DISCRETE WIRE SYSTEMS

samtec.com/discretewire
MICRO MATE™ 1.00 mm PITCH SYSTEMS

- Cable-to-board, cable-to-cable and cable-to-panel
- Low profile design down to 3.2 mm
- 28 and 30 AWG wire options in PVC or Teflon™ fluoropolymer wire
- Up to 40 total crimp-style dual leaf contacts
- Socket or terminal, single or double row
- Rugged positive latching for increased retention
- Vertical and right-angle mating headers

Components (ISS1, ISD1/CC09; IST1, IDT1, ISP1, IDP1/TC37) and tooling available: visit samtec.com/tooling

*S1SS/T1M, S1SDT/T1M

*“Teflon” is a trademark of the Chemours Company FC, LLC used under license by Samtec.

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TIGER EYE™ DISCRETE WIRE SYSTEMS

- 0.80 mm, 1.27 mm and 2.00 mm pitch
- 24 to 32 AWG in PVC or Teflon™ fluoropolymer wire; color coded wire available
- Single or double ended assemblies
- Up to 100 total positions
- Shrouded, polarized and keyed for more rugged applications
- Retention latching option for higher withdrawal forces
- Optional screw downs
- Crimp for automotive applications in development for 1.27 mm pitch (SFSD/FFSD) assemblies; contact AutoSalesGroup@samtec.com

Components available for build-it-yourself design and application flexibility; please see chart above

Hand tools available for low volume and semi-automatic mini applicators for self assembly; visit samtec.com/tooling

IDC cable assemblies with rugged strain relief and mating shrouded headers; visit samtec.com/idc

<table>
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<tr>
<th>0.80 mm Pitch</th>
<th>1.27 mm Pitch</th>
<th>2.00 mm Pitch</th>
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<tbody>
<tr>
<td>Series</td>
<td>SESDT</td>
<td>SFSS, SFSTT, SFSD, SFSDT</td>
</tr>
<tr>
<td>Cable AWG</td>
<td>32</td>
<td>28 and 30</td>
</tr>
<tr>
<td>Cable Type</td>
<td>Teflon™ fluoropolymer</td>
<td>PVC or Teflon™ fluoropolymer; color coded available</td>
</tr>
<tr>
<td>No. of Rows</td>
<td>2</td>
<td>1 or 2</td>
</tr>
<tr>
<td>Total No. of Positions</td>
<td>10, 20, 30, 40</td>
<td>3 - 100</td>
</tr>
<tr>
<td>Mates - Terminal Cables</td>
<td>--</td>
<td>TFSS, TFSSST, TFSD, TFSDT</td>
</tr>
<tr>
<td>Mates - Board Connectors</td>
<td>TEM-L1</td>
<td>TFM/SFM, TFC/SFC</td>
</tr>
<tr>
<td>Component - Body</td>
<td>ISDE</td>
<td>ISDF, TSDF</td>
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<tr>
<td>Component - Contact</td>
<td>CC396</td>
<td>CC03R, CC03M, T1M44-M, T1M44-R</td>
</tr>
</tbody>
</table>

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**MINI MATE® DISCRETE WIRE SYSTEMS**

- .100" (2.54 mm) pitch
- Individually shrouded contacts
- 2 to 50 total positions
- Single and double row
- 20 to 30 AWG PVC or Teflon™ fluoropolymer wire; color coded available
- Keyed polarization
- Rugged metal or plastic latching
- Vertical or right-angle mating header
- Sealed version on roadmap for harsh environments

**POWER MATE® DISCRETE WIRE SYSTEMS**

- .165" (4.19 mm) pitch
- Individually shrouded contacts
- 2 to 30 total positions
- Single and double row
- 16 to 24 AWG PVC or Teflon™ fluoropolymer wire
- Keyed polarization
- Rugged plastic latching
- Single or double ended
- Vertical or right-angle mating header

Components (IPD1/CC79L/CC79R) and tooling available for application flexibility; visit samtec.com/tooling

