

Interconnect Solutions Short Form Catalog

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Complete Solutions for the Electronics Industry

3M Electronics 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 Electronics can help you design, modify and customize your product as well as help you to seamlessly integrate our products into your manufacturing process on a global basis.

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Enter keywords or phrases as they would appear. A search for "cable and assembly" will only return matches to that exact phrase. Try entering a partial keyword or part number. A search for "assembl" will return pages with "assembly" and "assemblies" in them. For searches by Tech Sheet number, enter up to four digits. If you do not find any results, try entering a partial part number. Less is best. Do not enter spaces. Search is not case sensitive.

3M™ BACKPLANE CONNECTOR SOLUTIONS

PRODUCT FEATURES PERFORMANCE MATERIALS • RoHS Compliant Version Available Contact Current Rating: 3.0 A @ 30°C **DIN Connectors** • DIN 41612 Material: Copper Alloy T-rise above ambient • C-Form Plug and Socket Insulation Flammability: UL 94V-0 • C-Form Wiremount Plugs Temperature Rating: -55°C Material: Engineering Thermoplastic and Sockets **Plating** to +125°C • R-Form Plug and Socket Underplating: 50 µ" [1.27 µm] · Q-Form Plug and Socket Min. Nickel • B-Form Wiremount Plug Interface: 30 µ" [76 µm] Gold and Socket or 3 μ" [.08 μm] Gold over Pinless Shrouds 7 μ" [.18 μm] PdNi Solder Tails or Press-Fit • Inverse Versions • EMLB Contact Loading PCB Retention Clips MetPak™ 2-FB Connectors • RoHS Compliant Version Available Current Rating: Signal: 1.5 A Contact • Futurehus+® Material: Copper Alloy All contacts simultaneously • Inverse Version Available Insulation Flammability: UL 94V-0 Vertical and Right Angle Material: High Temp LCP Temperature Rating: -55°C Stacking Versions **Plating** to +125°C • Elevated Versions Underplating: 50 μ " (1.27 μ m) Nickel Guiding Features Interface: 10 μ " [25 μ m] or 30 μ " Pinless Shroud [.76 um] Gold or 3 to 5 u" 1.07 to 12 um 1 Gold over 7.27 or · Power Header and Socket 40 μ" [.18, .69, 1.01 μm] PdNi MetPak™ CP2 Connectors • RoHS Compliant Version Available Contact Current Rating: 1A at +70°C • Compact PCI® Material: Copper Alloy Flammability: UL 94V-0 • Types A, B and C Temperature Rating: -55°C Insulation to +125°C Header and Socket Material: Glass Filled Polyester • Grounding Options Plating • EMLB Contact Loading Underplating: Nickel Coding Kevs Wiping Area: 30 u" [0.79 um] Gold Lower Shield Option • Pinless Shroud • RoHS Compliant Version Available MetPak™ HM Connectors Contact Current Rating: (Fully Loaded): • Hard Metric (HM) Material: Copper Alloy 1 A at 70°C Signal, 8.25 A @ • 5- and 8-Row Versions Insulation 70°C Power Socket and Header Material: High Temperature Flammability: UL 94V-0 Power Options Thermoplastic Temperature Rating: -55°C Protective Caps Plating to +125°C Coding Kevs Underplating: 50 µ" [1.27 µm] Nickel Shielding Options Interface: 30 μ " [.76 μ m] Gold or 5 μ" [.13 μm] Gold over 40 μ" [1.01 µm] PdNi MetPak™ HSHM Connectors • RoHS Compliant Version Available Current Rating: (Fully Loaded): Contact • High Speed Hard Metric (HSHM) 1 A at 70°C Signal, 8.25 A @ Material: Copper Allov • 5 Gigabits Per Second Insulation 70°C Power • Orthogonal Design Capable Material: High Temperature Flammability: UL 94V-0 · Differential Pairs in Rows or Thermoplastic Temperature Rating: -55°C Columns **Plating** to +125°C Virtual Coax Capable Underplating: 50 µ" [1.27 µm] Nickel • 5- and 8-Row Versions Interface: 30 µ" [.76 µm] Gold or Socket and Header 5 μ" [.13 μm] Gold over 40 μ" Power Options [1.01 µm] PdNi • Protective Caps for Headers Coding Keys Shielding Options

• Guide Pin Options

3M[™] BOARDMOUNT CONNECTOR SOLUTIONS

PRODUCT	FEATURES	MATERIALS	PERFORMANCE
Sockets and Pin Strip Headers, .100" x .100" Series 929	 RoHS Compliant Version Available 2-80 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) Plating Pinstrip Underplating: 50 μ" [1.27μm] Nickel, Interface: 10 μ" [.25 μm] or 30 μ" [.76 μm] Gold Socket Underplating: 100 μ" [2.54 mm] Nickel, Interface: 10 μ" [.25 μm] or 30 μ" [.76 μm] Gold Tin Plated Versions Available.	Current Rating: 1 A, 2 A or 2.5 A Flammability: UL 94V-0 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 Plating Underplating: 2 µm [79 µ"] Nickel Wiping Area: 0.3 µm [12 µ"] Gold	Current Rating: 1 A Flammability: UL 94V-0 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 Plating Underplating: 50-150 µ" [1.27-3.81 mm] Nickel Wiping Area: 30 µ" [0.76 µm] Gold	Current Rating: 1 A Flammability: UL 94V-0 Temperature Rating: -55°C to +105°C
Pak 50 Sockets and Headers Series P50	• RoHS Compliant • 20-200 Positions • 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 Plating Underplating: Nickel Wiping Area: 10 µ" [0.25 µm] Gold	Current Rating: 0.5 A Flammability: UL 94V-0 Temperature Rating: -55°C to +85°C

