

MICRO RUGGED

INTERCONNECT SOLUTIONS GUIDE

MICRO RUGGED INTERCONNECT SOLUTIONS

Rugged contact systems, flexible power interconnects and rugged signal integrity combined with ultra-rugged offerings, create the foundation of Samtec's micro rugged solutions for high cycle, high speed and high power applications.

Additional testing for severe environments ensures products are more than suitable for military, space, automotive, industrial and other extreme applications. Samtec's rugged products are offered in conjunction with full engineering support, online tools and a service attitude that is unmatched in the connector industry.

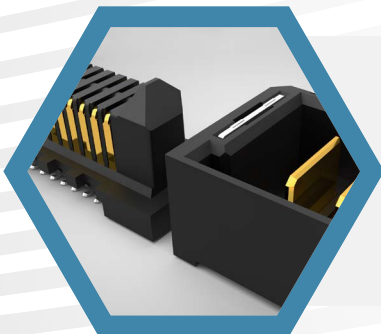
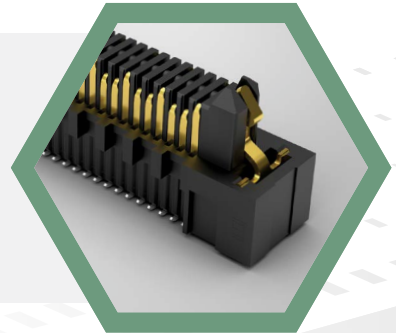


RUGGED CONTACT SYSTEM

- 1,000+ MATING CYCLES
- TIGER EYE™ HEAT-TREATED BECU CONTACTS
- MULTIPLE POINTS OF CONTACT FOR HIGH-RELIABILITY

RUGGED SIGNAL INTEGRITY

- HIGH SPEEDS TO 56 GBPS PAM4
- EDGE RATE® CONTACT DESIGN INCREASES WEAR LIFE
- EXPERTISE IN SIGNAL INTEGRITY DESIGN & ANALYSIS



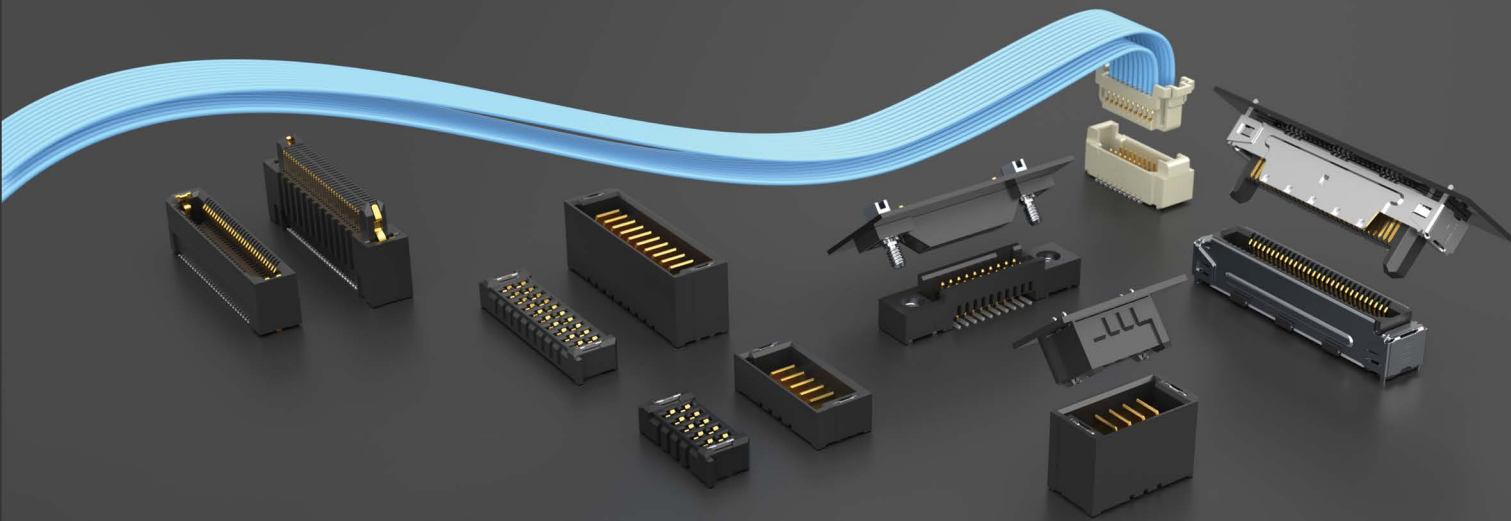
FLEX POWER

- 3 TO 60 AMPS
- CONFIGURABILITY OF POWER & SIGNAL
- SPACE-SAVING FORM FACTOR

ULTRA RUGGED

- EXTREME HIGH MATING CYCLES
- RUGGED MIL-DTL MATERIALS
- TESTING FOR EXTREME/HARSH APPLICATIONS





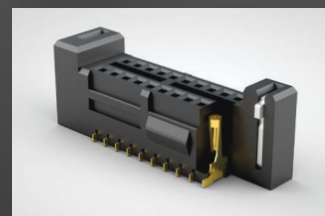
RUGGED CONTACT SYSTEMS

Tiger Eye™ contact system for high-reliability in rugged applications

1,000+ mating cycles

0.80 mm to 2.00 mm pitch

Board-to-board, discrete wire and IDC cable assemblies



4-7

RUGGED SIGNAL INTEGRITY SYSTEMS

Edge Rate® contact system for rugged signal integrity performance

Performance to 56 Gbps PAM4

0.50 mm, 0.635 mm and 0.80 mm pitch

Edge card and ultra-micro connectors



8-11

FLEXIBLE POWER SYSTEMS

Ultra-micro power to 18 A and incredible design flexibility

Individually shrouded contacts

Small form factor, high power systems to 60 A

Board-to-board and cable assemblies



12-15

ULTRA RUGGED SOLUTIONS

Ultra rugged power I/O systems

Ultra rugged hardware and standoffs

Ultra rugged testing (SET, E.L.P™, DQT)

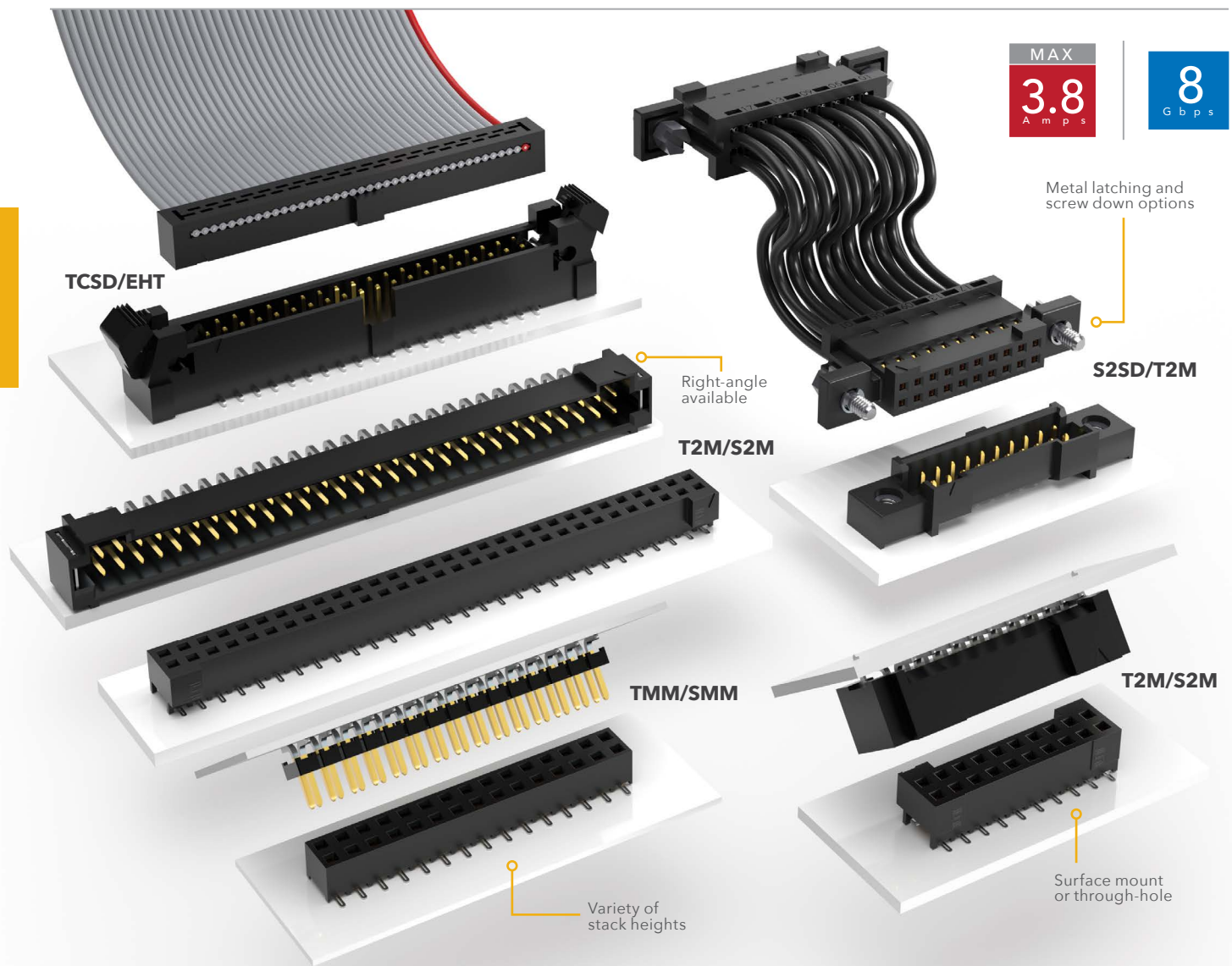


16-19

Rugged Features and Contact Systems	20
Sealed I/O Systems	21
Power Integrity & Custom Solutions	22
Full System Support	23

RUGGED TIGER EYE™ SYSTEMS

HIGH-RELIABILITY • MULTI-FINGER BeCu CONTACT • HIGH MATING CYCLES



2.00 mm PITCH TIGER EYE™

- Tiger Eye™ is Samtec's most rugged contact system rated to 1,000+ mating cycles
- Wide range of stack heights
- Right-angle mating headers available
- Optional screw downs, weld tabs and locking clips
- Discrete wire assemblies available in 24-30 AWG PVC or Teflon® wire; contact asp@samtec.com for custom solutions



