



700 SERIES ATR Enclosures

DESIGN > DEVELOP > DEPLOY



700 SERIES ATR Enclosures

With a legacy of over fifty years providing enclosures, backplanes, system integration and custom solutions, Atrenne Computing Solution specializes in rugged electronic systems for mission-critical and high-performance embedded computing platforms deployed in harsh environments.

The 700 Series ATR will accept a variety of bus structures and platforms, including SOSA, VXS, VPX, VME and cPCI technologies, providing an expansive product offering of bus standards as well as application-specific custom designs.

The 700 Series ATR Enclosures are available in standard ARINC sizes that include ¼ ATR Short to 1½ ATR Long and any custom form factor desired utilizing a variety of engineering methods including; bolted and bonded, brazements, and additive manufacturing.

Features and Benefits of Atrenne's 700 Series ATR Enclosures

- Expansive range of ARINC sizes
- Easily configurable for custom sizes
- Modular power supply
- AC or DC filtered inputs
- High-altitude fan offering
- System performance monitoring
- SOSA VPX, VME64x, cPCI
- Cold-start heaters
- Avionics isolation tray
- Configurable I/O panel
- Lightweight solutions
- Top-load and side-load options
- I/O Board modules to reduce wiring
- Engineered thermal performance
- Available with water-tight seals



700 SERIES



714 Convection-cooled

Designed for maximum strength and lightweight deployment, the frame and construction of the 714 Series models the fabrication techniques used in manufacturing today's commercial and military aircraft. Utilizing an aluminum frame that provides flexibility in size, the frame is assembled with solid rivet technology and reinforced with aluminum outer panels to form a rugged ATR that can withstand the most severe shock and vibration environments.



716 Conduction-cooled

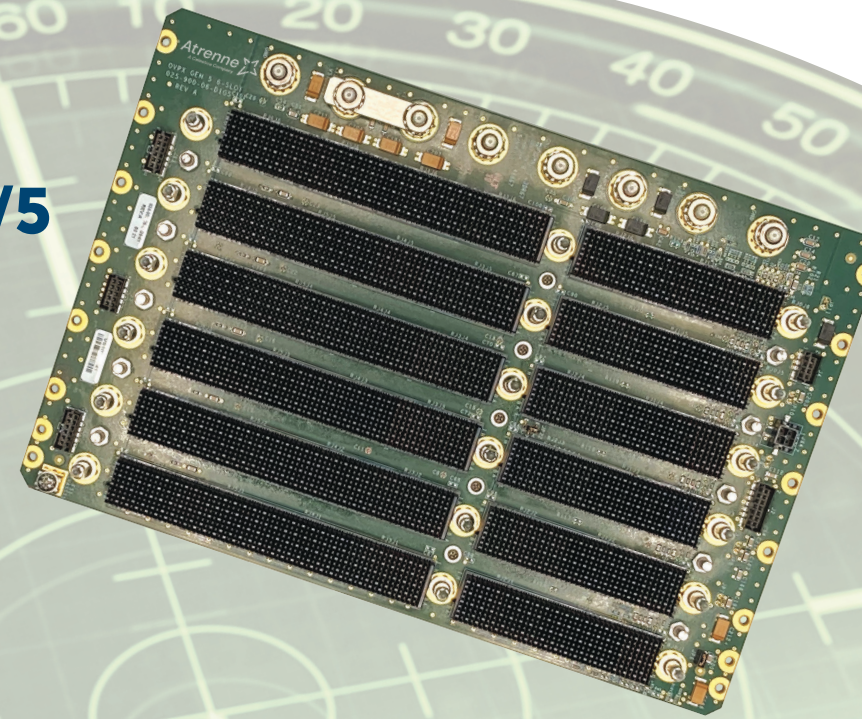
Engineered for strength, lightweight deployment, and maximum cooling in a conduction-cooled environment, the 716 Series incorporates a unique frame and configurable conducting walls that allow the ATR to be tailored to meet a wide range of thermal requirements.



717 Air-Over Conduction-cooled

Designed for strength and maximum cooling in a conduction-cooled environment, the 717 Series incorporates brazed folded-fin material thermally bonded between the conducting wall and the outer panel and a machined finned rear panel that help increase the thermal planes for maximum heat dissipation. Combined with an auxiliary external fan, the 717 Series can increase thermal dissipation over 30 percent compared with conventional conduction cooling.

