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We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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# **Complete Solutions for the Electronics Industry**

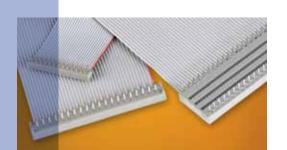
3M Interconnect Solutions offers a comprehensive range of Interconnect Solutions for the electronics industry, with a product portfolio that includes connectors, cables, cable assemblies and assembly tooling for a wide variety of applications.

3M is dedicated to innovation, continually developing new products that become an important part of everyday life across many diverse markets. A number of 3M solution categories are based on custom-designed products for specialized applications. 3M Interconnect Solutions can help you design, modify and customize your product as well as help you seamlessly integrate our products into your manufacturing process on a global basis.

Design, modify and Customize your product

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#### 3M™ BACKPLANE CONNECTOR SOLUTIONS

PRODUCT	FEATURES	MATERIALS	PERFORMANCE
DIN Connectors	RoHS Compliant Version Available     DIN 41612     C-Form Plug and Socket     C-Form Wiremount Plugs and Sockets     R-Form Plug and Socket     Q-Form Wiremount Plug and Socket     B-Form Wiremount Plug and Socket     Prinless Shrouds     Solder Tails or Press-Fit     Inverse Versions     EMLB Contact Loading     PCB Retention Clips	Contact Material: Copper Alloy Insulation Material: Engineering Thermoplastic Flammability UL 94V-0 Plating Underplating: 50 µ" [ 1.27 µm ] Min. Nickel Interface: 30 µ" [ 0.76 µm ] Gold or 3 µ" [ 0.08 µm ] Gold over 7 µ" [0.18 µm ] PdNi	Current Rating: 3.0 A @ 30°C T-rise Above Ambient Temperature Rating: -55°C to +125°C
MetPak™ 2-FB Connectors	RoHS Compliant Version Available Futurebus+® Inverse Version Available Vertical and Right Angle Stacking Versions Elevated Versions Guiding Features Pinless Shroud Power Header and Socket	Contact Material: Copper Alloy Insulation Material: High Temp LCP Flammability UL 94V-0 Plating Underplating: 50 µ" (1.27 µm) Nickel Interface: 10 µ" [ 0.25 µm ] or 30 µ" [ 0.76 µm ] Gold or 3 to 5 µ" [ 0.07 to 0.12 µm ] Gold over 7, 27 or 40 µ" [ 0.18, 0.69, 1.01 µm ] PdNi	Current Rating: Signal: 1.5 A All Contacts Simultaneously Temperature Rating: -55°C to +125°C
MetPak** CP2 Connectors	RoHS Compliant Version Available Compact PCI® Types A, B, AB and C Header and Socket Grounding Options EMLB Contact Loading Coding Keys Pinless Shroud	Contact Material: Copper Alloy Insulation Material: Glass Filled Polyester Flammability UL 94V-0 Plating Underplating: Nickel Wiping Area: 30 μ² [ 0.76 μm ] Gold	Current Rating: 1 A at +70°C Temperature Rating: -55°C to +125°C

#### 3M™ BACKPLANE CONNECTOR SOLUTIONS

PRODUCT	FEATURES	MATERIALS	PERFORMANCE
MetPak™ HM Connectors	RoHS Compliant Version Available Hard Metric (HM) 5 - and 8-Row Versions Optional Four Integrated 8.25 A Power Blades for a Total of 33 A Power; Saves Space and Press-Fit Operations Socket and Header Power Options Protective Caps Coding Keys Shielding Options	Contact Material: Copper Alloy Insulation Material: High Temperature Thermoplastic Flammability UL 94V-0 Plating Underplating: 50 μ" [ 1.27 μm ] Nickel Interface: 30 μ" [ 0.76 μm ] Gold or 5 μ" [ 0.13 μm ] Gold over 40 μ" [ 1.01 μm ] PdNi	Current Rating: (Fully Loaded): 1 A at 70°C Signal, 8.25 A @ 70°C Power Temperature Rating: -55°C to +125°C
MetPak™ HSHM Sockets and Headers	RoHS Compliant Version Available     Low Crosstalk at High Frequencies     Optional Four Integrated 8.25 A     Power Blades for a Total of 33 A     Power; Saves Space and Press-Fit     Operations     •50/100 (Single-Ended/Differential)     Impedance     Modular/Scalable Format IEC     61076-4-101     •63 Mated Lines Per Linear Inch     Press-Fit Headers and Receptacles     End-To-End Stackable with 5 Row     3M™ Metpak™ CP2, HM, and     HSHM Headers     • High Speed Hard Metric (HSHM)     •8 Gbps Per Second     • Orthogonal Design Capable     • Differential Pairs in Rows or       Columns     • Virtual Coax Capable     •5- and 8-Row Versions     • Socket and Header     • Power Options     • Protective Caps for Headers     • Coding Keys     • Shielding Options     • Guide Pin Options	Contact Material: Copper Alloy Insulation Material: High Temperature Thermoplastic Flammability UL 94V-0 Plating Underplating: 50 µ" [ 1.27 µm ] Nickel Interface: 30 µ" [ 0.76 µm ] Gold or 5 µ" [ 0.13 µm ] Gold over 40 µ" [ 1.01 µm ] PdNi	Current Rating: (Fully Loaded): 1 A at 70°C Signal, 8.25 A @ 70°C Power Temperature Rating: -55°C to +125°C
Ultra Hard Metric (UHM) Connectors	<ul> <li>RoHS Compliant</li> <li>7+ Gbps Data Rates When Mated to Standard IEC 61076-4-101 2 mm Hard Metric Headers</li> <li>Low Crosstalk at High Frequencies</li> <li>50/100 Ω (Single-Ended/Differential) Impedance</li> <li>Press-Fit Receptacles Fully Compatible With IEC 61076-4-101</li> <li>Dual Beam Contact Construction for High Reliability</li> <li>End-To-End Stackable with 5 Row 3M Metpak CP2, HM, UHM and HSHM Sockets</li> <li>Mates With 3M Metpak CP2, HM, UHM, HSHM Headers and Any Other cPCI® Type Headers</li> </ul>	Contact Material: Copper Alloy Insulation Material: High Temperature Thermoplastic (LCP) Flammability UL 94V-0 Plating Underplating: 50 µ" [ 1.27 µm ] Nickel Interface: 30 µ" [ 0.76 µm ] Gold	Current Rating: 1 A at 70°C Signal Temperature Rating: -55°C to +125°C

