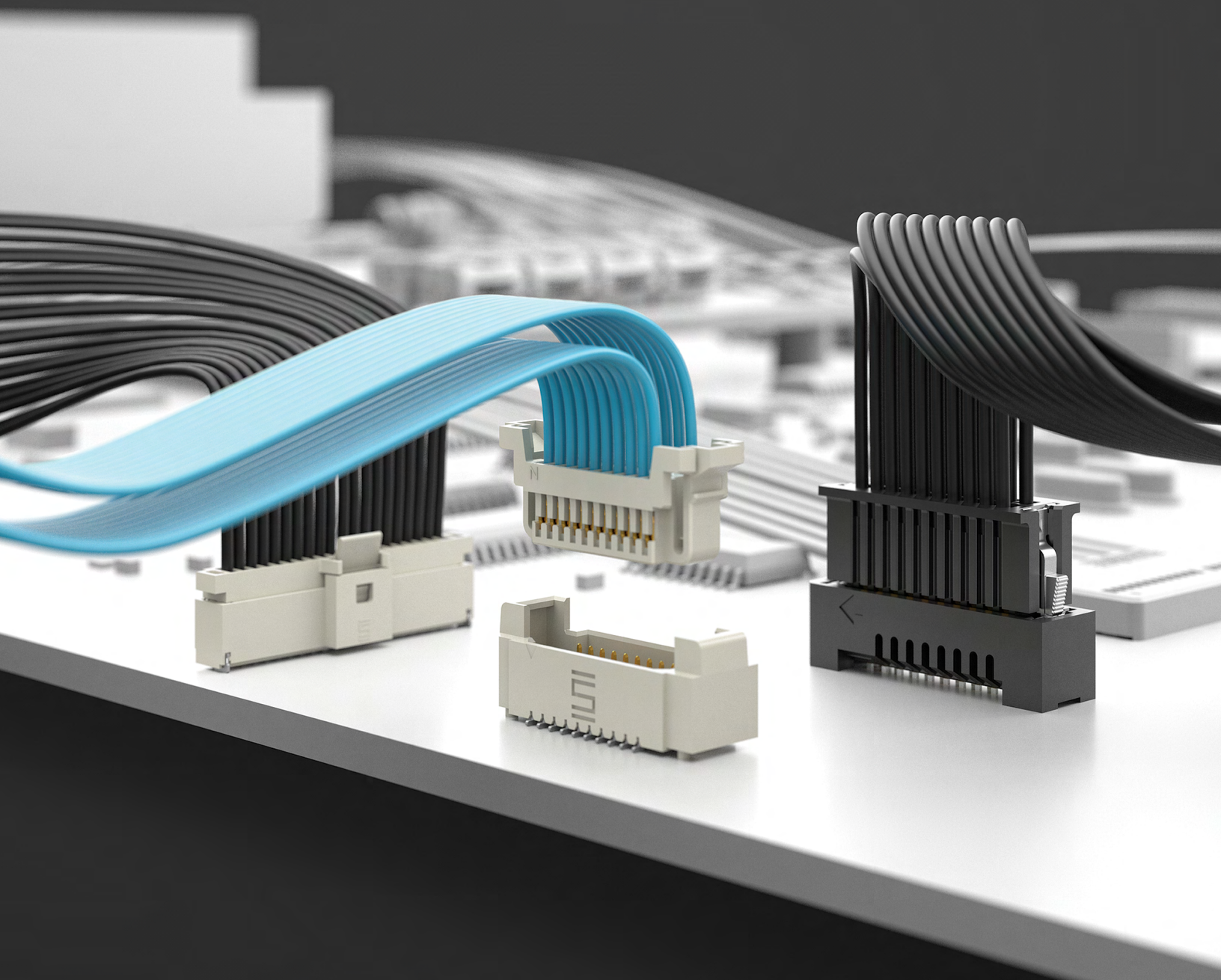




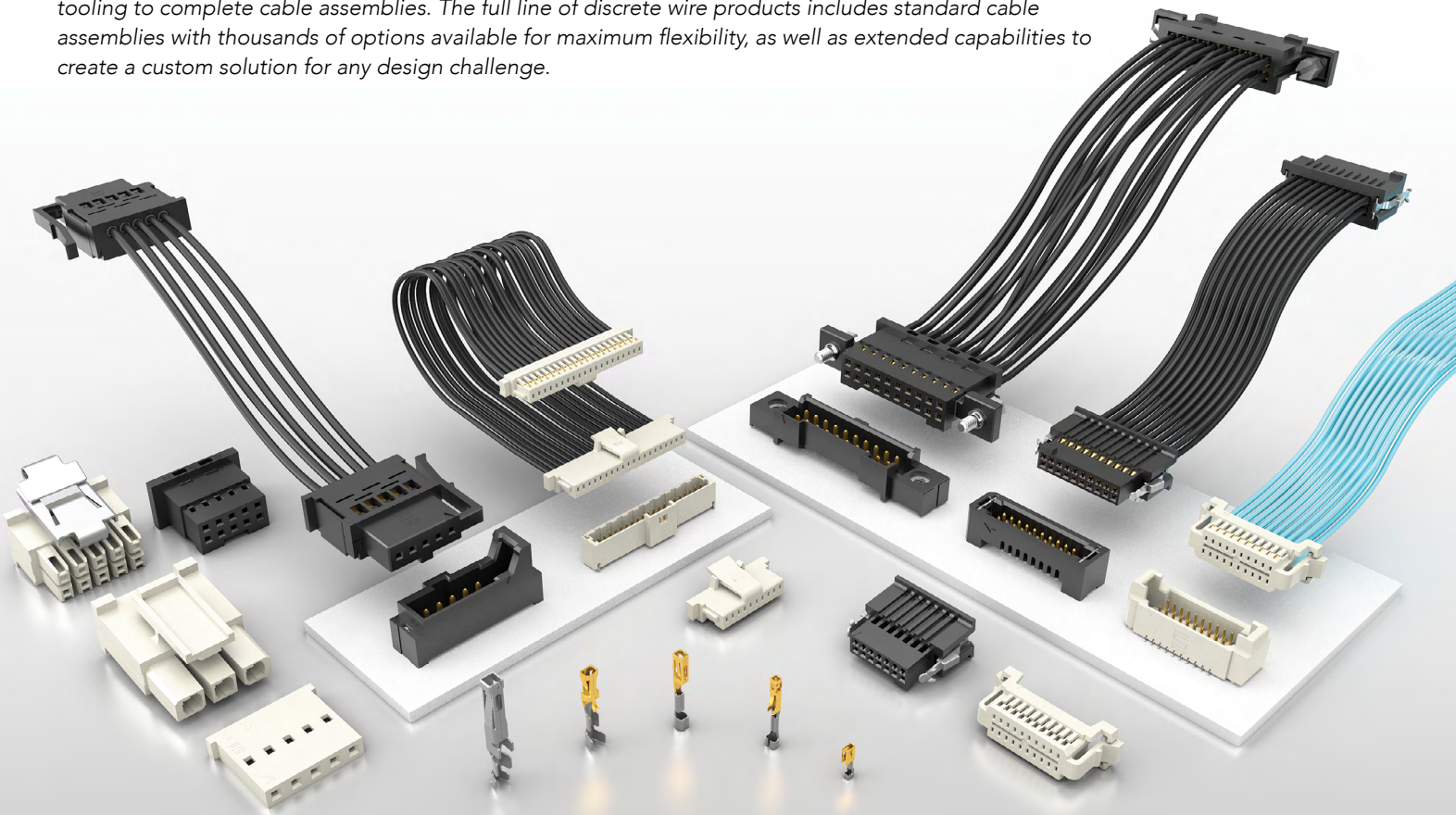
MICRO DISCRETE WIRE

APPLICATION DESIGN GUIDE 2016



MICRO DISCRETE WIRE SOLUTIONS

Samtec is uniquely positioned as a full support supplier of discrete wire products, from components and tooling to complete cable assemblies. The full line of discrete wire products includes standard cable assemblies with thousands of options available for maximum flexibility, as well as extended capabilities to create a custom solution for any design challenge.

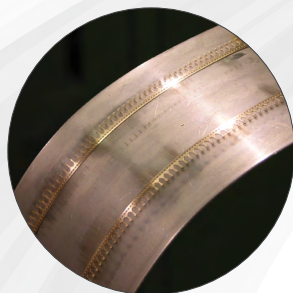


ADVANCED INTERCONNECT DESIGN

System engineered for high-reliability performance



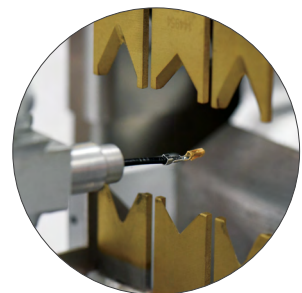
High-precision micro molding for fine pitch and small form factor interconnects



