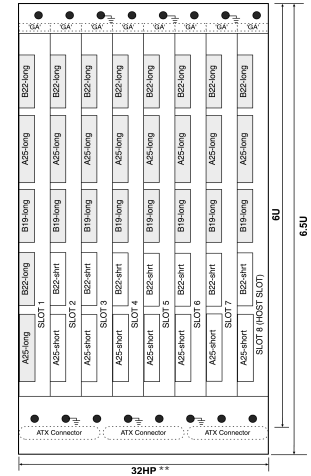
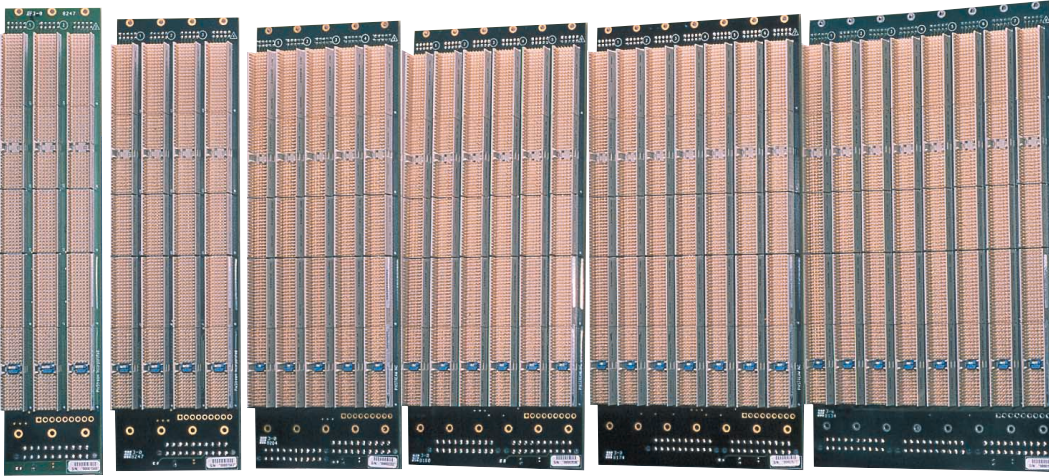


## PS1400 And PS1400B Modular Series For 6U CompactPCI Boards



### General Description:

The PS1400 Series of 6U 64/32-bit backplane components allows the construction of CompactPCI systems with any number of slots. Each backplane contains between 2 and 8 slots, and can operate in stand-alone mode with a host CPU board and power supply. Multiple backplanes can be linked together using rear-mounting CompactPCI bridge modules (PS1130). In this case, only the rightmost backplane operates with a host CPU board in the system slot. A bridge module drives the bus of the adjacent backplane, which does not contain a host CPU module. The rightmost slot becomes available for a standard CompactPCI peripheral board. That backplane can, in turn, drive a third backplane via a second bridge module and so on. Power is supplied to the system through ATX-compliant connectors. Standard ATX power supplies or CompactPCI power supplies mounted in Kaparel/Rittal modular power supply backplanes may be used. The PS1400B series has the same configuration as the PS1400 series, but uses Kaparel/Rittal's low profile bridges.

### Features:

- Any slot count is achieved by connecting backplanes with bridge modules (PS1130)
- 2 to 8, 6U single wide (4HP) cPCI slots
- +5 V, 33 MHz PCI bus interface
- 32-bit or 64-bit busses available
- User-definable geographic address for each physical slot
- PICMG 2.0 R2.1 CompactPCI and pre-2.1 compatible
- PICMG 2.1 R1.0 CompactPCI Hotswap specification compliant
- ATX-compliant power connectors (except PS1475)
- Host slot on right, except PS14x5 (left host)
- Selectable VI/O (on PS1400B series only).

### Power Inputs:

Each of the PS1400 Series has at least 1 ATX header for providing power and measuring voltages on the backplane. The ATX connector can be found on newer PC motherboards and power supplies. The backplanes may either be used with a standard "PC ATX" supply or they may be used with Kaparel/Rittal's modular series of power backplanes.

### Specifications:

#### Electrical:

PCI Local Bus Specification Rev 2.1  
PICMG 2.0 R2.1 cPCI Specification  
PICMG 2.1 R1.0 cPCI Hotswap Specification

#### Mechanical:

IEEE 1101.1-1991  
IEEE 1101.10-1996

#### Mechanical:

The PS1400 Series backplanes are 8-layer PCBs which are 6.5U (284.3 mm) tall, 0.125" thick (see configuration table for physical widths). Two layers are dedicated ground layers. The backplanes are attached to the subrack using a series of screws

### PS1400: 8 slot, 6.5U, 64-bit

\*\*Width throughout modular series is 4HP per slot (see configuration chart).

along the top and bottom edges of the backplanes. Approximately every third mounting hole along the top and bottom is connected to digital ground. These holes provide a return to the subrack from the digital PCI ground planes, identified by a ground symbol on the rear of the backplane. In situations where connecting digital ground to the subrack is not desired, the grounded mounting screws can be left uninstalled. On all backplanes, the mounting holes in the four corners of the board are not grounded, so these screws may always be installed.

Order No.	Model No.	Related products
3686571	PS1130	Right rear pallet bridge module (see page 83)
3686679	PS1241	Power supply backplane (see page 87)
3686684	PS1250	Power supply backplane (see page 87)
3688601	PS1260	Power supply backplane (see page 87)
3686570	PS1600	Cable assembly (see page 87)

Order No.	Model No.	Slot count	Bus width	Physical width	ATX Pwr. conn.	Rear I/O (P3-P5)	Slot expansion	Geographic addressing	Hot swap	66MHz
-	PS1400A	8	64-bit	32HP	3	J3, J4, J5	S	•	•	-
3687866	PS1401	8	32-bit	32HP	3	NA	S	•	•	-
3688501	PS1405	8	64-bit	32HP	3	J3, J4, J5	S	•	•	-
3689205	PS1420B	7	64-bit	28HP	2	J3, J4, J5	SBE	•	•	-
3687867	PS1421	7	32-bit	28HP	2	NA	SBE	•	•	-
3689206	PS1430B	6	64-bit	24HP	2	J3, J4, J5	SBME	•	•	-
3687868	PS1431	6	32-bit	24HP	2	NA	SBME	•	•	-
3686552	PS1440	5	64-bit	20HP	2	J3, J4, J5	SBE	•	•	•
3687869	PS1441	5	32-bit	20HP	2	NA	SBE	•	•	•
3686579	PS1450	4	64-bit	16HP	1	J3, J4, J5	SBE	•	•	•
3687870	PS1451	4	32-bit	16HP	1	NA	SBE	•	•	•
9817942	PS1455	4	64-bit	16HP	1	J3, J4, J5	SBE	•	•	•
3689209	PS1460B	3	64-bit	12HP	1	J3, J4, J5	SBE	•	•	•
3686581	PS1461	2	64-bit	12HP	1	J3, J4, J5	SBE	•	•	•
3687871	PS1462	3	32-bit	12HP	1	NA	SBE	•	•	•

Legend- S=Stand alone B=Beginning segment M=Middle segment E=Ending segment 1 HP=0.200" (4HP = 1 single slot width) NA= Not Applicable; denotes left host