### 3M™ BOARDMOUNT CONNECTOR SOLUTIONS

PRODUCT	FEATURES	MATERIALS	PERFORMANCE
Pin Strip Headers Series 95X	RoHS Compliant     Single and Dual Row     3 - 80 Positions     High Temperature Dielectric     "No Lead" Wave and Reflow Solder Compatible     Maximizes Use of PC Board Space     End Stackable Feature     Mates with Boardmount and Wiremount Products     Available in Straight, Right Angle Through-Hole and Surfacemount Versions	Contact Material: Copper Alloy Insulation Material: High Temperature Thermoplastic Color: Black Flammability UL 94V-0 Plating Underplating: 1.25–2.5 µm [ 100 µ"] Nickel Wiping Area: 0.25 µm [ 10 µ"] Gold Solder Tail Area: 1–3 µm [ 40–118 µ"] Matte Tin	Current Rating: 1 A Temperature Rating: -40°C to +105°C
Boardmount Pin Strips and Sockets 2 mm, Series 95X	RoHS Compliant Maximizes Use of PC Board Space High Temperature Dielectric "No Lead" Wave and Reflow Solder Compatible Dual Row Design, 4–80 Pins Minimized PC Board Stacking Heights Mates With Pin Strip Header Products Available in Straight, Right Angle Through-Hole, Through-Board and Surfacemount Versions	Contact Material: Copper Alloy Insulation Material: High Temperature Thermoplastic Color: Black Flammability UL 94V-0 Plating Underplating: 1.25–2.5 µm [100 µ"] Nickel Wiping Area: 0.25 µm [ 10 µ"] Gold Solder Tail Area: 1–3 µm [ 40–118 µ"] Matte Tin	Current Rating: 1 A Temperature Rating: -40°C to +105°C
Box Headers 2 mm x 2 mm, Solder Tail Series 957	RoHS Compliant     High Temperature Dielectric     "No Lead" Wave and Reflow Solder Compatible     Maximizes Use of PC Board Space     Center Slot Polarization     Prevents Mis-Insertions and     Reduces Insertion Time     10 - 68 Positions	Contact Material: Square Pin 0.5 mm, Copper Alloy Insulation Material: High Temperature Thermoplastic Color: Black Flammability UL 94V-0 Plating Underplating: 1.25–2.5 µm [ 100 µ' ] Nickel Wiping Area: 0.25 µm [ 10 µ" ] Gold Solder Tail Area: 1–3 µm [ 40–118 µ" ] Matte Tin	Current Rating: 1 A Temperature Rating: -40°C to +105°C
Sockets and Pin Strip Headers, .100" x .100" Series 929	RoHS Compliant Version Available     2-72 Positions     Single- and Dual-Row Options     Through-Hole and Through-Board Options     Customizable Stack Heights from .150" to 1.325"     High Temperature Insulator Option	Contact Material: Copper Alloy Insulation Material: Glass Filled Polyester (PBT) or PCT (RoHS Compliant) Flammability UL 94V-0 Plating Pin Strip Underplating: 50 µ" [ 1.27 µm ] Nickel, Interface: 10 µ" [ 0.25 µm ] or 30 µ" [ 0.76 µm ] Gold Socket Underplating: 100 µ" [ 2.54 mm ] Nickel, Interface: 10 µ" [ 0.25 µm ] or 30 µ" [ 0.76 µm ] Gold Tin Plated Versions Available	Current Rating: 1 A, 2 A or 2.5 A Temperature Rating: -40°C to +105°C
Polarized Boardmount Sockets, .100" x .100" Series 5100, 6800, 8500, 9100	RoHS Compliant     10-64 Positions     Vertical and Right Angle Options     Center Bump Polarization	Contact Material: Copper Alloy Insulation Material: Glass Filled Polyester Flammability UL 94V-0 Plating Underplating: 2 µm [ 79 µ"] Nickel Wiping Area: 0.3 µm [ 12 µ"] Gold	Current Rating: 1 A Temperature Rating: -55°C to +105°C
Sockets and Pin Strip Headers, 2 mm x 2 mm Series 15	RoHS Compliant Version Available     4-60 Positions     Single and Dual-Row Options     Surfacemount, Through-Hole and Through-Board Options     Customizable Stack Heights from .101" to 1.418"     High Temperature Insulator	Contact Material: Copper Alloy Insulation Material: Glass Filled PCT Flammability UL 94V-0 Plating Underplating: 50-150 μ" [ 1.27-3.81 μm ] Nickel Wiping Area: 30 μ" [ 0.76 μm ] Gold	Current Rating: 1 A Temperature Rating: -55°C to +105°C

### 3M™ BOARDMOUNT CONNECTOR SOLUTIONS

PRODUCT	FEATURES	MATERIALS	PERFORMANCE
Pak 50 Sockets and Headers Series P50	RoHS Compliant     20-200 Positions     .050" Pitch     Reliable Ribbon Contacts     7.0 - 30.0 mm Stack Heights     Parallel, Perpendicular and End-to-End Mating     Audible Tactile "Click" for Blind Mating     Optional Power/Ground Pins     Wiremount Options Available	Contact Material: Phosphor Bronze Insulation Material: Glass Filled Nylon Flammability UL 94V-0 Plating Underplating: Nickel Wiping Area: 10 μ* [ 0.25 μm ] Gold	Current Rating: 0.5 A Temperature Rating: -55°C to +85°C
Pak 10 Plugs and Connectors Series PK10	RoHS Compliant 30-100 Positions 1.0 mm Pitch Optional Power/Ground Pins Parallel, Perpendicular and End-to-End Mating	Contact Material: Phosphor Bronze Insulation Material: Glass Filled LCP Flammability UL 94V-0 Plating Underplating: Nickel Wiping Area: 2 μ" [ 0.05 μm ] or 4 μ" [ 0.1 μm ] Minimum Gold	Current Rating: 0.5 A Temperature Rating: -55°C to +85°C
Pak 8 Plug Connectors Series P08	RoHS Compliant     20-100 Positions     .8 mm Pitch     3.0 - 8.0 mm Stack Heights	Contact Material: Copper Alloy Insulation Material: High Temperature Plastic Flammability UL 94V-0 Plating Underplating: 50 µ" [ 1.27 µm ] Nickel Wiping Area: 8 µ" [0.20 µm] Gold	Current Rating: 0.5 A Temperature Rating: -55°C to +85°C
Pak 8 Hermaphroditic Connector Series P08	RoHS Compliant 30-100 Positions 8 mm Pitch 11.5 mm Mated Height Mates to Itself, One Part on the Bill of Material	Contact Material: Phosphor Bronze Insulation Material: High Temperature Plastic Flammability UL 94V-0 Plating Underplating: 50 µ" [ 1.27 µm ] Nickel Wiping Area: 8 µ" [ 0.20 µm ] Minimum Gold	Current Rating: 0.5 A Temperature Rating: -55°C to +85°C
Pak 5 Connectors Series P05N	• RoHS Compliant • 20-100 Positions • .5 mm Pitch • 3.0 - 6.0 mm Stack Height	Contact Material: Copper Alloy Insulation Material: High Temperature Thermoplastic Flammability UL 94V-0 Plating Underplating: 50 µ" [ 1.27 µm ] Nickel Wiping Area: 8 µ [ 0.2 µm ] Gold	Current Rating: 0.5 A Per Contact Temperature Rating: -55°C to +85°C
Pak 5 Plugs Series PK5	RoHS Compliant     40-160 Positions     .5 mm Pitch     4.0 - 8.0 mm Stack Heights	Contact Material: Copper Alloy Insulation Material: Glass filled LCP Flammability UL 94V-0 Plating Underplating: Nickel Wiping Area: 2 µ" [ 0.05 µm ] Minimum Gold over Nickel	Current Rating: 0.3 A Temperature Rating: -55°C to +85°C

### 3M™ BOARDMOUNT CONNECTOR SOLUTIONS

PRODUCT	FEATURES	MATERIALS	PERFORMANCE
4-Wall Low Profile Headers, .100" x .100", Series 2500 and Series D2500	RoHS Compliant Low Profile, Space Saving Design     Center Slot Polarization     Optional Retainer Clip for Locking Sockets in Place and Increasing Connection Reliability in Vibration Prone Environments     Optional High Temperature Insulator     Straight, Right Angle Through-Hole, and Straight Surfacemount Versions Available     10-64 Positions	Contact Material: Brass Insulation Material: High Temp Glass Filled Polyester Flammability UL 94V-0 Plating Underplating: 50-100 u" [ 1.27 - 2.54 µm ] Nickel Wiping Area: 30 u" [ 0.76 µm ] Gold for 2500 Series 10 µ" [ 0.25 µm ] Gold for D2500 Series Solder Tails: 40-120 u" [ 1-3 µm ] Matte Tin	Current Rating: 2 A Temperature Rating: -55°C to +105°C
4-Wall Latch/Eject Headers, .100" x .100", Series 3000, Series D3000	RoHS Compliant Version Available  10-64 Positions Straight and Right Angle Tails Vertical Compliant Pin Option 3- or 4-Wall Options Robust Roll Pin Latch System High Temperature Option	Contact Material: Copper Alloy Insulation Material: Glass Filled Polyester Flammability UL 94V-0 Plating Underplating: 100 µ" [ 2.54 µm ] Nickel - Overall Wiping Area: 30 µ" [ 0.76 µm ] Gold 30 µ" Gold for 3000 Series, 10 µ" Gold for D3000 Series	Current Rating: 2 A Temperature Rating: -55°C to +105°C
Latch/Eject Headers, 2 mm Series 1552	RoHS Compliant     13 Pin Counts, Ranging from 6–50 Positions     Robust Ejectors for Vibration Environments and to Reduce Likelihood of Latch Breakage when Ejecting     Mates to 3M™ Sockets, IDC, 1522 Series and 3M™ Molded Cable Assemblies, 2M Series (with Latching Ear Option)	Contact Material: Copper Alloy Insulation Material: Glass Filled Polyester Flammability UL 94V-0 Plating Underplating: 50 µ" [ 1.27 µm ] Nickel Wiping Area: 10 µ" [ 0.25 µm ] Gold or 30 µ" [ 0.76 µm ] Gold Solder Tails: 200 µ" [ 5.0 µm ] Matte Tin	Current Rating: 1 A Temperature Rating: Operating Temperature: -55°C to +105°C
4-Wall Condo Headers, .100" x .100" Series 3400	RoHS Compliant Version Available 20-128 Positions Right Angle Tails 3- or 4-Wall Options Robust Roll Pin Latch System High Temperature Option 3-Wall Fits in VME Board Stacking Criteria "HDI" Alternative	Contact Material: Copper Alloy Insulation Material: Glass Filled Polyester Flammability UL 94V-0 Plating Underplating: 100 μ" [ 2.54 μm ] Nickel - Overall Wiping Area: 30 μ" [ 0.76 μm ] Gold	Current Rating: 1 A Temperature Rating: -55°C to +105°C
Surfacemount Latch/Eject Headers, .100" x .100" Series N4600	RoHS Compliant Version Available     10-60 Positions     Robust Roll Pin Latch System     High Temperature Body     Raised Body and Gull Wing Leads Allow for Easy Inspection	Contact Material: Copper Alloy Insulation Material: Glass Filled Polyester Flammability UL 94V-0 Plating Underplating: 100 μ" [ 2.54 μm ] Nickel Wiping Area: 30 μ" [ 0.76 μm ] Gold	Current Rating: 1 A Temperature Rating: -55°C to +105°C

