Amphenol



THE NEXT-GENERATION INTEROPERABILITY STANDARD



ABOUTOPEN VPXTM

Open VPX[™] is the next-generation interoperability standard for system-level defense and aerospace applications. It is ideal for rugged applications that require smaller packages, as well as high I/O and connectivity densities and higher speed.

Open VPX leverages the work of the individual VPX standards to reduce customization, testing, cost and risk. It defines an architecture that manages and constrains module and backplane designs, defines pin outs, and sets interoperability compliance while maintaining full compliance with VPX.

Amphenol has multiple product offerings for Open VPX, open architecture system needs.





R-VPX CONNECTORS

Amphenol's new R-VPX is a ruggedized high speed, board-to-board interconnect system capable of data rates in excess of 10 Gb/s, meeting and exceeding VITA 46 standards. This connector system gives users modularity and flexibility by utilizing PCB wafer construction allowing for extreme flexibility with customized wafer-loading patterns.

APPLICATIONS:

- Commercial and Military Aerospace
- Electronic Systems/C4ISR
- · Ground Systems
- · Missile Defense
- Space Systems

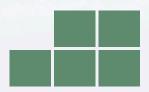
FEATURES AND BENEFITS:

- Compliant to VITA 46 for Open VPX[™] applications
- Meets and exceeds VITA 47 and VITA 72 performance requirements
- Supports Ethernet, Fiber Channel, InfiniBand, and other protocols
- Modular COTS lightweight connector system
- Low mating force connector system
- Pin-less backplane connector family
- Supports .8 inch card slot pitches
- Up to 140 signals per inch
- Can be combined with high power modules, RF modules (VITA 67) and Optical modules (VITA 66)





Contact Information: Amphenol Aerospace **Cat Brandas** cbrandas@amphenol-aao.com (607) 563-5129



VITA 66.1 FIBER OPTIC INTERCONNECTS

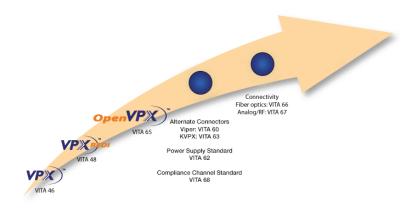
Amphenol's proposed VITA-66.1 MT connector provides a reliable high speed connection for the most extreme commercial and military environments. This ruggedized interconnect is among the highest density of connector products on the market.

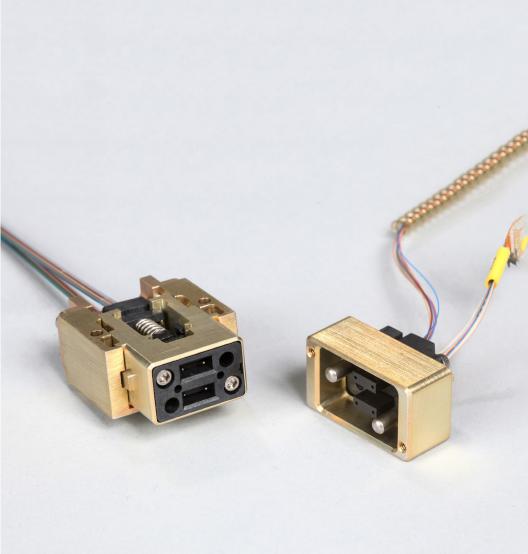
MT ferrules can be accommodated as follows:

- Up to 24 fiber optic channels per MT ferrule
- Up to 48 channels per connector

MT ferrules are not supplied by Amphenol. Connectors are supplied less the MT ferrules.

Amphenol's VITA 66.1 Interconnect is designed in accordance with the VPX Technology Road-map.





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VITA 67:

HIGH DENSITY & HIGH PERFORMANCE RF

ADDITION TO THE OPEN VPX[™] PLATFORM

FEATURES:

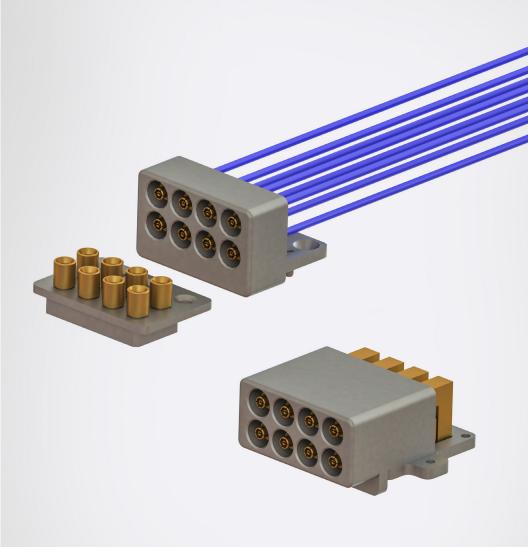
- The foundational coaxial interconnect for RF on the VPX platforms
- Cable assembly daughtercard modules that mate to backplane adapters
- Designed for side-by-side implementation with VITA 46 hardware
- Floating SMPM coaxial pins ensure excellent RF performance in any mating condition
- Available in 3U (4 position) and 6U (8 position) formats

