



# **SAMTEC**

## **INTERCONNECT**

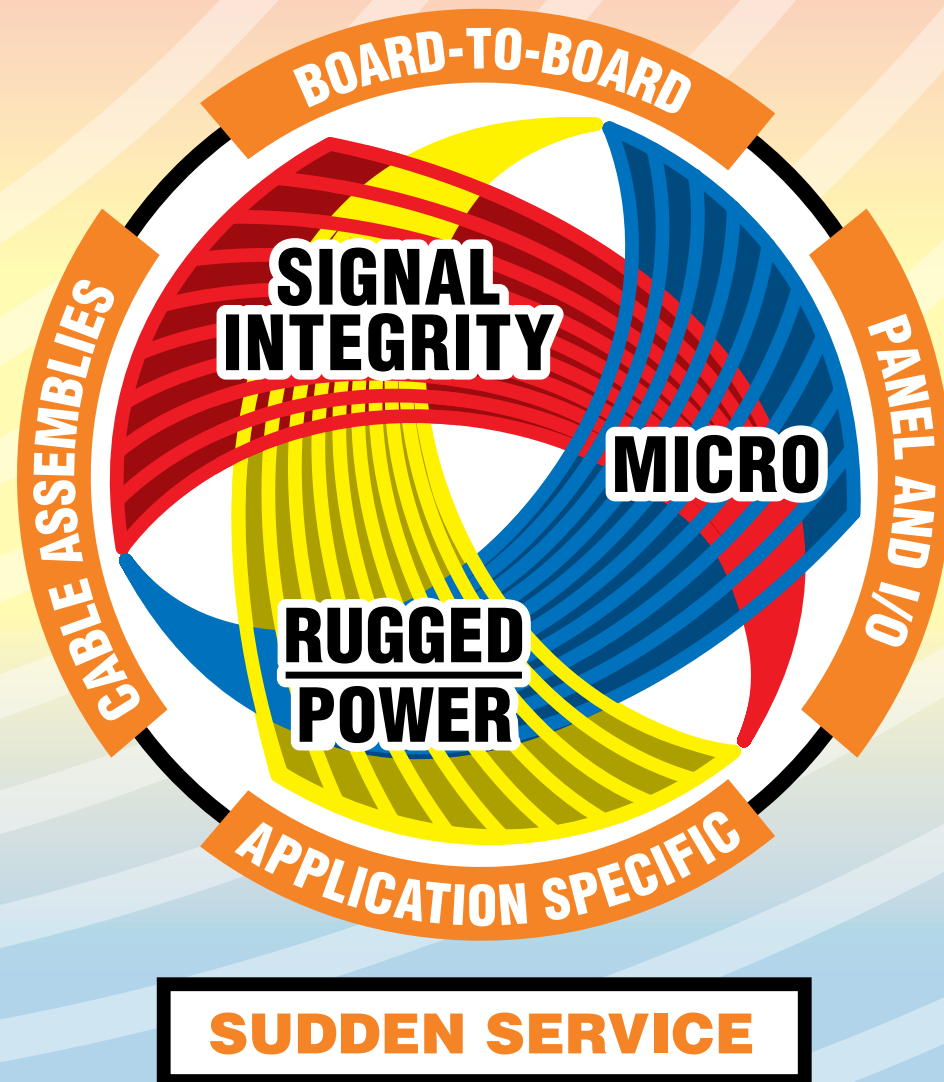
### **CAPABILITIES**



# Samtec Interconnect Capabilities

Whether you need high speed Signal Integrity cables and connectors, Micro interconnect flexibility, or Rugged and Power systems, you will love Samtec's standard, off-the-shelf interconnect solutions.

And for the ultimate in design flexibility, Samtec also offers the unique ability to weave these products and features together for "mix-and-match" Application Specific solutions to fit all your Cable, Board-to-Board and Panel & I/O Applications.