Optional strain relief and variety of wiring options

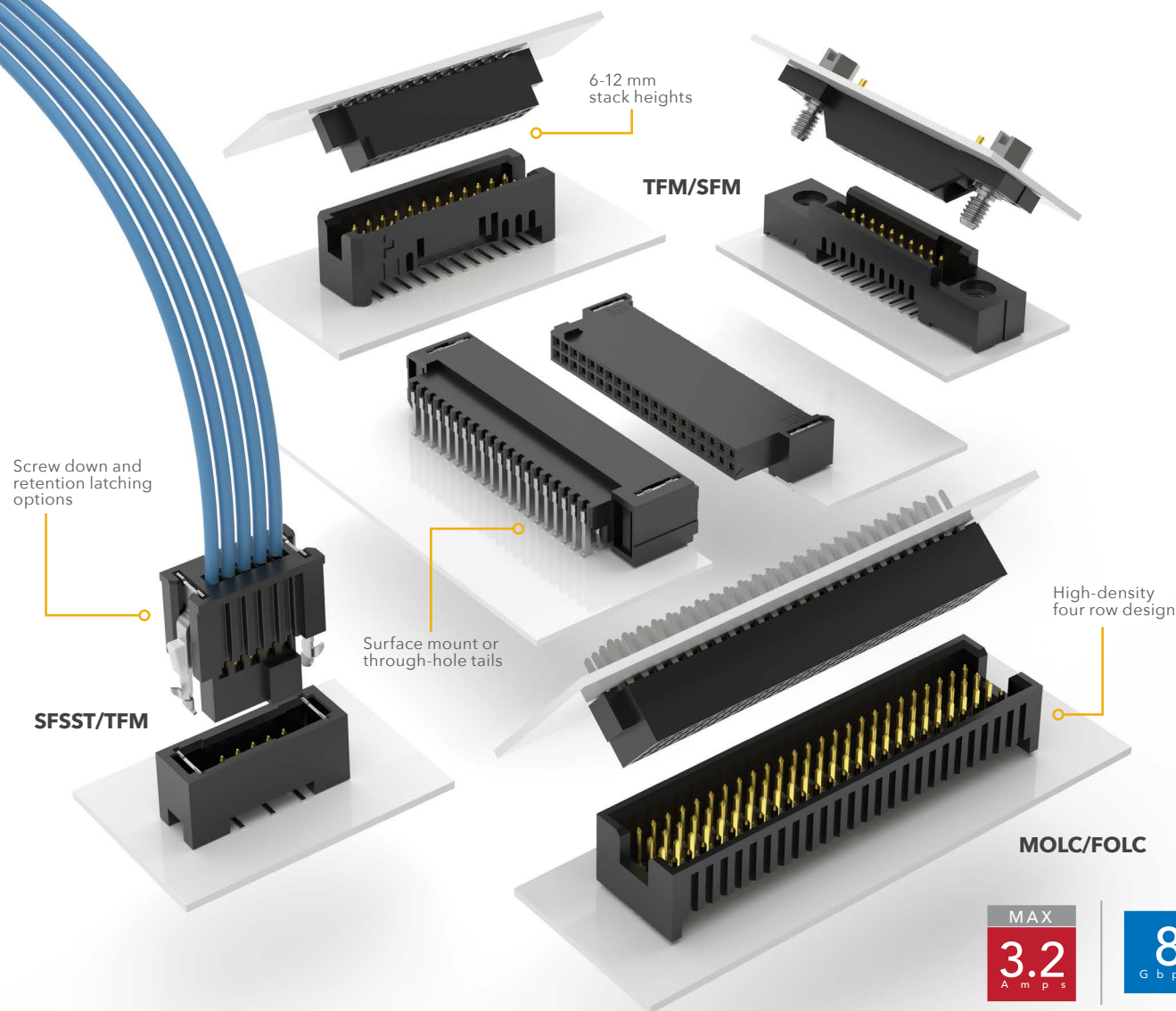


Components (ISD2/CC81) & tooling available: samtec.com/tooling



TIGER EYE™ CONTACT SYSTEM

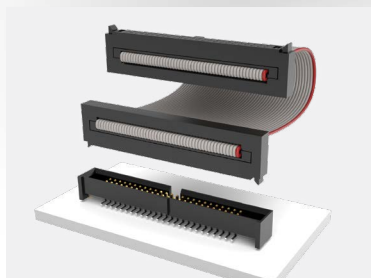
- Multi-finger design with several points of contact for high-reliability
- Smooth, flat mating area increases mating cycles and lowers contact resistance
- Heat-treated BeCu for the best combination of mechanical and electrical properties
- Surface mount, micro slot tail increases solder surface area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



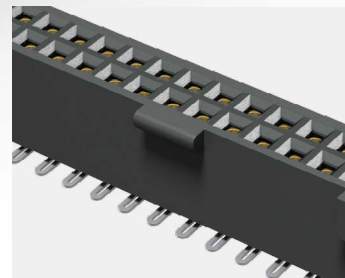
1.27 mm PITCH TIGER EYE™

- Screw down, locking clip, friction latching and weld tab ruggedizing options
- Shrouded, polarized and keyed
- Discrete wire assemblies available in single or double row, 28 and 30 AWG PVC or Teflon® wire; contact asp@samtec.com for custom solutions
- Cable components (ISDF/CC03) and tooling available

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



IDC cable assemblies with rugged strain relief (FFSD/FFMD, FFTP/FMTP)



Locking for increased unmating force (SFML/TFML)

RUGGED TIGER EYE™ SYSTEMS

HIGH-RELIABILITY • MULTI-FINGER BeCu CONTACT • HIGH MATING CYCLES

0.80 mm PITCH TIGER EYE™

- Micro pitch and slim body for space-savings
- 6 mm, 7 mm and 10 mm stack heights
- Locking clip, alignment pins and weld tab ruggedizing features
- Discrete wire assembly available with 32 AWG Teflon® wire; contact asp@samtec.com for custom solutions
- Extended Life Product™ testing available



**TIGER
EYE**
CONTACT

MAX
2.9
A m p s

8
G b p s

Rugged latching system for increased withdrawal force

TEM/SEM

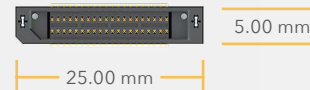
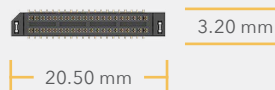
TEMS/
SEMS

SESDT/
TEM-L1

TEM/
SEM

Vertical and right-angle mating headers

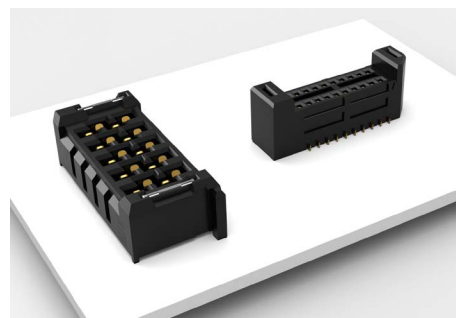
TEM/SEM shown at 40 total positions



Locking for increased unmating force (SEML)



Components (ISDE/CC396) and tooling available: samtec.com/tooling

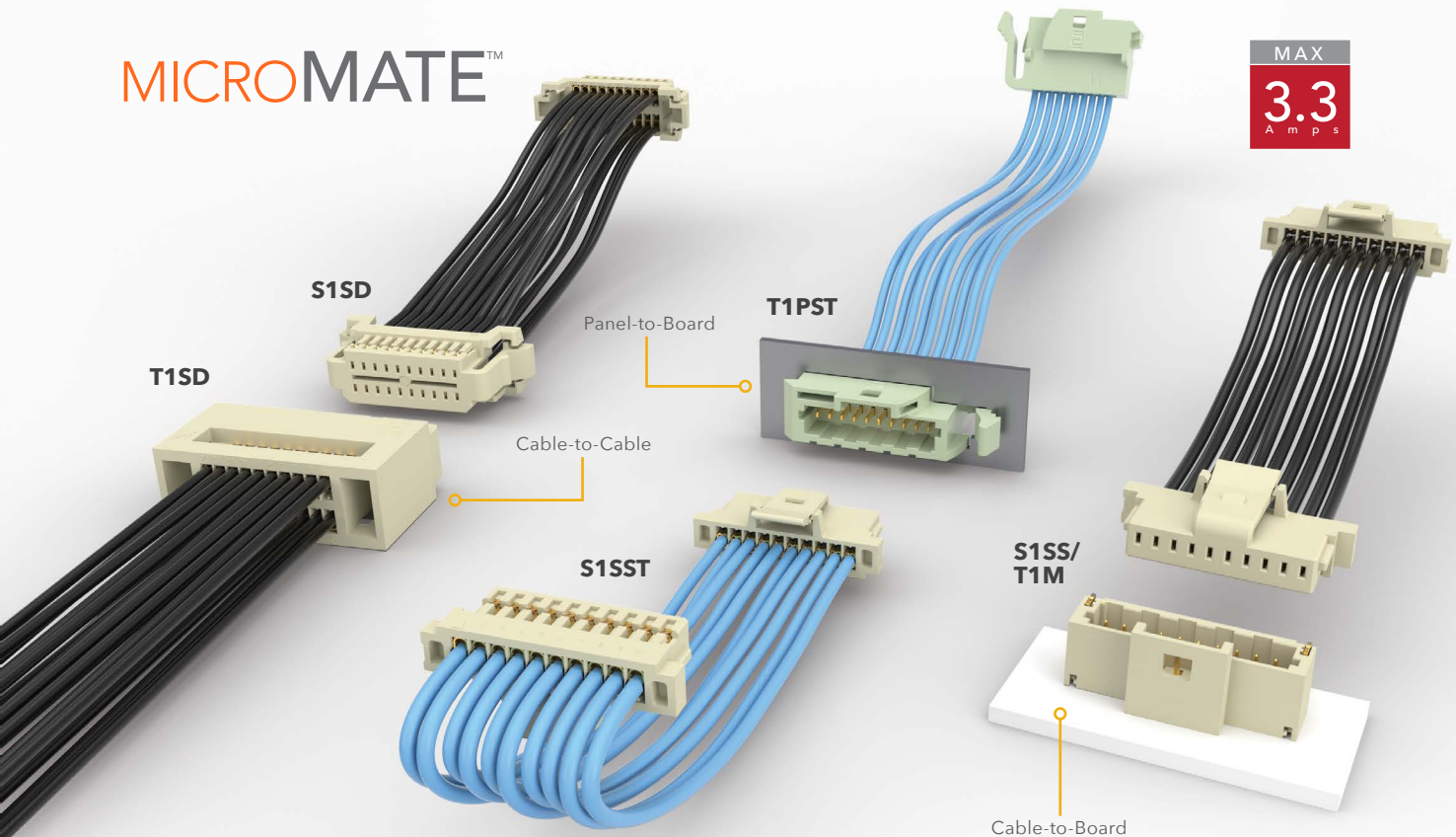


Compatible with mPOWER® for power/signal flexibility

RUGGED MICRO MATE™ SYSTEMS

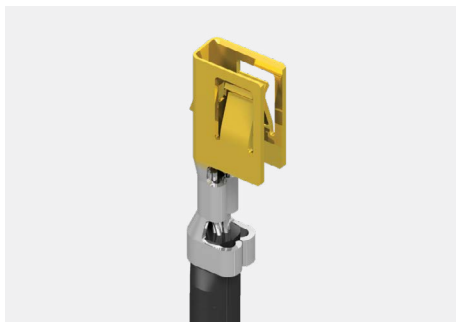
SPACE-SAVING • DESIGN FLEXIBILITY • HIGH-RELIABILITY

MICROMATE™

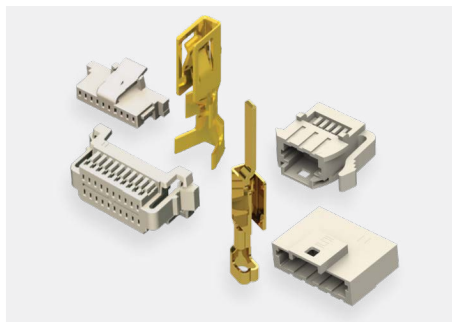


1.00 mm PITCH MICRO MATE™ SYSTEMS

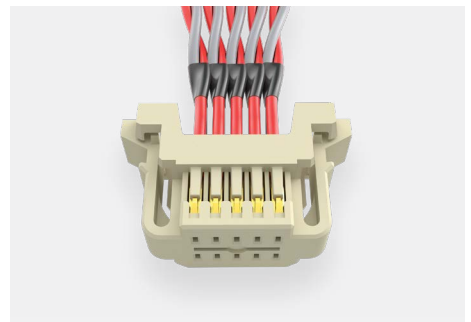
- Crimp-style dual leaf contact system for reliable wire-to-board connection
- 28 and 30 AWG wire options in PVC or Teflon®
- Rugged positive latching for increased retention
- Socket or terminal, single or double row assemblies
- Vertical and right-angle mating headers