### 3M™ WIREMOUNT CONNECTOR SOLUTIONS

PRODUCT	FEATURES	MATERIALS	PERFORMANCE
Pak 50 Wiremount Sockets Series P25E, P25LE, P50E	RoHS Compliant     20-100 Positions     Accepts .025" And .050" Cable     Integrated Latch/Eject     Audible Tactile "Click" for Blind Mating	Contact Material: Copper Alloy Insulation Material: Glass Filled Polyester Flammability UL 94V-0 Plating Underplating: 100 μ" [ 2.54 μm ] Nickel Wiping Area: 10 μ" [ 0.25 μm ] Gold	Current Rating: 0.5 A Temperature Rating: -55°C to +85°C
Link Connectors, .100" IDC Series 381 and 382	RoHS Compliant     Simple and Low Cost Wiring Solution     Hermaphroditic Mating Wiremount Connector     Meets CC-Link/LT Standard IDC Termination to Discrete Wire or Flat Cable with Standard Pliers     Straight and Right Angle Boardmount Sockets	Contact Material: Copper Alloy Insulation Material: Glass Filled Polyester (PBT) Flammability UL 94V-0 Plating Underplating: 2.54 µm [100 µ"] Minimum Nickel Wiping Area: 0.2 µm [8 µ"] Minimum Gold with Lubricant Solder Tails: Gold Flash	Current Rating: 5.0 A Temperature Rating: -20°C to +70°C
Mini-Clamp Sockets and Plugs, Wiremount Series 371 and 373	RoHS Compliant     Flexible, Easy-To-Use, Wire-To-Wire or Wire-To-Board Connector System     High Number of Mating Cycles     Mating Latch Features Provide a Reliable Interconnection in Demanding Applications     Allows Easy and Simple Interconnecting of Sensors or Other Discrete Wire Devices     Dust Cap Accessory Available for Use in Harsh Environments	Contact Material: Copper Alloy Insulation Material: Nylon Color: Black Flammability UL 94V-0 Plating Underplating: 2.54 µm [100 µ*] Minimum Nickel Wiping Area: 0.2 µm [8 µ*] Minimum Gold with Lubricant Solder Tails: Gold Flash	Current Rating: 3.0 Amps Temperature Rating: -20°C to +85°C Ambient (1.0 A max.) -20°C to +75°C Ambient (2.0 A max.) -20°C to +60°C Ambient (3.0 A max.)
Mini-Clamp Sockets, 2 mm, Boardmount and SMT Series 372	RoHS Compliant     Low Profile Design Minimizes Overall Thickness     Compact Design Saves Board Space     Multiple PCB Locating Post Layouts to Provide Competitive Compatibility     Solder Tab Design Helps Provide a Reliable Solder Joint     Matching Latch Feature Provides a Reliable Interconnection in Demanding Applications     High Number of Mating Cycles (300)     Maximum Current Rating of 3 Amps     Dust Cover Accessory Available For Use in Harsh Environments	Contact Material: Copper Alloy Insulation Material: LCP Color: Black Flammability UL 94V-0 Plating Underplating: Nickel Wiping Area: 0.2 µm [ 8 µ" ] Minimum Gold with Lubricant Solder Tails: Gold Flash	Current Rating: 3.0 Amps Temperature Rating: -20°C to +85°C Ambient (1.0 A max.) -20°C to +75°C Ambient (2.0 A max.) -20°C to +60°C Ambient (3.0 A max.)
Power Clamp Sockets, Headers and Branch Series 355, 356 and 357	RoHS Compliant     5 Position     Wiremount Socket     Vertical Header     Branch Header     Easy, Labor Saving and Reliable IDC Termination     Accommodates 18 - 20 AWG Discrete Wire     No Special Wire Preparation Required     Field Terminatable with a Common Pliers     Polarization Provides Proper Interconnecting of Mated Pairs     Based on CC-Link Standard	Contact Material: Copper Alloy Insulation Body Material: Nylon Flammability UL 94V-0 Plating Underplating: 2.5 µm Minimum Nickel Wiping Area: 0.5 µm Minimum Gold Solder Tails: Gold Flash	Current Rating: 10 A Maximum (1 Contact) 7 A Maximum (2 or More Contacts) Temperature Rating: -20°C to +75°C Ambient

## 3M™ WIREMOUNT CONNECTOR AND ASSEMBLY SOLUTIONS

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PRODUCT	FEATURES	MATERIALS	PERFORMANCE
Wiremount Sockets, .100" x .100" Series 3000	RoHS Compliant     10-60 Positions     Two-Piece with Adhesive Cover for Daisy Chain or Round-to-Flat Cable Applications     Plastic or Metal Strain Relief Option     Positive Locking Metal Clip for High Cover Retention     Open or Closed-End Covers	Contact Material: Beryllium Copper Insulation Material: Glass Filled Polyester Flammability UL 94V-0 Plating Underplating and U-Slot: 100 μ" [ 2.54 μm ] Nickel Wiping Area: 30 μ" [ 0.76 μm ] Gold Wire Accommodation: 26 and 28 AWG Stranded	Current Rating: 1 A Temperature Rating: -55°C to +105°C
Wiremount Sockets, .100" x .100" Series 891, Series D89	RoHS Compliant     Pre-Assembled for High Efficiency     Pre-Assembled, Designed to Terminate     Faster Than Two-Piece Sockets,     "Sword" Packaging Makes Easy     Loading of Manual And Semi- Automatic Assembly Equipment     "Bumps" Prevent Premature Latch     Locking During Shipment     Military Polarization, with or without     Centerbump     Optional Double-Sided Adhesive Pull     Tab For Easy Unplugging     Double-Recessed Cover for Cable     Terminating From Either Side     Virtually Eliminates Need for Single- Recessed Cover Connectors	Contact Material: Phosphor Bronze Insulation Material: Glass Filled Polyester (PBT) Color: Gray Flammability UL 94V-0 Plating Underplating: 50 µ" [ 1.27 µm ] Nickel Wiping Area: 30 µ" [ 0.76 µm ] or 10 µ" [ 0.25 µm ] Gold Wire Accommodation: 26 and 28 AWG Stranded	Current Rating: 2 A (EIA 364-70) Temperature Rating: -55°C to +105°C
Molded Socket Assembly, .100" x .100" Series 87, 1M	RoHS Compliant When Used with Compliant Cable     6-64 Positions     Supplied as Complete Assembly Only (1M Series)     Mates with Standard 0.25" Square Contacts on .100" x .100" Centers     One Piece, Molded-on Construction Provides Integral Strain Relief     High and Low Profile, Polarity and Pull Tab Options Available	Contact Material: Copper Alloy Insulation Material: Glass Filled Polyester Plating Underplating and U-Slot: 50 - 150 μ" [1.27 - 3.81 μm] Nickel Wiping Area: 30 μ" [ 0.76 μm] Gold	Current Rating: 1 A Temperature Rating: -55°C to +105°C
Polarized Wiremount Sockets, .100" and .100" x .100" Series CHG	RoHS Compliant     10-64 Positions     Single- and Dual-Row Side-to-Side Stackable     Single-Row 2-36 Positions     Dual-Row 6-72 Positions     Dual-Row Polarized Version     IDC with Individual Strain Reliefs on Each Contact     22-28 AWG Discrete or Flat Cable Wire	Contact Material: Copper Alloy Insulation Material: Glass Filled Polyester Flammability UL 94V-0 Plating Wipe Area: 30 μ" [ 0.76 μm ] Gold Underplating and U-Slot: 100 μ" [ 2.54 μm ] Nickel	Current Rating: 22-24 AWG: 2 A; 26-28 AWG: 1.5 A Temperature Rating: -55°C to +105°C
Wiremount Plugs, .100" x .100" Series 4600	RoHS Compliant     10-64 Positions     Open- or Closed-End Covers     Optional Ejector Latcwhes     Optional Mounting Flanges     Plastic Strain Relief Option	Contact Material: Copper Alloy Insulation Material: Glass Filled Polyester Flammability UL 94V-0 Plating Underplating and U-Slot: 100 µ" [ 2.54 µm ] Nickel Wiping Area: 30 µ" [0.76 µm] Gold	Current Rating: 1 A Temperature Rating: -55°C to +120°C

