» 19" Rack Mount Industrial Chassis «

2U 4-slot and 4U 8-slot of 6U Boards

» High Quality Ruggedized Construction

» Modular Backplanes: VME64x, VITA 31.1 or cPCI

» Modular Power Supply Unit

» EN55022-A EMC Compliant Design

» Custom Configurations, Integration and Qualification Services

If it's embedded, it 's Kontron.

Product Overview

Kontron offers a full range of 19" Rack Mount Industrial Chassis for 6U air-cooled boards. These high quality racks complement the Kontron's offering of Intel and PowerPC single board computers, computing nodes and I/O products.

In this way, Kontron products lines allow customers to build complex real-time systems for the most demanding Defense, Aerospace, Industrial, and Communications applications.

The 19" Rack Mount Industrial Chassis products line ranges from 2U height featuring 4 slots of VME 6U size boards up to 4U height 8 slots. Designed by Kontron, these quality products have successfully passed the mechanical, thermal, electromagnetic EMC/EMI qualification tests required by our customers.

The R2U4S and R4U8S are brand new members of Kontron's activities of 19" Rack Mount Industrial Chassis for 6U air-cooled boards. Their modular design enables to fulfil the requirements of application areas ranging from the environmentally benign right through to deployed industrial, airborne and naval applications.

All feature a door to better protect the electronics which is placed inside. All use a modular Power Supply Unit (PSU) which allows Kontron to derive the product in a short time with a PSU more suitable for the application aimed by the customer, such as redundant PSU or higher power one. In the R2U4S and R4U8S devices, the 6U cards bay can be available either on the front or the rear, as a build option.

Custom Configuration, Integration and Qualification Services

The Kontron´s 19" racks are backed up by the full range of Kontron integration and qualification services. This ranges from the delivery of the rack equipped with boards and integration test reports, to the qualification of a full managed system in compliance with the requirements of industrial aerospace or naval applications.

COTS Tailorization

Kontron's 19" Racks have been designed to be easily and cost effectively adapted to meet the constraints of almost any application. The installation of rugged MIL-STD-38999 connectors or the addition of fan-trays for vertical air-flow are examples of adaptations previously provided to customers. Please ask Kontron for additional information.

Inside Front to Rear Cabling Way

A cabling way ease cable passing between the front and rear cards bays and/or between one of these bays and the peripherals room.

Monitoring LEDs & Pass-through RJ-45

Located on the front panel, monitoring LEDS report the status of the power supplies, the fans and the inside temperature. Nearby these LEDs, a passthrough RJ-45 plug allows the customer to easily route an Ethernet link to the front panel.

Room for peripherals

The R2U4S and R4U8S feature a room for hosting either 2.5" or 3.5" Hard Disk Drives (HDD). An optional tray can accomodate two 3.5" HDD in the RTM bay of the R2U4S and R4U8S. A DVD drive can be provided on request.


Modular Power Supply Unit

The modularity of the power supply unit (PSU) of the R2U4S and R4U8S allows Kontron to propose at low cost the tuning of the power supplies in accordance to the electronic equipments which will be plugged into the rack.

Modular Backplane

The default version of Kontron's 19" rack features a standard VME64x backplane. Versions equipped with a VITA 31.1 compliant or a CompactPCI backplane are also available.
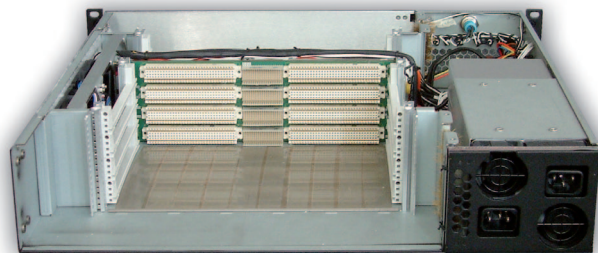
Environmental Specifications

Temperature	DO-160E §4	Operating: -20° to 65° C / Non Operating: -40° to 85° C
Relative Humidity	DO-160E §6	5 to 95% non condensing
Flammability	UL94-V0	
Safety	EN60950	
EMC Emissions		
Conducted / Radiated	EN55022 Class A	
Harmonic Distorsion	EN61000 §3.2	
Flicker and Fluctuation	EN61000 §3.3	
EMC - Immunity		
Conducted/Radiated Susceptibility	EN55024	
Altitude		Operating: 10,000 ft (3,048m) / Storage: 30,000 ft (9,144m)
Shock	DO-160E	Operating: 15g peak half sinus 11ms duration Storage: 15g peak half sinus 20ms duration
Vibration	DO-160E §8.5.2 EN 60068	Operating: Curve B (1.48 Gms) from 10 to 2000 Hz Operating: 2g sinusoidal from 5 to 500 Hz