3M[™] BOARDMOUNT CONNECTOR SOLUTIONS

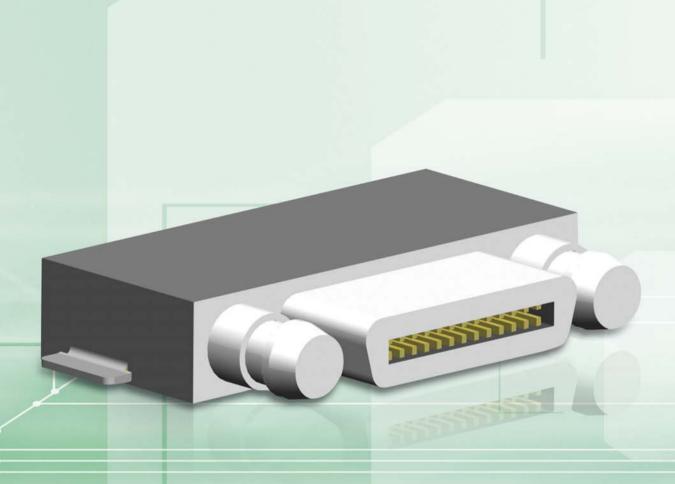
PRODUCT	FEATURES	MATERIALS	PERFORMANCE
Pak 10 Plugs and Connectors Series PK10	 RoHS Compliant 30-100 Positions 1.0 mm Pitch Parallel, Perpendicular and End-to-End Mating 4 Mating Heights Available 	Contact Material: Phosphor Bronze Insulation Material: Glass Filled LCP Plating Underplating: Nickel Wiping Area: 2 µ" [0.05 µm] or 4 µ" [0.1 µm] min. Gold	Current Rating: 0.5 A Flammability: UL 94V-0 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 Plating Underplating: 50 μ" [1.25 μm] Nickel Wiping Area: 8 μ" [0.20 μm] Gold	Current Rating: 0.5 A Flammability: UL 94V-0 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 Plating Underplating: 50 μ" [1.27μm] Nickel Wiping Area: 8 μ" (0.2 μm) minimum Gold	Current Rating: 0.5 A Flammability: UL 94V-0 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 Plating Underplating: 50 μ" [1.27 μm] Nickel Wiping Area: 8 μ [0.2 μm] Gold	Current Rating: 0.5 A per contact Flammability: UL 94V-0 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 Plating Underplating: Nickel Wiping Area: 2 µ" [0.05µm] min. Gold over Nickel	Current Rating: 0.3 A Flammability: UL 94V-0 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	 RoHS Compliant Version Available 10-64 Positions Straight and Right Angle Tails Vertical Surfacemount High Temperature Option 	Contact Material: Copper Alloy Insulation Material: Glass Filled Polyester Plating Underplating: 100 µ" [2.54 µm] Nickel - Overall Wiping Area: 15 µ" [0.38 µm] or 30 µ" [0.38 µm] Gold	Current Rating: 2 A Flammability: UL 94V-0 Temperature Rating: -55°C to +105°C	
Low Profile Headers, .100" x .100" Series 303	RoHS Compliant 6-50 Positions Straight and Right Angle Tails Economy Series	Contact Material: Brass Insulation Material: Glass Filled Polyester Plating Underplating: 30 µ" [0.76 µm] Nickel Wiping Area and Solder Tails: Gold Flash	Current Rating: 1 A Flammability: UL 94V-0 Temperature Rating: -55°C to +105°C	
4-Wall Latch/Eject Headers, .100" x .100" Series 3400	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 Plating Underplating: 100 µ" [2.54 µm] Nickel - Overall Wiping Area: 30 µ" [0.76 µm] Gold	Current Rating: 1 A Flammability: UL 94V-0 Temperature Rating: -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 Plating Underplating: 100 µ" [2.54 µm] Nickel - Overall Wiping Area: 30 µ" [0.76 µm] Gold	Current Rating: 1 A Flammability: UL 94V-0 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 Plating Underplating: 100 μ" [2.54 μm] Nickel Wiping Area: 30 μ" [0.76 μm] Gold	Current Rating: 1 A Flammability: UL 94V-0 Temperature Rating: -55°C to +105°	