### 3M™ WIREMOUNT CONNECTOR SOLUTIONS

PRODUCT	FEATURES	MATERIALS	PERFORMANCE
Tripolarized Wiremount Sockets, .050" x .100" Series 82	RoHS Compliant     Version Available     20-100 Positions     Rugged Tri-Polarized     Mating System     High Performance     Hill-n-Dale IDC Interface     Metal Cover Latch     Optional Metal Strain Relief     Compatible with PVC, TPE and FEP Cable Insulations	Contact Material: Copper Alloy Insulation Material: Glass Filled Polyester Flammability UL 94V-0 Plating Underplating: 100 µ" [ 2.54 µm ] Nickel U-Slot: Matte Tin (RoHS compliant) or Tin-Lead Wiping Area: 30 µ" [ 0.76 µm ] Gold	Current Rating: 0.5 A Temperature Rating: -55°C to +105°C
4-Wall, Tripolarized Headers, .050" x .100" Series 81	RoHS Compliant Version Available  20-100 Positions Straight and Right Angle Vertical SMT Option High Temperature	Contact Material: Copper Alloy Insulation Material: High Temperature Plastic Flammability UL 94V-0 Plating Wiping Area: 30 μ" [ 0.76 μm ] Gold Underplating: 100 μ" [ 2.54 μm ] Nickel	Current Rating: 0.5 A Temperature Rating: -55°C to +105°C
PCB 2-Row, .100" x .100" Series 78	RoHS Compliant  10-64 Positions Low Profile 2.8 or 3.8 mm Tail Options	Contact Material: Beryllium Copper Insulation Material: Glass Filled Polyester Flammability UL 94V-0 Plating Underplating: 100 µ" [ 2.54 µm ] Nickel U Slot and Solder Tails: Gold Flash	Current Rating: 1 A Temperature Rating: -55°C to +105°C
PCB 4-Row, .100" x .100" Series 3400	RoHS Compliant     Version Available     10-50 Positions     Low Profile Design	Contact Material: Copper Alloy Insulation Material: Glass Filled Polyester Flammability UL 94V-0 Plating Underplating: 100 µ" [ 2.54 µm ] Nickel, Class 2 U-Slot and Solder Tails: 10 µ" [0.25 µm] Gold or 200 µ" [5.08 µm] Tin Lead	Current Rating: 1 A Temperature Rating: -55°C to +120°C

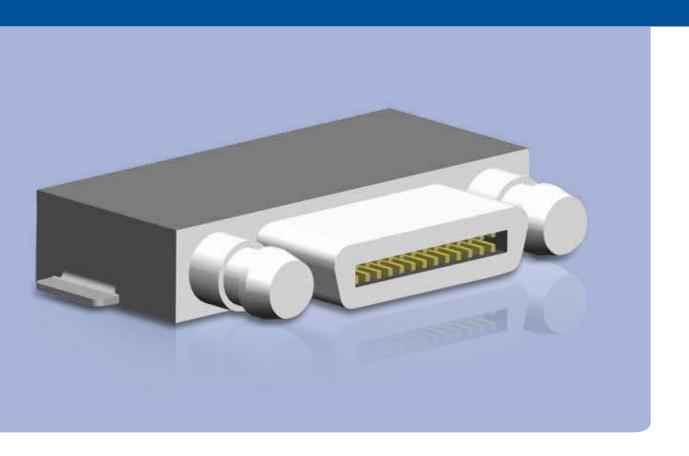
## 3M™ WIREMOUNT CONNECTOR AND ASSEMBLY SOLUTIONS

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PRODUCT	FEATURES	MATERIALS	PERFORMANCE
Wiremount Sockets, 2 mm x 2 mm Series 1522	RoHS Compliant  10 - 50 Positions Rugged Cover Retention Pre-Assembled for High Efficiency Low Profile Metal Strain Relief Option Open or Closed Cover	Contact Material: Copper Alloy Insulation Material: Glass Filled Polyester (PBT) Color: Gray Flammability UL 94V-0 Plating Underplating and U-Slot: 50-150 µ" [ 1.27-3.81 µm ] Nickel-QQ-N-290, Class 2 Wiping Area: Gold, MIL-G-45204, Type II Grade C	Current Rating: 1 A Temperature Rating: -55°C to +105°C
Molded Socket Assembly, 2 mm x 2 mm Series 87, 2M	RoHS Compliant When Used with Compliant Cable Available in Multiple Sizes Sockets Mate with Standard 2 mm x 2 mm Headers and Plugs Molded-In Strain Relief	Material Varies for Connectors and Cables. See Website for Specifics.	Current Rating: 1 A Temperature Rating: -55°C to +105°C
Molded PCB Assembly, .100" x .100" Series 87, 1M	RoHS Compliant When Used with Compliant Cable     6 - 64 Positions     Supplied as Complete Assembly Only (1M Series)     Mates with Standard .100" x .100" Board Pattern     One Piece, Molded-on Construction Provides Integral Strain Relief     Straight and Retention Pin Options Available	Contact Material: Copper Alloy Insulation Material: Glass Filled Polyester Plating Underplating and U-Slot: 50 - 150 μ" [ 1.27 - 3.81 μm ] Nickel Contact Tail: 300 - 400 μ" [ 7.62 - 10.16 μm ] Matte Tin	Current Rating: 1 A Temperature Rating: -55°C to +105°C
Molded PCB Assembly, 2 mm x 2 mm Series 87, 2M	RoHS Compliant When Used with Compliant Cable 6-50 Positions Supplied as Complete Assembly Only (2M Series) Mates with Standard 2 mm x 2 mm Board Pattern One Piece, Molded-on Construction Provides Integral Strain Relief	Contact Material: Copper Alloy Insulation Material: Glass Filled Polyester Plating Underplating and U-Slot: 50-150 μ* [ 1.27 - 3.81 μm ] Nickel, Class 2 [ 2.62 - 10.10 μm ] Matte Tin Contact Tail: 300-400 μ*	Current Rating: 1 A Temperature Rating: -55°C to +105°C

