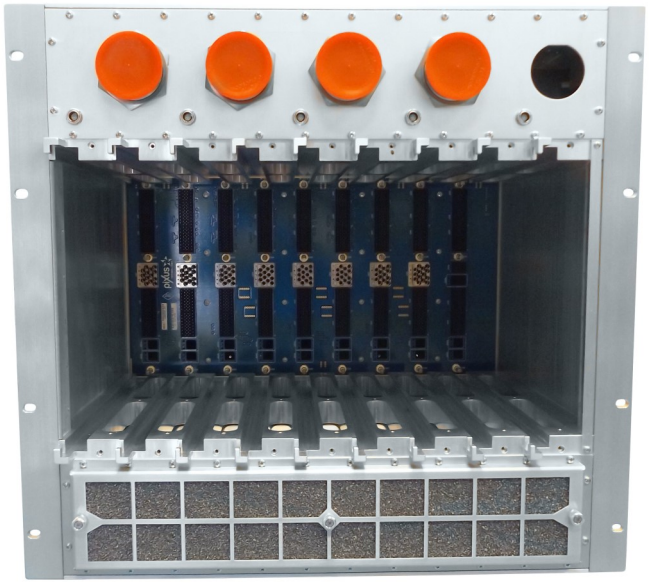
19” Rackmount Rugged Chassis Platforms—Air Cooled

RRFAC6—6U Boards



KEY FEATURES

- 2U-12U rugged chassis platforms for 6U OpenVPX / SOSA™ aligned boards
- Versions aligned to the SOSA™ Technical Standard are optional
- Designed for use in MIL-810 and MIL-901D systems for shock/vibration
- Designed to meet MIL-461 for EMI
- Humidity levels of 0% and 95% non-condensing, conformal coating options
- Versions for VITA 48.8 Air Flow Through are optional
- Ruggedized PSUs to MIL specs with VITA 62 / SOSA options
- Versions with RTM access are optional
- Options with up to 50 ms hold-up time
- 6U OpenVPX or other/custom backplanes
- Vertical mount for 8U-12U versions, 2U-6U are horizontal-mount
- MIL-grade fans and cabling
- Front-to-rear cooling standard with other cooling options available
- Temperature ranges of –20C to +70C (industrial rugged) up to –40C to +85C (MIL rugged)

The RR19XUFAC6 is a rugged rackmount chassis platform for use in Mil/Aero or other harsh environments. It is designed to meet shock/vibration to MIL-810 and 901D and MIL-461 for EMI. The chassis features air and power filtering with optional power redundancy and hold-up time. 6U OpenVPX backplanes are typical, but other architectures are available. Options for VITA 66 (optical), VITA 67 (RF), and for SOSA/HOST requirements.

Various PSU input and output options are available. For rugged designs typically VITA 62 or comparable PSUs are used.

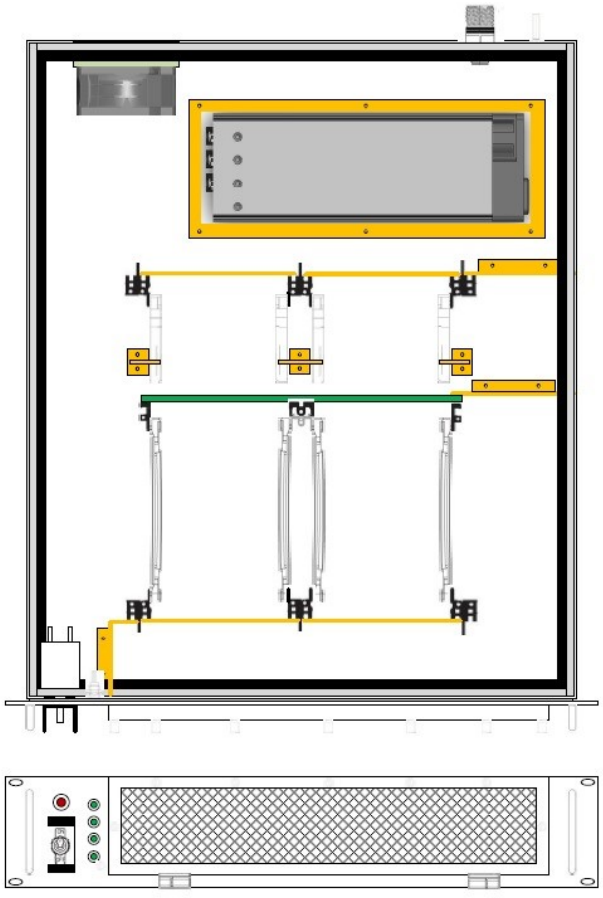
Pixus specializes is customized configurations, contact us to discuss your specific requirements.

