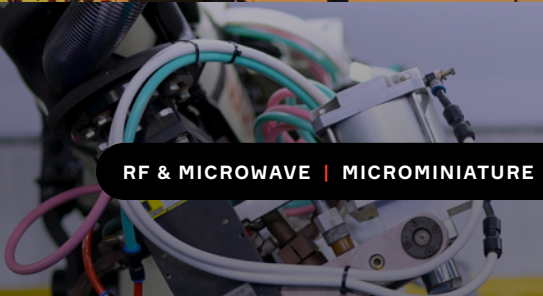
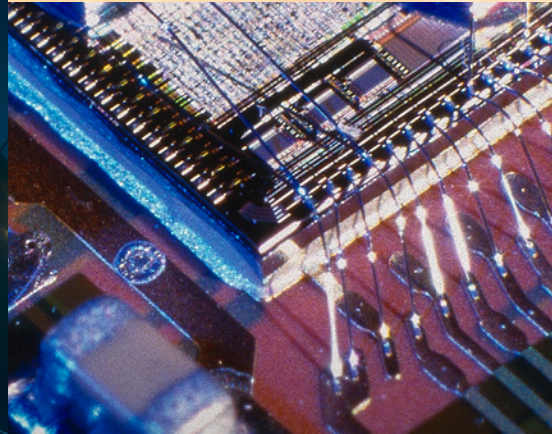
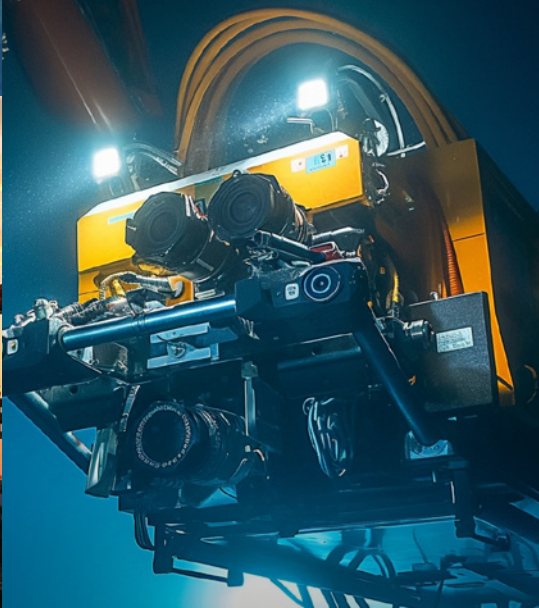


• **ACTIV** •

PRODUCTS AND CAPABILITIES



RF & MICROWAVE | MICROMINIATURE | HERMETICS | WIRE & CABLE | MIL-SPEC

RF & Microwave

RF Connectors

- Connector and adapter families
- Precision in series & between series adapters: 1mm, 1.85mm, 2.4mm, 2.92mm, 3.5mm, SMA, Type N, ATNC
- High power & general purpose in series & between series adapters: INHD, SQS, QDS, QRM, HN, 7/16 DIN, LC, EIA & MEIA 7/8, EIA & MEIA 1 5/8, EIA & MEIA 3 1/8
- Quick Disconnect Connectors
 - QC-SMA, QC-N - Compatible with existing female connectors
 - SQS, QDS, QRM - High powered interfaces
- Small Signal Connectors
 - Centurion®, 1.0mm, 1.85mm, SMPS, SMPM, SMP, SSMA, 2.4mm, 2.9mm, BMAM, 3.5mm, SMA, QMA, BMA, TNC, Type N, MCX, MMCX
- High Power Connectors
 - Type HN, 7/16 DIN, LC, EIA 7/8, EIA 1 5/8, EIA 3 1/8
 - MEIA Series - light weight connectors Compatible w/ Standard EIA Sizes
- Non-magnetic
- PowerSnaps
- Precision, MVP, High Voltage, Keyed (Kings®)

RF Cable

- DynaFlex® - weatherized, ruggedized and high temperature coax
 - 100 Series - General Application
 - 200 Series - Low loss
 - 300 Series - Light weight
 - 400 Series - Dynamic flexure
- PhaseTite® - Superior phase stability over temperature
- ArcTite® - Ultra low profile bends
- SpaceFlex® - Space grade cable and assemblies; frequencies up to 100 GHz
- Semi-Rigid - Numerous low loss constructions for a wide variety of applications

