

FEATURES

- Modified COTS hybrid 3U/6U OpenVPX forced air conduction-cooled test chassis
- Based on COTS development chassis
- (14) 6U OpenVPX conduction-cooled slots
- (2) 3U OpenVPX conduction-cooled slots
- Application-specific hybrid 3U/6U OpenVPX backplane
 - (14) slots 6U OpenVPX
 - (2) slots 3U OpenVPX
 - Pass-through I/O connections with VPX + cables
- Power and cooling for 150W per slot (6U)
- Access windows on left and right sides for circuit card debug access
- Ethernet/SNMP System Monitoring
 - Atrenne rugged Power & Control Module (PCM) supporting Ethernet/SNMP
 - Atrenne rugged Intelligent Fan Controllers
- 0 to +30°C operating
- 220 VAC, 20A power input
- 2.2 kW embedded power supply

CHASSIS SOLUTION 74-179

UAV AIRBORNE ISR HYBRID 3U/6U
OPENVPX FORCED AIR CONDUCTION-
COOLED TEST CHASSIS



MARKET

Military

APPLICATION

Development for UAV Airborne ISR Application

CHALLENGE

Design and manufacture a quick turn development chassis that provides a development environment for high power conduction-cooled payload with hybrid of 3U and 6U OpenVPX card cage and backplane. This chassis was needed for development activities for a high power ATR form factor UAV Airborne ISR Application.

CONCERNS

Program required hybrid 3U-6U conduction-cooled OpenVPX card cage and backplane, and quick-turn delivery requirements.

HOW CAN WE HELP REDUCE YOUR RISK?

Atrenne can help you with all of your application-specific backplane and chassis requirements.

The solutions that you see on our website are just a small sample of what we have done. Please browse our solutions and contact us for a consultation.

The application-specific UAV Airborne ISR OpenVPX Forced Air Conduction-Cooled Test Chassis (Solution 74-179) is based on the 13U RME13CC development chassis, but converted to desktop with windows on the left and right sides for circuit card debug access. This test chassis includes an application-specific hybrid OpenVPX backplane with (14) 6U slots and (2) 3U slots. The chassis includes power and cooling for 150W per slot, a 2.2 kW power supply, and Ethernet/SNMP chassis monitoring.



CHASSIS SOLUTION 74-179

UAV AIRBORNE ISR HYBRID 3U/6U OPENVPX
FORCED AIR CONDUCTION-COOLED TEST CHASSIS

SPECIFICATIONS

PHYSICAL	
Width	17.1" (20.1" including handles)
Height	23.0" (including feet)
Depth	20.0" (21.35" including handles)
Weight	100 lbs. including power supply
Construction	Bolted Aluminum
ENVIRONMENTAL	
Operating Temperature	0 to +30°C
Storage Temperature	-20 to +70°C
Altitude	0 to 5,000 ft
Cooling	Fan cooled: <ul style="list-style-type: none"> • Forced air conduction for 3U conduction-cooled slots at 50W per slot • Forced air conduction for 6U conduction-cooled slots at 150W per slot • Conduction rails < 55°C at 30°C ambient and 5000 ft. altitude
Shock	10 Gs, 11ms
Vibration	1 Gs RMS 10 to 330 Hz
POWER/ELECTRICAL	
AC Input	220 VAC 47-63 Hz, 20A
Backplane Connectors	<ul style="list-style-type: none"> • 3U OpenVPX connectors • 6U OpenVPX connectors
Monitoring Solution	<ul style="list-style-type: none"> • Atrenne rugged Power & Control Module (PCM) supporting Ethernet/SNMP • Atrenne rugged Intelligent Fan Controllers
Connector Pitch	1.0"
CONSTRUCTION	
Top & Bottom	Aluminum 5052
Extrusions	Aluminum 6063
Power Supply	Embedded power supply: 2200W

WARRANTY

This product has a one year warranty.

CONTACT INFORMATION

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