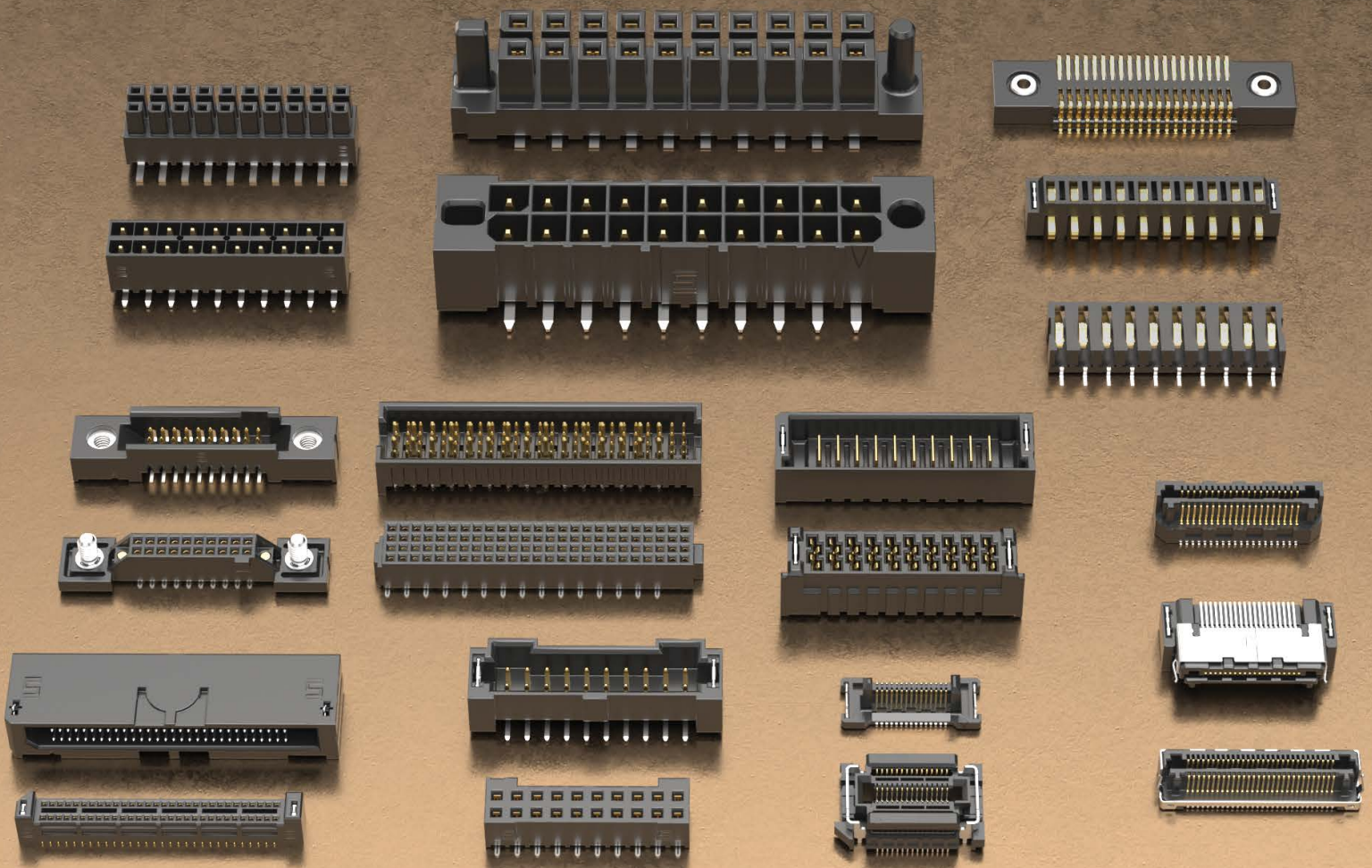