3M[™] WIREMOUNT CONNECTOR AND ASSEMBLY SOLUTIONS

PRODUCT FEATURES MATERIALS PERFORMANCE Wiremount Sockets. RoHS Compliant Contact **Current Rating: 1 A** .100" x .100" • 10-60 Positions Material: Copper Alloy Flammability: UL 94V-0 Series 3000 • Two-piece with Adhesive Cover Insulation Temperature Rating: -55°C for Daisy Chain or Round-to-Flat Material: Glass Filled Polyester to +105°C Cable Applications **Plating** Plastic or Metal Strain Underplating and U-Slot: 100 µ" Relief Option [2.54 µm] Nickel Positive Locking Metal Clip Wiping Area: 30 μ"[0.76 μm] for High Cover Retention Gold • Open or Closed-End Covers Wiremount Sockets. .100" x .100" RoHS Compliant Contact **Current Rating: 1 A** Series 891 Material: Phosphor Bronze (C510) • 10-60 Positions Flammability: UL 94V-0 Preassembled Insulation Temperature Rating: -55°C • Plastic Strain Relief Available Material: Glass Filled Polyester to +105°C • Open Cover for Daisy Chain **Plating** Underplating: 100 µ" [2.54 µm] Nickel Wiping Area: 15 μ" [.38 μm] Gold Molded Socket Assembly, .100" x .100" • RoHS Compliant When Used **Current Rating: 1 A** Contact with Compliant Cable Material: Copper Alloy Flammability: UL 94V-0 Series 871 • 6-64 Positions Insulation Temperature Rating: -55°C Supplied as Complete Material: Glass Filled Polyester to +105°C Assembly Only (1M Series) **Plating** • Mates with Standard 0.25" Underplating and U-Slot: 50 - 150 µ" Square Contacts on [1.27 - 3.81 µm] .100" x .100" Centers Nickel • One Piece, Molded-on Construction Wiping Area: 30 μ " [0.76 μ m] Provides Integral Strain Relief Gold • High and Low Profile, Polarity and Pull Tab Options Available Polarized Wiremount Sockets, .100" and .100" x .100" RoHS Compliant Contact Current Rating: 22-24 AWG: Series CHG • 10-64 Positions Material: Copper Alloy 2 A; 26-28 AWG: 1.5 A Flammability: UL 94V-0 • Single- and Dual-Row Insulation Side-to-Side Stackable Material: Glass Filled Polyester Temperature Rating: -55°C • Single-Row 2-36 Positions Plating to +105°C • Dual-Row 6-72 Positions Wipe Area: 30 μ" [0.76 μm] Dual-Row Polarized Version Underplating and U-Slot: 100 µ" • IDC with 4-Wipe Mating Contact • 22-28 AWG Discrete or Flat [2.54 µm] Nickel Cable Wire Wiremount Pluas. .100" x .100" RoHS Compliant **Current Rating: 1 A** Contact Series 4600 • 10-64 Positions Material: Copper Alloy Flammability: UL 94V-0 Temperature Rating: -55°C • Open- or Closed-End Covers Insulation • Optional Ejector Latches Material: Glass Filled to +120°C • Optional Mounting Flanges Polyester January Comment Plastic Strain Relief Option Plating Underplating and U-Slot: 100 u" [2.54 µm] Nickel Wiping Area: 30 μ" [0.76 μm] Gold



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3M Interconnects now offers 3D CAD models of selected products on our website, www.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 for 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 it to your desktop.

3M™ WIREMOUNT CONNECTOR AND ASSEMBLY SOLUTIONS

PRODUCT	FEATURES	MATERIALS	PERFORMANCE
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 Plating Underplating: 100µ" [2.54µm] Nickel U Slot and Solder Tails: Gold flash	Current Rating: 1 A Flammability: UL 94V-0 Temperature Rating: -55°C to +105°C
Molded PCB Assembly, .100" x .100" Series 878	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 Flammability: UL 94V-0 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 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 Flammability: UL 94V-0 Temperature Rating: -55°C to +120°C
Card Edge, .100" Series 3000	• RoHS Compliant • 10-64 Positions • Bifurcated Contacts • Metal Cover Clips • Optional Strain Relief • Optional Mounting Flanges	Contact Material: Copper Alloy Insulation Material: Glass Filled Polyester Plating Underplating and U-Slot: 100 μ" [2.54 μm] Nickel Wiping Area: 30 μ" [0.76 μm] Gold	Current Rating: 1 A Flammability: UL 94V-0 Temperature Rating: -55°C to +105°C
Link Connectors, Boardmount and Wiremount, .100" Series 38	 RoHS Compliant 4 Position Vertical or Right Angle Boardmount Hermaphroditic Wiremount Designed Around CC-Link Standard Field Terminable with Pliers 	Contact Material: Copper Alloy Insulation Material: Polyester Body, Nylon Cover Plating Underplating: 100 µ" [2.54 µm] Nickel Wiping Area: 8 µ" [0.2 µm] minimum Gold with lubricant IDC: Nickel	Current Rating: 5.0 A Flammability: UL 94V-0 Temperature Rating: -20°C to 70°C

3M[™] WIREMOUNT CONNECTOR SOLUTIONS

PRODUCT	FEATURES	MATERIALS	PERFORMANCE	
Compact Wiremount Sockets, .100" x .075" Series 501	• RoHS Compliant • 16-50 Positions • Uses Standard .050" Cable • Optional Metal Strain Relief	Contact Material: Copper Alloy Insulation Material: Glass Filled Polyester Plating Underplating: 100 µ" [2.54 µm] Nickel Wiping Area: 10 µ" [0.25 µm] Gold	Current Rating: 1 A Flammability: UL 94V-0 Temperature Rating: -40°C to +85°C	
Compact Headers, .100" x .075" Series 502	RoHS Compliant Version Available 16-50 Positions Right Angle Uses Standard .100 x .100 Board Pattern	Contact Material: Copper Alloy Insulation Material: Glass Filled Polyester Plating Underplating and U-Slot: 80 µ" [2.03 µm] Nickel Wiping Area: 12 µ" [0.30 µm] Gold	Current Rating: 1 A Flammability: UL 94V-0 Temperature Rating: -40°C to +85°C	
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	Contact Material: Copper Alloy Insulation Material: Glass Filled Polyester 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 Flammability: UL 94V-0 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 Plating Wiping Area: 30 μ" [0.76 μm] Gold Underplating: 100 μ" [2.54 μm] Nickel	Current Rating: 0.5 A Flammability: UL 94V-0 Temperature Rating: -55°C to +105°C	
Pak 50 Wiremount Sockets Series P25E, P50E	RoHS Compliant 20-100 Positions Accepts .025" and .050" Cable Integrated Latch/Eject Audible Tactile "Click" for Blind Mating	Contact Material: Phosphor Bronze Insulation Material: Glass Filled Nylon Plating Underplating: Nickel Wiping Area: .025μm [10 μ"] Gold	Current Rating: 0.5 A Flammability: UL 94V-0 Temperature Rating: -55°C to +85°C	