Components (IPBD/CC69L/CC69R) and tooling available; visit samtec.com/tooling
mPOWER® ULTRA MICRO POWER SYSTEMS

- Micro 2.00 mm pitch cable-to-board and cable-to-cable solutions
- Simplifies board layout and delivers power directly to active components
- 2 - 10 total power blades
- 16 and 18 AWG wire; color coded available
- Plastic top latching or metal side latching options
- Tin or 10 μ" Gold plated power blades; 30 μ" Gold plating available to meet specific regulations
- PVC or high-temp Teflon™ fluoropolymer wire
- Vertical and right-angle mating headers with optional weld tabs

POWERSTRIP™ HIGH-POWER SYSTEMS

- 5.00 mm and 6.35 mm pitch
- 2 to 8 total dual blade contacts
- 30 Amp signal/power combo with 4 total power, and 16 or 24 Tiger Eye™ signal positions
- 10 - 16 AWG wire
- Polarized with a rugged latching system
- Single or double ended
- Vertical and right-angle mating headers

Components (IMPE/IMPE/TC146) and tooling available for self assembly; visit samtec.com/tooling

Components (IMCC/IMCC/CC489, IMPEC/IMPE/TC146) and tooling available for flexible applications; visit samtec.com/tooling
RUGGEDIZING OPTIONS

**POSITIVE LATCHING**
Manually activated latches increase unmating force by up to 200%

**FRICTION LOCKS**
Metal or plastic friction locks increase retention/withdrawal force

**RETENTION PINS**
Increase unmating force by up to 50%

**BOARD LOCKS**
Boards are mechanically locked together

**WELD TABS**
Significantly increase shear resistance of connector to PCB

**GUIDE POSTS**
Easy and secure mating

**SHIELDING**
360° shielding reduces EMI

**SCREW DOWNS**
Secure mechanical attachment to the board

CONTACT SYSTEMS

**TIGER EYE CONTACT**
- High-reliability
- High Mating Cycles
- Multi-finger Contact

**TIGER CLAW CONTACT**
- Dual Wipe Contact
- Pass-through Applications
- Ultra-low Profile

**BLADE & BEAM CONTACT**
- Mating/Alignment “Friendly”
- Cost-effective
- Micro Pitch

**TIGER BEAM CONTACT**
- Best Cost
- Reliable Performance
- Post & Beam Contact

**EDGE RATE CONTACT**
- Designed for Signal Integrity
- Superior Impedance Control
- Reduced Broadside Coupling

**MICRO-HYPERBOLOID**
- High-reliability
- Four Points of Contact
- Extreme Mating Cycles

samtec.com/contact-systems
WILLINGNESS, SUPPORT AND EXPERTISE

Industry-Leading Customer Service
- Quotes and samples in 24 hours
- Prototype and processing assistance
- Dedicated Application Specific Product engineers and technicians

Flexible, In-House Manufacturing
- Global Operations, including multiple cable fabrication & assembly facilities
- Quick-turn samples and prototypes
- Custom & modified product support

Signal Integrity Expertise
- Industry-leading engineering support for high-performance system design
- Full system optimization assistance, including simulation, testing, analysis and evaluation

CUSTOMS & EXPRESS MODIFICATIONS

FLEXIBLE RUGGED SOLUTIONS
- Contacts and bodies
- Stamping, plating and molding
- Wiring
- Strain relief
- Screw downs
- Latches & locks
- Shielding modifications
- Polarization

FLEXIBLE DISCRETE WIRE SOLUTIONS
- Variety of end 2 options
- Nylon woven sleeves
- Twisted pairs, color coding
- Heat shrink
- Selectively populated
- Barrel or harness crimp
- Ring/spade lug terminal
- Sealed

OPTICS FOR EXTREME ENVIRONMENTS
- Parylene coating
- Salt-fog inpenetrable
- Mitigation for tin whiskers
- Fungal resistant
- Extreme shock and vibration
- Full support for liquid immersion cooling

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