Dual leaf contact system for a reliable connection



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



Custom solutions available (twisted pair cable shown); contact asp@samtec.com

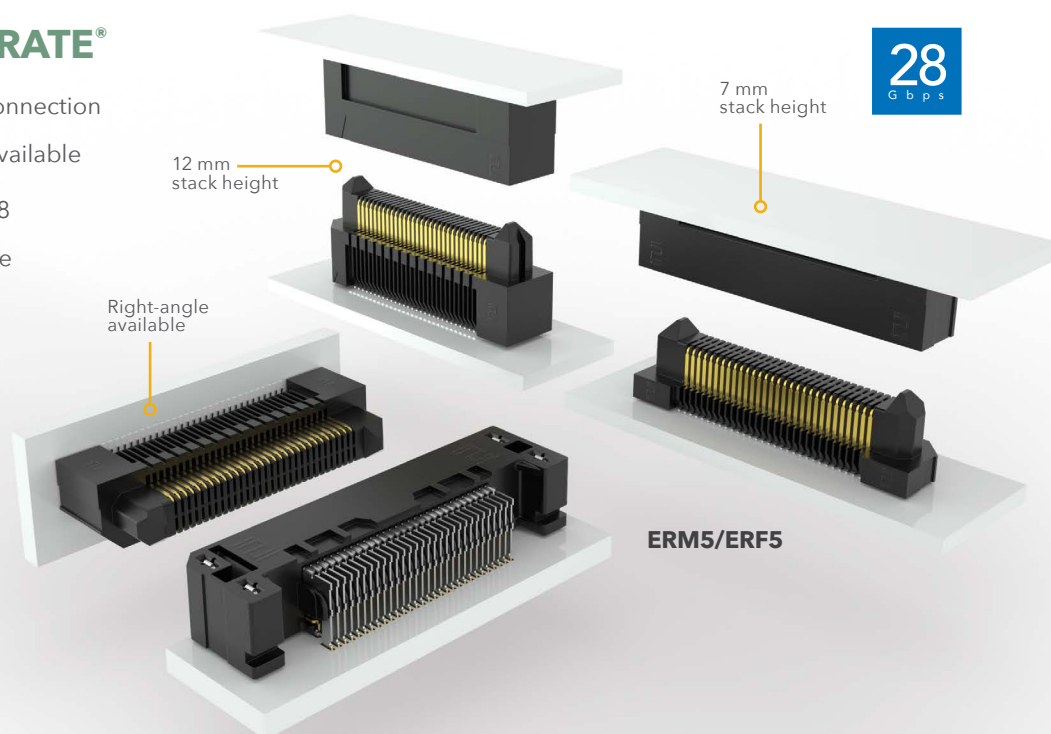
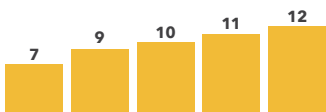
RUGGED SI EDGE RATE® SYSTEMS

OPTIMIZED FOR SI PERFORMANCE • INCREASED CONTACT WIPE • HIGH CYCLES

0.50 mm PITCH EDGE RATE®

- 1.00 mm contact wipe for a reliable connection
- Rugged friction locks and weld tabs available
- Up to 40% PCB savings vs. ERM8/ERF8
- Compatible with mPOWER® for flexible power/signal solutions

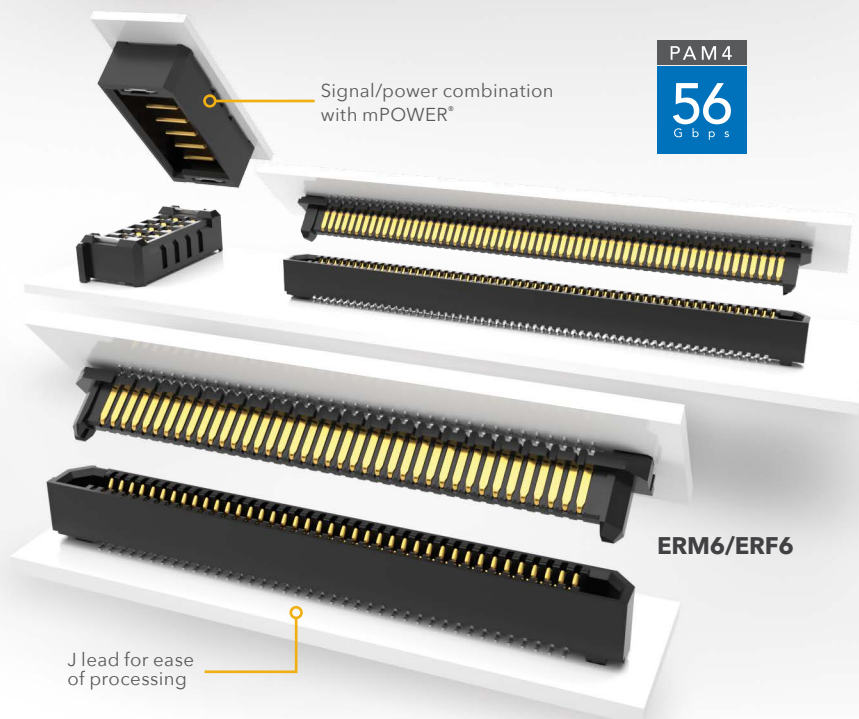
Stack Height Flexibility
(in mm)



0.635 mm PITCH SLIM BODY EDGE RATE®

- Extremely slim 2.5 mm body width
- Up to 120 positions in a 2-row design
- 5 mm stack height with others in development
- Compatible with mPOWER® for flexible power/signal solutions

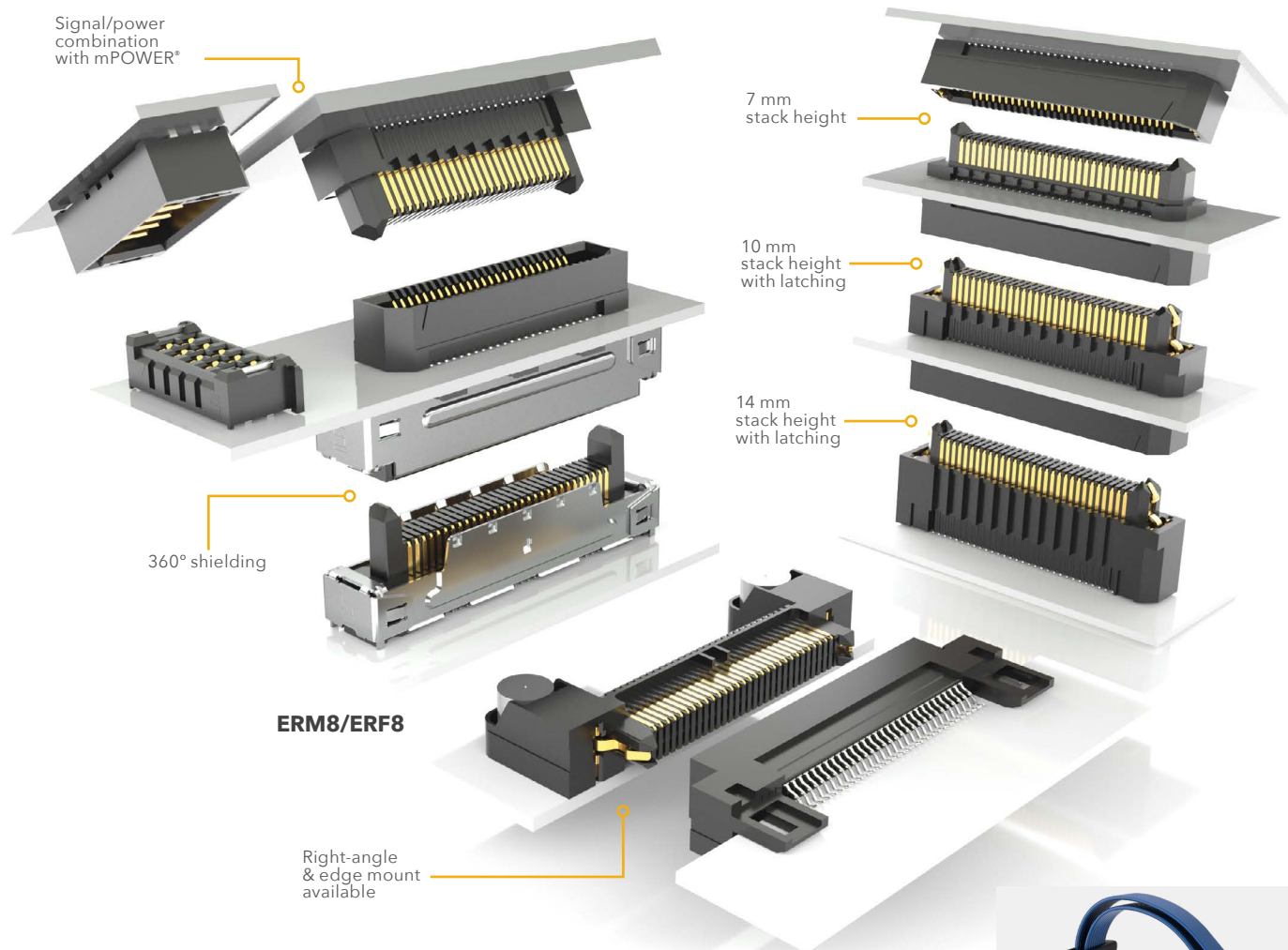
ERF6 shown at 40 total positions





EDGE RATE[®] CONTACT SYSTEM

- Smooth milled mating surface reduces wear and increases durability
- Lower insertion and withdrawal forces
- Robust when “zippered” during unmating
- Minimized parallel surface area reduces broadside coupling and crosstalk
- Designed, simulated and optimized for 50 Ω and 100 Ω systems



0.80 mm PITCH EDGE RATE[®]

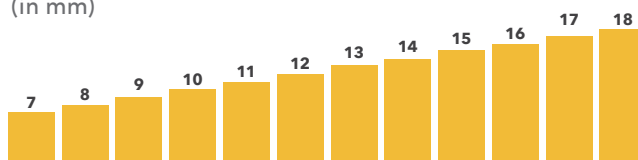
- 1.50 mm extended wipe
- Rugged metal latching for increased retention force
- 360° shielding option reduces EMI
- Compatible with mPOWER[®] for flexible power/signal solutions
- Cost-effective metal solder lock in development for a more secure connection to the board