RF Cable Assemblies

- Flexible, semi-flex (hand formable) and semi-rigid cables & assemblies
- ArcTite® with ultra low profile bends
- DynaFlex® with 18 GHz, 26 GHz, 32 GHz, 40 GHz
- DynaTest™ & TRUtest™ - Commercially available test & measurement cables
- PhaseTite® - Phase stability vs temperature 18 GHz, 26 GHz, 40 GHz
- SpaceFlex® - Space grade cable assemblies; frequencies up to 100 GHz
- TRUflex™ PWR - High power coaxial cable assemblies
- MIL-STD-348 and custom connector interfaces
- MIL-STD-810 & MIL-STD-202 environmental designs
- High power / voltage insulators (multi-paction)
- TRUtie™ – robust axial and torsional strain relief
- Instrument grade VNA / PNA test cables

RF Capabilities

- Ansys RF Modeling: HFSS & electromagnetic suite
- In-house machining, assembly
- High voltage interfaces
- Phase delay & matching
- Build-to-print cable assemblies
- MIL-PRF-39012 or MIL-STD-348 interface designs available



Microminiature and Hermetics

UltiMate Connectors

- Micro-D, (83513 QPL)
 - Wired Micro-D Connectors
 - Right Angle, Straight PCB Connectors
 - Rear Panel Mount, O-Ring Seal - PCB
 - Rear Panel Mount, Gasket - PCB
 - Rear Panel Mount, O-Ring Seal - Wired
 - Front Panel Mount, O-Ring Seal - Wired
 - Front Panel Mount, O-Ring Seal - Wired PCB
 - High Temperature +200C
 - Combo - Power/RF/Signal
 - Jackscrew Mate
 - Custom designed backshells
- Nano-D (32139 QPL)
 - Nano Connectors: Drawn one-piece contact
 - Strip Connectors (Latching)
 - Nano Field Attachable
 - PCB w/ Flat Tails (co-planarity)
 - Circulars (Metal/Plastic 5,7,19 positions) sealed options
 - Custom designed backshells

Microminiature Accessories

- Connector savers
- Hardware

Microminiature Capabilities

- Harnessing capability Micro to Nano to standard circulars, custom braiding
- 30 Awg to 24 Awg
- Full EMI capability
- IPC-620 Certified
- Custom connector design services based on Micro or Nano contact systems

Modular Connectors

- Modulus™ Connectors - high-speed SPE and modular power in a rugged, space-saving connector

platform

Hermetic Connectors

- Laser Weldable Micro-D
- Laser Weldable Nano-D
- Laser Weldable Sub-C
- Laser Weldable Sub-D
- Laser Weldable Feedthroughs
- 38999 Aluminium laser weldable connectors
- Standard Hermetic Connectors like SMA, SMP, SMPM & FMA
- Custom connectors and configurations

Hermetic Flanges

- Dewar Flanges
 - Integrated connectors and higher level camera packaging for use with Infrared (IR) Imaging Systems
- Vacuum Flanges

Hermetic Packaging

- Packaging, IMAs (Integrated Microwave Assemblies)
 - Aluminum, stainless, titanium cases with laser welded connectors and feedthroughs
 - Soldered / Hybrid style packages

Hermetic Capabilities

- Glass-to-Metal Sealing
- Ceramic (CERAMAX™) Sealing
- Variety of materials ;
 - Stainless steel, aluminum, and titanium
- Ability to join metals / value add services
 - Explosion bonding, laser welding, vacuum brazing and diffusion bonding
- In-house machined components shop
- Small or large production runs with short lead times
- Thermal management solutions

Ruggedized

- ATEX Connectors (Cadillac® EP) Explosion Proof
- Ruggedised Connectors (Cadillac® CN) Mil-C-5015
- Single Pole Series - 1,000 volts (AC/DC), up to 1,135 amps of continuous power
- Rotatable Connectors - High pressure bulkheads or retaining mechanisms
- Wet Connector - MWD, LWD, and wireline steering, logging tools and rotary steerable. 20,000 psi and 400°F.
- TrainLine Series for Rail
 - 27 point jumpers
 - 480 Volt
- Cable assembly and components, molded connectors, boot seals and snubbers
- In-house CNC machined components shop
- Small or large production runs with short lead times

Wire and Cable

Cable Solutions

- High Flex Cable - Withstand up to 20M flex cycles.
- Robotic Cable - Highly flexible robotics cables
- VFD Cable - Robust Variable Frequency Drive (VFD) cables
- LiteSPEed™ Cable - Single Pair Ethernet (SPE) Cable
- Custom Cable
- COTS Cable - Commercial Off The Shelf (COTS) and Military Off The Shelf (MOTS); can provide equivalent, non MIL-SPEC wire
- Fiber-Copper Hybrid Cable
- Industrial Ethernet - 10,100 and 1000 base
- Multi-Conductor Cable
- Tray Cable
- Coil Cords
 - Connectorized coil cord assemblies

