAGE](#)

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Squba 1.80mm-pitch connectors now offer 26 AWG terminals designed to securely grip smaller wire gauges ensuring reliable connections and helping eliminate intermittent electrical faults. These new terminals promote optimal current flow to minimize contact resistance that leads to voltage drops and damage connected devices. Ultimately, Squba 26 AWG terminals help prevent strain on wires stemming from mismatched terminals to keep manufacturing costs low.

FEATURES AND ADVANTAGES

Streamlines the bill of materials

These connectors convert even-circuit parts to odd-circuit parts allowing customers to avoid purchasing new components; ideal for cost savings.

Meets European standard for electrical requirements

This product uses V-0 Glow-Wire combination resin for compliance with international safety standards, facilitating greater market access.

Avoids seal punctures

The clean-body terminals have wraparound insulation crimps to help prevent punctures that lead to electrical failures.

Provides connector stability and security; offers easy assembly for operators

The latch design helps lock the connector into place to avoid disconnection.

APPLICATIONS BY INDUSTRY



Consumer

HVAC equipment
Home Appliances
Landscaping equipment
Liquid dispensing equipment
Vending machines
Washing machines



Commercial Vehicle

ATVs
Buses
Forklifts
Marine: under-the-dash wiring, lighting
Recreational vehicles
Trucks



Industrial Automation

Food processing facilities
Food processing equipment
Industrial controllers
Industrial machines and motors machines
Robotics



Connected Home

Home automation systems
Home health and wellness systems
Security and surveillance equipment
Smart appliances



EXTENSION

Compactus 80-Circuit Panel-Mount Headers

SERIES

300960, 301955, 560154



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Compactus 80-Circuit Panel-Mount Headers provide a panel-mount connection system that saves space, ensures reliability, and simplifies assembly and maintenance operations in electric vehicle (EV) applications such as powertrain subsystems, control units and N-in-1 electric drive (E-drive) units. The Compactus 80-Circuit Panel-Mount Header is the first 80-circuit product on the market that serves the needs of EV and E-drive manufacturers by providing a space-efficient, sealed, USCAR-standard wire-to-board interconnect solution.

FEATURES AND ADVANTAGES

Improves real estate optimization

Short and long wire dress cover options permit close clearances and avoid wasting space in compact applications.

Aids weight reduction

The connector is designed for thin wires which reduce weight and help lower emissions.

Provides designed-in flexibility for mounting in the dense engine space

Connectors are available with left or right flexible cable outlets, reducing design limitations.

Achieves high performance within the harsh engine environment

The connector offers a heat-resistant, vibration-resistant, sealed design that helps prevent inadvertent disconnections and failures due to moisture or dust ingress.

APPLICATIONS BY INDUSTRY



Commercial Vehicle

Construction/agriculture machinery
Door control unit modules
Motorcycles
VCU modules



Automotive

Automatic doors
Battery packs
Body electronics
Chassis control unit modules
DC-to-DC converters
Electric motors
Electric vehicle (EV) reducers
Electronic control units
Electronically controlled parking brakes
Engine control unit modules
Hybrid electric vehicle and EV inverters
Illumination control systems
Junction/fuse boxes
Motor control units
N-in-1 E-drive units
Onboard chargers
Power distribution units
Suspension controllers
Transmission controllers
Vehicle control unit (VCU) modules
Zonal control units



EXTENSION

Micro-Lock Plus 1.50mm Connectors

SERIES

225051, 225052, 225053, 225054



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[VIEW PRODUCT RESOURCES](#)

Ideal for compact applications, the Micro-Lock Plus Connector System addresses the challenges of designing components into smaller spaces to reduce overall package size. The 1.50mm-pitch connector series expands the Micro-Lock Plus family, offering a low-profile, space-saving design ideal for tight spaces. Its exceptional reliability, compact form and user-friendly features make it perfect for demanding applications.

FEATURES AND ADVANTAGES

Provides secure mating retention

The wide latch design increases the surface area that holds the connector together. The audible click that occurs when the connector is fully mated serves as an important confirmation for users.

Provides improved retention force

A positive lock provides a strong retention force so that the connector is less likely to become detached due to pulling or tension on the cables.

Strengthens lock for more reliable connection

The positive-lock for the single-row version provides additional points of contact and engagement between the connector and its mating counterpart. This added stability helps to maintain the connection even in environments where the connector may be subjected to mechanical stresses.