3M[™] WIREMOUNT CONNECTOR AND ASSEMBLY SOLUTIONS

PRODUCT FEATURES MATERIALS PERFORMANCE Mini Clamp • RoHS Compliant Contact **Current Rating: 3.0 A** Sockets and Plugs • 3- or 4- Positions Material: Copper Alloy Flammability: UL 94V-0 Series 37 Temperature Rating: -20°C Latching Insulation • No Wire Prep Required Material: Glass reinforced to 85°C • Field Terminable with Pliers thermoplastic body and lower Vertical Boardmount cover, transparent thermoplastic cover Plating Underplating: 100 µ" (2.54 µm) Nickel Wiping Area: 8 μ" (0.2 μm) minimum Gold with lubricant IDC: Nickel Wiremount Sockets, 2 mm x 2 mm RoHS Compliant Contact **Current Rating: 1 A** Series 1522 • 10-50 Positions Flammability: UL 94V-0 Material: Copper Alloy Rugged Cover Retention Insulation Temperature Rating: -55°C • Open or Closed Cover Options Material: Glass Filled Polyester to +105°C • Metal Strain Relief Option **Plating** Underplating and U-Slot: 50-150 µ" [1.27-3.81 µm] Nickel, Class 2 Wiping Area: 15 μ " [.38 μ m] or 30 u" [.76 um] Gold * 454454555555555555555555 Molded Socket Assembly, 2 mm x 2 mm • RoHS Compliant When Used Contact Current Rating: 1 A Series 870 with Compliant Cable Material: Copper Alloy Flammability: UL 94V-0 • 6-50 Positions Temperature Rating: -55°C Insulation Supplied as Complete Material: Glass Filled Polyester to +105°C Assembly Only (2M Series) **Plating** • Mates with Standard 2 mm x 2 mm Underplating and U-Slot: 50-150 µ" [1.27-3.81 µm] Nickel Headers Wiping Area: 30 μ" [0.76 μm] • One Piece, Molded-on Construction Provides Integral Gold Strain Relief ----- Centerbump and Latching Ear Features Available Molded PCB Assembly, 2 mm x 2 mm • RoHS Compliant When Used Contact **Current Rating: 1 A** Material: Copper Alloy Series 879 with Compliant Cable Flammability: UL 94V-0 • 6-50 Positions Temperature Rating: -55°C Insulation · Supplied as Complete Material: Glass Filled Polyester to +105°C Assembly Only (2M Series) **Plating** • Mates with Standard 2 mm x 2 mm Underplating and U-Slot: 50-150 μ " Board Pattern [1.27 - 3.81 µm] Nickel. Class 2 • One Piece. Molded-on Construction Provides Integral [2.62 - 10.10um] Matte Tin Strain Relief Contact Tail: 300-400 µ"

3M[™] DEVICE-TO-BOARD CONNECTOR SOLUTIONS

PRODUCT	FEATURES	MATERIALS	PERFORMANCE	
PC Card Headers, PCMCIA Series MCH	RoHS Compliant Version Available Single and Dual Slot ESD and Board Retention Options Available With and WithoutIntegrated Ejectors Low Profile Version Alternate Board Pattern Available for Competitive Cross	Contact Material: Copper Alloy Insulation Material: LCP Plating Underplating: 50 μ" [1.27 μm] Nickel Wiping Area: Gold flash over 27 μ" [.68 μm] Palladium Nickel	Current Rating: 0.5 A Flammability: UL 94V-0 Temperature Rating: -20°C to +60°C, 95% RH Non-condensing	
CF Card Headers, CompactFlash™ Series N7E50	RoHS Compliant Version Available 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 Thermplastic 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 Flammability: UL 94V-0 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 3.0 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 HDD Fitted with SAS or Serial Advanced Technology Attachment (SATA) Header Meets SFF-8482 Specification Meets SAS Specification SAS-1.1 OPTIONS Elevated Receptacle Version for Additional Backplane Stand-off Plated Through-Hole or Press Fit Right Angle Version Available SMT Vertical Option Press-fit Contacts	Contact Material: Copper Alloy Insulation Material: High Temperature Themoplastic Plating Underplating: 50 - 80 μ" [1.27 - 2.03 μm] Nickel Wiping Area: 30 - 40 μ" [0.76 - 1.02 μm] Gold	Current Rating: Power Pin: 1.5A Signal Pin: 500 mA Flammability: UL 94V-0 Temperature Rating: -40°C to +85°C	-
Serial Adavanced Tecnology Attachment (SATA) Connectors	RoHS Compliant 1.5 Gbps I/O Connector for HDD Applications EMLB Contacts for Hot Swap Blind Mate Polarization Meets SATA 1.0 Specifications OPTIONS Press-Fit Contacts Extended Height Receptacles for Additional Backplane Standoff Right Angle Surfacemount Receptacle 7-Pin Signal Plug 7-Position Signal Assemblies 15 x 2 Y-Type Power Assembly 22p Device Plugs for Drive Interface	Contact Material: Copper Alloy Insulation Material: High Temperature Thermoplastic Plating Underplating: 50 - 80 µ" [1.27 - 2.03 µm] Nickel Wiping Area: 30 - 40 µ" [0.76 - 1.02 µm] Gold Solder Tails: 100 - 200 µ" [2.54 - 5.08 µm] Tin	Current Rating: Power Pin: 1.5A Signal Pin: 500 mA Flammability: UL 94V-0 Temperature Rating: Operating Temperature: 0°C to +55°C Non-Operating Temperature: -40°C to +85°C	-