APPLICATIONS:

- · Robust and rugged high speed cabled solution
- High-reliability, high-density for aerospace & defense applications
- SIGINT, EWR, ground base station & communication systems, avionics, radar systems
- Air Transport Racks (ATRs) without Rear Transition Modules (RTMs) or limited speed through RTM

BENEFITS:

- · MIL-STD 810 for shock and vibration
- Minimal footprint of I/O slot
- Significant reduction in Mean-Time-To-Repair (MTTR) since rear panel interface enables quick disconnect
- Utilizes existing and proven SMPM interfaces
- Unique SV connector retention mechanism offers significant ease of assembly/disassembly



Contact Information: SV Microwave **Domenic LoPresti** dlopresti@svmicro.com (561) 840-1800 x173

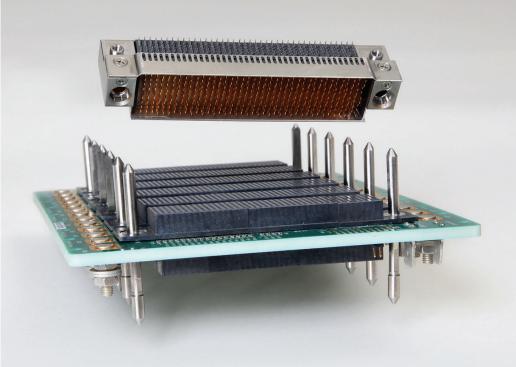


VIPER:

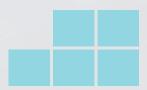
HIGH SPEED, HIGH DENSITY MODULAR INTERCONNECTS

The VIPER® Connector is a shielded, high-density, hi-speed modular interconnect with press-fit termination that meets or exceeds future avionic high-level requirements such as:

- High-level vibration and mechanical shock protection
- · Condensing moisture resistance
- Ruggedization in packaging that can scale to higher bandwidths
 without costly and time consuming chassis redesigns. The VIPER
 connector platform offers the ability to scale from 80 Mb/s to over 10
 Gb/s while retaining the same Vita 46 platform slot pitch at 20.3mm
 to 25.4mm.
- Fully footprint-compatible with VITA 60, VITA 46 and VITA 48 standards
- Hi-Speed: the VIPER is designed for 10 + Gb/s data rate performance
- 100 ohm impedance for differential pair configuration
- The daughtercard assembly is optimized for differential pair architecture on a 1.8mm x 1.35mm grid.
- The daughtercard is waferized, and provides single-ended and power wafer options integrated onto a stainless steel stiffener with stainless steel frame and keying elements
- The backplane has signal contacts that incorporate a highly reliable 4-point-of-contact beam design, and ground contacts which are robust compliant pin & contact fork design
- ±0.52mm nom. translation in fully mated condition
- ESD protection supports 2-level maintenance designs
- Flexible modular design is ideal for standard 3U and 6U applications, as well as unique custom configurations incorporating RF and fiber optic MT solutions



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MODUL'R:

AVIONICS BOARD LEVEL CONNECTOR

With its unique platform of proven technologies, MODUL'R is an innovative commercial avionics connector covering a wide array of applications including:

- Avionics equipments
- · Communication (Radar, Radio, Ect.)
- · Flight Control Systems
- Engines/power units/FADEC

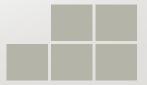
The MODUL'R is available in both 6U and 3U format to address the future avionics market needs with respectively 4 cavities equipped with 4 modules each and 2 cavities equipped with 3 modules each.

A fully adaptable platform covering all the commercial avionics needs:

- · High speed signal transmission
- Power management solutions
- High-density design (size and weight optimization)
- Size adaptability (3U & 6U)
- · Thermal management option for better cooling
- Easy to use solution:
 - Less tools, quick install, blind mate and shock-proof
- Ruggedization and fully protected against:
 - Electro Magnetic Interferences (EMI)
 - Short cuts



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