CSS
LABORATORIES, INC.

TECHNICAL REFERENCE

PB-10404
Passive Backplane for
Preferred, MaxPRO and
ProRACK Systems

P/N PB-10404-DOC

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Technical Reference

PB-10404 8-Slot Passive Backplane

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- 1 Single Board Computer (SBC) connector for easy upgrades through the latest Pentium® and Pentium® Pro products. The SBC is compatible with any CSS Single Board Computer.

- Basic connectors provided for speakers, hard disk LED, reset/turbo LED, keylock, PS/2 mouse and CMOS battery.

- Power connectors for both 5 volt and 3 volt power source.

- Two sets of auxiliary power connectors for flexibility in motherboard-to-chassis mounting.

coming from computing equipment.

Note: This equipment has been tested and found to comply with the limits for a Class A digital device pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

CSS Labs is not responsible for any radio or television interference caused by unauthorized modifications to this

device is in violation of U.S. Federal law and will not allow the device to meet the maximum emission limits.

CAUTION: Any changes or modifications not expressly approved by the grantee of this device could void the user's authority to operate the equipment.

Note: If you have purchased the miniature tower system, please note the following...

WARNING: The system is to be installed on desk or table tops only. The unit will become unstable if operated as a floor standing unit and unintentional force is applied to the top of the unit.

Turn the unit off and unplug the power cord before you open the cover to install any cards or peripheral devices.

REPLACE ONLY WITH THE SAME OR EQUIVALENT TYPE RECOMMENDED BY THE MANUFACTURER. DISCARD USED BATTERIES ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS.

ATTENTION:IL Y A DANGER D'EXPLOSION S'IL Y A REMPLACEMENT INCORRECT DE LA BATTERRIE. REMPLACER UNIQUEMENT AVEC UNE BATTERI DU MEME TYPE OU D'UN TYPE RECOMMENDE PAR LE CONSTRUCTEUR. ETTERAU REBUT LES BATTERRIES USAGEES CONFORMEMANT AUX INSTRUCTIONS DU FABRICATANT.

This document describes the technical features of the board. The topics include:

- **Board** - illustration and brief description of the board and the expansion slots.

- **Connectors** - description of connector locations and functions on the board.

- **Jumpers** - detailed description of jumpers and their functions.

For technical assistance, contact CSS Labs at 1-800-966-2771.

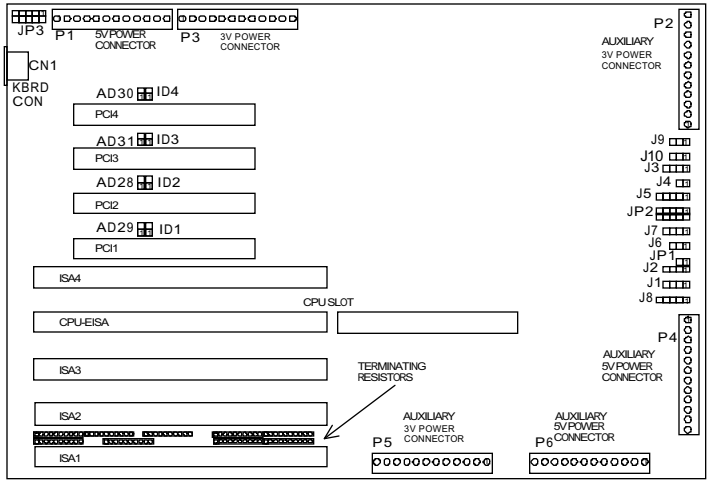
Basic Features

The board provides 3 ISA bus slots, 3 PCI bus slots, 1 shared ISA/PCI and 1 single board computer (SBC) slot.

Hard disk activity indicator LEDs are provided for either an add-in or on-board controller, if provided on the SBC.

Front panel, reset/turbo, mouse, speaker and keylock connectors are also provided. The features are on the SBC.