28
Gbps



Mating Cable Assemblies
(ERCD/ERDP Series)

Stack Height Flexibility
(in mm)

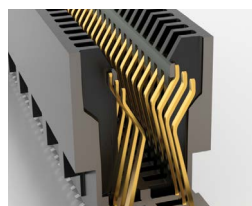


RUGGED SI EDGE CARD

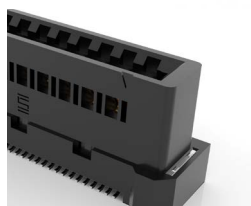
UP TO 56 Gbps PAM4 • CHOICE OF PITCH • EDGE RATE® CONTACTS

0.60 mm, 0.80 mm & 1.00 mm PITCH SYSTEMS

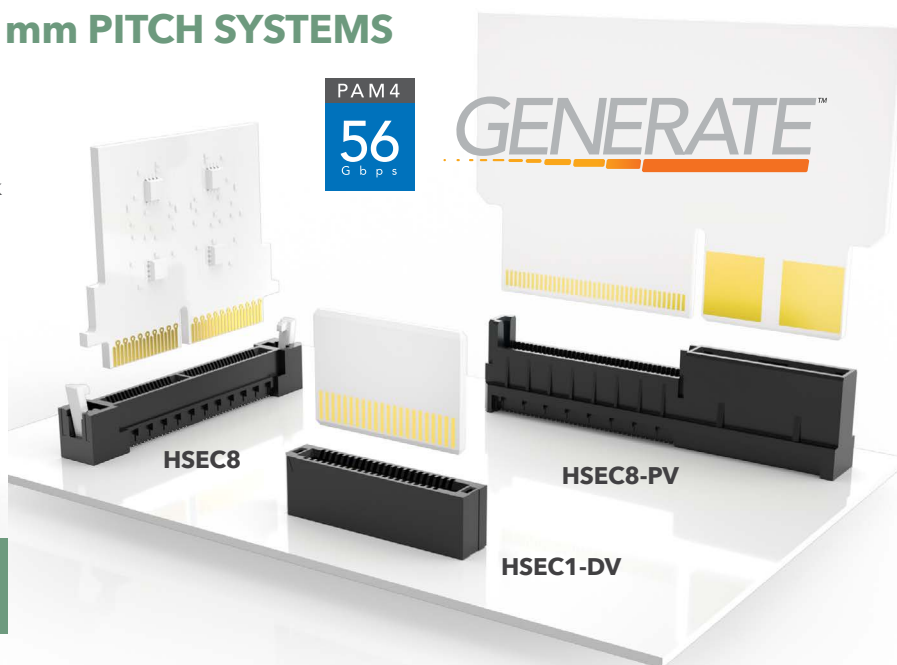
- High-speed Edge Rate® contact system
- Vertical, right-angle and edge mount
- Power/signal combo to 60 A per power bank
- 56 Gbps with differential pair (HSEC8-DP)
- Misalignment mitigation (HSEC1-DV)



PCIe® 4.0
rugged tucked beam
technology (HTEC8)

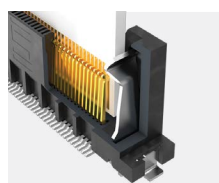


Compliant to Gen Z™
and SFF-TA-1002
specifications (HSEC6)

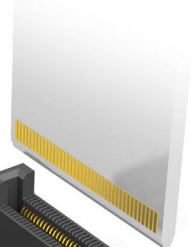


HIGH-DENSITY EDGE CARD

- Justification beam enables use of standard PCB tolerance
- 0.50 mm ultra-fine pitch with up to 300 total I/Os
- PCIe® 4.0 capable



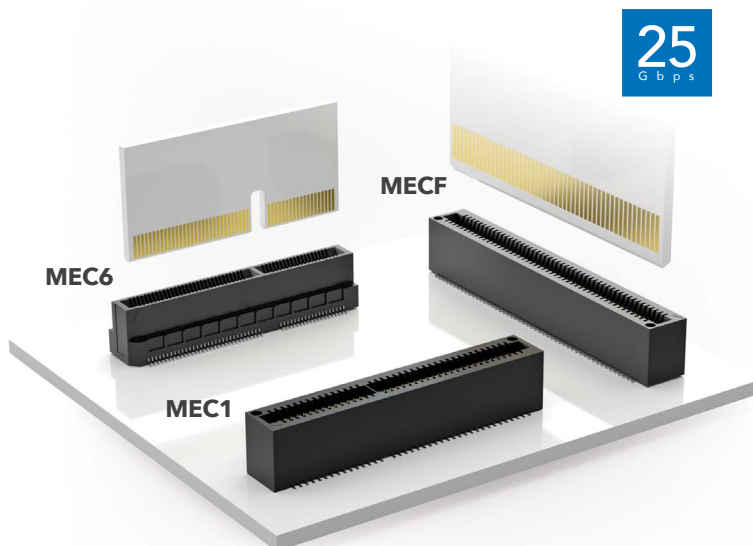
Beam ensures card
and body are flush



MEC5

MICRO EDGE CARDS

- 0.635 mm, 0.80 mm, 1.00 mm, 1.27 mm and 2.00 mm pitch
- Optional rugged weld tabs, board locks and solder locks
- Solutions for 1.60 mm (.062") and 2.36 mm (.093") thick cards



PCI-SIG®, PCI Express® and the PCIe® design marks are registered trademarks and/or service marks of PCI-SIG.

RUGGED SI MICRO SYSTEMS

HIGH-DENSITY • HIGH-RETENTION CONTACTS • SLIM ROW-TO-ROW DESIGNS

HERMAPHRODITIC RAZOR BEAM™ INTERFACES

- High-retention, high-speed Razor Beam™ contacts
- 0.50 mm, 0.635 mm and 0.80 mm pitch
- EMI shielding available to limit signal degradation and optimize performance



25
Gbps

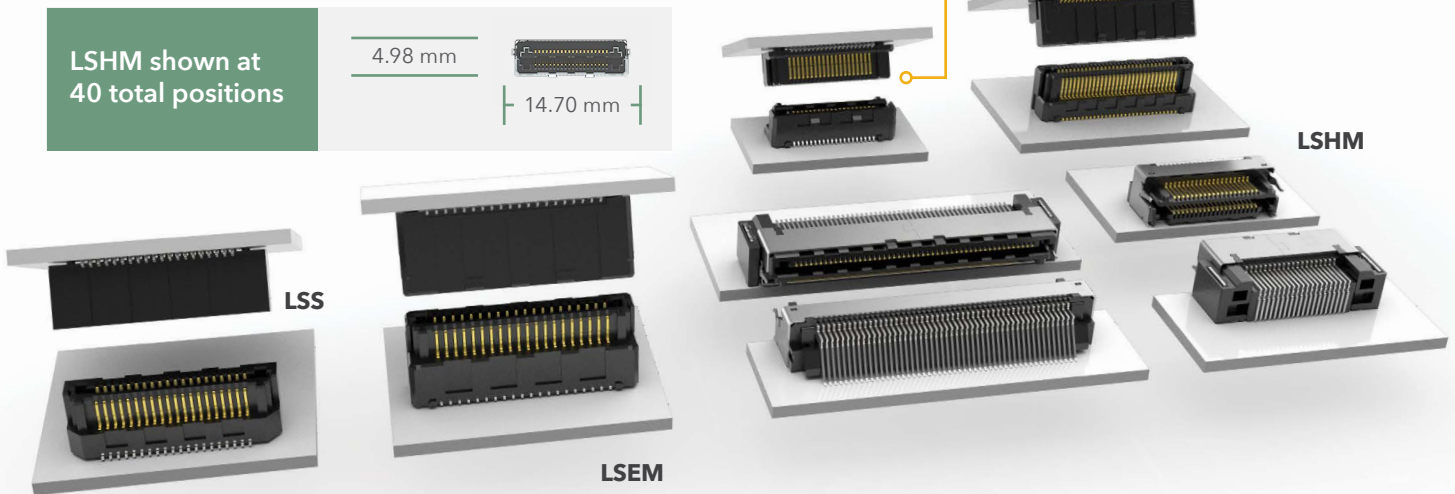
LSHM shown at
40 total positions

4.98 mm



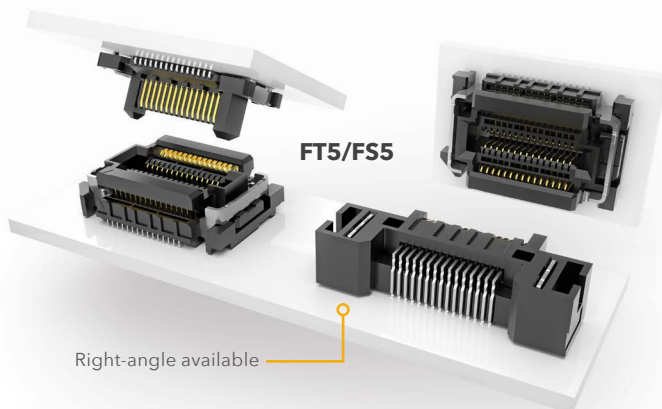
14.70 mm

5 - 12 mm
stack height
flexibility



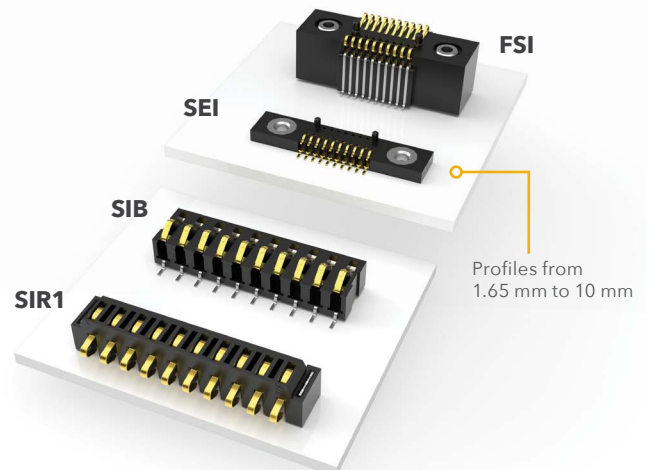
FLOATING CONNECTORS

- Provides 0.50 mm contact float in the X and Y axes to compensate for misalignment
- 5 mm and 7 mm stack heights
- Micro 0.50 mm pitch