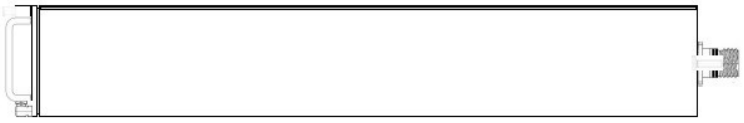
Pixus Technologies Inc. USA (916) 297-0020 Canada (519) 885-5775
Email: sales@pixustechnologies.com Website: www.pixustechnologies.com

POWER

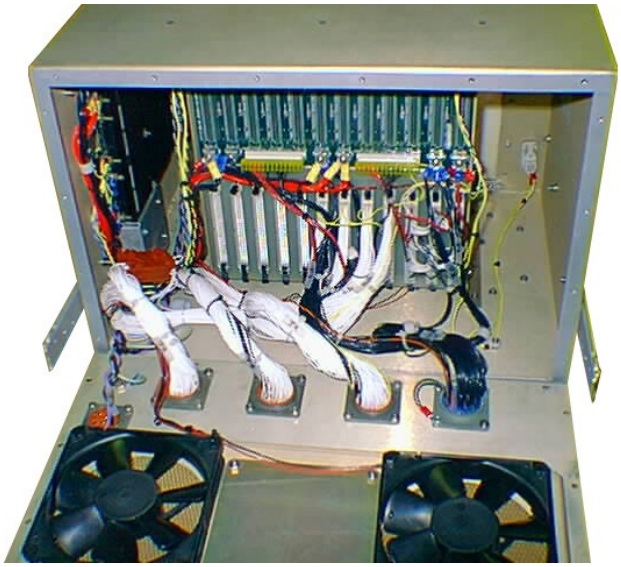
The RR19XUFAC can employ various grades of PSUs. Typically 6U tall VITA 62 PSUs are utilized with various wattage and input options. However, other PSU options are available. VITA 62 power supplies are designed for avionics and other MIL rugged applications and conform to MIL-STD-704, 461, and 810. There are also various options for AC or DC power feeds (typically 24-48VDC, or 90-264 VAC, 3-phase AC). Consult with Pixus for your power requirements.