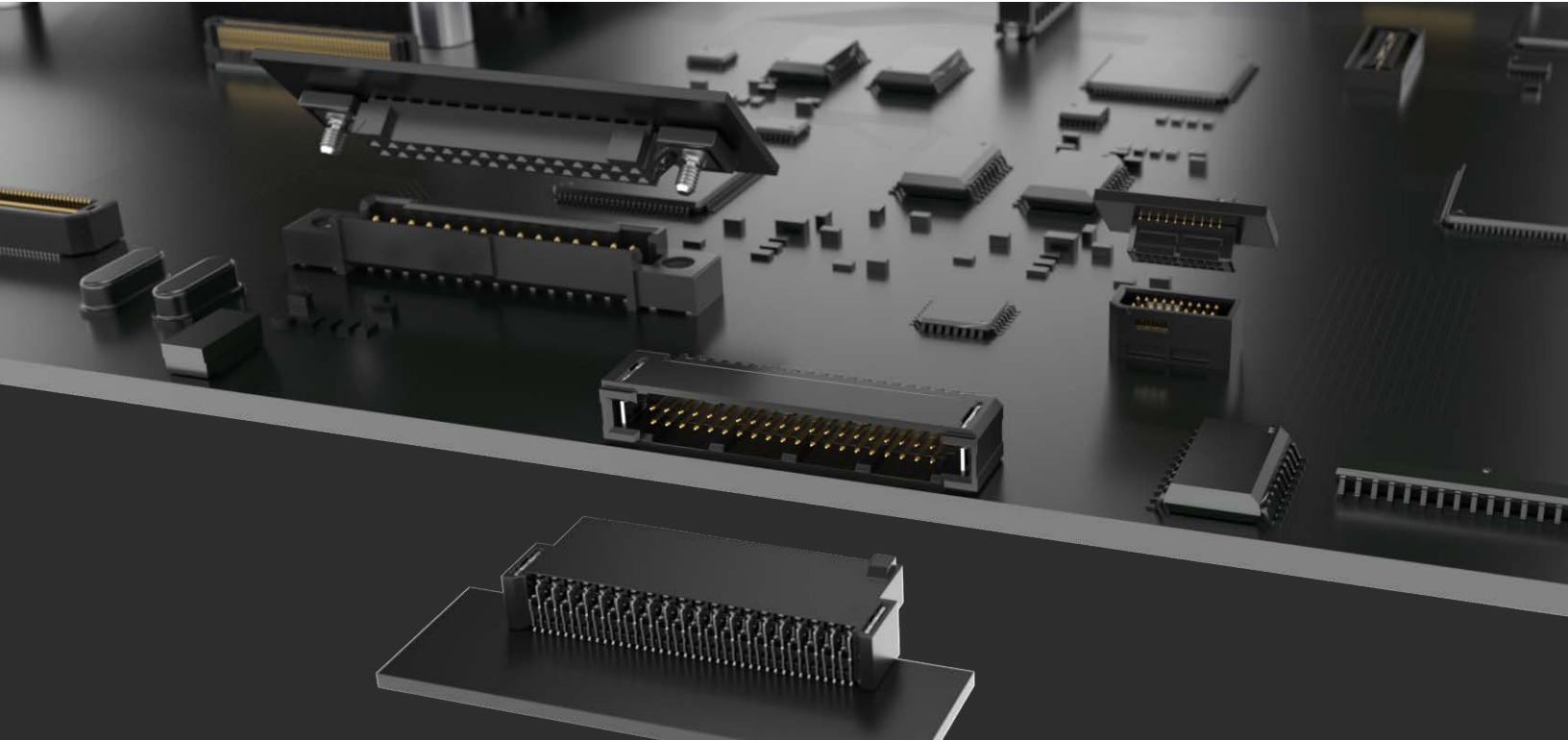




