

CP-ASM10-PSB



10U CompactPCI® System PCIMG 2.16 compliant

- ▶ High Power Airflow Front to Rear (F2R) and up to six 250 Watt Power Supplies
- ▶ PICMG® 2.16 Packet Switching Backplane with two PCI Segments, Dual Nodes on all Slots and Dual Switch Slots
- ▶ Chassis Monitoring through TCP/IP

POSSIBILITIES START HERE

CP-ASM10-PSB

CARRIER CLASS CompactPCI® PLATFORM

Kontron's CP-ASM10-PSB is a 19" rackmount CompactPCI® platform, utilizing state-of-the-art technology and offering unparalleled versatility. Datacom, Internet infrastructure, computer telephony, and convergence markets have influenced new technologies such as the PICMG2.16 specification. The CP-ASM10-PSB has been designed to meet the need for reliable and affordable CompactPCI® platforms in these markets.

Power full

With the power of up to four power supplies of 250 watts each it is a joy to every system designer to be able to provide his application with a full power platform to meet the demands of the growing power consumption of modern CPU and DSP blades. To dissipate all of this power the CP-ASM10-PSB is equipped with three hot swappable fans each with 294 m³/h or 173 CFM. This provides the platform with an average airflow of 3 m/s or 590LFM. This platform is therefore very well suited for providing power to multiple CPU blades.

Scaleable

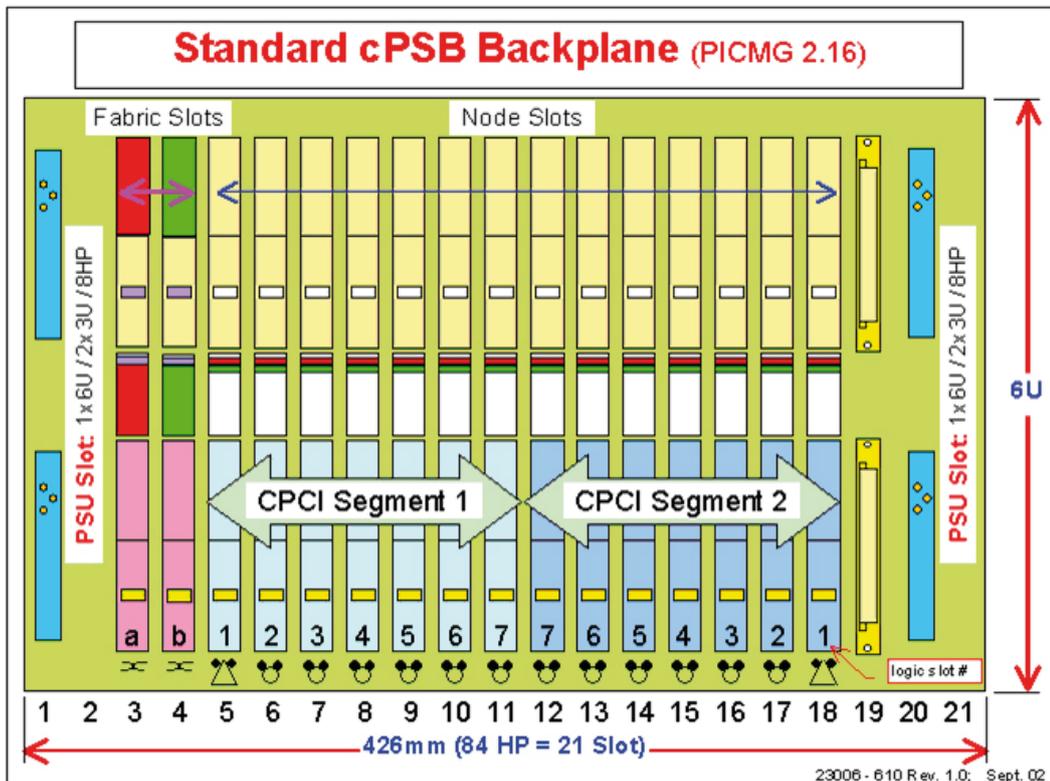
To achieve the utmost versatility using the CP-ASM10-PSB, the integrated backplane provides four power connectors, two PICMG2.16 compliant ethernet switch slots, two 7 slot CPCI segments each with two nodes and also redundant Chassis Monitor Slots. With the diversity of these features it is the ideal platform for developing and deploying your application.

Manageable

With the possibility to monitor several functions such as voltages, fan speed and temperature, the platform is able to transmit an alarm signal to the system manager, when predefined tolerances are exceeded. The function of the Chassis Monitor Module in detail are monitoring the system voltages continuously for exceeding the defined tolerances. Up to seven temperature sensors can be connected to the CP3-CMM1. There are 16 digital inputs. Some of them are used for power-good signals from the PSUs, shelf addressing and master slave position. The rest can be used for customized applications. Ten digital outputs are available for customized applications. The temperature and fan speed values from the Fan Control Module are transferred to the CP3-CMM1.