Stamped and formed BeCu contacts for high-reliability and high mating cycles



Specialized cable including high-temp and custom color coded



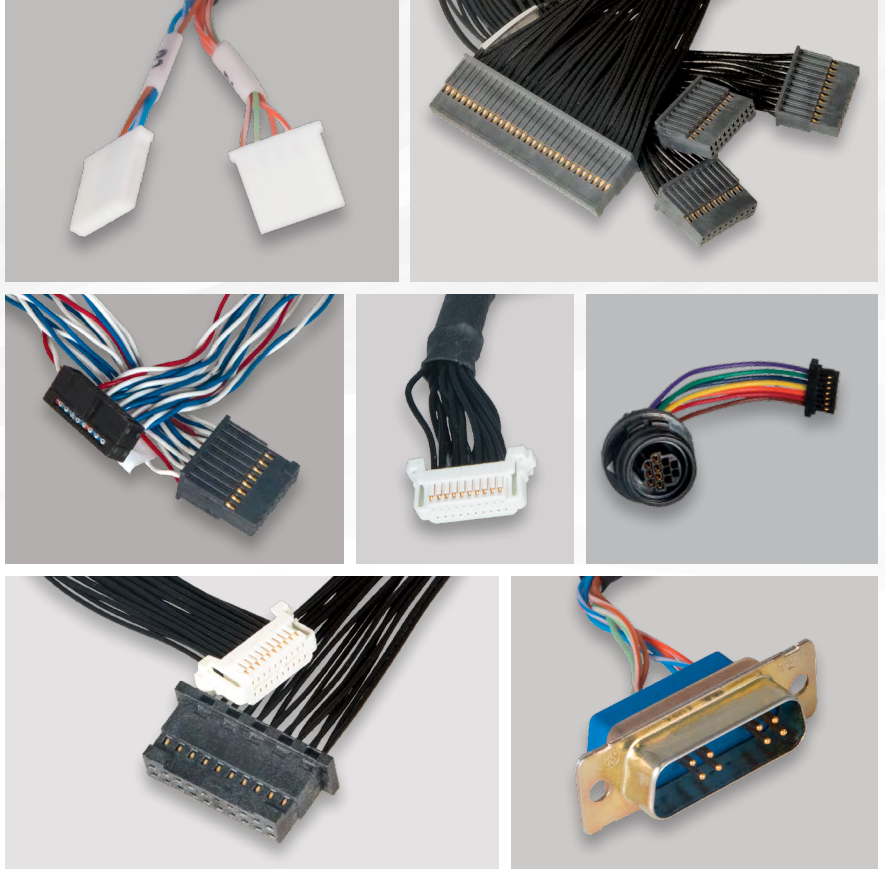
Automated assembly capabilities for speed, reliability and quality control

MICRO DISCRETE WIRE: CUSTOM SOLUTIONS

The expansive options and reliability of Samtec's micro discrete wire products, coupled with flexible manufacturing and willingness, create the opportunity to provide a variety of end two options or special request solutions.

Capabilities

- Nylon woven sleeves
- Twisted pairs
- Heat shrink
- Color coding
- Selectively populated
- Barrel crimp
- Ring/Spade lug terminal
- Break out
- Panel mount
- Sealed
- Harness style crimp



Contact discretewire@samtec.com

<https://widendtp.com/samtec/0u0xchlp/CAT-HT-309%20Hand%20TOOL.PSD?RES=PROXY> <https://widendtp.com/samtec/0u0xchlp/CAT-HT-309%20Hand%20TOOL.PSD?RES=PROXY>