# Signal Integrity Systems

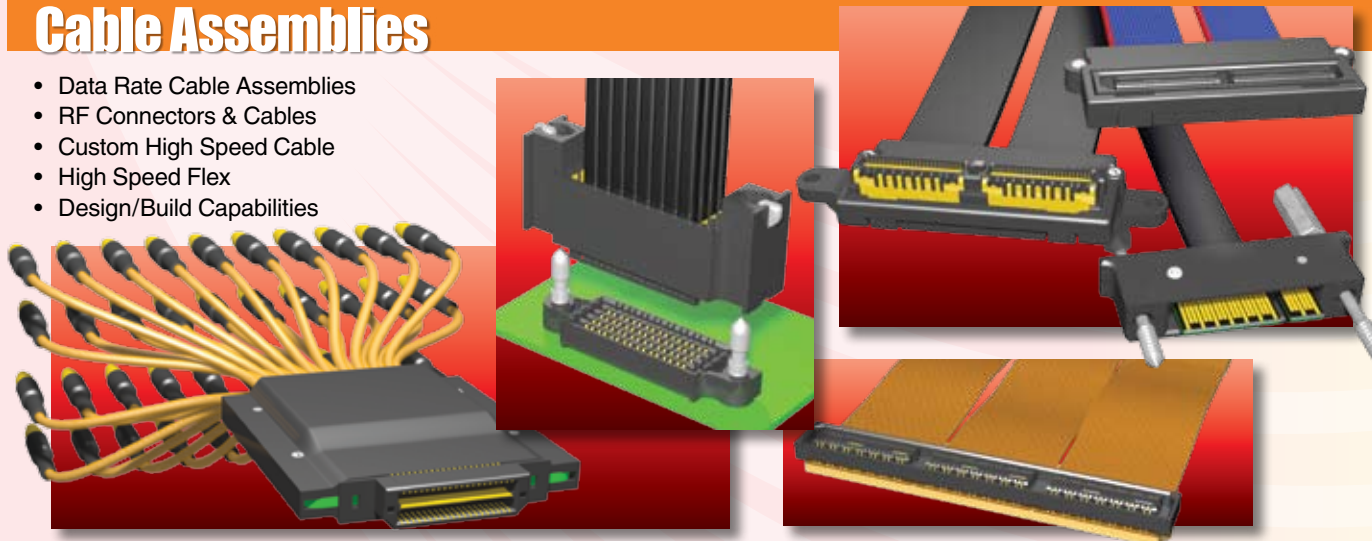
## Board-to-Board

- High Speed Connectors
- High Density Arrays
- Shielded & Rugged Systems
- Rugged Connector Systems
- Horizontal and Perpendicular Interfaces
- Elevated Riser Cards and Connectors
- Mixed Technology Footprint



## Cable Assemblies

- Data Rate Cable Assemblies
- RF Connectors & Cables
- Custom High Speed Cable
- High Speed Flex
- Design/Build Capabilities



## Panel and I/O

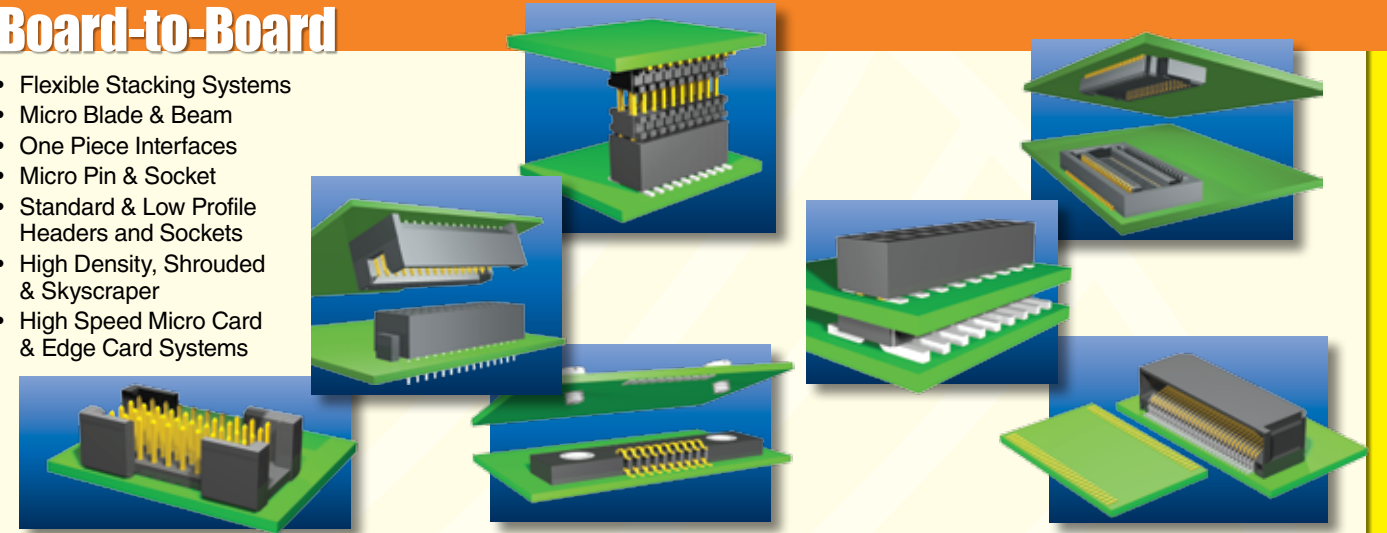
- High Speed I/O Cable Plugs and Receptacles
- DataBank™ High Density Cable Plugs and Receptacles