3M[™] DEVICE-TO-BOARD CONNECTOR AND ASSEMBLY SOLUTIONS

PRODUCT	FEATURES	MATERIALS	PERFORMANCE
DIP Sockets, Dual Wipe Series 4800	 RoHS Compliant .100" Lead Spacing 8-48 Leads Lower Cost Stamped and Formed Contact Kink Tail Option for Additional Board Retention Straight Tail Option Aids Automated Insertion 	Contact Material: Phosphor Bronze Insulation Material: Glass Filled Polyester Plating Underplating: 35 µ" [0.89 µm] min. Nickel Overall Surface Plating: 135 µ" [3.43 µm] min. Matte Tin Overall	Current Rating: 1 A Flammability: UL 94V-0 Temperature Rating: -25°C to +85°C
DIP and SIP Sockets, Screw Machine Series 100, 300-500	RoHS Compliant 6-64 Leads .100" Lead Spacing Screw Machine Contact for Reliable Package Retention Standard and Low Profile Options	Contact Sleeve: Brass Inner Contact: Beryllium Copper Insulation Material: Glass Filled PPS Plating Underplating: 100 µ" [2.54 µm] min. Nickel Wiping Area: 8 µ" [0.20 µm] min. Gold	Current Rating: 1 A Flammability: UL 94V-0 Temperature Rating: -65°C to +125°C
PGA Sockets, Screw Machine Series 200	RoHS Compliant .100" Lead Spacing Screw Machine Contact for Reliable Package Retention Up to 17x17 Array	Contact Sleeve: Brass Inner Contact: Beryllium Copper Insulation Material: Glass Filled Polyester Plating Underplating: 100 µ" [2.54 µm] min. Nickel Wiping Area: 8 µ" [0.20 µm] min. Gold	Current Rating: 1 A Flammability: UL 94V-0 Temperature Rating: -65°C to +125°C
Chip Carrier Sockets, PLCC Series 8400	RoHS Compliant 20-84 Leads Accepts Common JEDEC Standard Packages Surfacemount and Through-Hole High Temp - Reflow Capable	Contact Material: Beryllium Copper Insulation Material: Glass Filled Polyphenylene Sulfide Plating Underplating: 50 μ" [1.27 μm] Nickel - Overall Wiping Area: 160 μ" [4.06 μm] Matte Tin	Flammability: UL 94V-0 Temperature Rating: -40°C to +105°C

$3M^{\text{\tiny TM}}$ INPUT/OUTPUT CONNECTOR SOLUTIONS MINI DELTA RIBBON (MDR)

PRODUCT	FEATURES	MATERIALS	PERFORMANCE	
MDR Wiremount Plugs - IDC Series 101XX-6000, 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 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 (C172) Insulation Material: Glass Filled Polyester Plating Underplating: 80 μ" [2.0 μm] Nickel Wiping Area: 30 μ" [0.76 μm] Gold	Current Rating: 1 A Flammability: UL 94V-0 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	Contact Copper Alloy Insulation Glass Reinforced Polyester Plating Underplating: 80 µ" [2.0 µm] Nickel Wiping Area: Gold	Current Rating: 1 A Flammability: UL 94V-0 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	Contact Material: Beryllium Copper (C172) Insulation Glass Reinforced Polyester Plating Underplating: 80 µ" [2.0 µm] Nickel Wiping Area: 30 µ" [0.76 µm] Gold	Current Rating: 1 A Flammability: UL 94V-0 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) Quick Release Latching MDR Digital LCD Interface as a 20 or 26 Contact Connector OPTIONS 80 Position Jackscrew Latching for Connection Stability	Outer Shell Material: ABS Inner Shell Material: Steel, .020" [0.5 mm] Thick Plating Nickel	Flammability: UL 94V-0	

$3M^{\text{\tiny TM}}$ INPUT/OUTPUT CONNECTOR SOLUTIONS MINI DELTA RIBBON (MDR)

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, .050" [1.27 mm] Thick Plating Nickel	
MDR Junction Shells, Flat Cable Exit, Metal Series 103XX	RoHS Compliant Metal Junction Shell for Flat Cable 20-40 Positions Rugged Two-Piece Metal Shells for High Performance Pleated Foil Cable Assemblies (Compatible with 101XX-6000 EC Plug) Kit Includes Conductive Gasket for Superior Cable Shield to Shell Continuity Accepts 3M 50 Ohm PFC Cables	Shell Material: Zinc, .020" [0.5mm] Thick 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 Contacts: 68, 80 and 100	Shell Zinc, .030" [0.8 mm] Thick 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 Temperature Rating: -20°C to +85°C

