



# Product Overview



**CINCH**



## RF/Coax

Cinch's line of RF connectors for exacting requirements of today's designs where high frequency and low impedance are of primary importance. For use in a wide array of applications in diverse markets such as transportation, broadband, telecommunications, instrumentation and aerospace electronics, Cinch RF connectors are cost-effective products that meet industry standards for performance and quality. Each Cinch RF series is offered in PCB mount and cable connector configurations with a wide array of design options to meet each application's specific requirements.

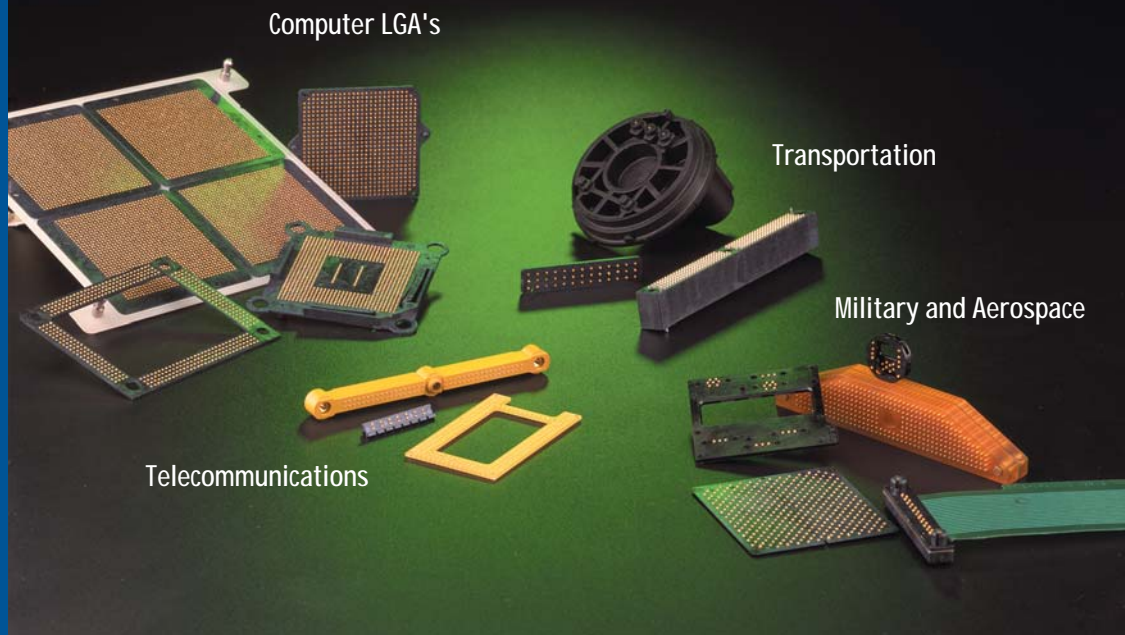
## Applications

- Voice, Data and Video Over Cable
- Test Equipment
- Antennas (PCB Wave Guides)
- Attenuators
- Amplifiers
- Switches
- Network Equipment
- LAN Equipment
- Base Stations
- Routers
- Global Positioning Systems
- Handhelds
- Medical Equipment
- Radar
- Satellite Communications

## Product Line Families Offered

- SMA
- SMB
- MMCX
- MCX (50 and 75 Ohm)
- DIN 1.0/2.3
- BNC (50 and 75 Ohm)
- TNC
- N
- F (75 Ohm)

# Product Overview



## CIN::APSE®

CIN::APSE is a high density, solderless Z-axis interconnect technology used to connect two parallel components. This high performance connector handles signals well above 20 GHz, while offering a superior combination of compact size, low inductance, and exceptional resistance to shock/vibration and thermal cycling. Customization of the plastic housing allows for unlimited designs and applications.

The key to this highly innovative technology is the CIN::APSE button-contact. The contacts themselves are made from randomly wound gold plated molybdenum wire, which are then loaded into a plastic insulator configured to the exact requirements of your application. By using different sizes of contacts, plungers, and spacers we can create a wide range of contact configurations.



LGA Cross Section

## General Applications

- Component-to-board
- Chip-to-board
- Flex-to-board
- Board-to-board

## Market Applications

- LGA Sockets
- Mezzanine Connectors
- Fiber Optic Transceivers
- Coaxial Connections
- Communication and Radar
- Antennas
- Smart Munitions
- Avionics
- Sensors



## Jones Plugs

Economically priced yet extremely durable, Jones Plugs are best utilized where mating and unmating, high current capacity and economics are crucial factors. Jones Plugs are best for applications where a high reliability is too costly and a low end stamped connector is unable to handle the current, environment or mating and unmating.