# Rugged Systems

## Board-to-Board

- Flexible Stacking Systems
- Micro Blade & Beam
- One Piece Interfaces
- Micro Pin & Socket
- Standard & Low Profile Headers and Sockets
- High Density, Shrouded & Skyscraper
- High Speed Micro Card & Edge Card Systems



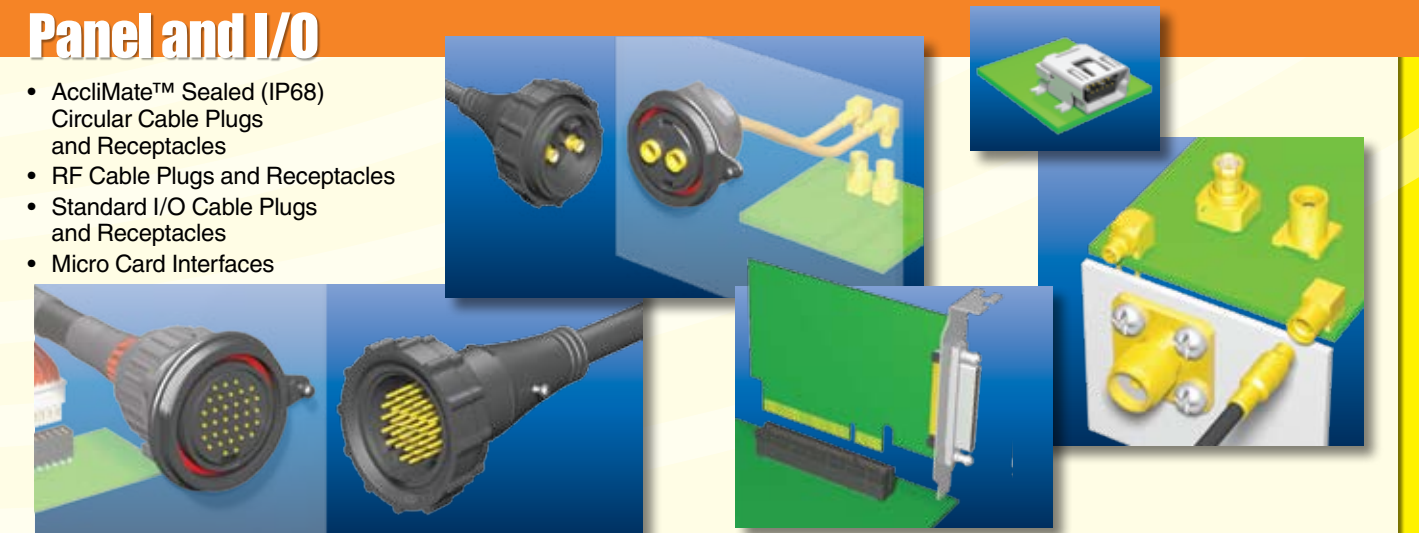
## Cable Assemblies

- Discrete Wire Systems
- IDC Ribbon Cable Assemblies
- Flex Circuits
- RF Cable Systems
- Data Rate Cable Assemblies



## Panel and I/O

- AccliMate™ Sealed (IP68) Circular Cable Plugs and Receptacles
- RF Cable Plugs and Receptacles
- Standard I/O Cable Plugs and Receptacles
- Micro Card Interfaces