3M[™] INPUT/OUTPUT CONNECTOR SOLUTIONS MINI DELTA RIBBON (MDR)

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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 OPTIONS Dust Covers Board Lock and Panel Mount Hardware	Contact Copper Alloy (C521) Insulation Glass Reinforced Polyester Plating Underplating: 80 μ" [2.00 μm] Nickel Wiping Area: 30 μ" [0.76 μm] Min Gold	Current Rating: 1 A Flammability: UL 94V-0 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 Contacts: 14, 20, 26, 40 and 50	Contact Copper Alloy (C521) Insulation Glass Reinforced Polyester Plating Underplating: 80 μ" [2.00 μm] Nickel Wiping Area: 20 μ" [0.50 μm] Min Gold	Current Rating: 1 A Flammability: UL 94V-0 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 (C521) Insulation Glass Reinforced Polyester Plating Underplating: 80 µ" [2.00 µm] Nickel Wiping Area: 30 µ" [0.76 µm] Min Gold	Current Rating: 1 A Flammability: UL 94V-0 Temperature Rating: -20°C to +85°C	

3M™ INPUT/OUTPUT CONNECTOR SOLUTIONS MINI DELTA RIBBON (MDR)

PRODUCT FEATURES MATERIALS PERFORMANCE MDR Boardmount Receptacles, **Current Rating: 1 A** RoHS Compliant Contact Compliant Pin Vertical • 14-100 Positions Copper Alloy (C521) Flammability: UL 94V-0 Series 102XX · Wiper-on-Wiper Contact for Insulation Temperature Rating: -20°C Reliable Repetitive Plugging Glass Reinforced Polyester to +85°C Rugged Die Cast Metal Case **Plating** Construction Underplating: 80 µ" [2.00 µm] OPTIONS Nickel Dust Covers Wiping Area: 30 μ " [0.76 μ m] Board Lock and Panel Min Gold Mount Hardware MDR Boardmount Receptacles. **PTH Right Angle** • RoHS Compliant Contact **Current Rating: 1 A** Series 102XX • 14-100 Positions Flammability: UL 94V-0 Copper Alloy (C521) · Wiper-on-Wiper Contact for Insulation Temperature Rating: -55°C Reliable Repetitive Plugging Glass Reinforced Polyester (PCT) to +105°C Rugged Die Cast Metal Case Plating Underplating: 80 µ" [2.00 µm] Construction SMT Compatible PCT Nickel Insulator Material Wiping Area: 30 μ" [0.76 μm] Min · Screw or Ground Lock for Gold 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 MDR Boardmount Receptacles, **PTH Right Angle Condo** RoHS Compliant Contact Current Rating: 1 A Version Available Copper Alloy (C521) Flammability: UL 94V-0 Series 102XX Temperature Rating: -20°C • Positions 40 (2 x 20), 100 Insulation (2 x 50) and 136 (2 x 68) Glass Reinforced Polyester to +85°C · Wiper-on-Wiper Contact for **Plating** Reliable Repetitive Plugging Underplating: 80 µ" [2.00 µm] Rugged Die Cast Metal Case Nickel Wiping Area: 20 μ" [0.50 μm] Construction Screw Lockdown for Reliable Min Gold PCB Retention . Interface Latch Design for Connection Stability Stacked Receptacles Save **Board Space OPTIONS** Dust Covers Board Lock and Panel Mount Hardware

3M™ INPUT/OUTPUT CONNECTOR SOLUTIONS MINI DELTA RIBBON (MDR)

PRODUCT	FEATURES	MATERIALS	PERFORMANCE	
MDR Boardmount Plugs, PTH Vertical Series 101XX	RoHS Compliant Version Available Wiper-on-Wiper Contact for Reliable Repetitive Plugging Contacts: 100	Contact Material: Copper Alloy Insulation Material: Glass Reinforced Polyester - Body Glass Reinforced Polyester - Insert Mold Plating Underplating: 80 μ" [2.00 μm] Nickel Wiping Area: 8 μ" [0.20 μm] Min Gold	Current Rating: 1 A Flammability: UL 94V-0 Temperature Rating: -20°C to +85°C	
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 Normal and Reverse "D" Interface Options for Board-to-Board Flexibility 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 Plating Underplating: 80 μ" [2.00 μm] Nickel Wiping Area: 30 μ" [0.76 μm] Min Gold	Current Rating: 1 A Flammability: UL 94V-0 Temperature Rating: -20°C to +85°C	
MDR Boardmount Plugs, Straddlemount Series 101XX	RoHS Compliant Version Available 50-100 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 Plating Underplating: 80 µ" [2.00 µm] Nickel Wiping Area: 30 µ" [0.76 µm] Min Gold	Current Rating: 1 A Flammability: UL 94V-0 Temperature Rating: -20°C to +85°C	

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

PERFORMANCE PRODUCT FEATURES MATERIALS MDR Cable Assemblies. • RoHS Compliant Pending Materials vary for connectors, **Current Rating: 1 A** Round Cable, Input/Output on Some Versions cables, shells and jackscrews. Flammability: AWM VW-1 Series 14XXX, 4926, 4120 • 14-100 Positions See website for specifics. Temperature Rating: -20°C • .050" Pitch Ribbon Style to +75°C Contact Provides Reliable Mating and is Industry Preferred · Compatible for a Variety of LVDS, IEEE 1284, Camera Link®, 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 **MDR Pleated Foil** Input/Output Cable Assemblies RoHS Compliant Materials vary for connectors, Temperature Rating: Series OM, LS Offers Superior Combination cables, shells and jackscrews. 75°C maximum of High-Density, Electrical See website for specifics. 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 **Enables Coax-Like** Performance Overmolded and Metal with Latching and Thumbscrew Shells Available Position Sizes from 20-100