Wire & Cable Capabilities

- High flexing cycles, crush resistance, harsh environments
- Standard and custom cables
- Small or large production runs with short lead times

Xtreme® Brand - Sub-Sea & Marine Cable for:

- ROV Tethers and Umbilicals
- Mission-critical custom cable
- Deep Sea
- Pushrod & Pipe Inspection Cable
- Undersea Instrumentation Cables
- Underwater Multi Conductor Cables
- Armored Cables
- Xtreme-Green® - Video and power cables
- Xtreme-CAT® - Shallow water underwater network data / power cables
- Xtreme-NET® - Deepwater ruggedised ethernet cables
- Xtreme-Lite® & Xtreme-Lite-Flex® - Deepwater (10Km) fiber optic cables
- Xtreme-Marine® - Underwater video cable

MIL-SPEC and Fiber Optic

Fiber Optic

- Standard Fiber Optic Connectors
- EL Series™ Rugged Contact Cable
- EL Series™ Video Jacks & Panels
- Tri-Loc®
- Military & commercial aerospace solutions
- Medical - Fiber Optic Solutions
- Snap Lock Connectors
- MIL-C-28840
- MIL-C-28876 Shipboard Communications. Uses M29504/14 & /15 Termini
- M29504 /4 & /5 Avionics/Communications
- DFOCA Ground Tactical Systems. Mobile Launch Applications
- M83522 Commercial and Military Applications
- HERMAPHRODITIC Pier-side Connectivity Broadcast / Mining Applications
- Delphi™ EverClean Expanded Beam Size 12 and Size 16 Contacts

QPL Products

- M39012 - Kings® Coax Connectors
- M55339 - Kings® Coax Adapters
- M49142 - Triax Connectors – Kings® TRT, TRB Series
- M28748 - CCC Rack and Panel Connectors
- M55302 - CCC PCB Connectors
- M39029 - CCC Contacts
- M83513 - UltiMate® Micro-D Connectors
- M32139 - UltiMate® Nano-D Connectors
- M28840 - Delphi™ Circular (Shipboard)
- M28804 - Delphi™ Rectangular Connectors - Hak Pak
- M28876 - Delphi™ Circular Fiber Optic (Shipboard)
- M29504 - Delphi™ Fiber Optic Termini (M28876/ D38999)
- M83522 - Delphi™ ST Fiber Optic Connector

Other MIL-SPEC and Rack & Panel

- Rack & Panel and JF Series
 - A wide variety of connectors are available including ;
 - 100 Series, JF, JFA, M, MRA, MRAC, MRE, PM, PowerSnap, SM, SMI, SREC, SRM, TMRAC, TXAC, UMI, XAC, XMRA & XMRE, and XNAC
- HDPC Series - Single piece contact system
- C-21 M85028 harsh environment

Electro-Mechanical Sub-Assembly Solutions

- Chassis assemblies box builds
- Front frame assembly
- Classic - Fan assembly
- Accessories and sub assembly
 - Power supply assembly
 - LCD assembly
 - Accessories assemblies



Engineered Cables

- Cable Assemblies
 - Thermoplastic overmolding
 - Mil-grade
 - Extensive tooling library (>3,000) of moulds and boots
- Military & commercial aerospace cable assembly solutions to MIL-STD-348, MIL-STD-810 & MIL-STD-202 environmental designs
- Medical - Cable assembly solutions in ISO13485 facilities
- IPC/WHMA-A-620 Class 3
- Complex wire harnessing
- Cirris CR testing system for up to 32,000 test points.
- Vertical and low pressure injection moulding
- Extensive cut, strip, crimp, seal capabilities
- Build-to-print and custom
- AS9100-D
- IPC/WHMA 610/620
- IPC/WHMA- 620S Space Certified
- J-STD-001
- NASA specifications trained & compliance



Market Solutions



Aerospace &
Defense



Automotive
& CV



Industrial &
Robotics



Marine
Subsea



Medical



Oil & Gas



Power & Data
Infrastructure



Rail Mass
Transit



Space

ABOUT APTIV:

Aptiv PLC (NYSE: APTV) is a global industrial technology leader delivering advanced solutions people trust when it matters most across automotive, commercial vehicle, aerospace and defense, telecom and datacom, and other diversified industrial end markets. Our differentiated portfolio enables devices and systems to sense, think, act, and continuously optimize performance. Building on decades of innovation, Aptiv brings global scale and a resilient, localized value chain to customers across the globe.

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