Meets industry standards for harsh environments

The ability of the Micro-Lock Plus 1.50mm-Pitch Connector to withstand operating temperatures of up to 105°C ensures that the connector can function effectively without degradation or failure, meeting the thermal standards.

APPLICATIONS BY INDUSTRY

Automotive

Car infotainment
Mirrors
Steering wheels
Switches

Appliances

White goods
Gaming machines
Drones
Laser Printers
Vacuum cleaners

HVAC

Air conditioners



Industrial Automation

Restaurant serving robots
Automation equipment



EXTENSION

Sentrality 3.40mm Right-Angle Pin and Socket Interconnects

SERIES
205000, 204314



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Sentrality Right-Angle Pin and Socket Interconnects enable co-planar, offset-planar and reverse-planar mating configurations, while providing a +/- 1.00mm self-aligning feature on the socket assemblies to mitigate tolerance stack-up issues. With Sentrality pin and socket assemblies, manufacturers can have the design flexibility they need and achieve high electrical performance in their products.

FEATURES AND ADVANTAGES

Offers low contact resistance

Multiple contact beams minimize heat generation at the contact interface, resulting in optimized electrical performance.

Enables for tighter board-to-board stack heights with shorter socket assemblies than most market equivalents using hyperbolic sockets

This interconnect system has a compact conical socket design.

Allows the socket to freely move radially +/- 1.00mm within the socket assembly during mating to help ensure no contact beam deformation

Its self-aligning sockets float between wave springs.

Offers design flexibility for attaching pins to various substrates

The screw-mount pins attach to both printed circuit boards (PCBs) and busbars; the surface-mount pins attach to printed circuit boards; the knurled press-fit pins attach to busbars.

APPLICATIONS BY INDUSTRY



Telecommunication/Networking

Servers
Data storage units
Power distribution units (PDUs)
Uninterruptible power supplies
Digital cross-connect switches
Network routers
Energy storage system



Data Centers

Enterprise switches
Servers
Data storage units
Power shelves
Power distribution units (PDUs)
Uninterruptible power supplies
Environmental control equipment



Industrial Automation

Battery charging stations
DC-to-AC inverters
AC-to-DC rectifiers
Robotics



EXTENSION

Sentrality 3.40mm - *Adding Additional lengths*

SERIES

227004, 227005, 227006, 227007



[VIEW PRODUCT PAGE](#)

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Introducing additional pin lengths of 16, 26 and 36mm for 3.40mm range. Sentrality Right-Angle Pin and Socket Interconnects support various planar configurations and feature a +/-1.00mm self-aligning socket to address tolerance stack-up, offering design flexibility and high electrical performance.

FEATURES AND ADVANTAGES

Offers low contact resistance

Multiple contact beams minimize heat generation at the contact interface, resulting in optimized electrical performance.

Enables for tighter board-to-board stack heights with shorter socket assemblies than most market equivalents using hyperbolic sockets

This interconnect system has a compact conical socket design.

Allows the socket to freely move radially +/- 1.00mm within the socket assembly during mating to help ensure no contact beam deformation

Its self-aligning sockets float between wave springs.

Offers design flexibility for attaching pins to various substrates

The screw-mount pins attach to both printed circuit boards (PCBs) and busbars; the surface-mount pins attach to printed circuit boards; the knurled press-fit pins attach to busbars.

APPLICATIONS BY INDUSTRY



Telecommunication/Networking

Servers
Data storage units
Power distribution units (PDUs)
Uninterruptible power supplies
Digital cross-connect switches
Network routers
Energy storage system



Data Centers

Enterprise switches
Servers
Data storage units
Power shelves
Power distribution units (PDUs)
Uninterruptible power supplies
Environmental control equipment



Industrial Automation

Battery charging stations
DC-to-AC inverters
AC-to-DC rectifiers
Robotics



EXTENSION

Sentrality 8.00mm - *Additional Lengths*

SERIES
203263



[VIEW PRODUCT PAGE](#)

[VIEW PRODUCT RESOURCES](#)

Sentrality Pin and Socket Interconnects are available in four different pin sizes (3.40, 6.00, 8.00 and 11.00mm diameters) and enable co-planar, offset-planar and reverse-planar mating configurations. They also provide a +/- 1.00mm self-aligning feature on the socket assemblies to mitigate tolerance stack-up issues. With Sentrality pin and socket assemblies, manufacturers can have the design flexibility they need and achieve high electrical performance in their products. Additional pin lengths of 16, 26 and 36mm are now available for the 8.00mm diameter range.