# Micro Systems

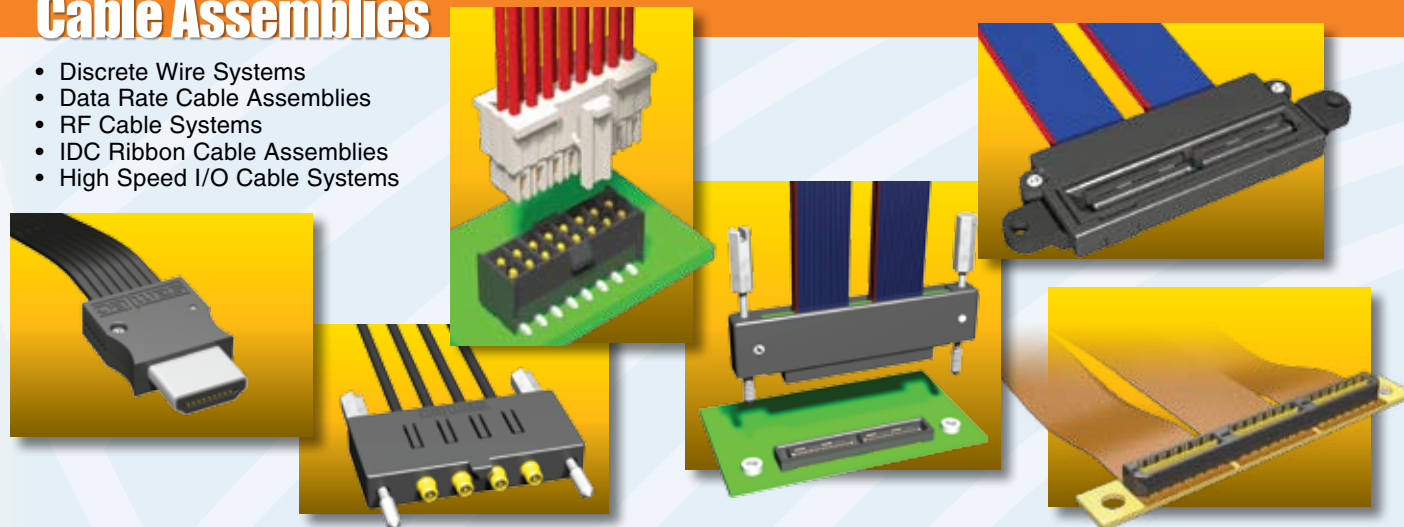
## Board-to-Board

- Power Sockets & Terminals
- Power/Signal combinations
- One Piece Interfaces
- Hermaphroditic Systems
- High Speed Board-to-Board
- Tiger Eye™ Contacts



## Cable Assemblies

- Discrete Wire Systems
- Data Rate Cable Assemblies
- RF Cable Systems
- IDC Ribbon Cable Assemblies
- High Speed I/O Cable Systems



## Panel and I/O

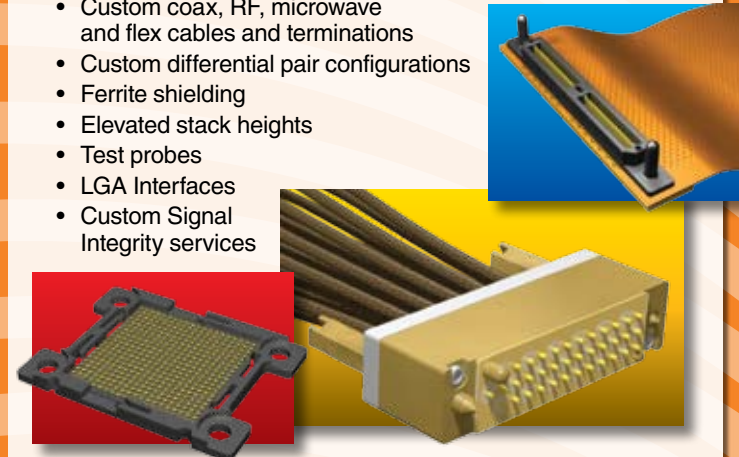
- AccliMate™ Sealed (IP68) Circular Cable Plugs and Receptacles
- High Speed I/O Cable Plugs and Receptacles
- RF Cable Plugs and Receptacles
- Specialty Mod Jacks
- I/O Cable Plugs and Receptacles



# Application Specific

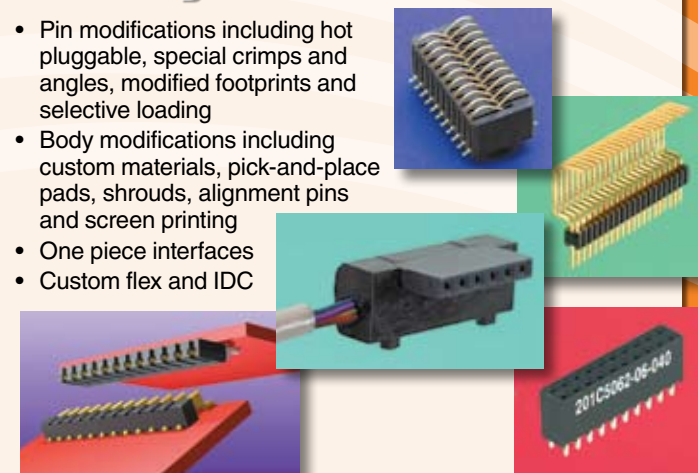
## Signal Integrity Systems

- Custom coax, RF, microwave and flex cables and terminations
- Custom differential pair configurations
- Ferrite shielding
- Elevated stack heights
- Test probes
- LGA Interfaces
- Custom Signal Integrity services