RUGGED BOARD-TO-BOARD



RUGGED BOARD-TO-BOARD SYSTEMS



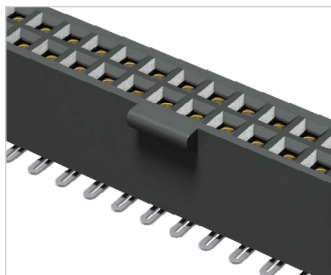
1.27 mm TIGER EYE™ SYSTEMS

- Tiger Eye™ is Samtec's most rugged contact system rated to 1,000+ mating cycles
- Screw down, locking clip, and weld tab ruggedizing options
- Shrouded, polarized and keyed
- Surface mount or through-hole tails
- 6 -12 mm stack heights; right-angle available
- Severe Environment Testing (SET) qualified (SFM/TFM); aligns with MIL-DTL-55302. Visit samtec.com/set for test reports
- Discrete wire and IDC cable assemblies available; visit samtec.com/discrete

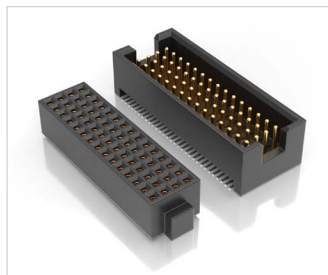
MAX
3.2
A m p s

8
G b p s

SFM/TFM



Locking for increased unmating force (SFML/TFML)



Four row design for higher density (MOLC/FOLC)

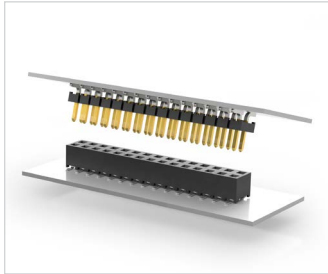


2.00 mm TIGER EYE™ SYSTEMS

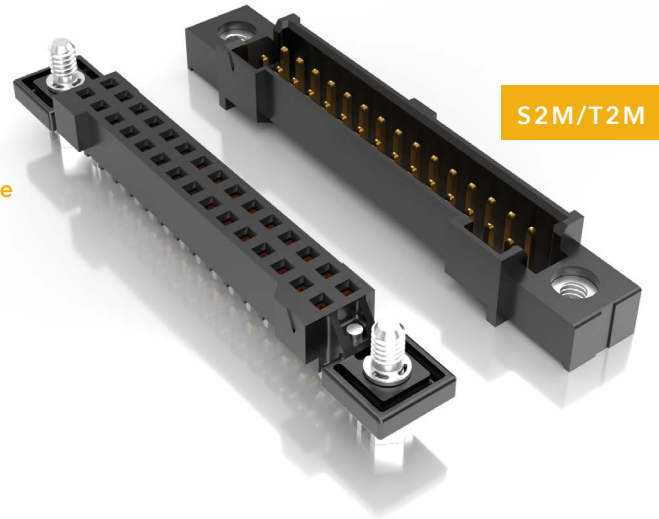
- Optional metal latching, screw downs, weld tabs and locking clips
- Double row with up to 80 total pins
- Surface mount or through-hole tails
- Right-angle mating headers available
- Severe Environment Testing (SET) qualified (S2M/T2M); aligns with MIL-DTL-55302. Visit samtec.com/set for test reports
- Discrete wire cable assemblies available; visit samtec.com/discrete

MAX
3.8
A m p s

8
G b p s



Wide range of stack heights (SMM/TMM)



S2M/T2M

0.80 mm TIGER EYE™ SYSTEMS

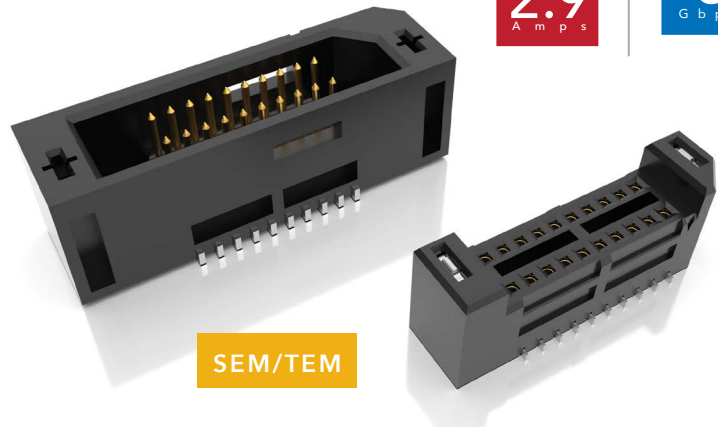
- Micro 0.80 mm pitch and slim body for space savings
- Locking clip and weld tab ruggedizing features
- Double row with up to 100 total pins
- Locking for increased unmating force (SEML)
- Extended Life Product™ high mating cycle connectors (SEM/TEM); test reports available at samtec.com/elp
- Discrete wire cable assemblies available; visit samtec.com/discrete

MAX
2.9
A m p s

8
G b p s

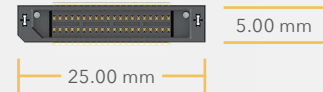
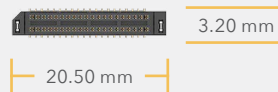