5 volt and 3 volt power connectors on the board supplies power to both the busses, add-in boards and SBC. An auxiliary set of connectors is provided in an alternate location.



P1	5 volt power
P3	3 volt power connector
P4, P5	Auxiliary 5 volt connectors
P2, P6	Auxiliary 3 volt connectors
CN1	Keyboard connector
JP3	PS/2 Mouse connector
J1	Speaker
JP1, J2	Hard drive LED
J3	Reset/Turbo LED
JP2	Front Panel connector
J6	Infrared connector
J5	Keylock
J7	Battery connector
J4	Test pins, do not alter

5 Volt Power Connector P1; Auxiliary Connectors P4, P5

The connectors attach the board to the power via the 5 volt regulator. Orient the plugs' black wires to sit side-by-side.

Pin	Assignment	Pin	Assignment
1	Power good	7	Ground
2	+5Vdc	8	Ground
3	+12 Vdc	9	-5 Vdc
4	-12 Vdc	10	+5 Vdc

regulator. Orient the plugs' black wires to sit side-by-side.

Pin	Assignment	Pin	Assignment
1	Ground	7	+3.3 Vdc
2	Ground	8	+3.3 Vdc
3	Ground	9	+3.3 Vdc
4	3.3 Vdc	10	Ground
5	3.3 Vdc	11	Ground
6	+3.3 Vdc	12	Ground

Keyboard Connector CN1

Keyboard plugs are keyed for proper installation.

Pin	Assignment	Pin	Assignment
1	Clock	4	Ground
2	Data	5	+5 Vdc
3	Not used		

Speaker Connector J1

J1 connects to a standard chassis speaker.

Pin	Assignment
1	Speaker (-)

Pin	Assignment	Pin	Assignment
1	Clock	6	Vcc
2	Not used	7	Ground
3	Not used	8	Data
4	Not used	9	Ground
5	Not used	10	Not Used

Hard Drive LED JP1, J2

JP1 and J2 connect a hard drive access LEDs to the front panel. The LED lights when the drive is accessed.

Pin	Assignment	Pin	Assignment
1	HD LED	3	HD LED
2	Power	4	Power

turbo LED indicates that the system is running at the higher clock speed when it is lit.

Pin	Assignment	Pin	Assignment
1	Reset	3	Turbo LED
2	Ground	4	Ground

Front Panel Connector JP2

This 10-pin connector is the interface between the system board and the control panel on the front of the system case.

Pin	Assignment	Pin	Assignment
1	Ground	6	Ground
2	Power LED	7	LED on
3	HD LED	8	Keylock
4	Not used	9	Power LED
5	Power LED	10	Reset

Infrared Connector J6

J6 connects to an optional infrared add-in controller. Infrared controllers can act as ports for a number of peripheral devices including mouse, printer and keyboard.

Pin	Assignment
1	Receiving

Pin	Assignment
1	Power LED
2	Not used
3	Ground
4	Keylock
5	Ground

Battery Connector J7

J7 is used to connect the lithium battery to the board. This battery provides constant power to the Single Board Computer's CMOS and has a typical lifespan of five years.

Pin	Assignment
1	Battery Power
2	Not Used
3	Not used
4	Ground

Connector	Description
ID1, ID2, ID3, ID4	PCI bus enable for Non-Pentium
AD28, AD29 AD30, AD31	PCI bus enable for (Triton I) Pentium SBC

These jumpers configure the PCI bus for use with either Pentium-based or non-Pentium-based (or Triton I chipset) Single Board Computers (SBC).

Non-Pentium Single Board Computer ID1, ID2,ID3, ID4

These jumpers must have shunts installed when the system is configured with a CSS 486-based SBC. Jumpers AD28, AD29, AD30, AD31 should be open.

Pentium (Triton I) Single Board Computer AD28, AD29, AD30, AD31

These jumpers must have shunts installed when the system is configured with a CSS 486-based or Triton I-based SBC. Jumpers ID1, ID2, ID3, ID4 must be open.

Test Pins J8, J9, J10