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	Contact Phosphor Bronze Insulation PA9T Plating Underplating: 80µ" [2.00 µm] Nickel Wiping Area: 30µ" [0.76µm] Au	Current Rating: 0.5 A Flammability: UL 94V-0 Temperature Rating: -40°C to +70°C	
Shrunk Delta Ribbon (SDR) Cable Assemblies, .80 mm, Input/Output 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	Insulation Material: Polyvinyl Chloride Plating Underplating: 100 µ" [2.55 µm] Nickel Wiping Area: 30 µ" [0.76 µm] Min Gold Material varies for connectors, cables, shells and jackscrews. See website for specifics.	Current Rating: 0.5 A Flammability: AWM VUS-1 Temperature Rating: 0°C to 70°C	

3MTM INPUT/OUTPUT CONNECTOR SOLUTIONS

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 or Threaded (SAE or Metric) Mounting Holes OPTIONS Mounting Hardware Open and Closed-End Covers	Contact Material: Copper Alloy Insulation Material: Glass Filled Polyester Plating Underplating: 100 μ" [2.54 μm] Nickel Wiping Area: 30 μ" [0.76 μm] Gold	Current Rating: 1 A Flammability: UL 94V-0 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 or Threaded (SAE or Metric) Mounting Holes OPTIONS Mounting Hardware Open and Closed-End Covers	Contact Material: Copper Alloy Insulation Material: Glass Filled Polyester Plating Underplating: 100 μ" [2.54 μm] Nickel Wiping Area: 30 μ" [0.76 μm] Gold	Current Rating: 1 A Flammability: UL 94V-0 Temperature Rating: -55°C to +105°C

3M™ INPUT/OUTPUT CONNECTOR SOLUTIONS

PRODUCT	FEATURES	MATERIALS	PERFORMANCE	
D Sub - Junction Shell Round Cable, Metal Series 3357	RoHS Compliant Provides EMI/ESD Protection Similar to Aluminium Die Cast Easy Assembly Reduces Time and Labor to Ensure Low Applied Cost Optional Thumbscrew Kit Provides Option in Grounding for Discrete Wire Applications Light Weight, Compact Design OPTIONS Thumbscrew Kit Retainer Rings	Cover Nut Material: Glass Filled Polyester Shell and Hardware Material: Steel Plating Nickel	Flammability: UL 94V-0	
D Sub - Junction Shell Round Cable, Plastic Series 3357	RoHS Compliant Protection from EMI/ESD Easy Assembly Reduces Time and Labor for Low Cost Light Weight and a Compact Design Strain Relief Compensates for Multiple Cable Diameters Jack Screws Provide Positive Retention OPTIONS 60 Degree Relief Cable Exits	Shell and Hardware Shell Material: ABS Insulation Material: Thermo Plastic Elastomer Plating Bright Zinc	Flammability: UL 94V0 Temperature Rating: 0°C to +75°C	
D Sub - Junction Shell Flat Cable Series 3485	RoHS Compliant Uses Standard Hardware Light Weight, Compact Size Full Family of Sizes OPTIONS EMI Versions Available	Shell Material: Glass Filled Polyester	Flammability: UL 94V-0 Temperature Rating: -55°C to +105°C	

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 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 For Other Variations, See Website Split Sections	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 Back Wire on .050 Inch Wire Spacing Permits Mass Termination to a Broad Line of IDC Connectors Jippable 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
WANDEN WALL	Twisted Pair Flat Cable Series 1700, 2100	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 8 AWG Stranded Wire Provides Flexibility and Extended Product Life 10-Color Repeat 2100 is Halogen Free OPTIONS Color Coded Variable Twist and Flat Repeat Lengths	Insulation 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

3M[™] CABLE SOLUTIONS

PRODUCT	FEATURES	MATERIALS	PERFORMANCE	
Round Jacketed Flat Cable Series 3659, 3759, 3758, 3896	RoHS Compliant Round Construction Permits Easier Routing Basier Routing Round Construction Permits Easier Routing Round Connectors Frinancion 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 Unal Shielding Provides 35 db Average Shielding Effectiveness OPTIONS O25", 050" Centerline Round Conductors Solid and Stranded Conductors Shielded and Non-Shielded Versions	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	
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	Jacket 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	

3M[™] CABLE SOLUTIONS

PRODUCT	FEATURES	MATERIALS	PERFORMANCE
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

Looking for a Test and Burn-in Solution?

3M has a broad range of sockets for your test and burn-in applications. Check out the 3M[™] Textool[™] Test and Burn-in Socket Solutions product catalog and Open-Top BGA brochure on CD. Contact your local 3M sales representative to obtain a copy.