Slim version available for a smaller footprint (SEMS/TEMS)



SEM/TEM

SEM/TEM shown at 40 total positions



TIGER
EYE
CONTACT



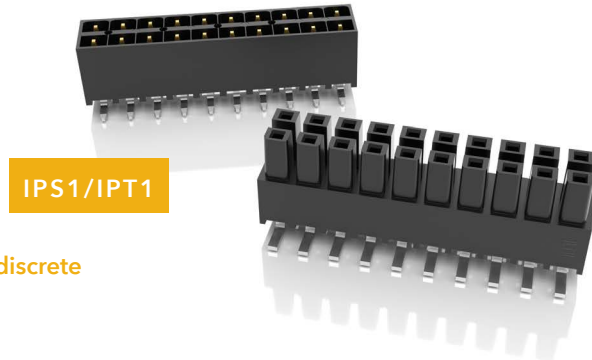
TIGER EYE™ CONTACT SYSTEM

- Multi-finger design with several points of contact for high-reliability
- Smooth, flat mating area increases mating cycles and lowers contact resistance
- Heat-treated BeCu for the best combination of mechanical and electrical properties
- Surface mount, micro slot tail increases solder surface area for higher joint strength

Rugged Board-to-Board Systems

MINI MATE® SHROUDED POWER SYSTEMS

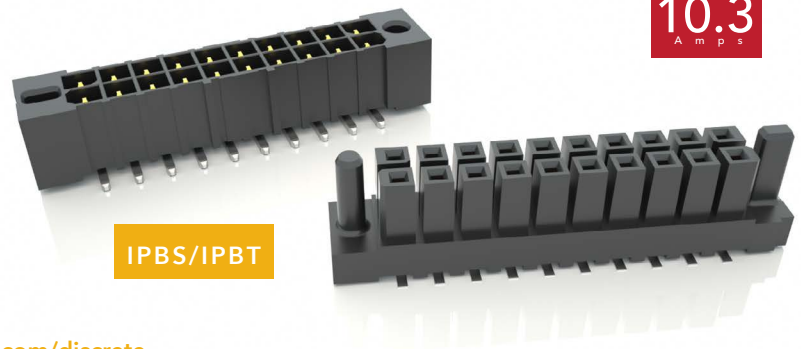
- High retention Tiger Buy™ contacts
- .100" (2.54 mm) pitch
- Up to 50 total individually shrouded contacts
- Elevated stack heights from 11 mm to 35 mm
- Optional alignment pin and locking clip
- Vertical and right-angle for parallel, perpendicular and coplanar applications
- Discrete wire cable assemblies available; visit samtec.com/discrete



MAX
5.9
A m p s

POWER MATE® ISOLATED POWER SYSTEMS

- .165" (4.19 mm) pitch
- Up to 30 total individually shrouded contacts
- Single or double row option
- Keyed polarization and polarized guide post options
- Vertical and right-angle for parallel and perpendicular applications
- Discrete wire cable assemblies available; visit samtec.com/discrete



MAX
10.3
A m p s

ULTRA MICRO POWER SYSTEMS

- Micro 2.00 mm (.0787") pitch
- Board-to-board, cable-to-board and cable-to-cable
- Choice of 2 to 10 positions
- 5 mm to 16 mm, 18 mm and 20 mm stack heights
- SureWare™ guide post standoffs (GPSO) assist with misalignment and "blind mate"
- Cable assemblies available; visit samtec.com/discrete
- Severe Environment Testing (SET) qualified (UMPS/UMPT); aligns with MIL-DTL-55302. Visit samtec.com/set for test reports

mPOWER®

MAX
18
A m p s



UMPT shown at
4 total positions



7.60 mm

15.30 mm

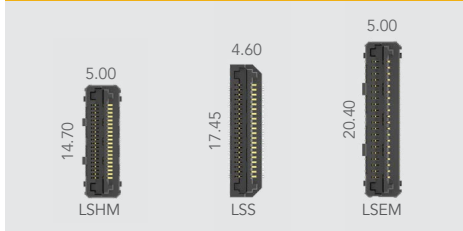
HERMAPHRODITIC CONNECTORS

- 0.50 mm, 0.635 mm and 0.80 mm pitch
- Razor Beam™ contacts for high-speed and fine-pitch systems
- Optional lubricated contacts and shielding for EMI protection
- 4-6x greater mating/unmating forces vs. typical micro pitch connectors
- Audible click when mated
- Severe Environment Testing (SET) qualified (LSHM); aligns with MIL-DTL-55302. Visit samtec.com/set for test reports

