

PANDORA

COMPACT and CONFIGURABLE PC/104 ENCLOSURE SYSTEM



- Flexible, low cost PC/104 enclosure system
- Supports all I/O from Athena II, Helios, Athena, Prometheus and Elektra single board computers
- Easy to assemble and install
- Rugged cable-free design
- Multiple lengths support varying PC/104 stack sizes

DESCRIPTION

Pandora is a compact, light weight, rugged enclosure system for Diamond Systems' PC/104 form factor single board computers.

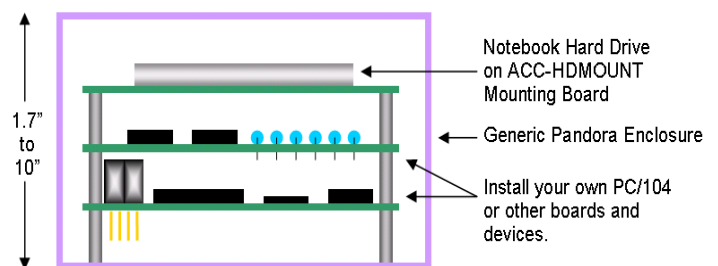
Pandora offers a unique approach to packaging by eliminating most internal cables. This speeds up the assembly process and improves reliability and ruggedness. In the Pandora system, one end cap serves as a base plate on which the PC/104 stack is assembled with the panel I/O board atop the stack. Once the stack is complete, it is inserted into the enclosure and bolted into place with direct connections to both the top and bottom of the enclosure for extra rigidity. The rear/bottom panel provides convenient holes for mounting the stack.

The panel I/O board can also accommodate I/O output from one or two add-on PC/104 modules without requiring costly and time consuming custom enclosure design. One pin header can be used with any PC/104 board with a 50-pin I/O connector. Two 20-pin connectors can be used with any model Emerald-MM to support four additional serial ports for a total of eight.

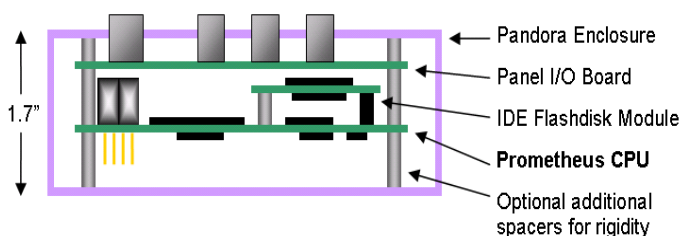
The Pandora enclosure is available in multiple lengths up to ten inches to support stacks of arbitrary size and is compatible with the following Diamond Systems' single board computers: Athena II (models ATHM500-256A, ATHM500-256N, ATHM800-256ALP, and ATHM800-256NLP), Helios, Athena, Prometheus and Elektra.

The Pandora enclosure system can also be used with other PC/104 SBCs. This generic version provides a flexible enclosure for arbitrary PC/104 stacks. With the generic version of Pandora, I/O connectors and system cabling is the responsibility of the user.

Pandora with 3rd Party CPU



Pandora with Prometheus CPU



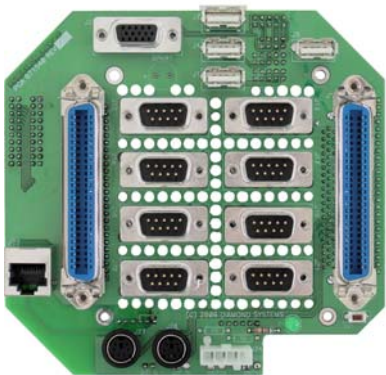
FOR MORE INFORMATION

Diamond Systems Corporation
 1255 Terra Bella Avenue
 Mountain View, CA 94043
 Tel: 650-810-2500
 Fax: 650-810-2525
techinfo@diamondsystems.com

PANEL I/O BOARD

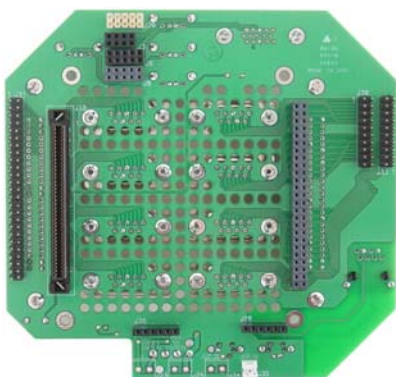
The panel I/O board provides the interface between the PC/104 stack and the outside world. Within the enclosure the panel I/O board plugs directly onto the Diamond Systems' SBC and converts most SBC I/O signals to industry standard connectors. The panel I/O board is then mounted directly to the matching front panel of the enclosure.

On its front panel side, the panel I/O board presents industry standard I/O connectors for Ethernet, USB, serial, parallel, display, data acquisition and PS/2 through the front panel.



Pandora Athena II Panel I/O Board – front panel side

On its SBC side, the panel I/O board and selected SBC connect together through a set of connectors, reducing the number of cables required.



Pandora Athena II Panel I/O Board – SBC side

POWER INPUT OPTIONS

Two power input options are provided: a 4-pin latching connector and a multi-input DB-9 connector.

SPECIFICATIONS

Dimensions	5.75" x 5.5" x 1.7" (145mm x 138mm x 43mm) up to
	5.75" x 5.5" x 7.0" (145mm x 138mm x 178mm)
Material	Heavy gauge aluminum
Power Input	SBC dependent
RoHS	Compliant
Operating Temp	-40°C to +85°C
Environmental	Supports FCC Class B Certification
Safety	Supports UL and CE Certification

ORDERING INFORMATION

Pandora for Diamond Systems' PC/104 SBCs

Part Number	Description
PNL-EAP-01	Athena II/Athena Panel I/O Board
PNL-HLV-01	Helios Panel I/O Board
PB-EAP-170-K	Pandora 1.7" enclosure with EAP panels
PB-EAP-300-K	Pandora 3.0" enclosure with EAP panels
PB-EAP-500-K	Pandora 5.0" enclosure with EAP panels
PB-EAP-700-K	Pandora 7.0" enclosure with EAP panels
PB-HLV-170-K	Pandora 1.7" enclosure for Helios
PB-HLV-300-K	Pandora 3.0" enclosure for Helios
PB-HLV-500-K	Pandora 5.0" enclosure for Helios
PB-HLV-700-K	Pandora 7.0" enclosure for Helios
C-PNLEAP-KIT	Cable kit for EAP panel board expansion
C-EAP-01	Cable, 50-pin IDC ribbon to 50-pin Centronics
PBEC-11-K	EAP front panel
PBEC-12-K	EAP rear/wall mount panel, 4 holes with mounts
PBEC-14-K	Helios enclosure front end cap with cutouts

Pandora for use with other PC/104 SBCs

Part Number	Description
PB-170-K	Pandora 1.7" generic enclosure
PB-300-K	Pandora 3.0" generic enclosure
PB-500-K	Pandora 5.0" generic enclosure
PB-700-K	Pandora 7.0" generic enclosure
PB-1000-K	Pandora 10.0" generic enclosure
PB7-INT-01-K	Pandora 7.0" enclosure with PBMT-07 internal mounting plate
PBEC-00-K	Pandora End Cap, Blank
PBEC-01-K	Pandora End Cap, PC/104 mounting holes, front/top of stack
PBEC-02-K	Pandora End Cap, PC/104 mounting holes, rear/bottom of stack
PBEC-06-K	Pandora End Cap for PBMT-07
PBMT-07	Pandora internal mounting plate