

Mini ATR, 3-Slot OpenVPX™ Platform

Rugged, Small Form Factor



Description

The modular design of this Mini ATR platform allows for various configurations. The chassis can easily be scaled up or down while using the same side walls. DC and AC power variations as well as custom front I/O configurations are available. Elma also offers a wide selection of backplanes in various architectures and has different milled card cage sizes off-the-shelf.

Features

- Small form factor mini ATR-style chassis, natural convection-cooled is low weight, ideal for weight critical applications (SWaP)
- 3-slot backplane, 1 in pitch to meet VITA 65 (OpenVPX) Backplane Profile BKP3-CEN03-15.2.9-n accepts 3U OpenVPX boards on a 1 in pitch, according to VITA 48.2 (REDI) and VITA 65 (OpenVPX)
- Other backplanes can be accommodated: 3U CPCI, custom
- Two sizes available; other sizes custom:
 - 1) 133mm H x 175mm W x 311mm D (5.24in H x 6.89in W x 12.24in D)
 - 2) 133mm H x 175mm W x 235mm D (5.24in H x 6.89in W x 9.25in D)
- Advanced airflow design distributes air across external fins in sidewalls
- Optional plug-in power supply provides up to 350 W VDC; AC versions also available
- Option to accommodate 2.5in storage with drive tray
- Custom I/O options including MIL-STD wiring and connectors



Optional Computing Products

- 3U and 6U VPX compliant single board computers.
- Storage solutions; Secure, Rugged, NAS, RAID.
- Blade level networking boards (fabric switches)
- FPGA configurable I/O solutions
- Ruggedization programs

Benefits

The all-aluminum Mini ATR incorporates military-grade components like MIL-DTL-38999L connector, on/off and reset switches, LEDs, breakers, etc. EMC shielding is compliant to MIL-STD-461E. Depending on specific applications, commercial, industrial, or military-grade power supplies are available. The Mini ATR can also be configured with solid-state storage and 250 W AC plug-in power supply module.

Ordering Information



Description	Order Number
<ul style="list-style-type: none"> • Mini ATR Platform, convection-cooled • Dimensions: 5.24in (133mm) H x 7.09in (175mm) W x 9.84in (235mm) L • 3-slot OpenVPX backplane designed to profile BKP3-CEN03-15.2.9-n, for 3U OpenVPX boards • Conduction-cooled side walls • Power supply, plug-in 250 W VDC • Plug-in I/O 	<p>SFFBB11203XVN2D4</p> <p>VPX</p>

Mini ATR, 3-slot OpenVPX™ Platform

Rugged, Small Form Factor

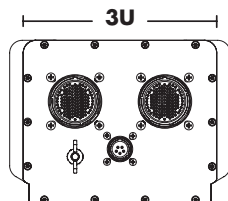


ATR

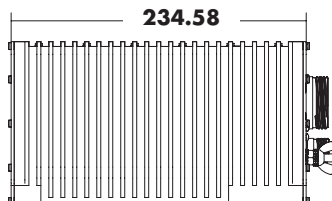


VPX

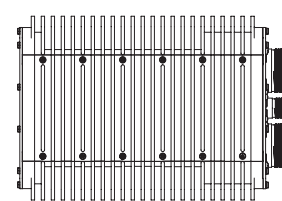
Line Drawings



Front View



Side View



Top View

Environmental

Operating	Storage / Transit
Temperature: (MIL-E-5400T Class2) -40°C to +70°C, Humidity: 95% Non condensing Shock: 40 Gs @ 11ms half sine Vibration: 20 to 2000Hz at 5Gs, sweep rate of 3 octaves per minute Agencies: Designed to meet MIL-STD 810F, MIL-STD 461E, & MIL-STD 901D, (CE102, CS101, CS114, CS115, CS116, RE102, RS103) Weight: Approx: 12.5lbs	-20°C to +70°C

Order Information

SFF



Form Factor



A = 3U x 160mm (.8in HP)
 B = 3U x 160mm (1in HP)
 C = VITA 73
 D = VITA 74 (Nano ATR)
 E = Vita 75
 F = Custom Carrier Card
 G = SFF MB/SBC Card
 Z = Custom

Architecture



B = oVPX, (VITA 65)
 W = VPX, (VITA 46)
 U = CPCI Express
 D = SUMIT/ISM
 E = PC/104a
 F = PCIe/104
 G = COM Express
 H = Ultra Compact Qseven
 I = EBX
 J = EPIC
 K = COMIT
 L = Pico-I/O
 M = Pico-ITXe
 N = CoreExpress
 O = PCI Express
 X = Not Installed
 Y = Hybrid
 Z = Custom

Width



0 = 0mm - 99mm
 1 = 100mm - 199mm
 2 = 200mm - 299mm
 3 = 300mm - 399mm

Height



0 = 0mm - 99mm
 1 = 100mm - 199mm
 2 = 200mm - 299mm
 3 = 300mm - 399mm

Depth



0 = 0mm - 99mm
 1 = 100mm - 199mm
 2 = 200mm - 299mm
 3 = 300mm - 399mm

Number of Slots



00-10: Single BP
 XX = Fixed-mounted card
 (not removable)

Storage



1 = SBC mounted
 2 = Standalone fixed
 3 = Standalone removeable
 X = Not installed

Cooling



C = Conduction
 H = Conduction-convection
 L = Liquid
 V = Convection

PSU Input



C = 90-230 VAC (47-500Hz)
 N = 28 VDC (Fixed)
 Q = MIL-STD-704, 28 VDC
 R = MIL-STD-704, 90-230 VAC (47-500Hz)
 S = MIL-STD-1275, 28 VDC
 T = MIL-STD-1275, 90-230 VAC (47-500Hz)
 Z = Custom
 X = No PSU

PSU Output



Not all PSU combinations available)
 1 = 100 - 199 watts
 2 = 200 - 299 watts
 3 = 300 - 399 watts
 4 = 400 - 499 watts
 X = Not Installed

Wiring



A = Discrete
 B = Rigid-flex-rigid
 C = RF
 D = Plug-in I/O

Shielding Level



4 = MIL-STD-461
 X = Not installed