Technical Information

	R2U4S	R4U8S
Dimension		
Height	2U 88.9 mm - 3.5"	4U 178 mm - 7"
Depth	440 mm - 17.32"	
Width	19" / 482.6 mm 17.63" / 448 mm (without earing)	
Weight (approx.)	6 Kg	12 Kg
Card Cages		
6U VME64x	VITA 1.1 / VITA 1.7 & VITA 38 VME64x backplane with P0 connector	
6U cPCI or VITA 31.1	Please contact Kontron	
Slots	4 - Horizontal	8 - Horizontal
Bay Position	Front or Rear	
Air Cooling	1.5 m/s	
Acoustic Noise	< 45 dB	< 55 dB
RTM Bay	6U - 80 mm - VITA 36 compliant	
Door	Front or Rear	
Room for HDD	2x 2.5"	2x 2.5" or 3.5"
Power Supply Unit (PSU)		
Input Voltage	100/240 VAC 50-60 Hz	
Max. Power	400W	700W
+5V	40A	80A
+3.3V	40A	80A
+12V	20A	20A
-12V	5A	5A
Redundancy	Option	Option
Modular PSU	Yes	Yes

EXAMPLES OF COTS TAYLORIZATION

2U "Tempest" Qualified Rack

10U cPCI with Fan Tray

R2U4S featuring
MIL-STD-68999 Ethernet Connector

Ordering Information

Article	Part.-No.	Description
R2U4S	R2U4SV-SA4F100	2U 19" Rack, 4*VME64x horizontal slots backplane / VITA 36 Rear Transition Modules support / Power Supply 400W, 5V/ + and - 12V/ 3,3V / Enclosure panel door : Front / 6U VME64x boards bay on Front
R2U4S	R2U4SV-SA4F200	2U 19" Rack, 4*VME64x horizontal slots backplane / VITA 36 Rear Transition Modules support / Power Supply 400W, 5V/ + and - 12V/ 3,3V / Enclosure panel door : Front / 6U VME64x boards bay on Rear
R2U4S	R2U4SV-SA4R100	2U 19" Rack, 4*VME64x horizontal slots backplane / VITA 36 Rear Transition Modules support / Power Supply 400W, 5V/ + and - 12V/ 3,3V / Enclosure panel door : Rear / 6U VME64x boards bay on Front
R2U4S	R2U4SV-SA4R200	2U 19" Rack, 4*VME64x horizontal slots backplane / VITA 36 Rear Transition Modules support / Power Supply 400W, 5V/ + and - 12V/ 3,3V / Enclosure panel door : Rear / 6U VME64x boards bay on Rear
R4U8S	R4U8SV-SA7F100	4U 19" Rack, 8*VME64x horizontal slots backplane / VITA 36 Rear Transition Modules support / Power Supply 700W, 5V/ + and - 12V/ 3,3V / Enclosure panel door : Front / 6U VME64x boards bay on Front
R4U8S	R4U8SV-SA7F200	4U 19" Rack, 8*VME64x horizontal slots backplane / VITA 36 Rear Transition Modules support / Power Supply 700W, 5V/ + and - 12V/ 3,3V / Enclosure panel door : Front / 6U VME64x boards bay on Rear
R4U8S	R4U8SV-SA7R100	4U 19" Rack, 8*VME64x horizontal slots backplane / VITA 36 Rear Transition Modules support / Power Supply 700W, 5V/ + and - 12V/ 3,3V / Enclosure panel door : Rear / 6U VME64x boards bay on Front
R4U8S	R4U8SV-SA7R200	4U 19" Rack, 8*VME64x horizontal slots backplane / VITA 36 Rear Transition Modules support / Power Supply 700W, 5V/ + and - 12V/ 3,3V /

OTHER VIEWS
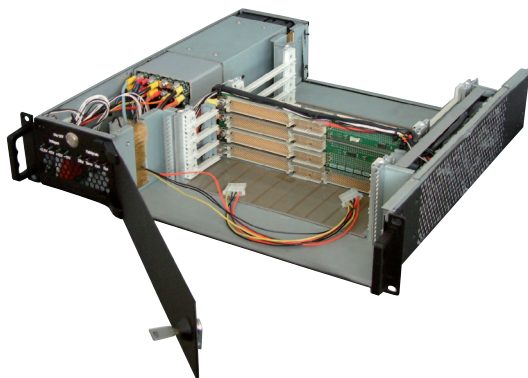
R2U4S

R4U8S

CORPORATE OFFICES

Europe, Middle East & Africa
Oskar-von-Miller-Str. 1
85386 Eching/Munich
Germany
Tel.: +49 (0)8165/ 77 777
Fax: +49 (0)8165/ 77 219
info@kontron.com

North America
14118 Stowe Drive
Poway, CA 92064-7147
USA
Tel.: +1 888 294 4558
Fax: +1 858 677 0898
info@us.kontron.com

Asia Pacific
17 Building,Block #1,ABP.
188 Southern West 4th Ring Road
Beijing 100070, P.R.China
Tel.: + 86 10 63751188
Fax: + 86 10 83682438
info@kontron.cn

www.kontron.com