

FEATURES AND BENEFITS

- High performance development chassis
- Supports 3U backplanes OpenVPX[™], VPX REDI, VPX, CompactPCI® (cPCI) and VME
- VPX REDI designed to the latest ANSI/VITA 46.0, VITA 46.3, ANSI/VITA 46.10, VITA 48.0, VITA 48.1 and OpenVPX specifications
- 3U x 160 mm card cage with seven 1.0" pitch positions per VITA 48.1 REDI or nine 0.8" pitch positions per IEEE 1101.10
- 3U x 80 mm Rear Transition Modules (RTMs) per ANSI/ VITA 46.10 (for VPX) and IEEE 1101.11
- Pac-2000® modular design
- Advanced cooling design: Cooling for >75W per slot per OpenVPX
- Up to 900W embedded power supply
- High performance 166 CFM fan provides >13 CFM per slot
- ATX power supply version: 102 CFM fan provides >13 CFM per slot
- Parented CoolSlot® card guides improve airflow distribution across the cards
- Airflow: lower front to upper rear
- x2 rear mounted power connectors for external peripherals
- Front panel power LED indicators and system reset
- Rear panel AC power switch, ESD Jack
- Fan speed control (not available in the ATX version)
- NEW! This chassis is now available with our new Gen-3 backplanes rated for 10.3 Gbaud!



The COOL-XC3 chassis is a 6-slot, 3U, VPX, forced-air portable tower chassis ideal for lab development. Developers may choose from Atrenne's product line of 3U, 6-slot backplanes, including variants supporting Gen-3 10 Gbaud. An off-the-shelf pass-through backplane provides quick customization for the lab environment, enabling the application developer to cable any desired topology. Atrenne is also able to design custom backplanes per the application requirement.

This chassis family is part of Atrenne's industry leading product line of high performance chassis and backplanes.

TABLE 1: TECHNOLOGY OVERVIEW

PHYSICAL			
Width	8.38"		
Height 18.02" + handle & feet			
Depth	14.0"		
Weight	25 lbs		
	CONSTRUCTION		
Extrusions	6063-T6 aluminum, precision grade with clear iridite (conductive) plating		
Sideplates 0.090" Thick aluminum, 5052-H32 with clear iridite (conductive) plating			
Card Guides (RTM) Molded plastic, Noryl N190X black (red for cPCI system slot), UL94-V0			
Tapped Strips	Tapped Strips Carbon steel bar stock with zinc plating and supplementary chromate treatment		
ESD Ground Clip Beryllium copper, alloy C17400, 1/2 HT, with bright tin plating/MIL-T-10727			
	ENVIRONMENTAL		
Temperature (system level) Operating: 0 to +30°C (at 0 to 5 kft)			
Flammability Rating UL94-V0			
Safety Agencies Designed to meet UL60950; CSA 22.2 #234; TÜV EN60950			
Earthing	ESD Ground Clip designed to comply with the earthing requirements of IEEE 1101.11 Section 15, IEC 60950 Section 2		
EMC	Designed to meet FCC Part 15, Subpart J, Class A; CISPR 22, Class A: conducted portion only		
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COOL-XC3

HIGH POWERED AIR-COOLED PORTABLE TOWER ENCLOSURE



TABLE 1: TECHNOLOGY OVERVIEW (continued from previous page)

	POWER
AC Input	110/220 VAC 10A 110/220VAC inlet, 110V line cord provided RFI line filter and circuit breaker

PART NUMBER

AIR8-D3AV - FRONT SLOT AIR BLOCKER (3U)

Cooling air will take the path of least resistance. In order to ensure adequate cooling, we recommend that Air Blockers be installed in all unused module slots. This ensures that the cooling air flows through the installed modules rather then bypassing the installed modules into empty slots or escaping through open faceplates. This is critical for high power modules to avoid overheating, and just installing a blank faceplate in unused slots is not sufficient to ensure adequate cooling.