## 3M™ DEVICE-TO-BOARD CONNECTOR SOLUTIONS

	CONNECTOR	SOLUTIONS	
PRODUCT	FEATURES	MATERIALS	PERFORMANCE
CF Card Headers, CompactFlash™ Series N7E50	RoHS Compliant Headers for Both Type I and II Cards Wide Array of Connector Size Options to Balance Between Footprint Size and Functionality	Contact Material: Copper Alloy Insulation Material: High Temperature Thermoplastic Flammability UL 94V-0 Plating Underplating: 2.03 μm [ 80 μ"] Nickel Wiping Area: 0.38 μm [ 15 μ" ] or 0.76 μm [ 30 μ" ] Gold	Current Rating: 0.5 A Temperature Rating: -40°C to +85°C
CF Card Ejectors, CompactFlash™ Series 7E50	RoHS Compliant     Mates to Selected N7E50     Series CF Headers to Provide     Added Ejection Functionality     Multiple Button Styles and     Orientations Allow     Design Flexibility	Button Material: Glass-Filled High Temperature Thermoplastic Frame Material: Stainless Steel Flammability UL 94V-0	Process Rating: 260°C (per J-STD-020C)
Serial Attached SCSI (SAS) Connectors Series SBR and SBH	RoHS Compliant  6.0 Gbps Input/Output Connector for Backplane Applications  Two Contact Mating Levels for Early-Mate and Late-Break Allows "Blind Mating" or "Hot Swap" Applications  Capable of Accepting SFF-Compliant HDD Fitted with SAS or Serial Advanced Technology Attachment (SATA) Header  OPTIONS  Elevated Receptacle Version for Additional Backplane Stand-off Plated Through-Hole, Press-Fit or SMT Available  Right Angle Version Available  Right Angle Version Prive Interface  29-Position Combo with Power	Contact Material: Copper Alloy Insulation Material: High Temperature Thermoplastic Flammability UL 94V-0 Plating Underplating: 50 µ" [1.27 µm] Nickel Wiping Area: 30 µ" [0.76 µm] Gold Solder Tails: 100 µ" [2.54 µm] Tin	Current Rating: Power Pin: 1.5 A Signal Pin: 500 mA Temperature Rating: -40°C to +85°C
Serial Advanced Technology Attachment (SATA) Connectors Series 5607 and 5622	RoHS Compliant 3 Gbps I/O Connector for HDD Applications EMLB Contacts for Hot Swap Blind Mate Polarization Meets SATA 2.6 Specifications OPTIONS Plated Through-Hole, Press-Fit or SMT Available Extended Height Receptacles for Additional Backplane Standoff Riight Angle Surfacemount Receptacle 7-Pin Signal Plug 22-Position Device Plugs for Drive Interface 22-Position Combo wih Power	Contact Material: Copper Alloy Insulation Material: High Temperature Thermoplastic Flammability UL 94V-0 Plating Underplating: 50 µ" [ 1.27 µm ] Nickel Wiping Area: 30 - 40 µ" [ 0.76 µm ] Gold Solder Tails: 100 µ" [ 2.54 µm ] Tin	Current Rating: Power Pin: 1.5 A Signal Pin: 500 mA Temperature Rating: Operating Temperature: 0°C to +55°C Non-Operating Temperature: -40°C to +85°C

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## 3D CAD models are available on the 3M website

3M Interconnects Solutions now offers 3D CAD models of select products on our website, 3M.com/interconnects.

On the website, these models can be found in the Product Search box by clicking on "3D Models" and can also be found throughout the website if you choose to search for a corresponding product first. Contact your local 3M sales representative for information on CAD models of other products.

To view or open a 3D model, you must have a CAD program and the WinZip® software. To download, right-click on the desired file and choose the option to "save to desktop."

## 3M™ DEVICE-TO-BOARD CONNECTOR AND ASSEMBLY SOLUTIONS

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PRODUCT	FEATURES	MATERIALS	PERFORMANCE
Serial Advanced Technology Attachment (SATA) Cables Series 5601, 5602	RoHS Compliant  7-Position Serial Signal Assembly Multiple Variations in Length and Interface Attachments Point-to-Point Signaling Polarized Interface Provides Proper Alignment 26 AWG Differential Pairs Meets SATA 2.6 Specification	Insulation  Material: High Temperature Thermoplastic Plating Wiping Area: 30 μ" [ 0.76 μm ] Gold Solder Tails: 100 μ" [ 2.54 μm ] Tin Underplating: 50 μ" [ 1.27 μm ] Nickel	Current Rating: 1 A Temperature Rating: -20°C to +85°C
Mini Serial Attached SCSI (miniSAS) Connectors, Series 8A26/8C26, 8A36/8B36, 8AB36	RoHS Compliant     6 Gbps Data Rate     Combination Connector with     Attached Shell Available     Multiple Keying Options     Multiple Tail Options and     Lengths Available on Shell     Meets SAS 1.1 Specification     Solder Hold Down Option on     26-Position Right Angle Receptacle     Available     External Housing Available in     1, 2 or 4 Ports	Contact Material: Copper Alloy Insulation Material: High Temperature Thermoplastic Flammability UL 94V-0 Plating Underplating: 50 µ" [ 1.27 µm ] Nickel Wiping Area: 30 µ" [ 0.76 µm ] Gold Solder Tails: 100 µ" [ 2.54 µm ] Tin	Current Rating: 0.5 A Temperature Rating: -20°C to +85°C
miniSAS External Cable Assemblies Series 8M26	RoHS Compliant Capable of 6 Gbps Per Channel Data Rate 26 Conductor Signal Assembly Multiple Lengths Available Metal Latch Pull Tab Ring Provides Easier Unmating Two Levels of EMLB for Hot Plugging Multiple Key Options Available	Connector Backshell Material: Zinc Diecast Plating 30 µ" [0.76 µm] Nickel Contact PCB Material: FR4 Underplating: 50 µ" [ 1.27 µm ] Nickel Wiping Area: 30 µ" [ 0.76 µm ] Gold Cable Conductor: Tin Plated Solid Conductor (AWG Depends on Length) Drain Wire: Tin Plated Solid Conductor Dielectric: Foam Polyethylene Shield: Mylar Jacket: Non-PVC Pulltab Material: Nylon Color: Blue	Current Rating: Per Contact: 0.5 A Operating Temperature: -20°C to +75°C

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PRODUCT	FEATURES	MATERIALS	PERFORMANCE
MDR Wiremount Plugs - IDC Series 101XX-60X0, 101XX-8000	RoHS Compliant  14-100 Positions  Wiper-on-Wiper Contact for Reliable Repetitive Plugging  Digital LCD Interface as a 20 or 26 Contact Connector  IEEE 1284C Interface as a 36 Contact Connector  Camera Link® Interface as a 26 Contact Connector  Accepts a Wide Variety of Cable Constructions Including Split, Flat, Round, Twisted Pair and Twinax Cables  Accepts a Wide Variety of Shielded Junction Shells  OPTIONS  Plastic-Non Shielded Version Termination Tools  Junction Shells	Contact Material: Beryllium Copper Insulation Material: Glass Reinforced Polyester Flammability UL 94V-0 Plating Underplating: 80 µ" [ 2.0 µm ] Nickel Wiping Area: 30 µ" [ 0.76 µm ] Gold	Current Rating: 1 A Temperature Rating: -20°C to +85°C
MDR Wiremount Plugs - Solder Series 101XX-3000	RoHS Compliant Version Available  14-50 Positions  Wiper-on-Wiper Contact for Reliable Repetitive Plugging  Solder Cup Termination Requires No Special Tooling  Accepts a Wide Variety of Discrete Wire (24 to 30 AWG) Cable Construction OPTIONS  Junction Shells  Camera Link Interface as a 26 Contact Connector	Contact Copper Alloy Insulation Glass Reinforced Polyester Flammability UL 94V-0 Plating Underplating: 80 μ" [ 2.0 μm ] Nickel Wiping Area: Gold	Current Rating: 1 A Temperature Rating: -55°C to +105°C
MDR Panelmount Receptacles - IDC Series 102XX-0210	RoHS Compliant     20-68 Positions     Wiper-on-Wiper Contact for Reliable Repetitive Plugging     IEEE 1284C Interface as a 36 Contact Connector     Interface Latch Design for Connection Stability     Accepts a Wide Variety of Cable Constructions Including Flat, Shielded Flat and Twisted Pair Cables     Replaces Boardmount Receptacle When a Wire Transition Is Needed OPTION     Wire Termination Tools     Camera Link Interface as a 26 Contact Connector	Contact Material: Beryllium Copper Insulation Glass Reinforced Polyester Flammability UL 94V-0 Plating Underplating: 80 μ" [ 2.0 μm ] Nickel Wiping Area: 30 μ" [ 0.76 μm ] Gold	Current Rating: 1 A Temperature Rating: -20°C to +85°C
MDR Junction Shells, Round Cable Exit, Plastic Series 103XX	RoHS Compliant     14-80 Positions     Durable One-Piece Plastic Over Two-Piece Metal Junction Shell for Straight Round Cable (Compatible with 101XX-6000 EC Plug)     MDR Digital LCD Interface as a 20 or 26 Contact Connector OPTIONS     80 Position     Quick Release Latching or Secure Thumbscrew Versions Available	Outer Shell Material: ABS Inner Shell Material: Steel Flammability UL 94V-0 Plating Nickel	