ONE-PIECE INTERFACES

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



FLEXIBLE POWER

ULTRA MICRO POWER

18 A PER BLADE • MICRO 2.00 mm PITCH • DESIGN FLEXIBILITY

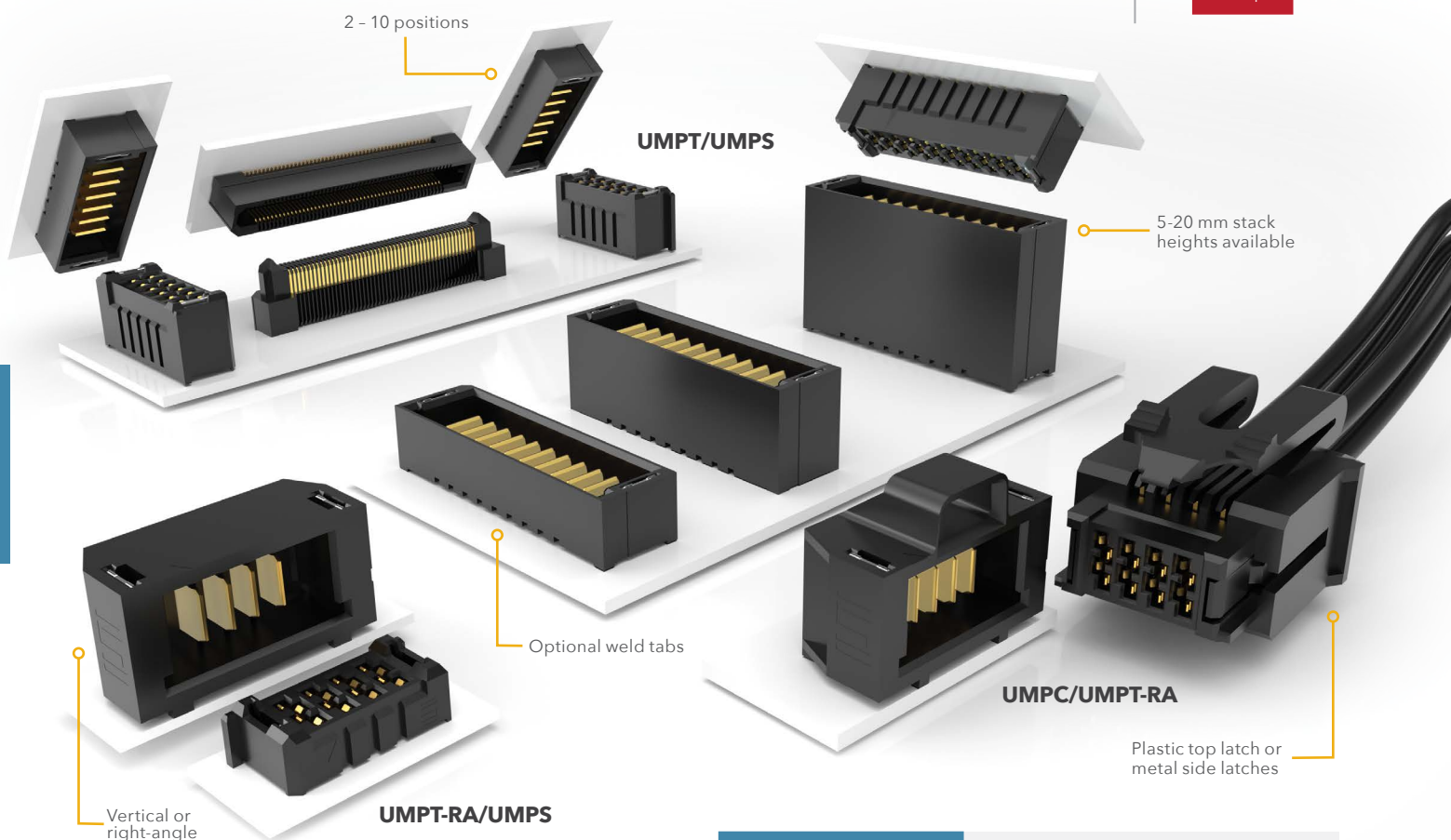
2.00 mm PITCH mPOWER®

- Design flexibility as a power-only system or a two-piece system for power/signal applications
- Use with Samtec's high-speed connector systems for a unique power/signal system (see chart)
- Tin or 10 μ " Gold plated power blades; 30 μ " Gold plating available to meet specific regulations

- Latch option for mating with cable assembly
- Standard creepage (2.20 mm) and clearance (1.65 mm)
- Cable components (IMPC/CC489) and tooling available
- Selectively loading contacts achieves customer specific creepage and clearance requirements; contact asp@samtec.com

mPOWER®

MAX
18
A m p s



UMPT shown at
4 total positions



7.60 mm

15.30 mm

POWER/SIGNAL MATED HEIGHTS

SIGNAL CONNECTOR	MATED HEIGHT (mm)													
	5	6	7	8	9	10	11	12	13	14	15	16	18	20
ADM6/ADF6	X													
BTE/BSE	X			X										
BTH/BSH, BTS/BSS	X													
ERM5/ERF5			X		X	X	X	X						
ERM6/ERF6	X													
ERM8/ERF8			X		X	X	X	X	X	X	X	X	X	
LPAM/LPAF	X													
QMS/QFS						X	X	X	X	X		X		
QRM8/QRF8			X		X	X		X		X				
QTE/QSE, QTH/QSH	X						X			X		X		
QTS/QSS	X													
SEAM/SEAF			X	X	X	X	X	X	X	X	X	X		X
SEAM8/SEAF8			X			X								
ST4/SS4	X	X												
ST5/SS5	X													
TEM/SEM		X	X			X								

CURRENT SPECIFICATIONS

CURRENT RATING (PER CONTACT)		
PINS	-T	-G
1	18.3 A	16.2 A
2	14.5 A	14.6 A
3	14.2 A	12.6 A
4	12.9 A	12.3 A
5	12.9 A	N/A
10	N/A	9.4 A

Ratings are derated 20% with 30 °C rise to the maximum allowable temperature

CREEPAGE & CLEARANCE

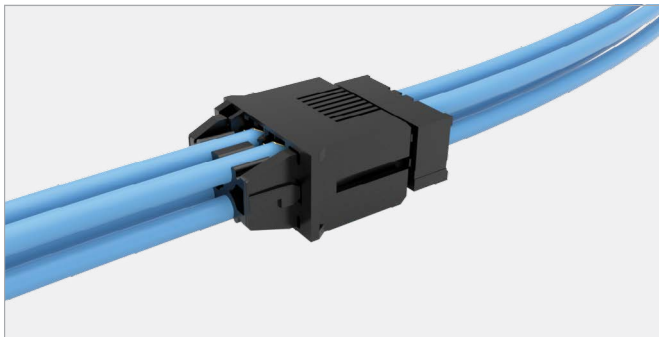
	CREEPAGE	CLEARANCE
UMPT/UMPS	2.20 mm	1.65 mm

Selectively loading contacts achieves customer specific creepage and clearance requirements. Contact asp@samtec.com

POWER SIMULATION

Samtec now offers power simulation that can calculate temperature increase in the connector area. Contact MicroRuggedGroup@samtec.com for more details.

PRODUCT ROADMAP



Cable-to-Cable System

Shown: 4 Position Cable Assemblies with high-temperature Teflon® cable

POSITIONS

2, 3, 4, 5, 6, 7, 8, 9, 10

OPTIONS

Teflon® cable and rugged latching

FLEXIBLE POWER HIGH-POWER

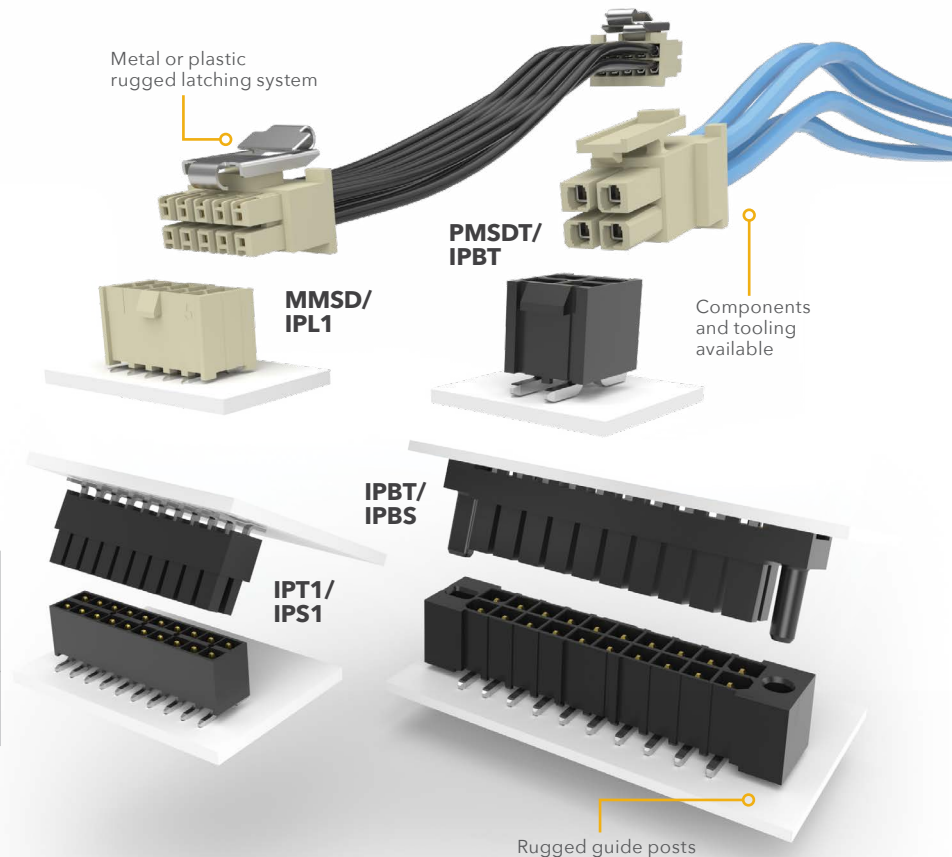
SMALL FORM FACTORS • 10-60 A PER PIN/BLADE • INDIVIDUALLY SHROUDED CONTACTS

MINI MATE® & POWER MATE®

- Individually shrouded contacts for electrical and mechanical protection
- .100" (2.54 mm) and .165" (4.19 mm) pitch
- Discrete wire assemblies with 16-30 AWG PVC or Teflon® wire
- Selectively loading contacts achieves customer specific creepage and clearance requirements; contact asp@samtec.com