DISCRETE WIRE TOOLING

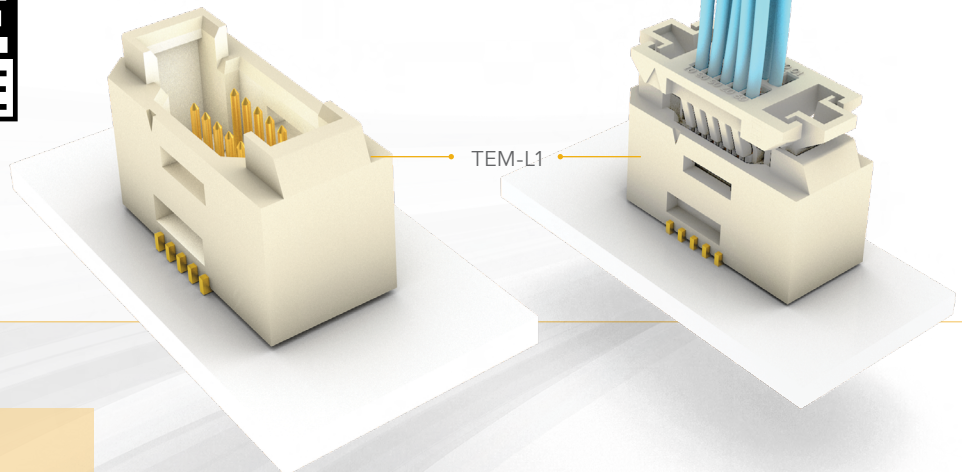
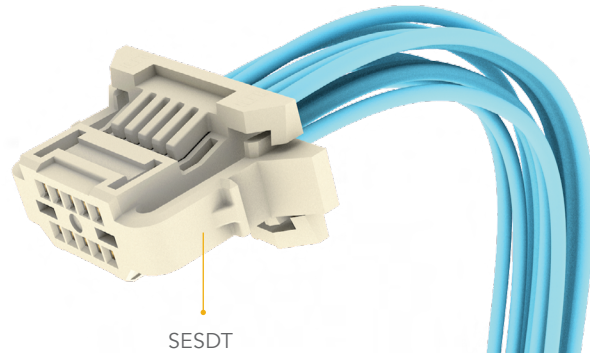
- Hand tools for low volume, pre-production and repair applications
- Quick-change semi-automatic crimp applicators compatible with industry standard equipment
- Wire ranges from 32 to 10 AWG
- Wide variety of additional application specific hardware and field service capabilities
- Visit samtec.com/discretewire or samtec.com/tooling



0.80 MM PITCH TIGER EYE™ DISCRETE WIRE

The 0.80 mm pitch Tiger Eye™ discrete wire socket cable assembly (SESĐT Series) is available in a double row design with 32 AWG *Teflon® cable for use in high temperature and other harsh environments where saving board space is crucial.

- High reliability Tiger Eye™ contact system
- Double row socket
- 10 to 40 total positions
- Standard 32 AWG Teflon® cable
- High mating cycles with board level terminal
- Rugged latching system for harsh environments
- Board level terminal with surface mount tails and through-hole weld tabs for increased stability
- Available as components or complete assemblies