FEATURES AND ADVANTAGES

Offers low contact resistance

Multiple contact beams minimize heat generation at the contact interface, resulting in optimized electrical performance.

Enables for tighter board-to-board stack heights with shorter socket assemblies than most market equivalents using hyperbolic sockets

This interconnect system has a compact conical socket design.

Allows the socket to freely move radially +/- 1.00mm within the socket assembly during mating to help ensure no contact beam deformation

Its self-aligning sockets float between wave springs.

Offers design flexibility for attaching pins to various substrates

The screw-mount pins attach to both printed circuit boards (PCBs) and busbars; the surface-mount pins attach to PCBs; the knurled press-fit pins attach to busbars.

APPLICATIONS BY INDUSTRY



Telecommunication/Networking

Servers
Data storage units
Power distribution units (PDUs)
Uninterruptible power supplies
Digital cross-connect switches
Network routers
Energy storage system



Data Centers

Enterprise switches
Servers
Data storage units
Power shelves
Power distribution units (PDUs)
Uninterruptible power supplies
Environmental control equipment



Industrial Automation

Battery charging stations
DC-to-AC inverters
AC-to-DC rectifiers
Robotics



EXTENSION

Sentrality 11.00mm Pin and Socket Interconnects - *Additional Lengths*

SERIES

213900, 213901, 213902



[VIEW PRODUCT PAGE](#)

[VIEW PRODUCT RESOURCES](#)

Sentrality Pin and Socket Interconnects come in four pin diameters (3.40, 6.00, 8.00, and 11.00mm) and support co-planar, offset-planar and reverse-planar mating configurations. The socket assemblies feature a $\pm 1.00\text{mm}$ self-aligning mechanism to reduce tolerance stack-up issues, offering manufacturers enhanced design flexibility and high electrical performance. New pin lengths of 16, 26 and 36mm are now available for the 11.00mm diameter range.

FEATURES AND ADVANTAGES

Offers low contact resistance

Multiple contact beams minimize heat generation at the contact interface, resulting in optimized electrical performance.

Enables for tighter board-to-board stack heights with shorter socket assemblies than most market equivalents using hyperbolic sockets

This interconnect system has a compact conical socket design.

Allows the socket to freely move radially $\pm 1.00\text{mm}$ within the socket assembly during mating to help ensure no contact beam deformation

Its self-aligning sockets float between wave springs.

Mitigates tolerance stack-up issues

Pin and socket assemblies are oriented to attach to PCBs with a right-angle orientation.

APPLICATIONS BY INDUSTRY



Telecommunication/Networking

Servers
Data storage units
Power distribution units (PDUs)
Uninterruptible power supplies
Digital cross-connect switches
Network routers
Energy storage system



Data Centers

Enterprise switches
Servers
Data storage units
Power shelves
Power distribution units (PDUs)
Uninterruptible power supplies
Environmental control equipment



Industrial Automation

Battery charging stations
DC-to-AC inverters
AC-to-DC rectifiers
Robotics



EXTENSION

Sentrality 11.00mm Right-Angle Socket Assembly

SERIES
226781



[VIEW PRODUCT PAGE](#)

[VIEW PRODUCT RESOURCES](#)

Sentrality Right-Angle Pin and Socket Interconnects enable co-planar, offset-planar and reverse-planar mating configurations, while providing a +/- 1.00mm self-aligning feature on the socket assemblies to mitigate tolerance stack-up issues. With Sentrality pin and socket assemblies, manufacturers can have the design flexibility they need and achieve high electrical performance in their products.

FEATURES AND ADVANTAGES

Offers low contact resistance

Multiple contact beams minimize heat generation at the contact interface, resulting in optimized electrical performance.

Enables for tighter board-to-board stack heights with shorter socket assemblies than most market equivalents using hyperbolic sockets

This interconnect system has a compact conical socket design.

Allows the socket to freely move radially +/- 1.00mm within the socket assembly during mating to help ensure no contact beam deformation

Its self-aligning sockets float between wave springs.

Mitigates tolerance stack-up issues

Pin and socket assemblies are oriented to attach to PCBs with a right-angle orientation.