INTERNAL EXAMPLE—Horizontal Mount Version

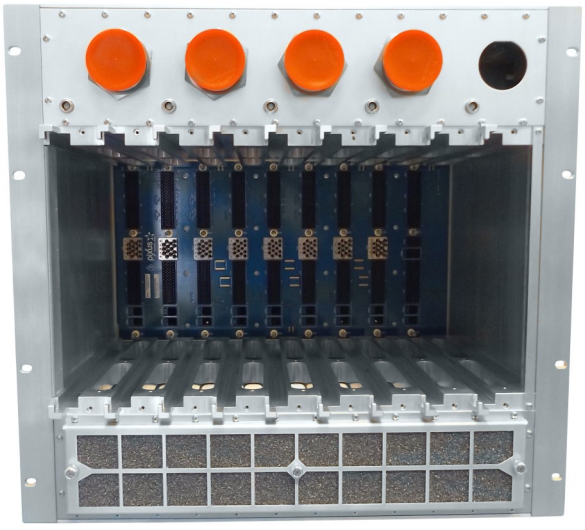




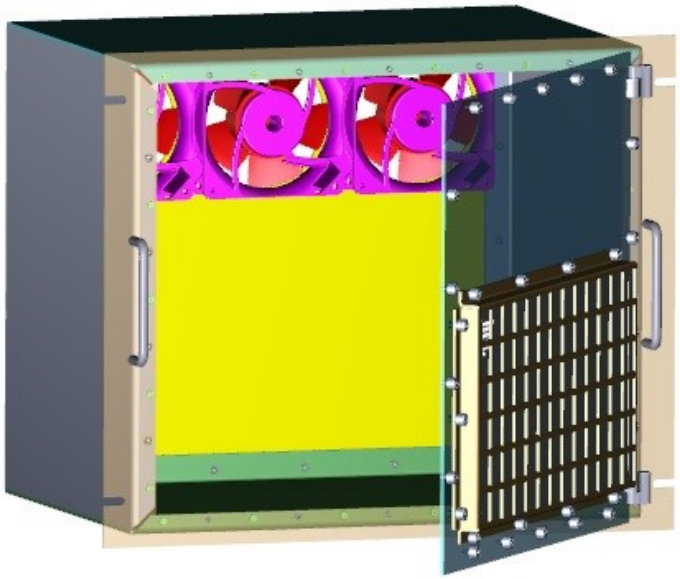
Rear Example —Vertical Mount Version



VITA 67.3 RF Example - deep boards



Model of Vertical Mount Style



SOSA Aligned Versions

Pixus has multiple backplane options that support the various SOSA slot profiles. SOSA aligned systems utilize just the 12V (VS1) rail along with some 3.3 AUX. The IPMB is routed across the backplane to support the use of a SOSA aligned chassis manager and VITA 46.11 compliant versions. Visit https://pixustechnologies.com/products/enclosure-system-solutions/vpx-vme64x-chassis-2/openvpx-3u-6u-sosa/ to see Pixus’ offering of SlotSaver™ mezzanine-based and pluggable SOSA aligned/ VITA 46.11 chassis manager options.

An examples of the wide variety of options are shown below. Several of the Pixus power and ground and routed backplanes have cutouts for Aperture H (VITA 67.3c) or other RF/Fiber sizes (Aperture J—VITA 67.3d, etc)