TOOLING

- Hand Tool - CAT-HT-396-3232-12
- Mini Applicator - CAT-MA-396-3232-XX-03

COMPONENTS

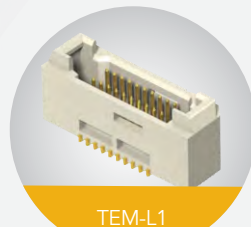


Double Row Body



Crimp Contact

MATE



Micro Terminal Strip,
Double Row, Vertical

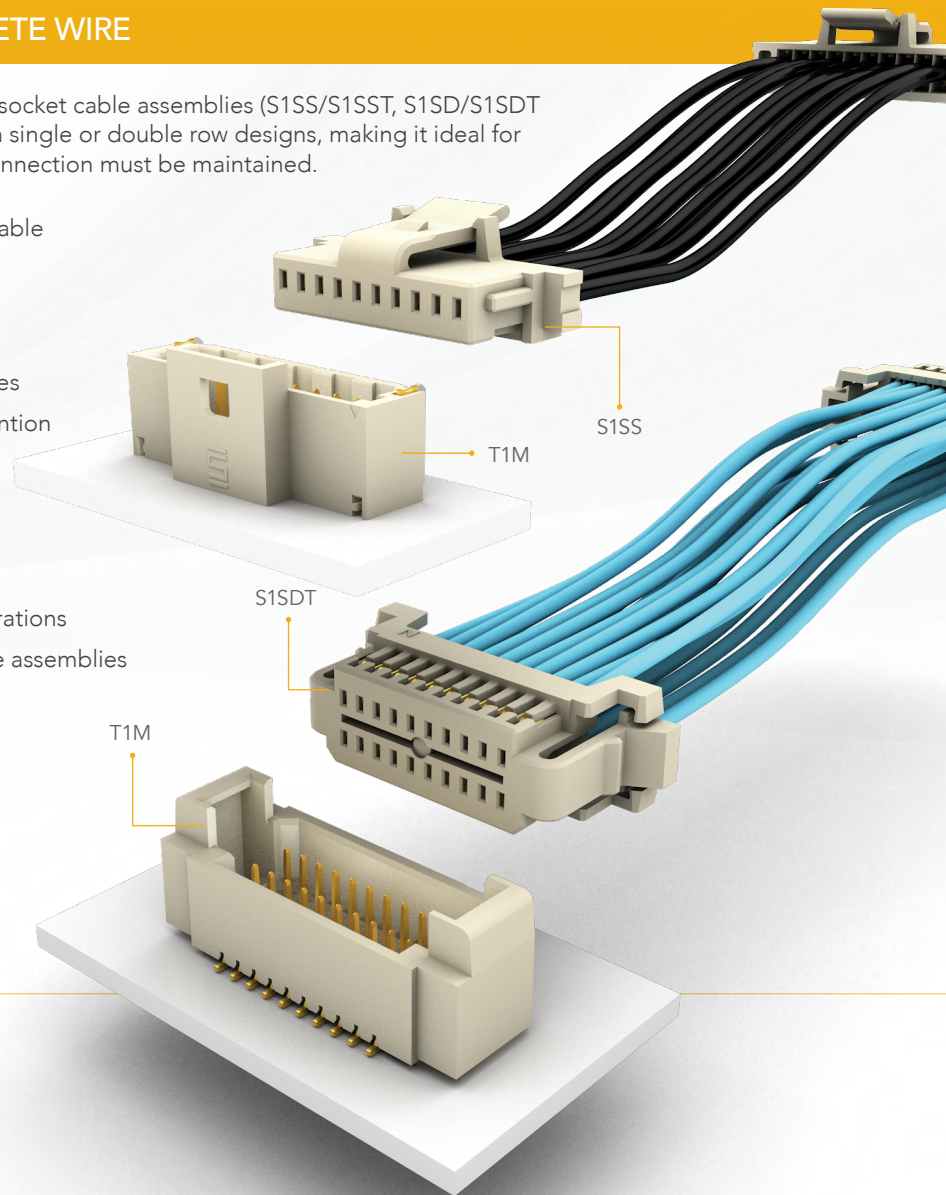
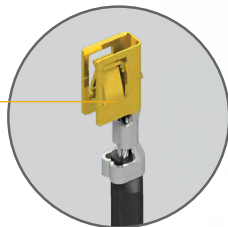
*DuPont™ Teflon® is a registered trademark of the E.I. du Pont de Nemours and Company or its affiliates.

1.00 MM PITCH SOCKET DISCRETE WIRE

The space-saving 1.00 mm pitch discrete wire socket cable assemblies (S1SS/S1SST, S1SD/S1SDT Series) feature crimp-style dual leaf contacts in single or double row designs, making it ideal for rugged applications where a highly reliable connection must be maintained.

- Crimp-style dual leaf contact system for reliable wire-to-board connection
- Single or double row
- 28 and 30 AWG cable options
- Choice of single or double ended assemblies
- Rugged positive latching for increased retention
- Performance up to 3.3 A per pin
- Single and double row up to 20 total pins
- Choice of PVC or Teflon® cable
- Surface mount terminal strip available in space saving vertical or right-angle configurations
- Available as components or complete cable assemblies

Dual leaf contact system



TOOLING

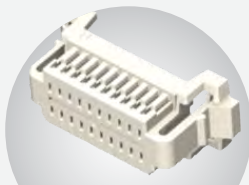
- Hand Tool - CAT-HT-309-2830-12
- Mini Applicator - CAT-MA-309-2830-XX-01