APPLICATIONS BY INDUSTRY



Telecommunication/Networking

Servers
Data storage units
Power distribution units (PDUs)
Uninterruptible power supplies
Digital cross-connect switches
Network routers
Energy storage system



Data Centers

Enterprise switches
Servers
Data storage units
Power shelves
Power distribution units (PDUs)
Uninterruptible power supplies
Environmental control equipment



Industrial Automation

Battery charging stations
DC-to-AC inverters
AC-to-DC rectifiers
Robotics



EXTENSION

Sentrality Pin and Socket Interconnects 6.00mm - *Additional Lengths*

SERIES
203263



[VIEW PRODUCT PAGE](#)

[VIEW PRODUCT RESOURCES](#)

Sentrality Pin and Socket Interconnects are available in four different pin sizes (3.40, 6.00, 8.00 and 11.00mm diameters) and enable co-planar, offset-planar and reverse-planar mating configurations, while providing a +/- 1.00mm self-aligning feature on the socket assemblies to mitigate tolerance stack-up issues. With Sentrality pin and socket assemblies, manufacturers can have the design flexibility they need and achieve high electrical performance in their products. Introducing additional pin lengths of 16, 26 and 36mm for 6.00mm diameter range.

FEATURES AND ADVANTAGES

Offers low contact resistance

Multiple contact beams minimize heat generation at the contact interface, resulting in optimized electrical performance.

Enables for tighter board-to-board stack heights with shorter socket assemblies than most market equivalents using hyperbolic sockets

This interconnect system has a compact conical socket design.

Allows the socket to freely move radially +/- 1.00mm within the socket assembly during mating to help ensure no contact beam deformation

Its self-aligning sockets float between wave springs.

Mitigates tolerance stack-up issues

Pin and socket assemblies are oriented to attach to PCBs with a right-angle orientation.

APPLICATIONS BY INDUSTRY



Telecommunication/Networking

Servers
Data storage units
Power distribution units (PDUs)
Uninterruptible power supplies
Digital cross-connect switches
Network routers
Energy storage system