RAZOR
BEAM
SYSTEM

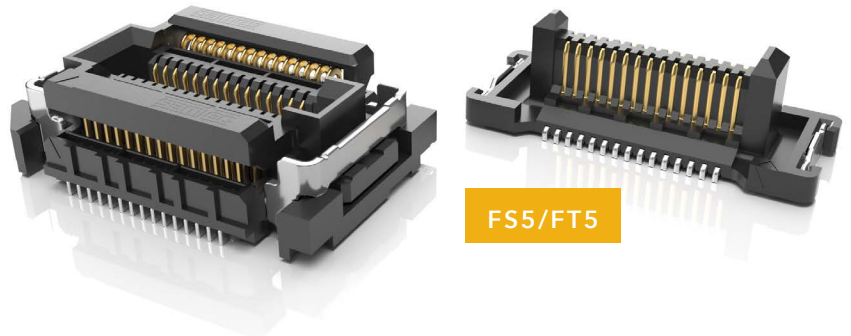
25
Gbps

Slim Body Designs (40 total positions each)



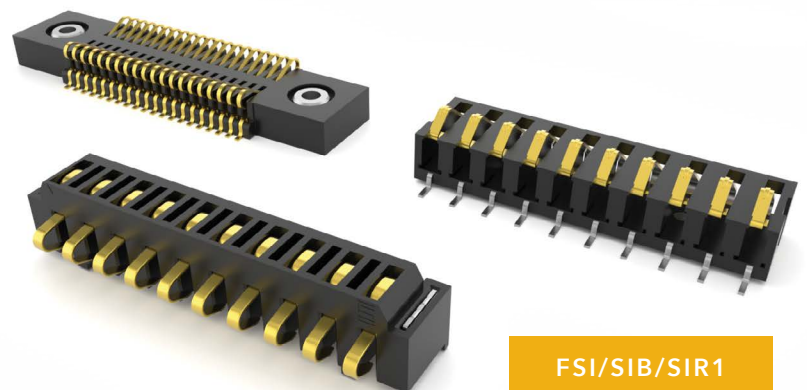
FLOATING CONNECTORS

- Provides 0.50 mm contact float in the X and Y axes to compensate for misalignment
- Ideal for multiple connectors on a board
- 5 mm and 7 mm stack heights
- Micro 0.50 mm pitch
- Up to 60 total positions
- Vertical and right-angle



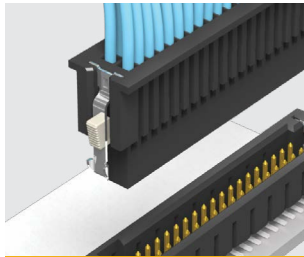
ONE-PIECE INTERFACES

- Robust design and mechanical hold-downs for high-shock and vibration applications
- Optional rugged weld tabs, screw downs and locking clips
- 1.00 mm, 1.27 mm and 2.54 mm pitch designs
- Up to 100 total positions