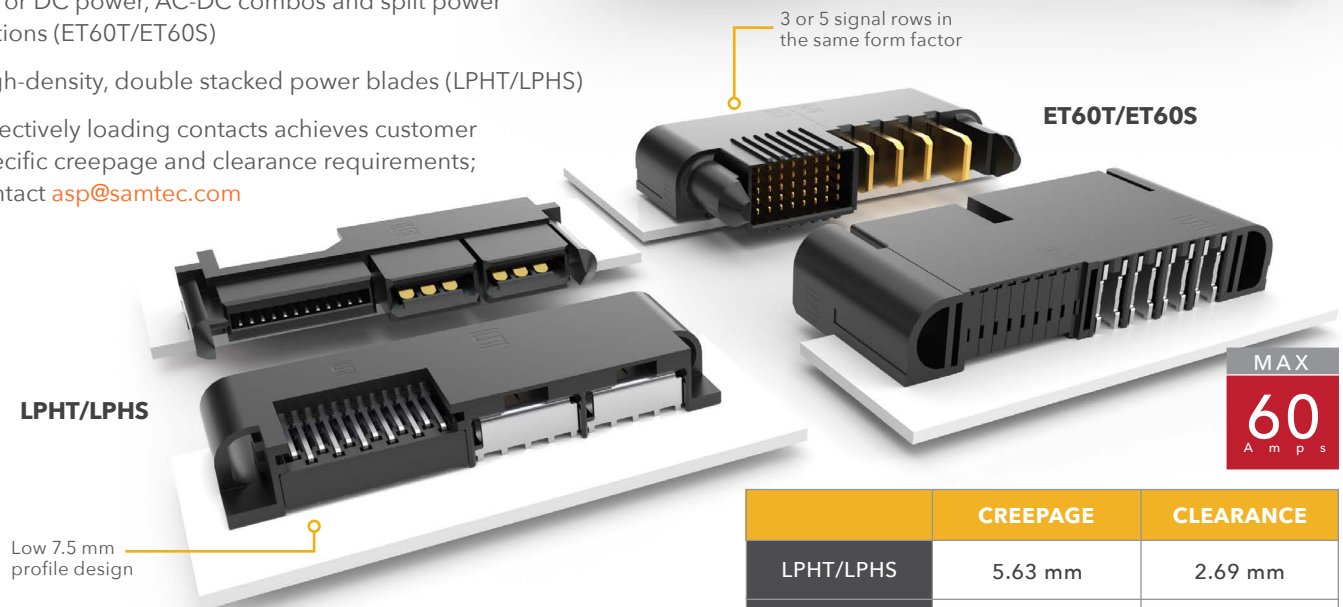
MAX
10.3
A m p s

	CREEPAGE	CLEARANCE
IPT1/IPS1 MMSS(T)/MMSD(T)	2.55 mm	1.91 mm
IPBT/IPBS PMSS(T)/PMSD(T)	4.27 mm	3.05 mm



EXTREME POWER

- AC or DC power, AC-DC combos and split power options (ET60T/ET60S)
- High-density, double stacked power blades (LPHT/LPHS)
- Selectively loading contacts achieves customer specific creepage and clearance requirements; contact asp@samtec.com



	CREEPAGE	CLEARANCE
LPHT/LPHS	5.63 mm	2.69 mm
ET60T/ET60S	3.02 mm	1.87 mm

POWERSTRIP™ SYSTEM

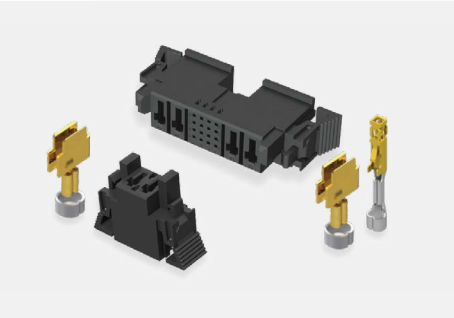
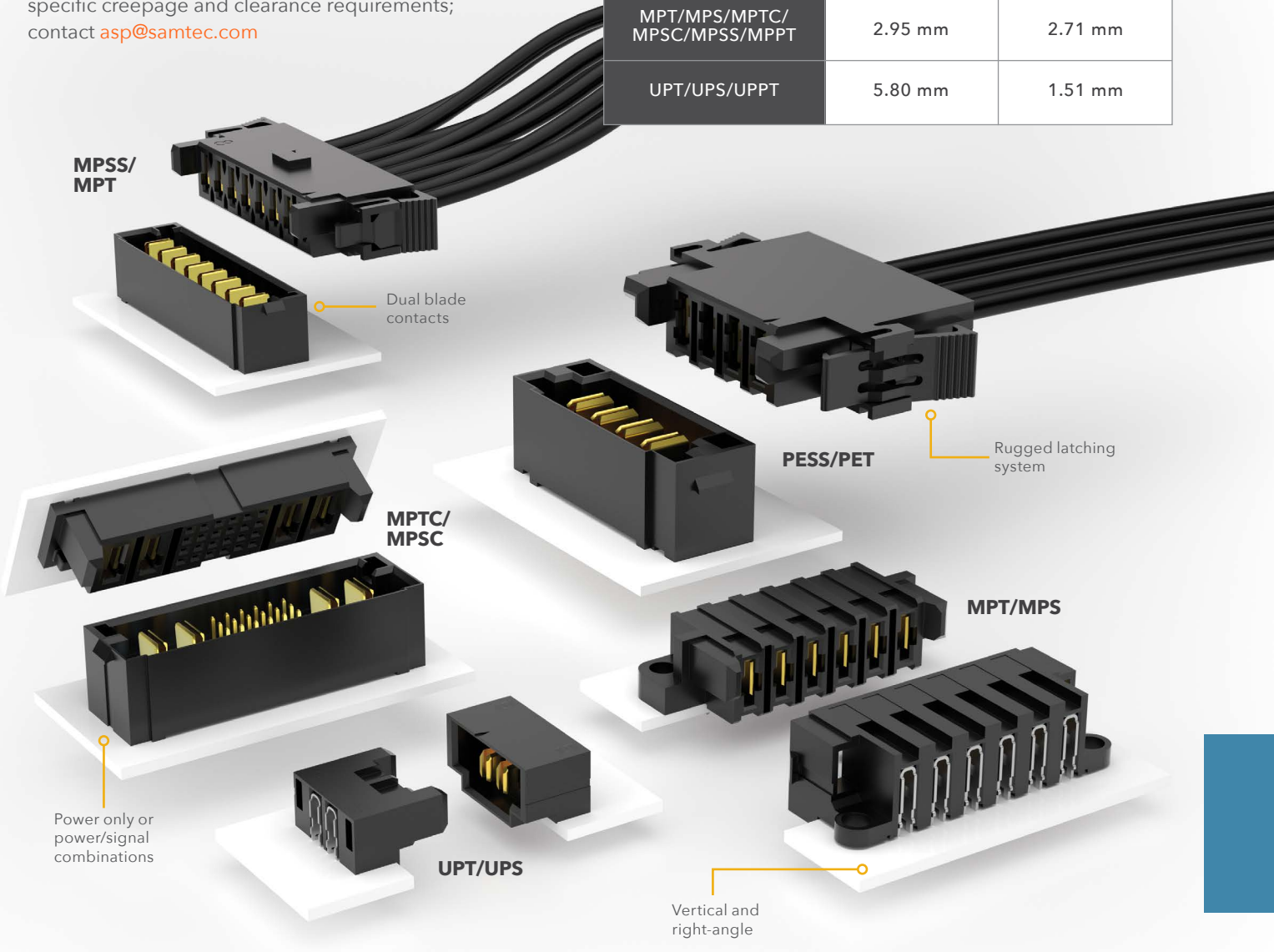
MAX

60

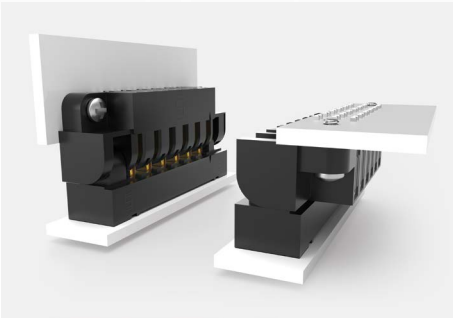
A m p s

- 23.5 A/blade to 58.7 A/blade (1 blade powered)
- 5.00 mm and 6.35 mm pitch
- Discrete wire assemblies with 10-16 AWG wire
- Selectively loading contacts achieves customer specific creepage and clearance requirements; contact asp@samtec.com

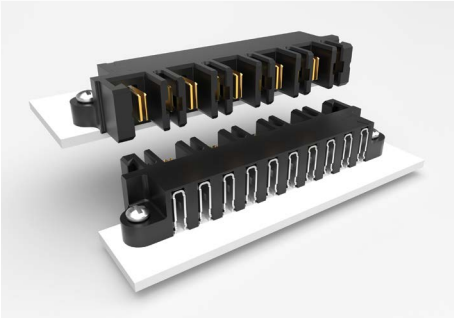
	CREEPAGE	CLEARANCE
PET/PES/PETC/PESC/PESS	3.66 mm	3.31 mm
MPT/MPS/MPTC/MPSC/MPSS/MPPT	2.95 mm	2.71 mm
UPT/UPS/UPPT	5.80 mm	1.51 mm



Discrete wire components (IMS5,IMSC5/CC46,CC81; IPS6/CC10) and tooling available: samtec.com/tooling



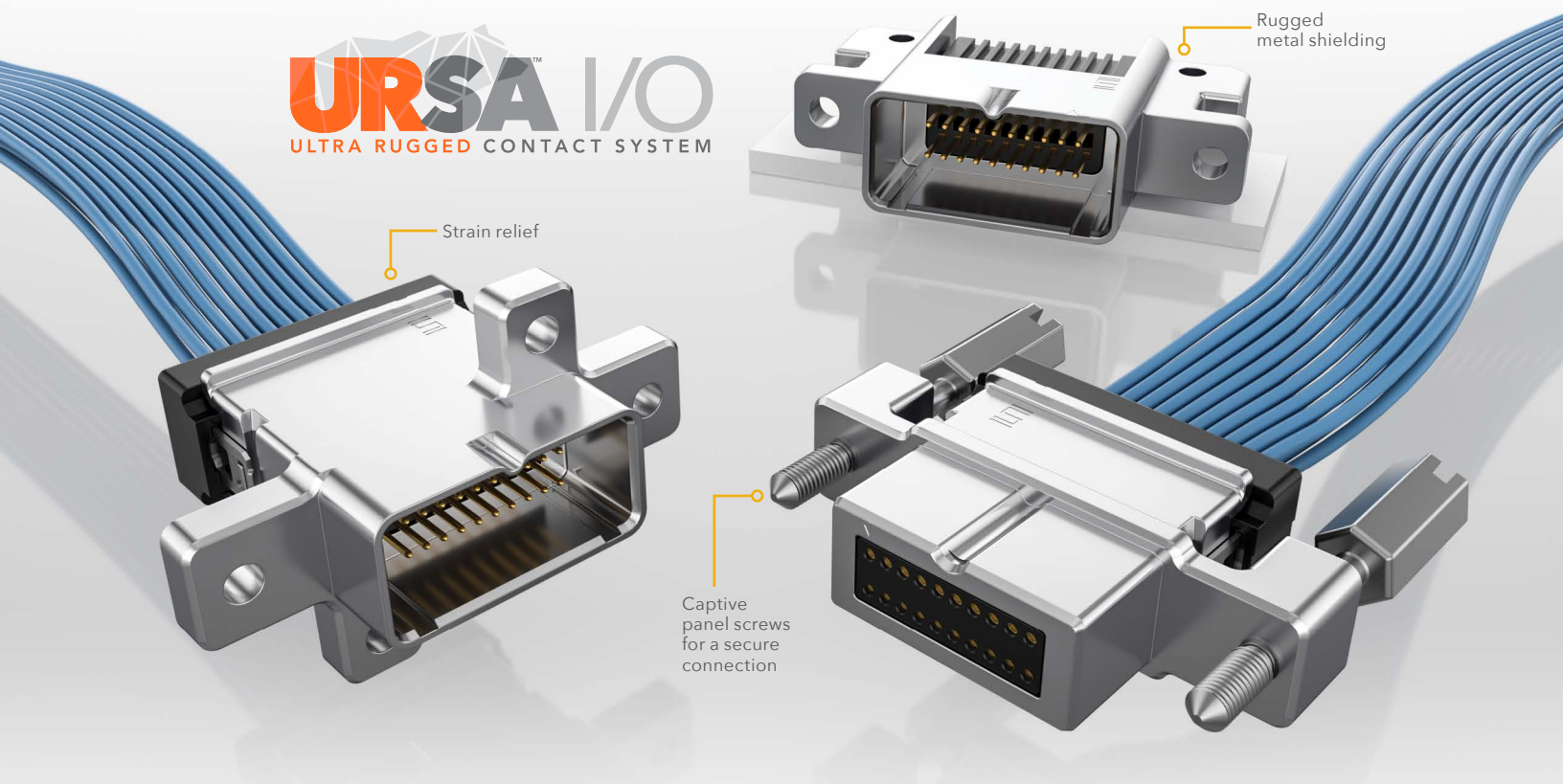
"Hinging" for 90° mating radius, ideal for blind mating (FMPT/FMPS)