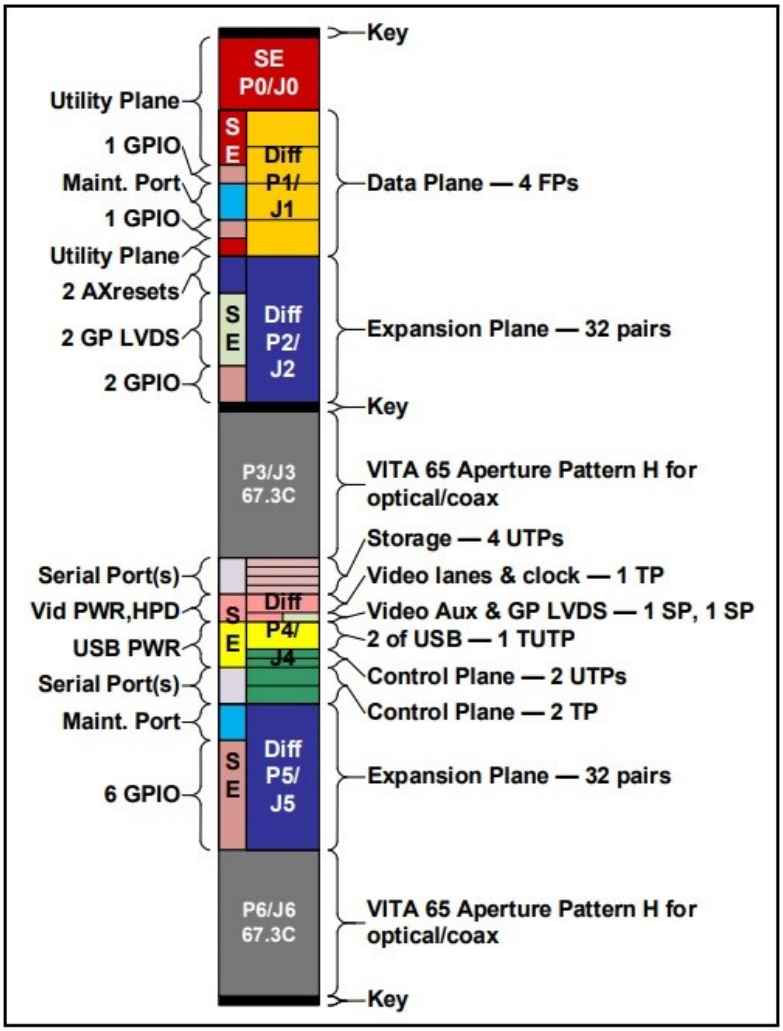


Figure 10.6.4-1 SLT6-PAY-4F2Q1H4U1T1S1S1TU2U2T1H-10.6.4-n

SPECIFICATIONS

Architecture		
Physical	Dimensions	Height: 2U-12U
	Pitch	1.0” slot pitch standard, 0.80” optional
		Width: 19”
		Depth: 12.5” - 23”*
Type		*consult Pixus for other size options
Standards		
DO-168	Type	DO-168 options
VITA/ANSI	Backplane, Chassis	VITA 65 for OpenVPX (optional), IEEE 1101.10/.11, VITA 66 (optical) options, VITA 67 (RF) options, VITA 48
MIL-STD	Type	810F (shock, vibration to 20G, environmental), 461F (EMI)
Configuration		
Power	Type	Options for 24-28VDC, 48VDC, 90-264VAC input @ 47-880Hz
		Various output options (3.3V, 5.5V, +/- 12V)
Environmental	Temperature	Operating temperature: up to -40° to +71°C (application dependent)
		Storage temperature: up to -55° to +90°C
	Altitude	Application dependent, consult Pixus for details
Conformal Coating		Upon request (See page 4 selection “J” for available options)
		0 and 95% humidity, non condensing
Other		
MTBF	Varies, consult factory for specifics	
Certifications	Designed to meet FCC, CE and UL certifications where applicable	
Standards	ISO9001:2015	
Compliance	Designed to MIL-STD-810, MIL-STD-461 (optional)	
Warranty	Two years	
Trademarks and logos	The Pixus Logo is a registered trademark of Pixus Technologies Inc. other registered trade-marks are the property of their respective owners. Specs. subject to change without notice.	

ORDERING OPTIONS

(Previously RR19XUFAC6 prefix)

RRFAC6-HABCCD-EFGI-JK

H = Height

1 = 8U
2 = 3U (horizontal-mount)
3 = 5U (horizontal-mount)
4 = Other
5 = 9U (most common)
6 = 10U

A = Backplane

1 = 6U OpenVPX / SOSA aligned (standard)
2 = Other

B = Backplane Speed

1 = 6.25 GB/s
2 = 8 GB/s (for PCIe Gen3)
3 = 40GbE or equivalent
4 = Other
5 = 100GbE or equivalent

CC = Payload Slots

Example 0n = n slots
01 = 1 slot
03 = 3 slots
02 = 2 slots
09 = 9 slots

D = PSU Slots

1 = 1 VITA 62 / SOSA slot
2 = 2 VITA 62 / SOSA slots
3 = Other

E = PSU Input

1 = 12-36V DC
2 = 90-230V AC
3 = 48V DC
4 = Other

F = PSU Output

1 = Up to 1000W
2 = Reserved
3 = Up to 2400W
4 = Reserved
5 = Other

G = Hold-up Time

0 = n/a
2 = Other
1 = 50 ms

I = Cooling

1 = Front-to-rear airflow, standard
2 = Other
3 = VITA 48.8 Air Flow Through (AFT) module, front-to-rear airflow

J = Conformal Coating

0 = None
1 = Humiseal 1A33 Polyurethane
2 = Humiseal 1B31 Acrylic

K = Finish/Coating

0 (or Blank) = Clear chromate finish (standard)
1 = Painted (contact Pixus for options)
2 = Anodized (external only)