TABLE 2: CHASSIS AND POWER SUPPLY CONFIGURATION OPTIONS (Continued on next page)

CONFIGURATIONS	BACKPLANE	POWER SUPPLY	OPENVPX PROFILE DIAGRAM
COOL-XC3-OVP06C1AB		800W 12V-centric	024-901-06-CEN1-01 Gen-2 6.25 Gbaud Payload Switch/ slots Management
COOL-XC3-OVP06C1AC	6-slot OpenVPX BKP3-CEN06-15.2.2-3 6.25 Gbaud	900W 5V-centric	1 2 3 4 5 6 Expansion Place (PP) None None None None None Data Place (PP) None None None None None None
COOL-XC3-OVP06C1AD		ATX 500W	Control Plane (UTP) Maragement Plane (PME) Utility Plane Includes Power
COOL-XC3-OVP06D1AB		950W 12V-centric	024-901-06-DIS1-01 Gen-2 6.25 Gbaud Payload Switch slots Management
COOL-XC3-OVPO6D1AC	3U VPX 6-slot OpenVPX BKP3-DIS06-15.2.7-3 6.25 Gbaud	900W 5V-centric	Defa Plane (PP + 4 lane)
COOL-XC3-OVP06D1AD	.23 uuauu	ATX 500W	Casted Place (17 + 6 pain) Management Place (PM) Management Place (PM) Management Place (PM) Management Place (PM) Management Place (PM) Place (PM) P

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TABLE 2: CHASSIS AND POWER SUPPLY CONFIGURATION OPTIONS (Continued from previous page)

CONFIGURATIONS	BACKPLANE	POWER SUPPLY	OPENVPX PROFILE DIAGRAM
COOL-XC3-OVP06X1AB		950W 12V-centric	024-901-06-01 - Pass-thru VPX VPX VPX VPX VPX VPX 1 2 3 4 5 6
COOL-XC3-0VP06X1AC	3U VPX 6-slot OpenVPX Pass-thru 6.25Gbaud	900W 5V-centric	Expansion Plane (Pass-Thru) Data Plane (Pass-Thru) Control Plane (Pass-Thru)
COOL-XC3-OVPO6X1AD		ATX 500W	Manageneret Plane (PMB) Utility Plane Includes Power
COOL-XC3- OVP05C1AB		950W 12V-centric	024-901-05-CEN1-01 Gen-2 6.25 Gbaud
COOL-XC3-OVP05C1AC	3U VPX 5-slot OpenVPX BKP3-CEN05-15.3.3-3 2 RF VITA 67.1 payload slots 6.25 Gbaud	900W 5V-centric	VPX VPX VPX VPX VPX 1 2 3 4 5 Expansion Plane (PP) VTX 45100 (4.87) Data Plane (PD) Data Plane (PD)
COOL-XC3-OVP05C1AD		ATX 500W	Control Plane (777) Massagement Plane (PHB) (Wity Plane Includes Power
COOL-XC3-OVP6C23AB		950W 12V-centric	024-901-06-C2G3-01 Gen-3 10.3 Gbaud Payload Switch Stots Management
COOL-XC3-OVP6C23AC	3U VPX 6-slot OpenVPX BKP3-CEN06-15.2.18-4 10.3 Gbaud - NEW!	900W 5V-centric	VPX
COOL-XC3-OVP6C23AD		ATX 500w	Control Plane from train from tra



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TABLE 2: CHASSIS AND POWER SUPPLY CONFIGURATION OPTIONS (Continued from previous page)

COOL-XC3-OVP6X13AB	3U VPX 6-slot OpenVPX Pass-thru 10.3 Gbaud - NEW!	950W 12V-centric	024-901-06-X1G3-01 - Pass-thru Gen-3 10.3 Gbaud			
			VPX VPX VPX VPX VPX VPX 1 2 3 4 5 6			
COOL-XC3-OVP6X13AC		900W 5V-centric	Expansion Plane (Pass-Thru) Data Plane (Pass-Thru)			
COOL-XC3-OVP6X13AD		ATX 500W	Cantrol Plane (Pass-Thru) Management Plane (PMB) Utility Plane Includes Power			
COOL-VLN08AA	3U VME 8-slot	600W				
COOL-XC3-CL605AA	3U cPCI 5-slot 32-bit 66MHz	600W				

Notes:

1. Consult factory for other configuration

2. ATX power supply versions do not comply with VITA 65 airflow requirements nor ANSI/VITA 46.0/VME power supply voltage tolerance and ripple/ noise requirements





COOL-XC3

HIGH POWERED AIR-COOLED PORTABLE TOWER ENCLOSURE

TABLE 3: ORDERING INFORMATION

		PART NUMBER: COOL-XC3-	XXX	XXXX	X	Х
BUS ARCHITECTURE			1			
(CL3) = cPC1, left hand system slot, 3.3V V(I/O), 32-bit, 33MHz						
(CL5) = cPCI, left hand system sl			xxx			
(CL6) = cPCI, left hand system sl	ot, 3.3V V(I/O), 32-bit, 66MHz					
(VPX) = VPX 0.8", slot pitch, daisy chain fabric topology per ANSI/VITA 46.0, VITA 46.3, VITA 46.4, VITA 46.9, VITA 46.10						
(OVP) = Open VPX, VPX REDI 1.0" slot pitch per ANSI/VITA 48.0, ANSI/VITA 48.1, ANSI/VITA 46.0, VITA 46.3, VITA 46.4, VITA 46.9, VITA 46.10, VITA 68						
(VLN) = VME J1						
	BACKPLANE		1	1		
(03, 08) = VME J1						
(03, 05) = cPCI			ļ			
(06C1) = OpenVPX 1.0" pitch, BK	P3-CEN06-15.2.2-3, 6-slot central switch, 5 payload slots, 1 switch slo	ot, 6.25 Gbaud				
(06D1) = OpenVPX 1.0" pitch, BK	P3-DIS06-15.2.7-3, 6-slot, 5 payload slots daisy chain data fabric, 1 u	ncommitted control switch slot, 6.25 Gbaud				
(06X1) = OpenVPX 1.0" pitch, 6-slot, no data plane, control plane, or expansion plane fabric connectivity, all fabric signals pass through to RTM connectors for user, 6.25 Gbaud				XXXX		
(05C1) = OpenVPX 1.0" pitch, BKP3-CEN05-15.3.3-3, 5-slot, 2 standard payload slots, 2 RF VITA 67.1 payload slots, 1 control switch slot, star fabric topology, 6.25 Gbaud						
(6C23) = OpenVPX 1.0" pitch, BKP3-CEN06-15.2.18-4, 6-slot, 5 payload slots, 1 data and control switch slot, star fabric topology, Gen-3, 10.3 Gbaud - NEW!						
(6X13) = OpenVPX 1.0" pitch, 6-slot, no data plane, control plane, or expansion plane fabric connectivity, all fabric signals pass through to RTM connectors for user, Gen-3, 10.3 Gbaud - NEW!						
	INPUT POWER					
(A) = AC 115-220 Auto-ranging with US 110V cordset (consult Atrenne Computing Solutions applications for non-US power connections)					Х	
	POWER SUPPLY					
(A) = Smart 600W only for 3U cPCI/VME	+3.3V @ 35A +5V @ 60A	+/-12V @ 4A +24 V (fans) @ 4A				
(B) = Smart 900W for 3U 12V-centric VPX	VS1: +12V @ 34A VS2: +3.3V @ 35A VS3: +5V @ 35A	+3.3V_AUX @ 10A +/-12V_AUX @ 4A +24V (fans) @ 4A				
(C) = Smart 950W for 3U 5V-centric VPX	VS1: +12V @ 17A VS2: +3.3V @ 35A VS3: +5V @ 70A	+3.3V_AUX @ 10A +/-12V_AUX @ 4A +24V (fans) @ 4A				X
(D) = ATX 500W	VS1: +12V @ 18A VS2: +3.3V @ 30A (also powers 3.3 V_AUX) VS3: +5V @ 30A (220W max total for 3.3V and 5V)	+12V_AUX @ 15A -12V_AUX @ 0.8A +12V (fans) @ 15A				

Notes:

1. ATX power supply versions do not comply with VITA 65 airflow requirements nor ANSI/VITA 46.0/VME power supply voltage tolerance and ripple/noise requirements

WARRANTY

This product has a one year warranty.

CONTACT INFORMATION

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