PICMG2.16

The continued ability of products to interoperate is essential to the timely development and evolution of systems in a changing world. The prime objective of a Packet Switched Backplane is to assure the ethernet network interoperability between the blades and the switches even if they are from different vendors. Kontron offers a variety of PICMG2.16 compliant CPU blades and also Ethernet switches CP6940. For more information on the entire selection which is currently available, please see the respective datasheets that can be found on www.kontron.com.



// CP-ASM10-PSB sample configuration

► TECHNICAL INFORMATION

| | | |
|------------------------|----------------------|--|
| PROCESSOR | | Anaodized aluminium based 19" rack Dimensions: 10U x 84 HP (445 x 483 x 325 mm) |
| POWER SUPPLY | | |
| | COMMON | Housing 3 U, 8 HP with P47 in PICMG2.11 standardized connector. Featuring redundancy, current sharing and hot swap. Output Voltage (Current): +3.3 V (40 A), +5.0 V (40 A), +12 V (5.5 A), - 12 V (1.5 A). Maximum total output power: 200 W at 250 lfm air flow Interference suppression (EN50081-1, EN55011, EN55022) Front panel status LED indicators: - Green: Input power OK - Red: Failure |
| | AC TYPE | Nominal input voltage 110/230 VAC Automatic input selection from 85 to 264 VAC Frequency 47 to 63 Hz |
| | DC TYPE | Nominal input voltage -48 VDC Input voltage from 36 to 75 VDC |
| BACKPLANE | SAMPLE CONFIGURATION | Full 64 bit PCI implementation on two separate segments Rear Panel I/O on P3, P4 and P5 at all CPCI Slots Two PICMG2.16 compliant GigaBit capable switch slots Two 7 slot CPCI segment with one left and one right side system slot Hot swap features according to PICMG2.1 Explanation of the slot functions (see functional overview on next page) - Slot 1, 2 : Two P47 power connectors - Slot 3, 4 : PICMG2.16 GigaBit switch slots - Slot 5: Left system slot of CPCI segment # 1 - Slot 6-11: Peripheral slots of CPCI # 1 with 2 nodes - Slot 12- 17: Peripheral Slots of CPCI # 2 with 2 nodes - Slot 18: Right system slot of CPCI segment # 2 - Slot 19: Redundant Chassis Monitor Slots - Slot 20, 21: Two P47 power connectors |
| CHASSIS MONITOR MODULE | | From factor: 3 U, 4 HP euroboard with 96 pin connector Operates at 5 VDC/400 mA Monitors systems parameters like - Voltage tolerances - Temperature values - Fan speed - Customized signals Error signal is generated if tolerances are exceeded Communicates with Fan Control Modul on hot swap fan tray 10BaseT interface for communication via TCP/IP to a web browser RS232 interface for configuration and output alarm Ten digital outputs available for customized applications |
| FAN CONTROL MODULE | | FCM Operates with 5 VDC/500 mA Located on hot swap fan tray 4 digital inputs 2 digital outputs 4 counter inputs for fan sensor 4 NTC input for temperature measurement |
| HOT SWAP FAN TRAY | | Located in the lower 3 U part of the system Three 24 Volt high power fans with 294 m ³ /h each (3 x 170 CFM) Measured average airflow speed 3 m/s (590 LFM) Airflow from "Front-in to Rear-out" |
| GENERAL | TEMPERATURE RANGE | 0 °C to + 50 °C (operating) -40 °C to + 85 °C (non operating) |
| | HUMIDITY RANGE | 30..80 % (non-condensing) |
| | MTBF | On request, depends on application |
| | SCHOCK AND VIBRATION | EN60068-2-6 and EN60068-2-27 |
| | SAFETY | Designed to meet EN 60950-1 and EN 62368-1 |
| | PROTECTION CLASS | IP20 |
| | WEIGHT | 20 kg |

▶ ORDERING INFORMATION

| ARTICLE | DESCRIPTION |
|---------------------------------------|---|
| CP-ASM10R-84F-P200AC-B1400-STD-PSB | 10U/84 HP rack, one AC power supply, backplane, hot swap fan tray and fan control module (on project request) |
| CP-ASM10R-84F-P200DC48V-B1400-STD-PSB | 10U/84 HP rack, on DC power supply, backplane, hot swap fan tray and fan control module (on project request) |
| CP3-SVE-P200AC | 3U/8 HP power supply, 200 Watt 110/230 VAC with P47 connector |
| CP3-SVE-P200DC-48V | 3U/8 HP power supply, 200 Watt +48 VDC with P47 connector |
| CP3-CMM1 | 3U/4 HP chassis monitor module |
| CP6940 | 6U/4HP managed Gigabit Ethernet Switch according PICMG2.16 (Various versions) |
| CP-RI06-923 | Various 6U/4HP or 8HP rear IO modules available |

Note: 1) Other Backplane options on request

2) Ask for the available selection of PICMG2.16 CPU blades from Kontron

3) More information on CPCI products can be found on our website: <http://www.kontron.com>

▶ GLOBAL HEADQUARTERS

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