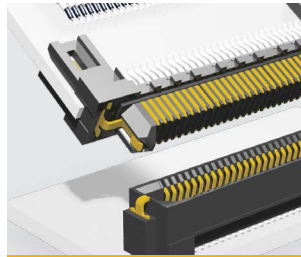
RUGGED FEATURES & CUSTOM SOLUTIONS

RUGGEDIZING OPTIONS



POSITIVE LATCHING

Manually activated latches increase unmating force by up to 200%



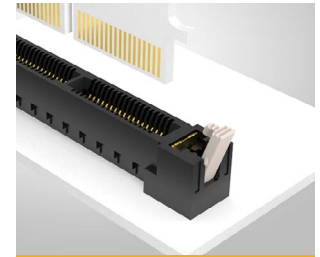
FRICTION LOCKS

Metal or plastic friction locks increase retention/withdrawal force



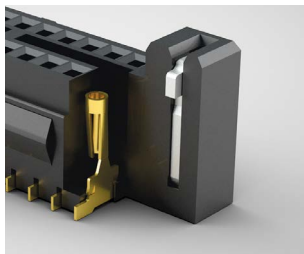
RETENTION PINS

Increase unmating force by up to 50%



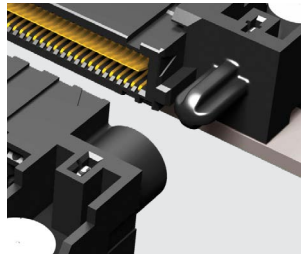
BOARD LOCKS

Boards are mechanically locked together



WELD TABS

Significantly increase shear resistance of connector to PCB



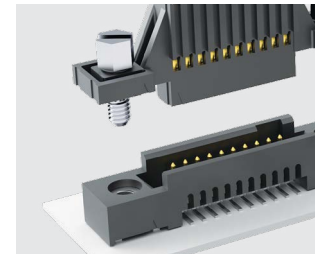
GUIDE POSTS

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

WILLINGNESS, SUPPORT AND EXPERTISE

Industry-Leading Customer Service

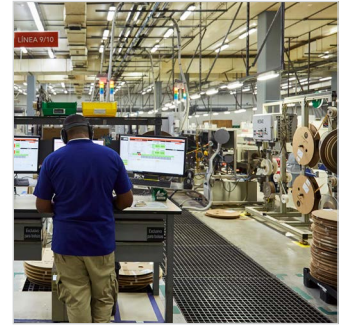
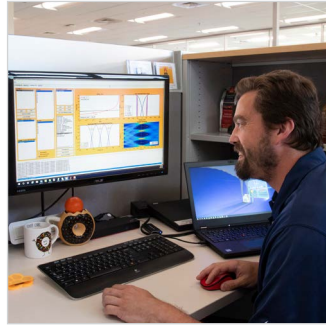
- Quotes and samples in 24 hours
- Prototype and processing assistance
- Dedicated Application Specific Product engineers and technicians

Flexible, In-House Manufacturing

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

Signal Integrity Expertise

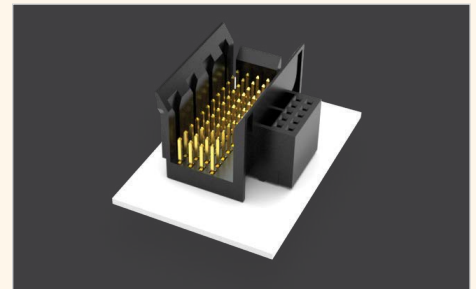
- Industry-leading engineering support for high-performance system design
- Full system optimization assistance, including simulation, testing, analysis and evaluation



CUSTOMS & EXPRESS MODIFICATIONS

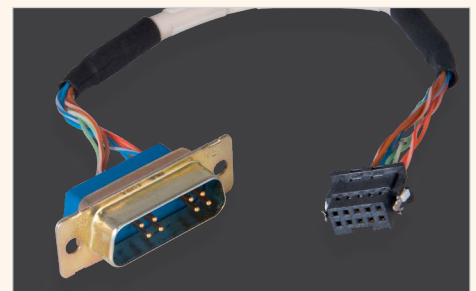
FLEXIBLE RUGGED SOLUTIONS

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



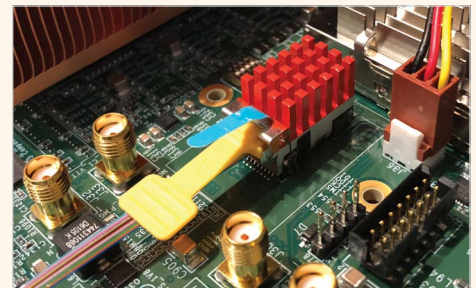
FLEXIBLE DISCRETE WIRE SOLUTIONS

- 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 impenetrable
- Mitigation for tin whiskers
- Fungal resistant
- Extreme shock and vibration
- Full support for liquid immersion cooling





samtec
SUDDEN SERVICE®

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GERMANY • FRANCE • ITALY • NORDIC/BALTIC • BENELUX • ISRAEL • INDIA • AUSTRALIA / NEW ZEALAND
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