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PRODUCT	FEATURES	MATERIALS	PERFORMANCE
MDR Junction Shells, Round Cable Exit, Metal Series 103XX	RoHS Compliant  14-100 Positions  Metal Junction Shell for Round Cable Rugged Two-Piece Die Cast Metal Shell with Round Straight Exit (Compatible with 101XX-6000 EC Plug) Reliable Metal Strain Relief Clamp Provides Grounding for Cable Shield Excellent EMI/ESD Protection Quick Release Latching Mechanism OPTION  60 Degree Cable Relief Option	Shell Aluminum Plating Nickel	
MDR Junction Shells, Flat Cable Exit, Metal Series 103XX	RoHS Compliant     Metal Junction Shell for Flat Cable     20-50 Positions     Rugged Two-Piece Metal Shells for High Performance Pleated Foil Cable Assemblies (Compatible with 101XX-6000 EC Plug)     Kit Includes Conductive Gasket for Cable Shield to Shell Continuity     Accepts 3M 50 Ohm PFC Cables	Shell Material: Zinc Gasket Material: Elastomer with Conductive Fibers Plating Nickel	
MDR Junction Shells, Flat Cable Exit, Metal Series 103XX	RoHS Compliant     Rugged Two-Piece Metal     Junction Shell for Straight     Flat Cable (Compatible with     101XX-6000 EC Plug)     68-100 Positions     Jackscrew Latching for     Connection Stability     Kit Includes Gasket for Cable Shield     to Shell Continuity. Accepts 3M™     PFC Cables, 50 Ohm	Shell Zinc Gasket Material: Elastomer with Conductive Fibers Plating Nickel	
MDR Junction Shells, Round Cable, Solder Cup Series 103XX	RoHS Compliant  14-50 Positions  Design Features Durable Two-Piece Glass Reinforced Polyester Backshell with Ground Strap (Compatible with 101XX-3000 Plug)  Round Straight Exit  Reliable Metal Strain Relief Clamp Provides Grounding for Cable Shield  Quick Release Metal Latching Mechanism	Outer Shell Glass Reinforced Polyester Cable Clamp and Ground Plate Material: Stainless Steel Flammability UL 94V-0	<b>Temperature Rating</b> : -20°C to +85°C

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PRODUCT	FEATURES	MATERIALS	PERFORMANCE
MDR Boardmount Receptacles, SMT Vertical Series 102XX	RoHS Compliant     Version Available     20-36 Positions     Wiper-on-Wiper Contact for Reliable Repetitive Plugging     SMT Compatible PCT Insulator Material     Screw Lock-Down for Reliable PCB Retention     Interface Latch Design for Connection Stability     IEEE 1284C Interface as a 36 Contact Connector     Camera Link® Interface as a 26 Contact Connector     OPTIONS     Dust Covers     Board Lock and Panel Mount Hardware	Contact Copper Alloy Insulation Glass Reinforced Polyester Flammability UL 94V-0 Plating Underplating: 80 µ" [ 2.00 µm ] Nickel Wiping Area: 30 µ" [ 0.76 µm ] Minimum Gold	Current Rating: 1 A Temperature Rating: -55°C to +105°C
MDR Boardmount Receptacles, SMT Right Angle Series 102XX	RoHS Compliant Version Available  14-50 Positions  Wiper-on-Wiper Contact for Reliable Repetitive Plugging  Ultra-Low Signal Skew for High Data Rate Transmission  Interface Latch Design for Connection Stability  Digital LCD Interface as a 20 or 26 Contact Connector  Camera Link® Interface as a 26 Contact Connector  Contacts: 14, 20, 26, 40 and 50	Contact Copper Alloy Insulation Glass Reinforced Polyester Flammability UL 94V-0 Plating Underplating: 80 µ" [ 2.00 µm ] Nickel Wiping Area: 20 µ" [ 0.50 µm ] Minimum Gold	Current Rating: 1 A Temperature Rating: -55°C to +105°C
MDR Boardmount Receptacles, PTH Vertical Series 102XX	RoHS Compliant     Version Available     14-100 Positions     Wiper-on-Wiper Contact for Reliable Repetitive Plugging     Rugged Die Cast Metal Case Construction     Screw Lockdown for Reliable PCB Retention     Interface Latch Design for Connection Stability     IEEE 1284C Interface as a 36 Contact Connector     OPTIONS     Dust Covers     Board Lock and Panel Mount Hardware	Contact Copper Alloy Insulation Glass Reinforced Polyester Flammability UL 94V-0 Plating Underplating: 80 μ" [ 2.00 μm ] Nickel Wiping Area: 30 μ" [ 0.76 μm ] Minimum Gold	Current Rating: 1 A Temperature Rating: -20°C to +85°C

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PRODUCT	FEATURES	MATERIALS	PERFORMANCE
MDR Boardmount Receptacles, Compliant Pin Vertical Series 102XX	RoHS Compliant     14-100 Positions     Wiper-on-Wiper Contact for Reliable Repetitive Plugging     Rugged Die Cast Metal Case Construction     OPTIONS     Dust Covers     Board Lock and Panel Mount Hardware	Contact Copper Alloy Insulation Glass Reinforced Polyester Flammability UL 94V-0 Plating Underplating: 80 µ" [ 2.00 µm ] Nickel Wiping Area: 30 µ" [ 0.76 µm ] Minimum Gold	Current Rating: 1 A Temperature Rating: -20°C to +85°C
MDR Boardmount Receptacles, PTH Right Angle Series 102XX	RoHS Compliant  14-100 Positions  Wiper-on-Wiper Contact for Reliable Repetitive Plugging Rugged Die Cast Metal Case Construction Available  SMT Compatible PCT Insulator Material Screw or Ground Lock for Reliable PCB Retention Interface Latch Design for Connection Stability IEEE 1284C Interface as a 36 Contact Connector OPTIONS Stamped Metal Face and Die Cast Versions Dust Covers Board Lock and Panel Mount Hardware	Contact Copper Alloy Insulation Glass Reinforced Polyester (PCT) Flammability UL 94V-0 Plating Underplating: 80 µ" [ 2.00 µm ] Nickel Wiping Area: 30 µ" [ 0.76 µm ] Minimum Gold	Current Rating: 1 A Temperature Rating: -55°C to +105°C
MDR Boardmount Receptacles, PTH Right Angle Condo Series 102XX	RoHS Compliant     Version Available     Positions 40 (2 x 20), 100     (2 x 50) and 136 (2 x 68)     Wiper-on-Wiper Contact for Reliable Repetitive Plugging     Rugged Die Cast Metal Case Construction     Screw Lockdown for Reliable PCB Retention     Interface Latch Design for Connection Stability     Stacked Receptacles Save Board Space     OPTIONS     Dust Covers     Board Lock and Panel Mount Hardware	Contact Copper Alloy Insulation Glass Reinforced Polyester Flammability UL 94V-0 Plating Underplating: 80 µ" [ 2.00 µm ] Nickel Wiping Area: 20 µ" [ 0.50 µm ] Minimum Gold	Current Rating: 1 A Temperature Rating: -20°C to +85°C
MDR Boardmount Plugs, PTH Vertical Series 101XX	RoHS Compliant     Version Available     Wiper-on-Wiper Contact for     Reliable Repetitive Plugging     Contacts: 50 and 100	Contact Material: Copper Alloy Insulation Material: Glass Reinforced Polyester Flammability UL 94V-0 Plating Underplating: 80 µ" [ 2.00 µm ] Nickel Wiping Area: 8 µ" [ 0.20 µm ] Minimum Gold	Current Rating: 1 A Temperature Rating: -20°C to +85°C