3M[™] CABLE ASSEMBLY SOLUTIONS

PRODUCT	FEATURES	MATERIALS	PERFORMANCE	
Molded Flat Ribbon Assemblies Series 1M, 2M	RoHS Compliant When Used with Compliant Cable 6-6-4 Positions 1.00" x .100" - Sockets, PCBs and DIPs 2 mm x 2 mm - Sockets and PCBs One Piece, Molded-on Construction Provides Integral Strain Relief Mates with Standard .100" x .100" and 2 mm x 2 mm Headers and Plugs and 28 AWG Cable Available	Material varies for connectors and cables. See website for specifics.	Temperature Rating: -20°C to +105°C	
Mini Delta Ribbon (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, Camera Link®, 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 Flammability: AWM VW-1 Temperature Rating: -20°C to +75°C	
Mini Delta Ribbon (MDR), Pleated Foil Input/Output Cable Assemblies Series OM, LS, MS	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 Enables 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™ CABLE ASSEMBLY SOLUTIONS

PRODUCT FEATURES MATERIALS PERFORMANCE Shrunk Delta Ribbon (SDR) Cable RoHS Compliant Insulation **Current Rating: 0.5 A** Assemblies, .80 mm, Input/Output Supplied as a Complete Material: Polyvinyl Chloride Flammability: AWM VUS-1 Series 1MG, 1MF, 1SF Assembly Only **Plating** Temperature Rating: 0°C Underplating: 100 μ" [2.55 μm] • Supports New AIA Industrial to 70°C Camera Link® Standard for Nickel Mini C/L Camera to C/L Frame Wiping Area: 30 μ" [0.76 μm] **Grabber Applications** Min Gold • 11 Shielded Twisted Twinax Material varies for connectors, Pairs with Four Drain Wires cables, shells and jackscrews. · Double Overall Shield with See website for specifics. 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** Serial Advanced Technology Attachment RoHS Compliant Insulation **Current Rating: 4.5 A** (SATA) Power Cable • 15-position Power Cable Material: High Temperature Flammability: UL 94V-0 Series 5601 Rugged Over-molded Temperature Rating: Thermoplastic Construction Provided in Operational: 0°C to +55°C Standard Lengths Wiping Area: 30 μ " [0.76 μ m] Non-Operational: -40°C "Y" Type Supports Gold to +85°C Multiple Devices Solder Tails: 100 μ" [2.54 μm] Underplating: 50 µ" [1.27 µm] Nickel **Serial Advanced Technology Attachment** RoHS Compliant Insulation Current Rating: 1.5 A (SATA) Signal Cable • 7-position Serial Signal Material: High Temperature Flammability: UL 94V-0 Series 5601 Assembly Thermoplastic Temperature Rating: Multiple Variations in Length Plating Operational: 0°C to +55°C and Interface Attachments Wiping Area: 30 μ" [0.76 μm] Non-Operational: -40°C to +85°C Point-to-point Signaling Gold Polarized Interface Insures Solder Tails: 100 μ" [2.54 μm] Proper Alignment 26 AWG Stranded Underplating: 50 µ" [1.27 µm] Differential Pairs Nickel

3M[™] CABLE ASSEMBLY SOLUTIONS HIGH SPEED ASSEMBLIES

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PRODUCT	FEATURES	MATERIALS	PERFORMANCE	
Shielded Controlled Impedance (SCI) Assemblies High Speed Series 98	RoHS Compliant Robust Metal Grounded Connectors Provide EMI Shielding and Controlled Impedance for Industry Leading Signal Integrity and Performance			
SCI Cable Assembly, .100"	 .100" (2.54 mm) Center Spacing Available in Stand-Alone and Carrier Versions Stand-Alone Version Available in Right Angle and Straight Configurations Mates with 3M Two-pin Headers Carrier Version Available in Straight Configuration Designed for use with the 3M SCI Carrier System Mates with .100" x .100" Headers Carriers may be Purchased Separately 	Contact Material: Beryllium Copper Insulation Material: Thermoplastic	Current Rating: 1A Flammability: UL 94V-0 Temperature Rating: -55° to +105°C	
SCI Cable Assembly, 2 mm	 High Density 2.0 mm Center Spacing Available in Stand-alone and Carrier Versions Mates with CompactPCI®, HSHM, Futurebus® and 3M™ Pin Strip Headers, 1512 Series, 20-Pin Provides over 12 Gbps Performance Available with High Performance Coaxial or Twinaxial Cables Available with or without External Ground Clips 	Contact Material: Beryllium Copper Insulation Material: Thermoplastic	Bandwidth: Rated for Applications Requiring up to 12 Gbps Performance Current Rating: 1A Flammability: UL 94V-0 Temperature Rating: -40° to +105°C	

3M[™] CABLE ASSEMBLY SOLUTIONS HIGH SPEED ASSEMBLIES

PRODUCT	FEATURES	MATERIALS	PERFORMANCE
Custom Harness Assemblies	 Available with 0.100" and 2 mm SCI Double-ended SCI with Carrier or Optional Spring Probe Termination Controlled Impedance Through the Interface to Provide Minimal Reflections Low-loss, Low Cross-talk and Low Skew to Provide the Industry Leading Eye Openings and Performance Available in Differential or Coaxial Cable Configurations Contact 3M for Custom Configurations Compatible with Standard .100" x .100" Headers Standard Carriers Available 2 mm Harness Assemblies Compatible with CompactPCI®, HSHM, Futurebus® and 3M™ Pin Strip Headers, 1512 Series, 20-Pin Industry Leading Signal Density of up to 101 Signals per Linear Inch Surfacemount 3-wall Header Available 		

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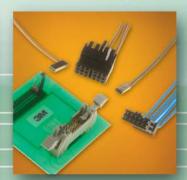
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