### Applications

- Data Processing Controls
- Amusement/Vending Machines
- Medical Equipment
- Communication Equipment
- Test Equipment
- Industrial Controls
- Heavy Duty and Battery Powered Equipment
- Security Systems



## Barrier Blocks

Placing barriers between terminals yields a higher electrical rating and provides additional protection against frayed wire shorting. A wide variety of barrier blocks make it possible to select the combination of mechanical and electrical characteristics that best meet the exact requirements of your application.

### Applications

- Industrial Controls
- Instrumentation
- Power Supplies
- Security Consumer Electronics and Monitoring
- HVAC
- Telcom Equipment
- Transportation



## Miniature Ribbons

The Miniature Ribbon connector has been a mainstay in the electronics industry for decades. First widely used in telecommunications, it has proven itself to be a very reliable interconnection system, providing with generous wipe action, high contact pressure and a large mating surface area in a compact format to ensure the reliability of the connection. Available in plastic or metal shell varieties.

### Applications

- Central Office Equipment
- Routers and Switches
- DSL
- Telecom Servers
- Gateways
- Voice Over IP Equipment
- Cross Connects
- Access Nodes
- Base Stations
- PB



## D-Subminiature

The D-subminiature is one of the most popular styles of connectors in the I/O category. It is used in computer, telecom, datacom, medical, military and test instrumentation.

### Applications

- Computer
- Telecom
- Datacom
- Medical
- Test Instrumentation
- Mil/Aero (High End Equipment)



## Cylindrical

The C48 Series (Omega) describes a family of connectors qualified to MIL-C-26500. While maintaining the MIL-C-26500 mating interface, this product has also been expanded to include qualifications to numerous Boeing specifications to satisfy general purpose requirements and unique product challenges for shielding, environmental sealing, fluid resistance, and vibration.

### Applications

- Boeing General Purpose Connector
- Boeing High Performance Connector



## Dura-Con™

Cinch Dura-Con connectors are designed for applications that require a rugged, durable, and high-performance interconnect qualifies to MIL-C-83513. Dura-Con is the ideal connector for applications where weight and space must be kept to a minimum while maintaining maximum reliability.

### Applications

- Miniaturized Airborne Electronics
- Data Processing Equipment
- Medical Monitoring Equipment
- Missile, Seekers and Control Units
- Smart and Guided Munitions
- Electronic Warfare
- Support Combat Electronics
- General Avionics
- Inseat IFE Equipment
- Commercial and Military Gyros



## 1.5mm Sealed Header System

The SHS product family was designed to perform on electronic control modules that must function in extreme environmental conditions commonly found on commercial and off-road vehicles and equipment. SHS header and harness connectors were developed on a highly reliable 1.5mm terminal platform.

### Applications

- Actuator
- Motors
- Sensors



## Cable Assemblies

Cinch has applied its extensive expertise in interconnection technology to engineer and manufacture cable assemblies and wire harnesses of various complexities using state-of-the-art technology and tooling.

### Applications

- Telephone
- Transmissions/Switching
- Premise Wiring
- Headend Equipment
- Telecom Systems
- Video Transmissions
- Cellular Base Stations
- Antenna Systems



## Proven Excellence

For over 70 years, Cinch has been a reliable supplier of a variety of quality connector products to various industries. We are a multi-national manufacturer with manufacturing facilities in the U.S., U.K. and Mexico.

Cinch has applied its extensive expertise in interconnection technology to engineer and manufacture connectors of various complexities using state-of-the-art technology and tooling. Mechanical design is accomplished using Pro/E® 3D solid modeling and AutoCAD® supported by nonlinear and linear Finite Element Analysis, and Mold Flow software.

Our engineers utilize in-house capabilities in high frequency interconnect simulation, SPICE model generation and high frequency testing to develop the optimum product.

All products are validated in Cinch's First Article, mechanical, electrical, and environmental test facilities ensuring the finished products meet our customers' most stringent specifications.

Simply, your connectors are manufactured in state-of-the-art facilities that are committed to customer satisfaction and continuous improvement.



1700 Finley Road  
Lombard, IL 60148

Phone: 630.705.6000  
1.800.323.9612  
Fax: 630.705.6060  
E-mail: [info@cinch.com](mailto:info@cinch.com)  
[www.cinch.com](http://www.cinch.com)

© 2005 Cinch Connectors Inc.  
MB-602/8.05