

New Generation Development Chassis

Made
in
Germany



Backplane

3U up to 10 slots
(VPX) / 12 slots
(PCI, Serial, PXI, VME)

Power Supply

1800 W ATX
(90–264 VAC input)

Cooling

10 fans
(4 front, 6 rear)
with adjustable speed

Chassis Dimensions

425 × 298 mm / 50 HP

Standards

IEEE 1101.1 &
1101.10/11,
IEC 60297-3-101
to -103

CompactPCI 4U 32HP 4 Slots

The New Generation Development Chassis is designed for engineers requiring maximum flexibility and power in testing and development environments. With a high-performance 1800 W ATX power supply capable of delivering up to 120 A at 12 V, it supports even the most demanding system configurations. The chassis offers a modular design accommodating multiple backplane types (VPX, PCI, PXI, VME) and integrates up to ten high-power cooling fans ensuring optimal thermal performance. Optional configurations include a SOSA™-aligned 7-slot VPX backplane (supporting 100 Gbit/s Ethernet) and a VITA 46.11 compliant chassis manager for advanced system monitoring and communication.

Block Diagram

Compliance

IEEE 1101.1 and 1101.10/11 mechanical standard compliant

IEC 60297-3-101, -102, -103 mechanical standard compliant

Optional VITA 46.11 chassis management support

Optional SOSA™-aligned 7-slot VPX backplane

Power & Efficiency

High-performance 1800 W ATX power supply

Input: 90 – 264 VAC

Output: 12 V / 120 A, 5 V / 45 A, 3.3 V / 15 A

Rear-mounted power connector for improved cable routing

Protection

Over-current and over-temperature protection (ATX integrated)

EMI shielding and continuous chassis grounding

Control & Monitoring

Optional chassis manager with I²C bus communication

Supports remote monitoring and system status reporting

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Design & Components

Modular design for various backplane configurations (VPX, PCI, PXI, VME)

Optional integration of Kontron Hartmann Wiener GmbH VPX backplanes

High airflow with ten high-power fans for flexible applications

Mechanical

Desktop mounting design

Dimensions: Height 425 mm / Width 50 HP / Depth 298 mm

Airflow: bottom-to-top cooling

Fan system: 4 front 120 / 120 / 38 mm (224 CFM), 6 rear 80 / 80 / 25 mm (51 CFM)

Mounting	Panel-Mount	
Backplane	4 slot, 3U, 3.3V or 5V I/O, 32 bit/33 MHz, system slot right with ATX connector	
Fan Tray	fixed	
no. Of Fans	1, (12V, 120mm, 120CFM, 48dBIA)	
Airflow	Bottom to top	
Power Supply Type	1800W ATX	
Power Input	100 - 240VAC, 47-63Hz	
No. Of Supplies	1	
Output Voltages	3.3V12A, 5vV14A, +12V14A, -12V10.3A, minimum load: 12V/0.1A	
Power Supply Connector	Front side with switch	
Chassis Height	4U	
Chassis Width	32HP	
Chassis Depth	254.4mm	
IEEE	1101.1 and 1101.10/11	
IEC	60297-3-101, -102, -103	
Military Shipboard	MIL-STD-810F: 514.5C-15 (vibration)	
Military Highway	MIL-STD-810F :514	
Railway	EN 50155-EN 1373 class 1 B, rolling stock (shock/vibration)	

Maximum Internal Working Temperatures	125 °C
Temperature Protection Sensing Point (internal)	125 °C (Outputs disable when internal PCB temperature exceeds threshold)
Maximum Currents 12V / 3V3 / 5V	see tables in "variants" for different power configurations
Fixed Switching Frequencies 12V / 3V3 / 5V	520 kHz / 520 kHz / 520 kHz
Peak Efficiencies 12V / 3V3 / 5V	93% / 82% / 90%
Max. Output Ripple and Noise: 12V / 3V3 / 5V	< 120 mVpp / < 50 mVpp / < 50 mVpp (worst case)
(0-20 MHz Bandwidth)	< 30 mVpp / < 25 mVpp / < 25 mVpp (typical)
Line Regulation: 12V / 3V3 / 5V.	< 10 mV / 10 mV / 50 mV
Vin=Vin,min to Vin,max, Io and Tc fixed	< 0.1%
Load Regulation: 12V / 3V3 / 5V	60 mV / 50 mV / 10 mV
Overvoltage Protection +/- 12V / 3V3 / 5V: Maximum Output Voltage (Sense Lines Open)	12.1 V / 3.4 V / 5.2 V
Load Transient Recovery Time (no load to full load change condition)	1 ms
Maximum Current	1 A / 1 A / 4 A
Load Dependent Switching Frequency	300 Hz ... 600 kHz
Efficiency	60% ... 80%
Max. Output Ripple and Noise (0-20 MHz Bandwidth)	
Load Transient Recovery Time (no load to full load change condition)	1 ms
MIL Standard Compliance	as per VITA 62 specification
MIL-STD-461F (EMI) Compliance	Designed (to be tested) in compliance with sections CE102, CS101, CS114, CS115, CS116. See user manual for more details.
MIL-STD-704F Compliance	Designed (to be tested) in compliance for normal transients (LDC105), abnormal transients (LDC302) and distortion spectrum (LDC103). External hold-up circuit optional. See user manual for more details.