Hermaphroditic power system with rugged screw downs (MPPT, UPPT)

ULTRA RUGGED I/O SYSTEMS

HIGH-RELIABILITY • HIGH CYCLE • SMALL FORM FACTOR



RUGGED POWER I/O SYSTEMS

- Four points of contact for an extremely reliable connection
- Micro 1.00 mm pitch
- Up to 40 positions per row
- Cable-to-cable & cable-to-board solutions
- EMI shielding to limit signal degradation and optimize performance
- Through-hole or surface mount
- 28 and 30 AWG cable
- Currently in development; for more information contact MicroRuggedGroup@samtec.com



Shown at 20 total positions



Hyperboloid-type contact for extreme high mating cycles



Extreme density with up to 1,550 total I/Os in a 1RU panel (31 cables at 50 total I/Os each)

ULTRA RUGGED HARDWARE

STACK HEIGHT FLEXIBILITY • MISALIGNMENT MITIGATION • RUGGED MATERIALS

GUIDE POST STANDOFFS (GPSO)

SUREWARE™
ULTRA RUGGED HARDWARE

- Allows for 0.035" of initial misalignment
- Assists with "blind mate" for ultra micro, fine pitch mezzanine connectors
- Pairs well with NVAM/NVAF, APM6/APF6, ADM6/ADF6 and UMPT/UMPS

JACK SCREW PRECISION STANDOFFS (JSO)

- Reduces risk of component damage
- Assists with unmating of high-normal force connectors like LSHM, SEAM/SEAMF, SEAM8/SEAF8 and LPAM/LPAF

5-30 mm
stack heights

GPSO

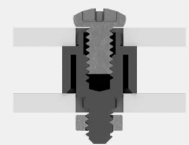
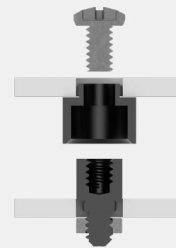
4-16 mm
stack heights

JSO

303 Stainless Steel
with MIL-C-13924
black oxide finish

GPSO

GPSO:
Alignment
starts before
connectors
engage



5-25 mm
stack heights

SO

PRECISION STANDOFFS (SO)

- Precision machined tolerances (+/- .002" (0.05 mm))
- Ideal for use with all Samtec high-speed connectors
- Standard nylon thread locking compound

ULTRA RUGGED TESTING

SEVERE ENVIRONMENT • EXTENDED LIFE • DESIGN QUALIFICATION

SEVERE ENVIRONMENT TESTING

Severe Environment Testing (SET) is a Samtec initiative to test products beyond typical industry standards and specifications for performance confidence in rugged/harsh environment industries. These products undergo additional testing, inspired by military standards, to ensure they are more than suitable for military, space, automotive, industrial and other extreme applications.

SET qualified products are Commercial Off-the-Shelf (COTS) and modified COTS for incredible design flexibility to get solutions to market faster. Visit samtec.com/SET or contact SET@samtec.com for additional information and current available test results.



- Performance confidence
- Short lead-times
- Cost-effective
- Qualification Testing online
- No minimum order quantity
- Modified COTS built to Samtec's print



SET QUALIFIED PRODUCTS

SFM/TFM – Tiger Eye™ 1.27 mm Pitch Micro Rugged System

SEAF/SEAM – SEARAY™ High-Density Arrays

LSHM – Razor Beam™ Hermaphroditic Strips

SSM/TSM – .100" Pitch Square Post Header & Socket

FTSH/CLP – .050" Pitch Header & Socket

ERF8/ERM8 – Edge Rate® Rugged High-Speed Strips

S2M/T2M – Tiger Eye™ 2.00 mm Pitch Micro Rugged System

UMPS/UMPT – mPOWER® Ultra Micro Power Connectors

SEAF8/SEAM8 – SEARAY™ Ultra-High Density Arrays

Testing Now: Micro Mate™ and Tiger Eye™ Discrete Wire Systems, Micro Coax and Twinax Cable Assemblies, FireFly™ Copper Systems and AccliMate™ Sealed I/O Systems

SET TESTING INCLUDES

- Mating/Unmating/Durability
- Mechanical Shock/Random Vibration/LLCR & Nanosecond Event Detection
- Temperature Cycling
- Non-Operating Class Temperature
- DWV at Altitude
- Electrostatic Discharge (ESD)
- Outgassing

NASA

Samtec's SET products are approved for NASA Class D missions that require high-reliability, quick-turn and cost-effective solutions for LEO and GEO satellites, SmallSats, CubeSats and other space exploration applications.

EXTENDED LIFE PRODUCT™

E.L.P.™ products are tested to rigorous standards, which evaluate contact resistance in simulated storage and field conditions.

- 10 year Mixed Flowing Gas (MFG)
- High Mating Cycles (250 to 2,500)
- Certain plating and/or contact options will apply

For complete details about Samtec's E.L.P.™ program, a list of qualifying products and test results, please visit samtec.com/ELP or email the Customer Engineering Support Group at ASG@samtec.com



DESIGN QUALIFICATION TESTING

All Samtec series undergo Design Qualification Testing (DQT), which includes:

- Gas Tight
- Normal Force
- Thermal Aging
- Mating/Unmating/Durability
- IR/DWV
- Current Carrying Capacity (CCC)
- Mechanical Shock/Random Vibration/LLCR
- Mechanical Shock/Random Vibration/Event Detection



TESTING REFERENCE CHART

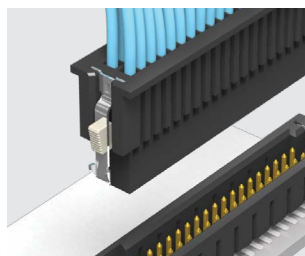
TEST	SET	E.L.P.™	DQT
Gas Tight	X*	X*	X
Normal Force	X*	X*	X
Thermal Aging	X*	X*	X
Mating / Unmating / Durability (240 Hrs)	X (100% RH, 250 Cycles)	X* (90-98% RH, 100 Cycles)	X (90-98% RH, 100 Cycles)
IR / DWV	X (At Altitude of 70,000 Feet)	X*	X
CCC	X*	X*	X
Mechanical Shock / Random Vibration / LLCR & Nanosecond Event Detection	X (40 G Peak, 11 ms, Half Sine & 12gRMS, 5 - 2,000 Hz, 1 Hr / Axis)	X* (100 G Peak, 6 ms, Half Sine & 7.56gRMS Avg, 2 Hr / Axis)	X (100 G Peak, 6 ms, Half Sine & 7.56gRMS Avg, 2 Hr / Axis)
Temperature Cycling (500 Cycles)	X	N/A	N/A
Non-Operating Class Temperature	X	N/A	N/A
Electrostatic Discharge (ESD)	X	N/A	N/A
10 Year MFG (Mixed Flowing Gas)	N/A	X	N/A
Mating Cycles (250 to 2,500)	N/A	X	N/A

*Completed as part of initial Design Qualification Testing (DQT). E.L.P.™ and SET testing are performed in addition to DQT.