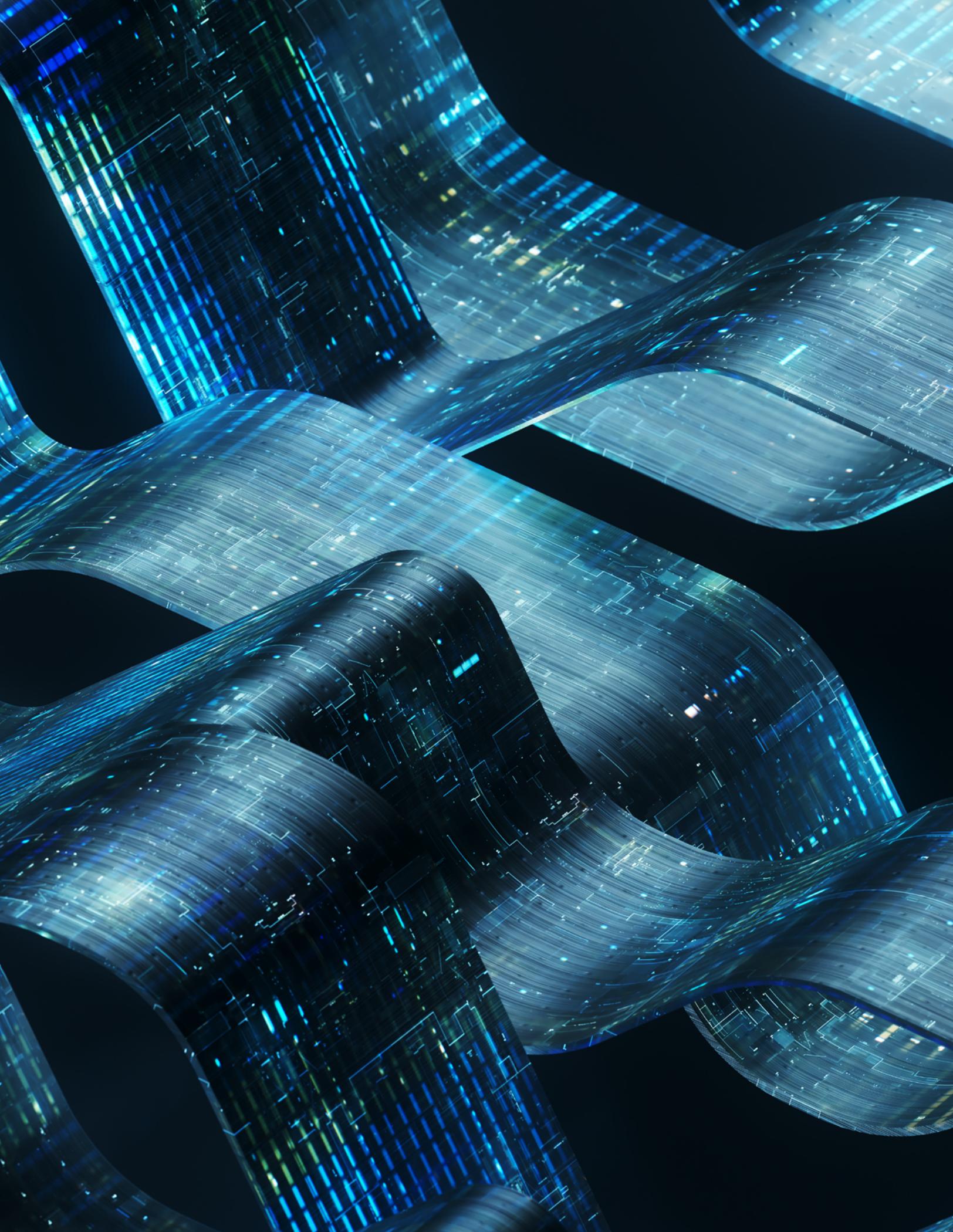
Data Centers

Enterprise switches
Servers
Data storage units
Power shelves
Power distribution units (PDUs)
Uninterruptible power supplies
Environmental control equipment



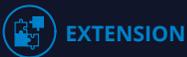
Industrial Automation

Battery charging stations
DC-to-AC inverters
AC-to-DC rectifiers
Robotics



Off-The-Shelf (OTS) Cable Assemblies And Pre-Crimped Leads

Off-the-Shelf Cable Assemblies and Pre-Crimped Leads offer simple and cost-effective solutions for pre-production, prototyping and mass production requirements. These products are available for the most popular Molex connector families.

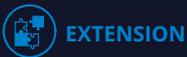


Off-the-Shelf (OTS) Micro-Fit + Cable Assemblies

SERIES
228363, 228364, 228410, 228411



Micro-Fit+ 3.00mm-Pitch Cable Assemblies were designed with the largest wire gauge that the connectors can accommodate to meet any prototype requirement on the market, delivering a current rating of 6.5A to 8.5A across a range of circuits.

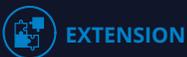


Off-the-Shelf (OTS) DuraClík Cable Assemblies

SERIES
228367, 228368, 228425, 228426



DuraClík 2.00mm-Pitch Cable Assemblies were designed with the largest wire gauge that the connectors can accommodate to meet any prototype requirement on the market, they can carry up to 2.0A of current per circuit in a dual row configuration.



Off-the-Shelf (OTS) Micro-Fit+ PCIe CEM5 Pre-Crimped Leads

SERIES
228369, 228370, 228431, 228432



The Micro-Fit+ PCIe 12V-2x6 Auxiliary Connector System is a CEM (card electromechanical) hybrid solution supporting next-gen PCIe 5.0 and 6.0 applications. These pre-crimped leads conform to CEM specifications, integrating 12x9.5A-capable power pins and 4x sideband signal pins in a compact, space-saving design.

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Off-the-Shelf (OTS)
Micro-Fit+ PCIe CEM5
Cable Assemblies

SERIES
228371, 228372



The Micro-Fit+ PCIe 12V-2x6 Auxiliary Connector System is a CEM (card electromechanical) hybrid solution supporting next-gen PCIe 5.0 and 6.0 applications. These cable assemblies conform to CEM specifications, integrating 12x9.5A-capable power pins and 4x sideband signal pins in a compact, space-saving design.

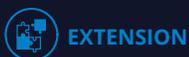


Off-the-Shelf (OTS)
Mini-Fit Sigma Low
Insertion Force Pre-
Crimped Leads

SERIES
229556, 229557, 229558, 229559,
229560, 229561, 229562, 229563,
229564, 229565, 229566, 229567



Mini-Fit Sigma Connectors offer a slim profile and mate with existing Mini-Fit headers, allowing for space savings without changing the bill of materials. These receptacles also include TPA for secure and stable connections to avoid terminal backout issues. Additionally, Glow Wire-compatible options are available to meet European electrical standards. Mini-Fit Sigma Connectors address many challenges PCB designers encounter and provide robust, reliability-enhancing features.