COMPONENTS



ISS1

Single Row Body



ISD1

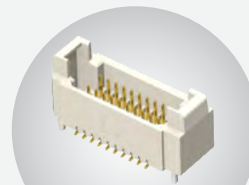
Double Row Body



CC09

Crimp Contact

MATE



T1M

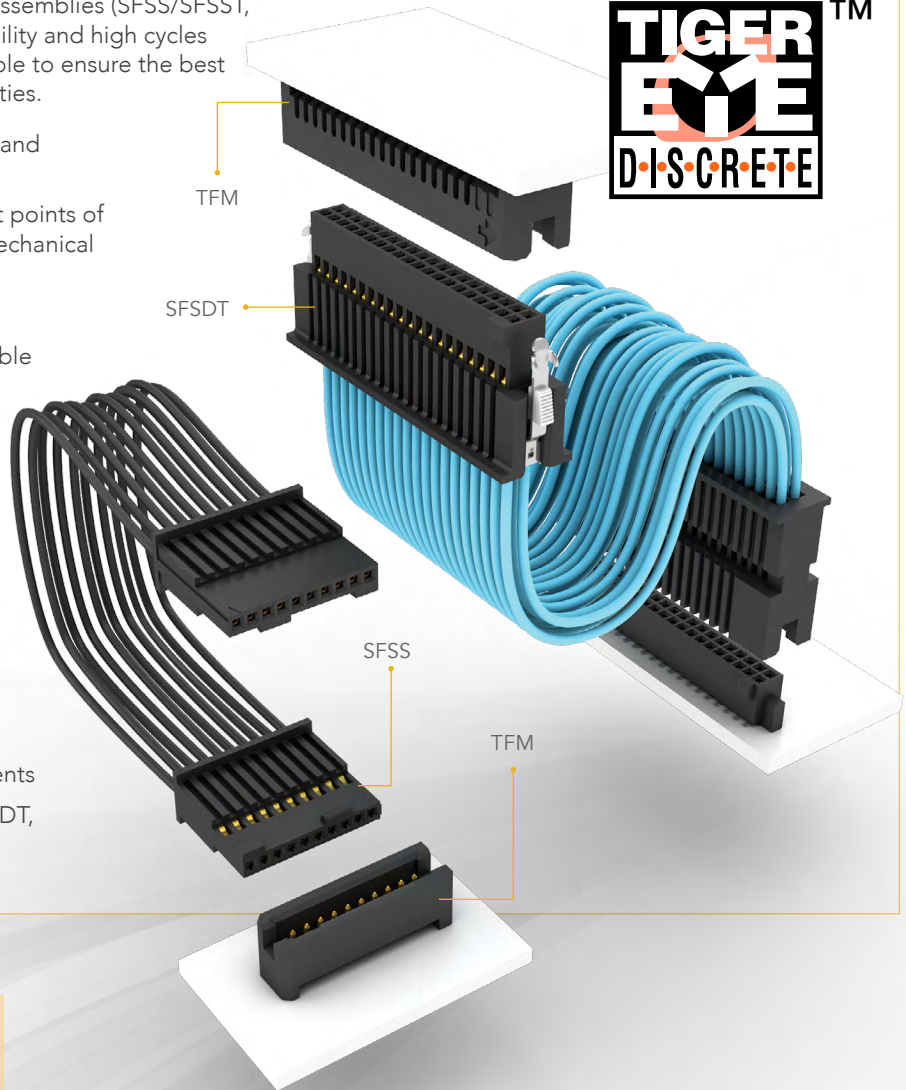
Terminal Strip, Single or Double Row, Vertical or Right-angle

.050" PITCH TIGER EYE™ DISCRETE WIRE ASSEMBLIES



The .050" pitch Tiger Eye™ discrete wire cable assemblies (SFSS/SFSST, SFSD/SFSDT Series) are designed for high-reliability and high cycles in micro rugged applications with options available to ensure the best combination of mechanical and electrical properties.

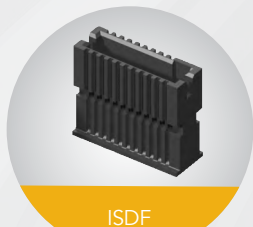
- Tiger Eye™ contact system for high-reliability and high cycle applications
- Multi-finger, BeCu contacts provide redundant points of contact along with the best combination of mechanical and electrical properties
- Single and double row cable assemblies
- Available in 28 and 30 AWG PVC or Teflon® cable
- Total pin counts from 3 to 100
- Performance up to 2.9 A per pin
- Shrouded, polarized and keyed for more rugged applications
- Choice of single or double ended
- Retention latching system for higher withdrawal forces
- Screw down option available for double row assembly
- Shrouded board level mates available
- Available as complete assemblies or components
- Cable plugs available (TFSS/TFSST, TFSD/TFSDT, TSDF, T1M44 Series)