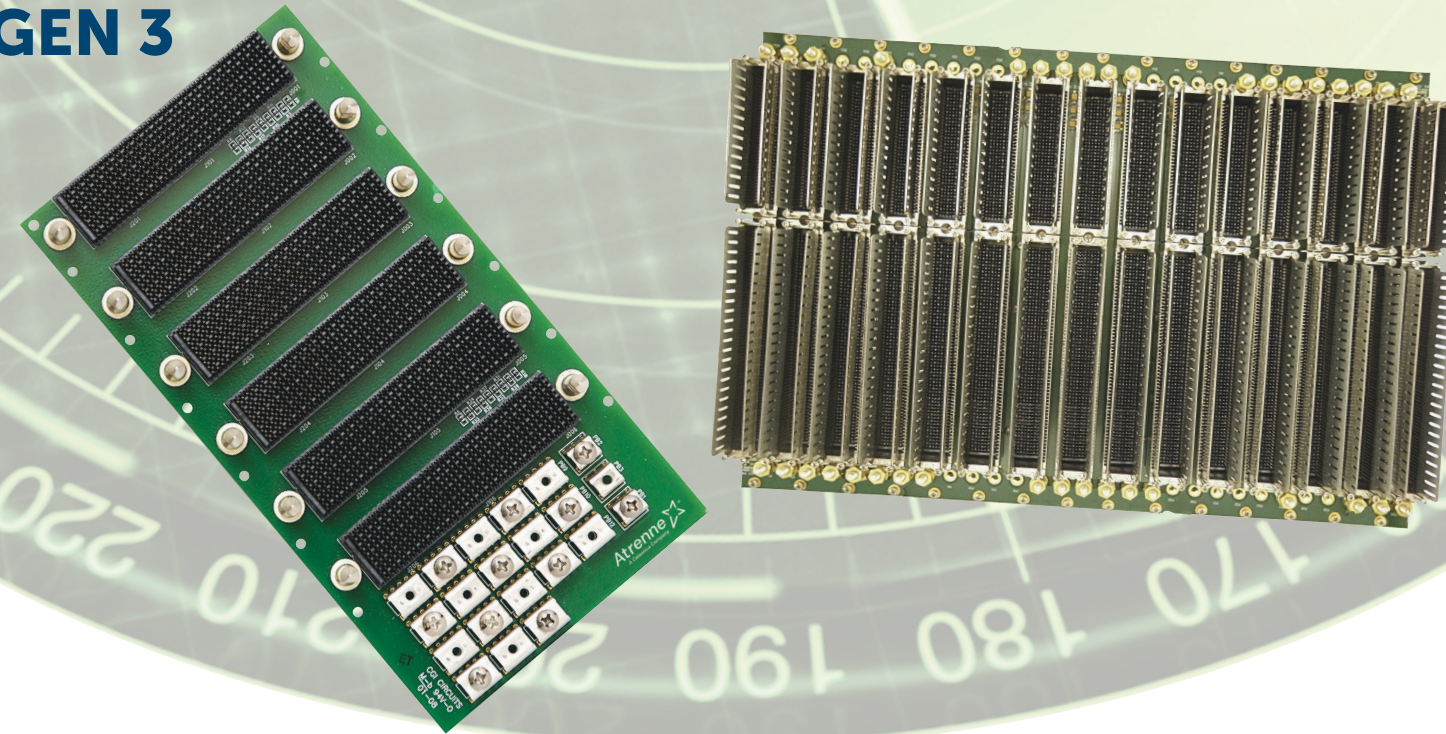
GEN 4/5



SOSA™ ...VPX...VME

Designed for performance, the VPX series backplanes meet or exceed the latest VITA standard requirements, from VITA 46 to VITA 65 OpenVPX to complete custom-configured solutions. Each backplane is designed to meet the rigorous performance and environmental standards associated with the deployment of VPX-based systems. Available in a wide range of slot counts in 3U and 6U formats and an array of backplane profiles for a wide range of applications.

GEN 3



718 Buttress (Base plate)

The 718 utilizes an ATR style design for maximum baseplate conduction cooling. Engineered for strength, lightweight, and maximum cooling in a conduction-cooled environment, the 718 enclosure incorporates a buttress-designed frame and configurable conducting walls for extended temperature, shock and vibration protection.



719 Air-flow-through

The 719 series air flow through (AFT) chassis is at the forefront of high-performance embedded computing (HPEC) cooling. Atrenne's AFT-cooled chassis can withstand thermal loads of up to 150W per system slot due to its engineered thermal path construction. Innovative cooling allows advanced processors to run at optimal performance levels with increased reliability.



720 Liquid-cooled

Engineered to provide the ultimate in thermal cooling performance, the 720 Series is capable of utilizing a variety of cooling fluids, such as Polyalphaolefin (PAO) and Ethylene or Propylene glycol/water (EGW) or (PGW), and jet fuel. The conducting walls are uniquely designed for either front or rear fluid access and can be configured with a mating avionics tray that provides a blind mate/quick disconnect feature. The liquid panels are also configured as a Line Replaceable Unit (LRU) for field upgrades.





General Inquires: + 1 800 926 8722

Atrenne Computing , US: + 1 508 588 6110

sales@atrenne-cs.com | atrenne.com

in Atrenne | [X @AtrenneOfficial](#)

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