Off-the-Shelf (OTS)
HyperQube Cable
Assemblies

SERIES
228962, 228963, 228964, 228965,
228966, 228967, 228968, 228969,
228970, 228971, 228972, 228973,
228974, 228975, 228976, 228977,
228978, 228979



Off-the-Shelf (OTS) HyperQube Cable Assemblies reduce both mechanical and electrical engineering requirements as well as the purchasing time needed to qualify a cable. Additionally, they are crimped in an automated press, eliminating the risk of poor crimping during prototyping. These cables offer reliable performance throughout all stages, from prototyping to mass production.

Off-The-Shelf (OTS) Cable Assemblies And Pre-Crimped Leads

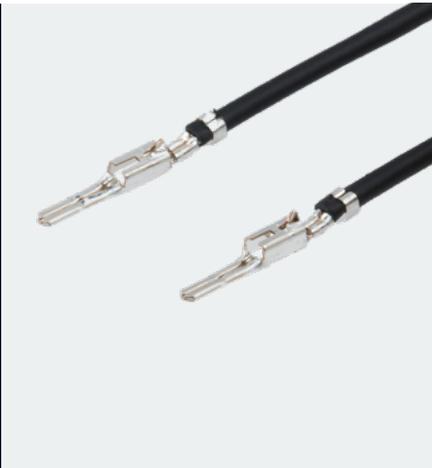
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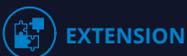


Off-the-Shelf (OTS) CP-3.3 Pre-Crimped Leads

SERIES
229112, 229113, 229114, 229115,
229116, 229117, 229118, 229119



CP-3.3 Wire-to-Wire, Power Connectors and Terminal Retainers have combined safety features to ensure prevention of electrical shortage from condensation of moisture in high-current applications.

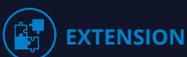


Off-the-Shelf (OTS) Mini-Fit BMI Cable Assemblies

SERIES
229584, 229585, 229586, 229587,
229588, 229589, 229590, 229591,
229592, 229593, 229594, 229595,
229596, 229597, 229598, 229599



The Mini-Fit BMI 4.20mm-pitch cable assemblies support a maximum current of up to 13.0A per circuit, providing high-power delivery for demanding applications. These assemblies ensure a secure and reliable connection between the header and receptacle, offering design flexibility while helping to reduce overall lead times.



Off-the-Shelf (OTS) Pico-EZmate 1.80mm High-Current (HC) Cable Assemblies

SERIES
229086, 229087



Pico-EZmate 1.80mm HC cable assemblies offer the highest electric current of 5.0A among the Pico-EZmate family, delivering robust power in a compact form factor. This enables designers to create space-saving solutions, especially for small consumer devices where mounting space is limited.

molex



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INNOVATION

Product Category	Product Name	Product Highlights	Target Market
RF Cable Assemblies	Cardinal Wave High-Frequency Cable Assemblies	With the increasing demand for higher-frequency and higher-speed connectivity, Cardinal Wave High-Frequency Cable Assemblies deliver high-performance solutions that enable seamless integration with evolving technologies. These cable assemblies address the challenges of rapidly changing environments while reducing maintenance costs and enhancing system efficiency.	Aerospace Defense Networking Telecommunications Wireless infrastructure
Board-to-Board Connectors	Float Stack Automotive Board-to-Board Connectors	Float Stack Automotive Board-to-Board Connectors provide design flexibility while meeting high-data rate requirements and high-current demands. Their layout enables automated assembly and complies with USCAR2 V2 standards.	Automotive Industrial Automation
Board-to-Board Connectors	VersaPower Board-to-Board Connectors	VersaPower Board-to-Board Connectors are designed to integrate larger-circuit-size connectors with high-power lines, reduce battery power loss through low-level contact resistance of 5m Ohms and facilitate easy mating with large alignment features.	Appliances Mobile Devices Wearables
Cable-to-Board Connectors	Flexi-Latch+ Connectors	Flexi-Latch+ Connectors streamline manufacturing processes and maximize PCB real estate. These solutions help ensure accurate mating, deliver excellent reliability and comply with USCAR2 V2/LV214 S1 and PG19 standards.	Automotive Industrial Automation
Cable-to-Board Connectors	Easy-On FFC/FPC FlexiSnap-15 Connectors	Easy-On FFC/FPC FlexiSnap-15 Connectors simplify assembly through a one-touch locking mechanism and dual locking nails, reducing the risk of failure and saving time. These connectors are compatible with standard 0.50mm pitch FFC/FPC cables, eliminating the need for custom solutions. Their robust design ensures secure mating, reliable electrical contact and strong mechanical performance, providing increased dependability with a compact footprint.	Appliances Mobile Devices Wearables
Circular Connectors	MiniCirc Series Connectors and Harnesses	MiniCirc Series Connectors and Harnesses deliver stable, high-performance connections with 60V/3.0A capacity, IP68 protection and robust vibration resistance. The compact 6.00mm plug supports up to six circuits and features color-coded, poka-yoke alignment to ensure easy, reliable assembly. This design allows OEMs to route cables through tight spaces and reduces overall design size.	Automotive Agricultural Machinery Charging Infrastructure Home Energy Storage HVAC
Automotive Connectivity	eHV60 High-Voltage Automotive Connectors	eHV60 High-Voltage Automotive Connectors feature a compact, rugged, sealed and fully shielded power connector that complies with global standards for auxiliary high-voltage, medium-current electrified architectures in automotive and industrial applications.	Automotive Industrial Automation