TOOLING

- Hand Tool - CAT-HT-203-2830-12
- Mini Applicator - CAT-MA-203-2830-XX-01

COMPONENTS



ISDF

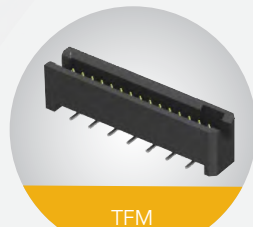
Single or Double Row Body



CC03

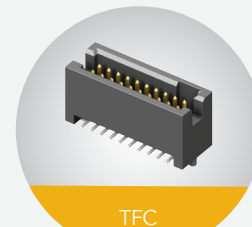
Crimp Contact

MATES



TFM

Terminal Strip, Single or Double Row



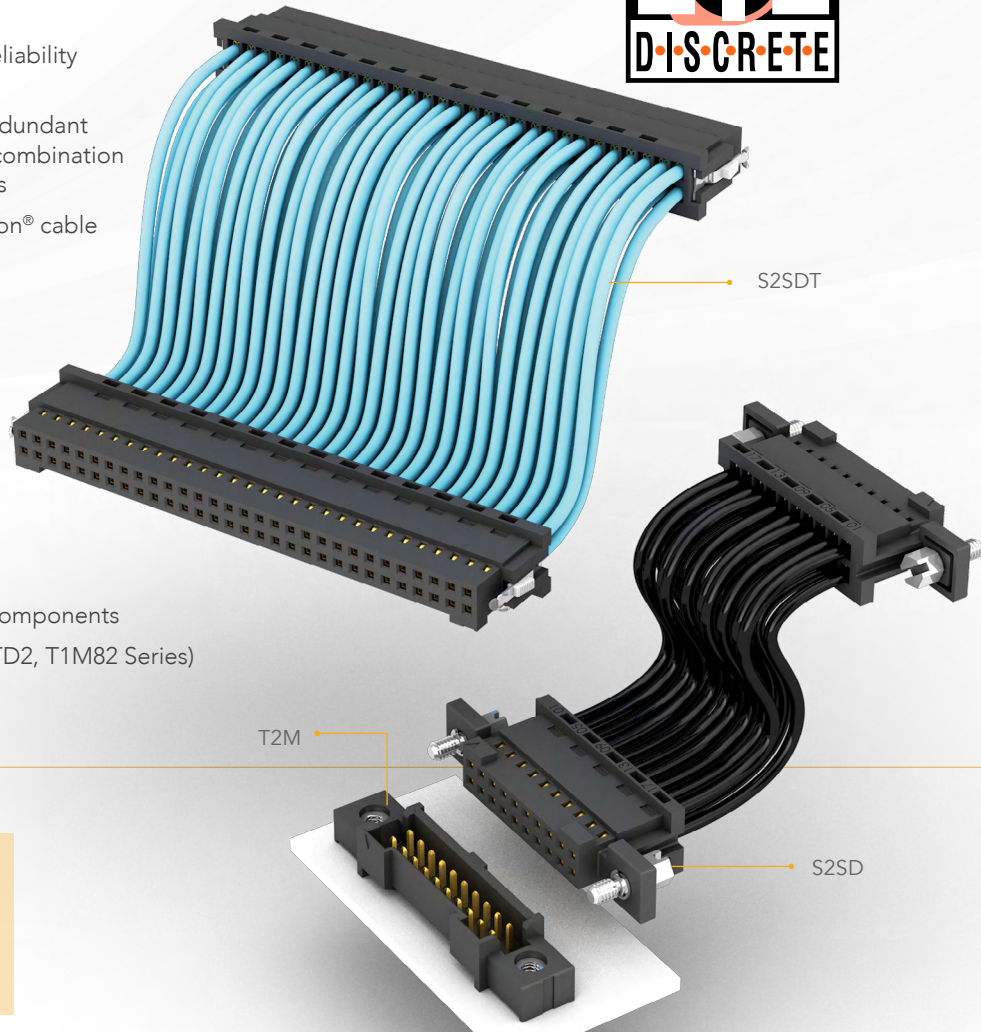
TFC

Cost-saving Terminal Strip, Double Row

2.00 MM PITCH TIGER EYE™ DISCRETE WIRE

The 2.00 mm pitch Tiger Eye™ discrete wire cable assemblies (S2SD/S2SDT Series) are shrouded, polarized and keyed for rugged, high cycle applications with high-reliability Tiger Eye™ contacts and a choice of PVC or Teflon® cable for use in high temperature environments.

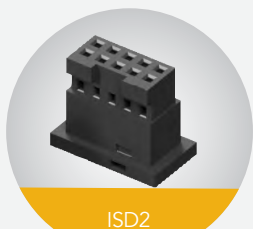
- Tiger Eye™ contact system for high-reliability and high cycle applications
- Multi-finger, BeCu contacts provide redundant points of contact along with the best combination of mechanical and electrical properties
- Available in 24 to 30 AWG PVC or Teflon® cable
- Total pin counts from 10 to 60
- Performance up to 3.8 A per pin
- Shrouded, polarized and keyed for more rugged applications
- Choice of single or double ended
- Retention latching system for higher withdrawal forces
- Screw down option available
- Shrouded board level mates available
- Available as complete assemblies or components
- Cable plugs available (T2SD/T2SDT, ITD2, T1M82 Series)