RUGGED FEATURES

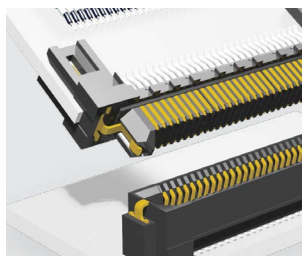
OPTIONS FOR HIGH-RELIABILITY • HIGH-RETENTION • HIGH-CYCLE LIFE

RUGGEDIZING OPTIONS



POSITIVE LATCHING

Manually activated latches increase unmating force by up to 200%



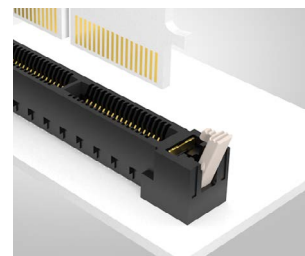
FRICTION LOCKS

Metal or plastic friction locks increase retention/withdrawal force



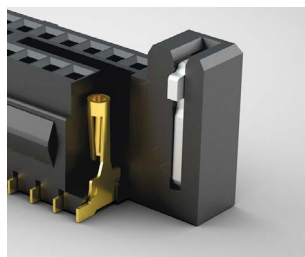
RETENTION PINS

Increase unmating force by up to 50%



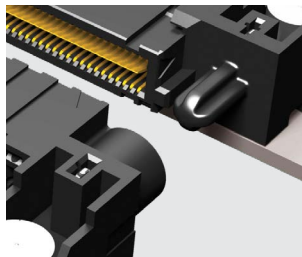
BOARD LOCKS

Boards are mechanically locked together



WELD TABS

Significantly increase shear resistance of connector to PCB



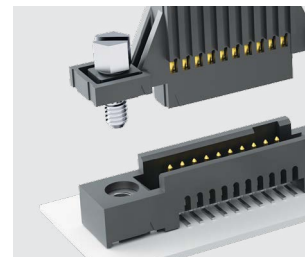
GUIDE POSTS

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

TIGER BEAM™
CONTACT



- Best Cost
- Reliable Performance
- Post & Beam Contact

EDGE RATE®
CONTACT



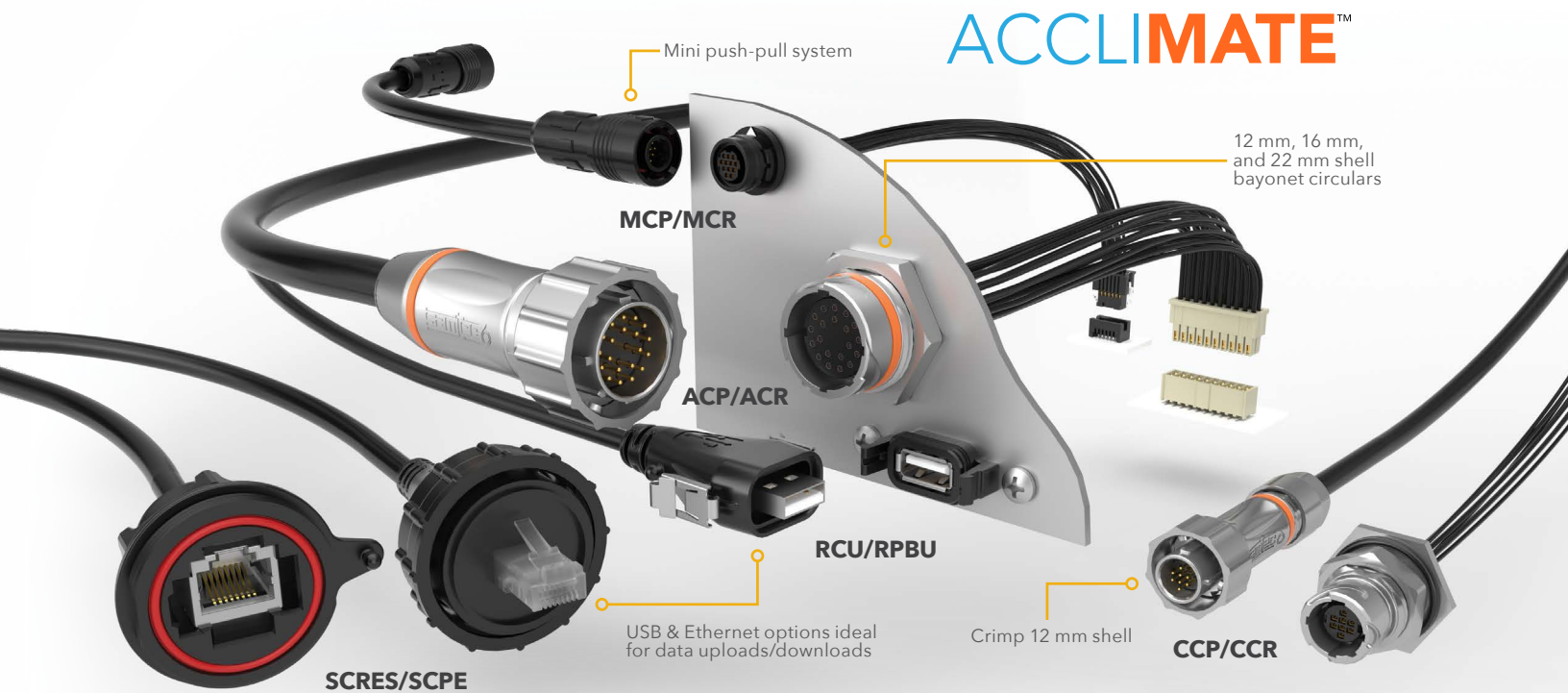
- Designed for Signal Integrity
- Superior Impedance Control
- Reduced Broadside Coupling

SEALED I/O ACCLIMATE™ SYSTEMS

IP67 & IP68 • BAYONET/PUSH-PULL CIRCULARS • SPACE-SAVING RECTANGULARS

FLEXIBLE SEALED SYSTEMS

- IP67 miniature push-pull latching system with lightweight plastic shell
- IP68 bayonet-style latching circulars with metal or plastic shells and flexible configurations
- Cost-effective crimp version available
- Rectangular design for maximum panel area savings
- IP68 threaded circulars with rugged overmold design
- Right-angle and cable-to-cable options in development (ACX, CCX)



Rectangular design for 25-45% panel area savings



Kitted components for efficient field assembly (ACPK/ACRK)



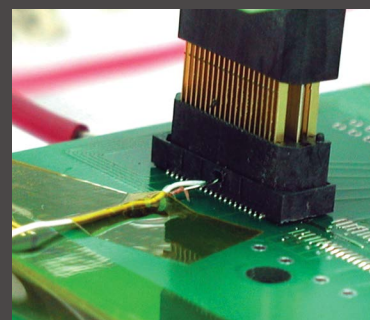
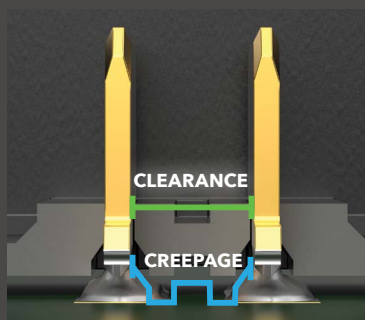
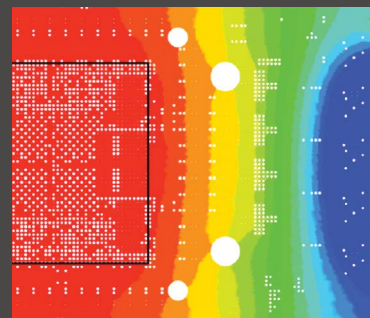
Rugged dust caps available

POWER INTEGRITY & CUSTOM SOLUTIONS

POWER INTEGRITY SERVICES

- Standard power test data, including current carrying capacity, working voltage, voltage drop and resistance, creepage and clearance, is available for select power systems
- Current Cycling Test Data, which demonstrates connector performance in realistic and common applications, is available for select series
- Power Integrity Guidelines are based on test data and proven design parameters, designed to help in connector selection and PCB design maximization
- Power Integrity Certified products undergo testing and additional requirements unique to Samtec. Products must pass Current Cycling Test EIA 365-55, have current carrying capacity, resistance vs. number of contacts data available and Power Integrity Guidelines developed

Visit samtec.com/powerintegrity to learn more

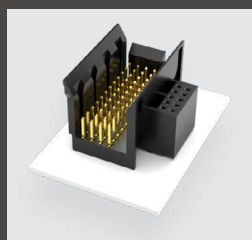


FLEXIBLE RUGGED SOLUTIONS

- Full engineering, design and prototype support
- Design, simulation and processing assistance
- Quotes and samples turned around in 24 hours
- Dedicated Application Specific Product engineers and technicians
- Custom options for board level connectors and cable assemblies including: contacts, bodies, stamping, plating, wiring, molding, ruggedizing features and more

Express Modification

Standard PowerStrip™ cable with non-standard end 2 option



Engineered Custom

Multi-power staging, power/signal combo, header/socket combo, custom body

FLEXIBLE DISCRETE WIRE SOLUTIONS

- Variety of end 2 options
- 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 Customer Engineering Support at asp@samtec.com for express modifications or engineered customs.

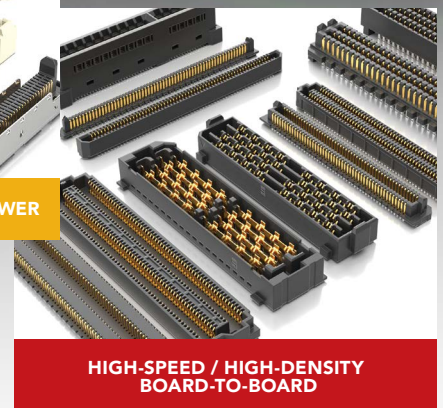
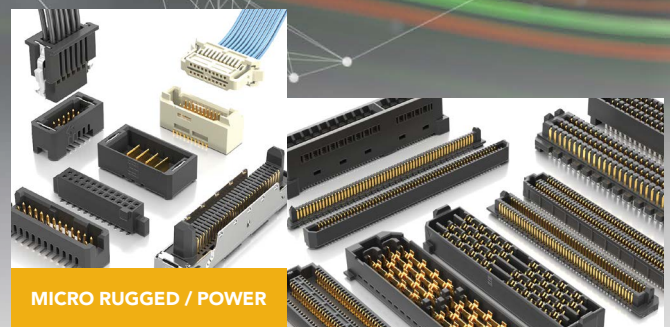
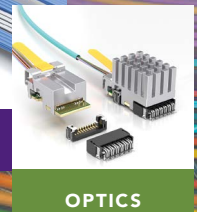
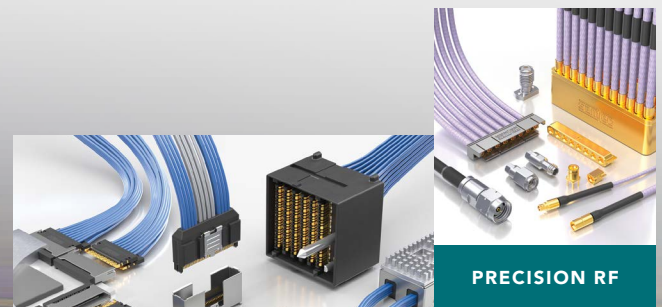
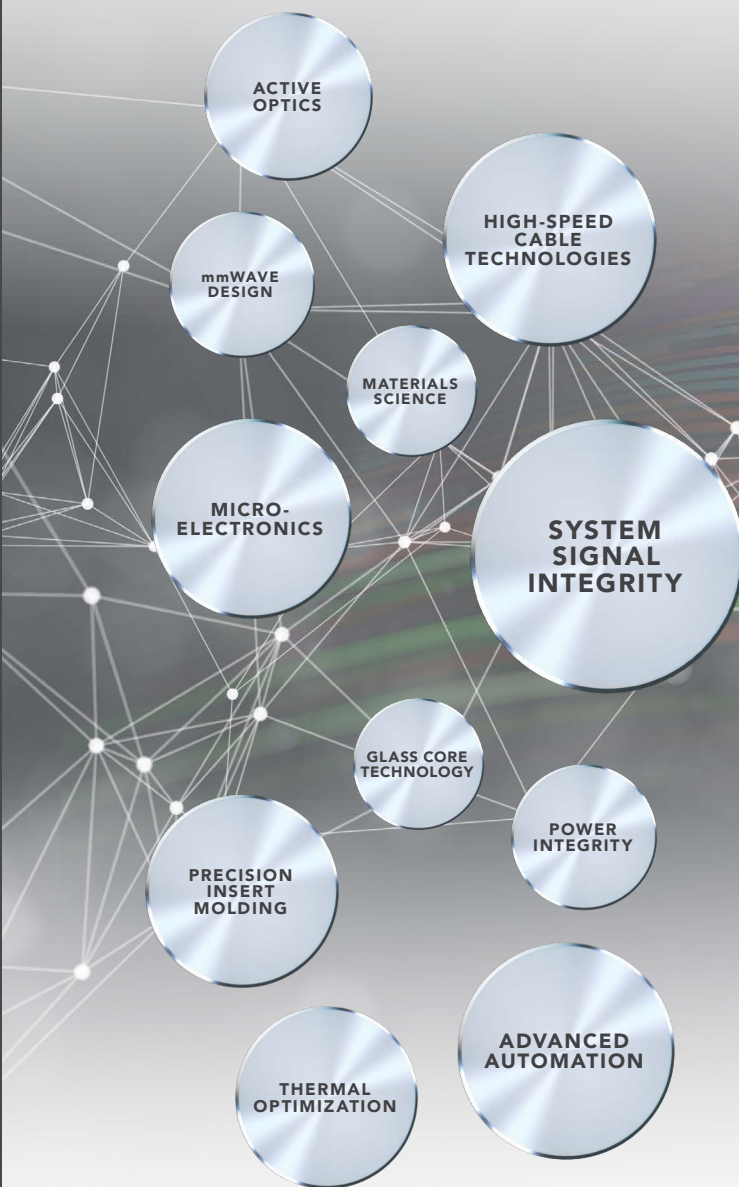
FULL SYSTEM SUPPORT

INTEGRATION LEADS TO

INNOVATION

Samtec's integrated approach provides high-level design and development of advanced interconnect systems and **TECHNOLOGIES**, along with industry-leading expertise that allows us to offer effective strategies and support for **optimizing the entire signal channel of high-performance systems**.

Samtec is structured like no other company in the interconnect industry. We work in a fully integrated capacity that enables true collaboration and results in uniquely innovative **PRODUCTS** because **our technology teams are not limited by the boundaries of traditional business units**.



Visit samtec.com/tech-centers for more information.



samtec
SUDDEN SERVICE[®]

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SINGAPORE • JAPAN • CHINA • TAIWAN • HONG KONG • KOREA