This is not a definitive list of applications for these products. It represents some of the more common uses.

Q1 2026 NPI Pipeline



ENHANCEMENT

Product Category	Product Name	Product Highlights	Target Market
RF Connectors	High Frequency RF Right-Angle Adapters	Optimized for high-performance applications requiring exceptional signal integrity, High-Frequency RF Right-Angle Precision Adapters offer low-voltage standing wave ratio (VSWR), robust construction and multiple connector options. They deliver reliable signal integrity and help simplify cable routing, reducing downtime and maintenance costs.	Aerospace Defense Networking Telecommunications Wireless Infrastructure
High-Power Solutions	EXTreme Ten60 Mezzanine Connectors	EXTreme Ten60 Mezzanine Connectors enable designers to deliver power and signals between parallel boards in one connector at the same stack height, resulting in a significantly smaller footprint. The addition of these hybrid mezzanine connectors enhances design flexibility and increases the modularity provided by EXTreme Power products.	Appliances Automotive Networking Power for Data Center Telecommunications
Automotive Connectivity	ConnTAK50 Connectors	Providing compact connectivity solutions for next-generation automotive modules, ConnTAK50 Connectors offer significant space savings and superior reliability. With an industry-first no-void connector position assurance (CPA) design, these connectors reduce size and weight by eliminating unused receptacle voids.	Automotive Industrial Automation Telecommunications
Board-to-Board Connectors	Quad-Row Connectors	More circuit sizes are being added to Quad-Row Connectors, expanding the count from 12 to 80. These connectors enable manufacturers and designers who require compactness, easy mating, secure contact and superior reliability in challenging environments to deliver robust power within a highly compact package.	Mobile Devices Wearables
Backplane Connectors	Impulse 112G Backplane Connector System	The Impulse 112G Backplane Connector System provides a high-speed, scalable and modular solution for cable, conventional and orthogonal board-to-board connectivity at speeds up to 112G. The high-density design improves airflow, enhances signal integrity and is uniquely suited to support cable backplane and cable midplane solutions for next-generation data center architectures.	Networking Servers and Storage
Automotive Connectivity	Mini50 Sealed Panel-Mount Connectors	Versatile and efficient, USCAR2-8-validated and IP67/IP69K-rated Mini50 Sealed Panel-Mount Connectors offer 33 circuits and multiple header options to deliver up to 40% space savings compared with 0.64mm connectors. These connectors provide reliable, space-efficient connectivity for critical applications in battery-electric vehicles and other harsh environments subject to dust or water ingress.	Automotive
Wire-to-Wire Connectors	Squba 1.80mm Colors (with CPA)	The Squba Sealed 1.80mm-pitch sealed wire-to-wire connector system now offers color mechanically keyed housings and receptacle housings with built-in CPAs, providing wider design flexibility for a range of applications. Color mechanically keyed housings help operators avoid mis-mating connectors in applications with multiple connections. Built-in CPA housings eliminate accidental disconnection in rugged environments, reducing electrical failures and ensuring reliable connections.	Appliances Automotive HVAC