TOOLING

- Hand Tool - CAT-HT-281-2430-13
- Mini Applicator - CAT-MA-281-2426-XX-01 (24-26 AWG) and CAT-MA-281-2830-XX-01 (28-20 AWG)

COMPONENTS



ISD2

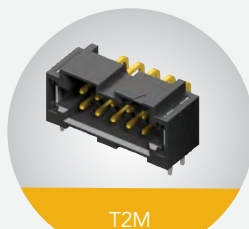
Double Row Body



CC81

Crimp Contact

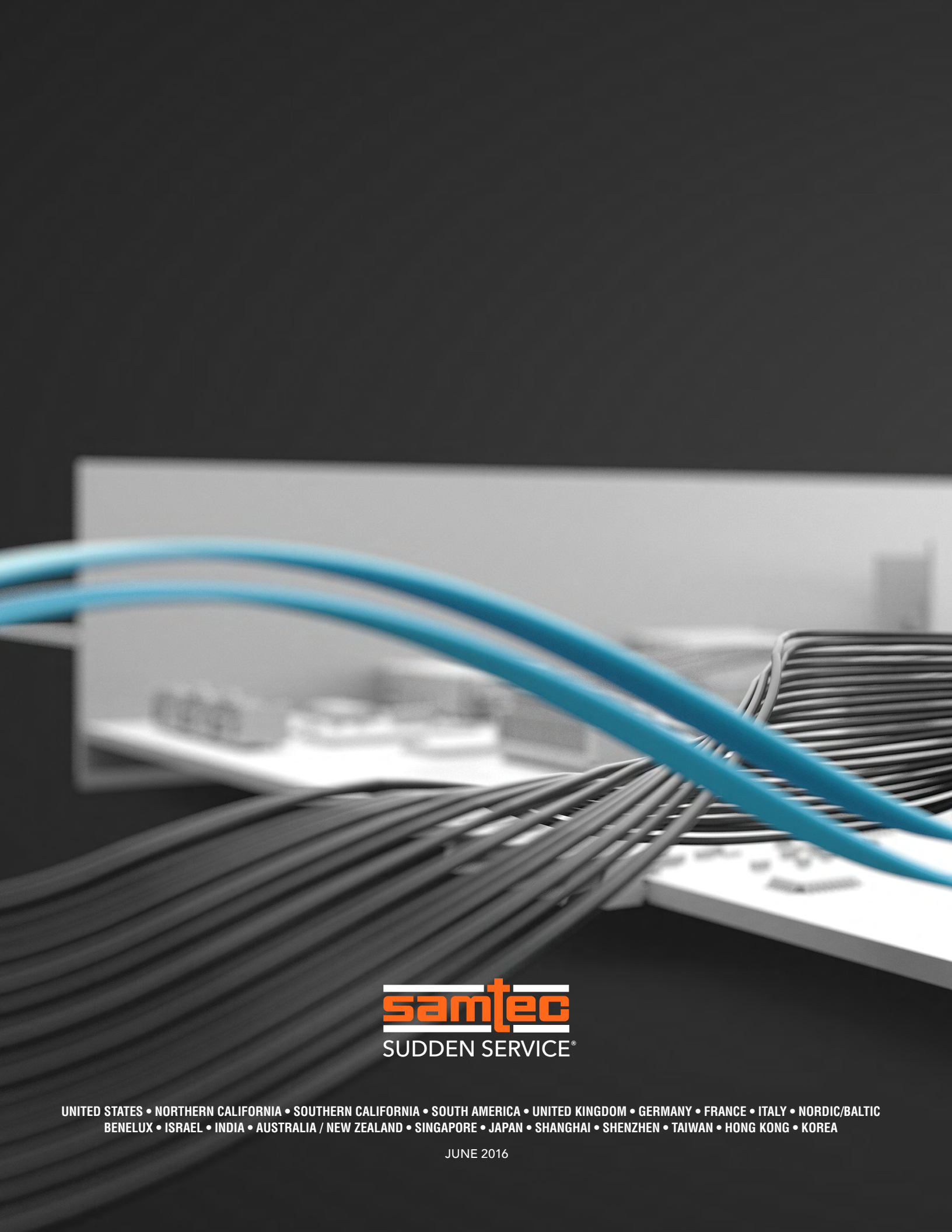
MATE



T2M

Terminal Strip,
Vertical or Right-angle

For complete specifications
visit www.samtec.com/discretewire



samtec
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JUNE 2016