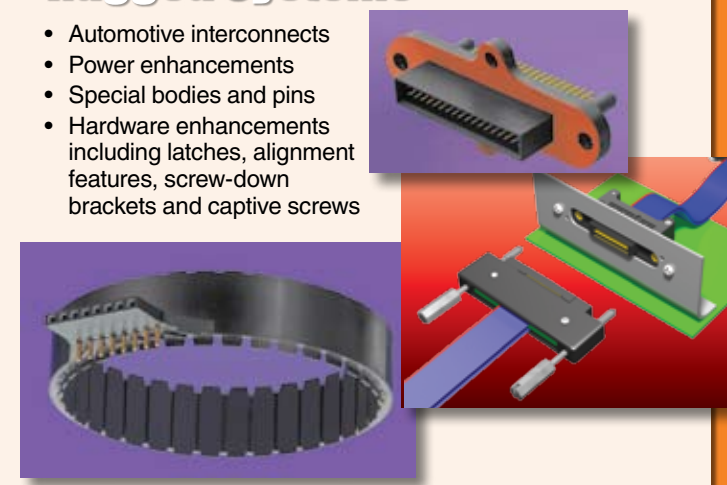
## Micro Systems

- Pin modifications including hot pluggable, special crimps and angles, modified footprints and selective loading
- Body modifications including custom materials, pick-and-place pads, shrouds, alignment pins and screen printing
- One piece interfaces
- Custom flex and IDC



## Rugged Systems

- Automotive interconnects
- Power enhancements
- Special bodies and pins
- Hardware enhancements including latches, alignment features, screw-down brackets and captive screws



## Signal Integrity Services

- Application Specific services for design, modeling and testing of full or sub-system
- Samtec involvement available at various levels
- Specific services tailored to your needs and products
- Extensive modeling, simulation and testing capabilities including de-embedding services



## Platings, Coax Cables & Flex Circuits

- In-house plating facilities for custom metals, thicknesses and selective platings
- In-house coax cable manufacturing for custom gauges, constructions and performance specifications
- In-house flex circuit manufacturing for custom designs and high speed specifications



## Testing & Development

- SMT lab for processing studies
- Stereolithography for mechanical studies
- Quick-turn prototype capabilities
- In-house mold design and fabrication
- Quick change tooling for easy modification





# Signal Integrity Support

**Integrated and accessible Signal Integrity services, support and reference for selection, development, simulation and testing of high speed systems for any application.**

## Signal Integrity Center

*Online support and reference for selection, development, simulation and testing of high speed systems for any application.*

- User friendly website
- High speed connector simulations, models, reports, drawings and searches
- SPICE, IBIS models
- Online PADS/ORCAD Libraries and Support
- High speed characterization reports
- Time and frequency domain test data
- Bandwidth Performance Selector and Interactive Cable Builders
- Application Notes: reference designs that verify performance to industry standards
- Cable Assembly Modeling
- Cable Performance Calculator
- High Speed Connector Selector
- White Papers, Presentations, Articles

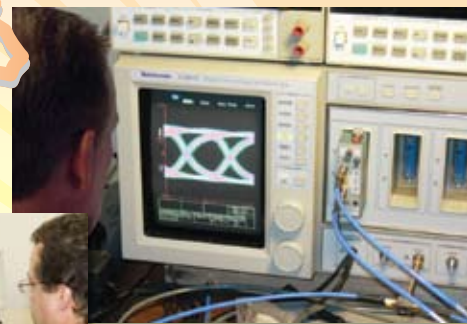


**SIGNAL  
INTEGRITY  
DIVISION**

## Signal Integrity Group

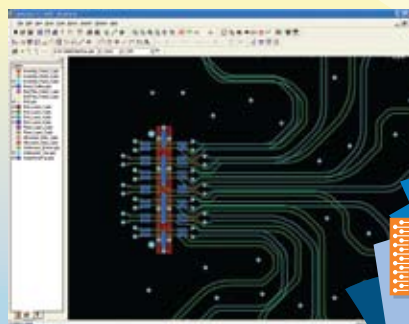
*Personal SI support for questions that cannot be answered via the Signal Integrity Center.*

- EE customer interface via in-house staff
- Design, modeling and testing of sub-systems
- Application Specific services for design, modeling and testing of full or sub-system
- Samtec involvement available at various stages of design
- Specific services tailored to your needs and products
- Extensive modeling, simulation and testing capabilities
- De-embedding capabilities



## Final Inch® PCB Design Tools

- Break Out Region (BOR) PCB designs that save design, development and validation time and resources and predict real-world performance expectations in real-world signal integrity applications
- Downloadable art files
- Downloadable HSPICE simulations
- Test and evaluation kits
- Empirical signal integrity data
- "On-Request" test data



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