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EXTENSION

Product Category	Product Name	Product Highlights	Target Market
RF Connectors	Solderless High-Frequency Precision PCB Connectors	New Solderless High-Frequency Precision PCB Connectors include 1.00mm, 2.92mm and vertical-launch connector options designed for precision RF applications such as test and measurement, aerospace and telecommunications systems.	Aerospace Defense Networking Telecommunications Wireless Infrastructure
Wire-to-Board Connectors	Micro-Lock Plus 1.50mm Connectors	This extension adds a 1.50mm series to the Micro-Lock Plus family, introducing a more compact size that provides 46.7% space savings compared to CLIK-Mate. The new product helps customers design components for smaller spaces, reducing overall package size.	Appliances Automotive HVAC Industrial Automation
Wire-to-Board Connectors	Zero-Hachi Dual Row Connectors	As devices shrink and speeds increase, engineers need compact connectors to keep up with these demands. Zero-Hachi 0.80mm pitch vertical-entry, dual-row connectors deliver higher circuit density and high-speed performance in the same tight footprint giving designers the reliability, flexibility and size required for next-generation products.	Mobile Devices Wearables Wireless Infrastructure
Wire-to-Board Connectors	Micro-One 2.00mm Connectors with Gold Plating	Micro-One 2.00mm-pitch connectors ensure secure, reliable connections with an Independent Secondary Lock and Terminal Position Assurance for proper retention. They support potting for protection against dust, moisture and corrosion while meeting strict flammability requirements with full Glow Wire compliance. These connectors are built for confidence in harsh environments.	Appliances Automotive HVAC Industrial Automation Power for Data Center
Premo-Flex Flat Flexible Cables	Premo-Flex 15036-Series Ultra Flexible, Superior Retention FFC/FPC Jumpers	Premo-Flex 15036-Series Ultra Flexible, Superior Retention FFC/FPC Jumpers are ideal for compact applications subject to repeated flex cycles. Designed to integrate with FlexiSnap-15 Connectors, these jumpers feature locking nails for efficient assembly and superior retention while supporting up to 5 million flex cycles.	Appliances Automotive MedTech Mobile Devices Telecommunications
Off-the-Shelf Cable Assemblies and Pre-Crimped Leads	Pico-EZmate 1.80mm High-Current (HC) Cable Assemblies	Pico-EZmate 1.80mm High-Current Cable Assemblies offer the highest electric current of 5.0A among the Pico-EZmate family, delivering robust power in a compact form factor. This enables designers to create space-saving solutions, especially for small consumer devices with limited mounting space.	Appliances Automotive MedTech Mobile Devices
Off-the-Shelf Cable Assemblies and Pre-Crimped Leads	Zero-Hachi Pre-Crimped Leads-Adding Gold (Au) Plating	The miniaturized Zero-Hachi 0.80mm Pitch Wire-to-Board Connectors fine pitch, low-profile height and extensive circuit size range address the challenges of shrinking electronic devices. The connector's dual-point contacts enhance electrical reliability during operation, while the easy-to-grip housing supports more efficient and error-free mating operations. They are now available with a gold (Au) plating option.	Appliances Industrial Automation Mobile Devices

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EXTENSION

Product Category	Product Name	Product Highlights	Target Market
Off-the-Shelf Cable Assemblies and Pre-Crimped Leads	High-Speed FAKRA-Mini (HFM) Cable Assemblies	High-Speed FAKRA-Mini (HFM) Cable Assemblies deliver up to 28Gbps at frequencies up to 20 GHz, providing compact, lightweight and rugged connectivity for advanced automotive systems such as cameras and telematics to optimize high-speed performance in space-constrained environments.	Automotive
Off-the-Shelf Cable Assemblies and Pre-Crimped Leads	Micro-Lock Plus 2.00-Pitch Connector System	The Micro-Lock Plus 2.00-Pitch Connector System offers a compact design with high-temperature reliability, excellent space savings and robust electrical and mechanical performance. These connectors are engineered to meet stringent industry standards, even in harsh environments.	Appliances Automotive Power for Data Center
Off-the-Shelf Cable Assemblies and Pre-Crimped Leads	Pico-Lock 3.00mm Wire-to-Board Connector System	Pico-Lock 3.00mm Wire-to-Board Connectors deliver ultra-low-profile, high-current and secure connections. The Pico-Lock system ensures reliable locking under shock and vibration and is available in 1.00–3.00mm pitches to meet modern compact device demands.	Automotive Appliances Industrial Automation

This is not a definitive list of applications for these products. It represents some of the more common uses.

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