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PRODUCT	FEATURES	MATERIALS	PERFORMANCE
MDR Boardmount Plugs, PTH Right Angle Series 101XX	RoHS Compliant     Version Available     20-50 Positions     Wiper-on-Wiper Contact for     Reliable Repetitive Plugging     Rugged Die Cast Metal Case     Construction     Screw or Ground Lock PCB     Retention     IEEE 1284C Interface as a 36     Contact Connector     OPTIONS     Normal and Reverse "D"     Interface Options     Panel and Board Locking Hardware	Contact Copper Alloy (C521) Insulation Glass Reinforced Polyester-Body Glass Reinforced Polyester-Alignment Plate Flammability UL 94V-0 Plating Underplating: 80 µ" [ 2.00 µm ] Nickel Wiping Area: 30 µ" [ 0.76 µm ] Minimum Gold	Current Rating: 1 A Temperature Rating: -20°C to +85°C
MDR Boardmount Plugs, Straddlemount Series 101XX	RoHS Compliant Version Available 26, 50, 68 and 100 Positions Wiper-on-Wiper Contact for Reliable Repetitive Plugging Solder Tails Require No Special Tooling	Contact Copper Alloy (C521) Insulation Glass Reinforced Polyester-Body Glass Reinforced Polyester-Insert Mold Flammability UL 94V-0 Plating Underplating: 80 µ" [ 2.00 µm ] Nickel Wiping Area: 30 µ" [ 0.76 µm ] Minimum Gold	Current Rating: 1 A Temperature Rating: -20°C to +85°C
MDR Connectors, 68-Position BM SCSI Footprint Series 102	Reverse Pin Layout — SCSI-2     Board Compatible     Proven Reliability of the MDR     Ribbon Contact Interface	Contact Material: Copper Alloy Insulation Material: Glass Reinforced Polyester Flammability UL 94V-0 Plating Underplating: 80 µ" [ 2.03 µm ] Nickel Wiping Area: 30 µ" [ 0.76 µm ] Minimum Gold	Current Rating: 1 A Temperature Rating: -55°C to +105°C
MDR Connectors, 1S10 Series 102  NEW	Rugged Die Cast Body Resists Tipping During Automated Soldering Operations Wiper-On-Wiper Contact for Reliable Repetitive Plugging Ultra-Low Signal Skew for High Data Rate Transmission Interface Latch Design for Connection Stability Suitable for Thumbscrew Attach (See TS-0142 for Available Hardware) MDR Digital LCD Interface as a 20 or 26 Contact Connector Camera Link® Interface as a 26 Contact Connector Contact: 14, 20, 26, 40 and 50	Contact Material: Copper Alloy Body Material: Glass Reinforced Polyester (PCT) Flammability UL 94V-0 Plating Underplating: 80 µ" [ 2.00 µm ] Nickel Wiping Area Plating: See Ordering Information	Current Rating: 1 A Temperature Rating: -55°C to +85°C

## 3M™ INPUT/OUTPUT CONNECTOR & CABLE ASSEMBLY SOLUTIONS MINI DELTA RIBBON (MDR)

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PRODUCT	FEATURES	MATERIALS	PERFORMANCE
MDR Cable Assemblies, Power Over Camera Link® Series 1SXXX, 1MXXX	RoHS Compliant     3M Is One of the Recognized Leaders in Camera Link® Connectivity     Supports Base Configuration Power over Camera Link® Applications     Straight or Right Angle Cable Exit     Flexible Cable Options Available for Moving Head Applications     SDR-to-SDR and SDR-to-MDR Configurations Available for Cross-Platform Use	Materials Vary for Connectors, Cables, Shells and Jackscrews. See Website for Specifics.	Current Rating: 0.5 A Temperature Rating: 0°C to +75°C
MDR Cable Assemblies, Round Cable, Input/Output Series 14XXX, 4926, 4120	RoHS Compliant Pending on Some Versions  14-100 Positions  .050" Pitch Ribbon Style Contact Provides Reliable Mating and Is Industry Preferred  Compatible for a Variety of LVDS, IEEE 1284, PanelLink™, TMDS, Flat Link™, and Channel Link™, OpenLDI and QuadLDI Applications  Mates with Standard 3M MDR Boardmount Products  Unshielded or Sheilded Twisted Pair or Twinax Cable Options  Contact 3M for Custom Configurations	Materials Vary for Connectors, Cables, Shells and Jackscrews. See Website for Specifics.	Current Rating: 1 A Temperature Rating: -20°C to +75°C
MDR Cable Assemblies, Camera Link® Series 1XX26	RoHS Compliant     3M Is One of the Recognized Leaders in Camera Link® Connectivity     Versions Available to Support Base, Medium and Full Configuration Camera Link® Applications     Straight or Right Angle Cable Exit     Flexible Cable Options Available for Moving Head Applications     Extension Cables for Bulkhead/Feed-Through	Materials Vary for Connectors, Cables, Shells and Jackscrews. See Website for Specifics.	Performance Varies by Type. See Tech Sheets.
MDR Pleated Foil Input/Output Cable Assemblies Series OM, LS	RoHS Compliant Offers Superior Combination of High-Density, Electrical Performance, Shielding and Durability Allows Digital Data Rates of up to 200 Megabits Per Second Per Conductor Mates with Standard 3M MDR Boardmount Connectors Pleated Copper Foil Provides 360 Degree Shield and Allows Coax-Like Performance Overmolded and Metal with Latching and Thumbscrew Shells Available Position Sizes from 20-100	Materials Vary for Connectors, Cables, Shells and Jackscrews. See Website for Specifics.	Temperature Rating: 75°C Maximum

## 3M™ INPUT/OUTPUT CONNECTOR AND CABLE ASSEMBLY SOLUTIONS

PRODUCT	FEATURES	MATERIALS	PERFORMANCE
Shrunk Delta Ribbon (SDR) Boardmount Receptacles Series 122XX	RoHS Compliant     14-50 Positions     Wiper-on-Wiper Contact for Reliable Repetitive Mating     Ground Lock for Reliable PCB Retention     Full Metal Face for Better EMI Shielding Effectiveness     On-Board Jacksockets Maintains a Secure Connection OPTIONS     Surfacemount and Through-Hole     Right Angle and Vertical     Panel and Board Lock Hardware     Mini Camera Link® Interface as a 26 Contact Connector	Contact Phosphor Bronze Insulation Glass Reinforced Polyester Flammability UL 94V-0 Plating Underplating: 80 μ" [ 2.00 μm ] Nickel Wiping Area: 30 μ" [ 0.76 μm ] Gold	Current Rating: 0.5 A Temperature Rating: -40°C to +70°C
Shrunk Delta Ribbon (SDR) Cable Assemblies, .80 mm, Mini Camera Link® Series 1MG, 1MF, 1SF	RoHS Compliant     Supplied as a Complete Assembly Only     Supports New AIA Industrial Camera Link® Standard for Mini C/L Camera to C/L Frame Grabber Applications     11 Shielded Twisted Twinax Pairs with Four Drain Wires     Double Overall Shield with Foil and Outer Braid EMI Shielded Cable Assembly     Straight and Right Angle Configurations Available     SDR-to-SDR and MDR-to-SDR     Options Available     Mates with 3M SDR and MDR     Boardmount Products	Material Varies for Connectors, Cables, Shells and Jackscrews. See Website for Specifics.	Current Rating: 0.5 A Temperature Rating: 0°C to 70°C
Shielded Compact Ribbon (SCR) Connectors Series 361, 362, 363	Rohs Compliant Robust, Vibration Resistant Connection Up to 1A per Pin (Signal or Power) 10 Pin Plug/Receptacle Solder Termination — No Tooling Required EMI Shielded Multiple Boardmount and Wiremount Configurations for Design Flexibility	Contact Material: Copper Alloy or Phosphor Bronze Insulation Material: Glass Reinforced LCP or Nylon Flammability UL 94V-0 Plating Underplating: Nickel Wiping Area: See Ordering Information Termination Area: See Ordering Information	Current Rating: 1 A Temperature Rating: -55°C to +85°C
I/O Connectors, IEEE 1394 Compatible, 2.0 mm Series 3E	RoHS Compliant Compatible with Popular IEEE 1394 I/O Interconnect Standard Robust, Vibration Resistant Connection with Secure Latching System Up to 1A per Pin (Signal or Power) Fin Plug/Receptacle Solder Termination — No Tooling Required EMI Shielded	Contact Material: Copper Alloy Insulation Material: Glass Filled Polyester Flammability UL 94V-0 Plating Underplating: 50μ" - 100 μ" [ 1.27 μm - 2.54 μm ] Nickel Wiping Area: 30 μ" [ 0.76 μm ] Gold Termination Area: See Ordering Information	Current Rating: 1 A Temperature Rating: -20°C to +85°C

## 3M™ INPUT/OUTPUT CONNECTOR AND CABLE ASSEMBLY SOLUTIONS

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PRODUCT	FEATURES	MATERIALS	PERFORMANCE
D Sub Plugs IDC Mass Terminated Series 8200	RoHS Compliant  9-50 Positions  Available in Either Open or Closed-End Cover  Shell Dimples to Aid in EMI/ESD Protection  Metal Strain Relief Hooks Directly to Metal Shell  Low Profile  Open (Except 50) or Threaded (SAE or Metric) Mounting Holes OPTIONS  Mounting Hardware  Open and Closed-End Covers	Contact Material: Copper Alloy Insulation Material: Glass Reinforced Polyester Flammability UL 94V-0 Plating Underplating: 100 μ" [ 2.54 μm ] Nickel Wiping Area: 30 μ" [ 0.76 μm ] Gold	Current Rating: 1 A Temperature Rating: -55°C to +105°C
D Sub Receptacles IDC Mass Terminated Series 8300	RoHS Compliant 9-50 Positions Available in Either Open or Closed-End Cover Metal Strain Relief — Hooks Directly to Metal Shell Low Profile Open (Except 50) or Threaded (SAE or Metric) Mounting Holes OPTIONS Mounting Hardware Open and Closed-End Covers	Contact Material: Copper Alloy Insulation Material: Glass Filled Polyester Flammability UL 94V-0 Plating Underplating: 100 µ" [ 2.54 µm ] Nickel Wiping Area: 30 µ" [ 0.76 µm ] Gold	Current Rating: 1 A Temperature Rating: -55°C to +105°C
D Sub - Junction Shell Round Cable, Metal Series 3357	RoHS Compliant     Provides EMI/ESD Protection     Similar to Aluminum Die Cast     Easy Assembly Reduces Time and     Labor to Ensure Low Applied Cost     Optional Thumbscrew Kit     Provides Option in Grounding     for Discrete Wire Applications     Lightweight, Compact Design     OPTIONS     Thumbscrew Kit     Retainer Rings	Cover Nut Material: Glass Filled Polyester Shell and Hardware Material: Steel Flammability UL 94V-0 Plating Nickel	
D Sub - Junction Shells Round Cable, Plastic Series 3357	RoHS Compliant     Protection from EMI/ESD     Easy Assembly Reduces Time and Labor for Low Cost     Lightweight and a Compact Design     Strain Relief Compensates for Multiple Cable Diameters     Jackscrews Provide Positive Retention     OPTIONS     60 Degree Relief Cable Exits	Shell and Hardware Shell Material: ABS Insulation Material: Thermoplastic Elastomer Flammability UL 94VO Plating Bright Zinc	Temperature Rating: 0°C to +75°C
D Sub - Junction Shells Flat Cable Series 3485	RoHS Compliant     Uses Standard Hardware     Lightweight, Compact Size     Full Family of Sizes     OPTIONS     EMI Versions Available	<b>Shell</b> Material: Glass Filled Polyester <b>Flammability</b> UL 94V-0	Temperature Rating: -55°C to +105°C

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### 3M™ CABLE SOLUTIONS

PRODUCT	FEATURES	MATERIALS	PERFORMANCE
Round Conductor Flat Cable Series 3365, 3355, 2010, 3601	RoHS Compliant  28 AWG Wire on .050 Inch Centers Permits Mass Termination to a Broad Line of IDC Connectors  Stranded Wire Provides Flexibility and Extended Product Life  Zippable for Branching or Discrete Termination  Series 3365 Available in Gray or Black  2010 Is Halogen Free OPTIONS  .025", .033", .050", 1 mm, .100" and .156" Center Line  18, 22, 24, 26, 28 and 30 AWG Conductors  Solid and Stranded Conductors  Multiple Roll Lengths  UL/CSA Marking Line  PVC Jacket Options  Split Sections  For Other Variations, See Website	Insulation Material: Polyvinyl Chloride TPE, FEP, PO Insulators	Flammability USA: VW-1 Canada: FT-1 Temperature Rating: -20°C to +105°C Voltage: USA 300V, Canada: 150V, EU: <50V
Extended Flex Life - Flat Cable Series 3319, 3539	RoHS Compliant Flex Life of 100 Million Cycles at 1 3/4 Inch Diameter High Strength Copper Alloy Provide the Longest Flex Life Available for Dynamic Applications 28 AWG Wire on .050 Inch Wire Spacing Permits Mass Termination to a Broad Line of IDC Connectors Zippable for Branching or Discrete Termination OPTIONS High Flex Medium Flex	Insulation Material: Polyvinyl Chloride	Flammability USA: VW-1, Canada FT-1 Temperature Rating: -20°C to +105°C Voltage: USA 300V, Canada: 150V, EU: <50V
Twisted Pair Flat Cable Series 1700, 2100, 3782	RoHS Compliant Wires Are Color-Coded for Easy Identification Twist and Flat Repeat Has Variable Length Option Can Be Mass Terminated to a Broad Line of IDC Connectors Provides Reduced Crosstalk in Balanced Drive Applications 28 AWG Stranded Wire Provides Flexibility and Extended Product Life 10-Color Repeat 2100 Is Halogen Free OPTIONS Variable Twist and Flat Repeat Lengths	<b>Insulation</b> Material: Polyvinyl Chloride or PO Insulators	Flammability USA: VW-1 Canada: FT-1 Temperature Rating: USA: -20°C to +105°C Canada: -20°C to +80°C Voltage: USA 300V, Canada: 150V, EU: <50V
Round Jacketed Flat Cable Series 3659, 3759, 3758, 3896	RoHS Compliant     Round Construction Permits     Easier Routing     28 AWG Wire on .050 Inch     Pitch Permits Mass Termination     to Broad Line of IDC Connectors     Continuous Split/Bond Repeat     Allows for Mass Termination     on 2.4 Inch Centers (Approximate)     Primary Cable Is Zippable for     Branching or Discrete Terminations     Meets External Wiring     Requirements of National     Electrical Code, Article 725 (CL2)     UL Listed for USA and     Canadian Markets     Dual Shielding Provides 35 db     Average Shielding Effectiveness     OPTIONS	Jacket Material: Polyvinyl Chloride or PO Insulators	Flammability USA: N.E.C. 725, CL2 Canada: FT-1 Temperature Rating: USA: CL2; 75°C Max or AWM; -20°C to +80°C, Canada: 80°C Voltage: USA 300V, Canada: 150V, EU: <50V

### **3M™ CABLE SOLUTIONS**

PRODUCT	FEATURES	MATERIALS	PERFORMANCE
Color Coded Flat Cable Series 3302, 3811	RoHS Compliant     28 AWG Wire on .050 Inch     Centers Permits Mass     Termination to a Broad Line     of IDC Connectors     Stranded Wire Provides Flexibility     and Extended Product Life     Zippable for Branching or     Discrete Termination Color     Coded for Wire Identification     OPTIONS     22, 26 and 28 AWG Conductors     100", .156" Centerline	Insulation Material: Polyvinyl Chloride	Flammability USA: VW-1 Canada: FT-1 Temperature Rating: USA: -20°C to +105°C Canada: -20°C to + 80°C Voltage: USA 300V, Canada: 150V, EU: <50V
Round Jacketed Discrete Twisted Pair Cable Series 3600, 3644	RoHS Compliant     Meets External Wiring Requirements of National Electrical Code, Article 725 (CL2)     28 AWG Stranded Wire Provides Flexibility     Twisted Pairs Reduce Crosstalk for Balanced Drive Applications     Dual Shielding with Aluminum Film Foil and Copper Braid Provides Excellent EMI/ESD Protection     Wires Are Color-Coded for Easy Identification     35 db Average Shielding Effectiveness OPTIONS     26 and 28 AWG Conductors	<b>Jacket</b> Material: Polyvinyl Chloride and PO Insulators and Jacket	Flammability USA: N.E.C.725, CL2 Canada: FT-1 Temperature Rating: USA: CL2 75°C Max, Canada: 80°C Voltage: USA 300V, Canada: 150V, EU: <50V
Pleated Foil Flat Cable Series 901XX, 902XX, 931XX	RoHS Compliant Compatible with IDC Mass Termination Connectors Functions with Applications Requiring Standard Impedance of 100Ω Balanced (Differential) Extremely Low Crosstalk, Used in the All-Signal Mode to Quadruple Signal Density as Compared to Standard .050 Inch Flat Ribbon Cable Solid Pleated Copper Foil Provides Flexibility and 35 db Average Shielding Effectiveness CL2 Rated, Rugged Design and High Reliability for Peripheral Applications OPTIONS .025" and .050" Centerline 28 and 30 AWG Conductors Solid and Stranded Conductors Thick and Thin Jacket Options Low Skew Versions	Jacket Material: TPE with PVC and TPE Jacketing Materials	Flammability USA: N.E.C. 725, CL2, Canada: FT-1 Temperature Rating: USA: CL2: 75°C; Canada: 80°C Voltage: USA 300V, Canada: 150V, EU: <50V

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