PCI Bus Expansion Chassis Short size, 2-Slots, BLACK

ECH-PCI-DE-H2B

Long size, 2-Slots, BLACK

ECH-PCI-DE-F2B

Short size, 4-Slots, BLACK

ECH- PCI -DE-H4B

Long size, 4-Slots, BLACK

ECH- PCI -DE-F4B



\* Specifications, color and design of the products are subject to change without notice.

This product is an expansion chassis that adds expansion slots to a PC. Connecting an optional expansion adaptor (EAD-DE-LPE) can add PCI bus slots or PCI Express(x1) bus slots onto the PC.

The installable card types are different depending on the chassis models, ECH-PCI-DE-H2B, ECH-PCI-DE-H4B are short-type [176.5 (L)  $\times$  107 (H) mm] PCI bus cards, and ECH-PCI-DE-F2B, ECH-PCI-DE-F4B are long-type [313.8 (L)  $\times$  107 (H) mm] PCI bus cards.

As your PC is turned ON or OFF, the expansion chassis can also be turned ON or OFF, accordingly. Since the cabinet contains a built-in cooling fan, which achieves a compact design, you can build a system even in a limited space next to your PC. The product is also bundled with an easy-to-carry AC adapter.

- \* The contents in this document are subject to change without notice.
- \* Visit the CONTEC website to check the latest details.
- \* The information in the data sheets is as of January, 2023.

## Features

#### PCI bus (5V/32bit 33MHz) slots can be added to your PC.

PCI bus slots (5V/32bit 33MHz) can be added to ECH-PCI-DE-xxB.

- ECH-PCI-DE-H2B and ECH-PCI-DE-F2B can add two PCI bus slots.
- ECH-PCI-DE-H2B and ECH-PCI-DE-F2B can add two PCI bus slots.
  ECH-PCI-DE-H4B and ECH-PCI-DE-F4B can add four PCI bus slots.

This expansion chassis is connected to a PC using an optional expansion adapter.

Short-type PCI bus cards can be connected. (ECH-PCI-DE-H2B, ECH-PCI-DE-H4B) You can connect short-type [176.5 (L) x 107 (H) mm] PCI bus cards.

- ECH-PCI-DE-H2B can connect two PCI bus cards.
- ECH-PCI-DE-H4B can connect four PCI bus cars.

**Long-type PCI bus cards can be connected.** (ECH-PCI-DE-F2B, ECH-PCI-DE-F4B) You can connect short-type [176.5 (L)  $\times$  107 (H) mm] and long-type [313.8(L)  $\times$  107 (H) mm] PCI bus cards.

- ECH-PCI-DE-F2B can connect two PCI bus cards.
- ECH-PCI-DE-F4B can connect four PCI bus cards.

## Power-ON/OFF control of the expansion chassis can be linked to that of your PC.

As your PC is turned ON or OFF, the expansion chassis can also be turned ON or OFF, accordingly.

# The compact design of the cabinet with a built-in cooling fan enables space-saving system construction.

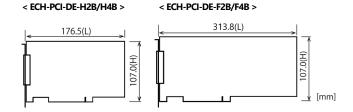
Since the cabinet contains a built-in cooling fan, which achieves a compact design, you can build a system even in a limited space next to your PC. The product is also bundled with an easy-to-carry AC adapter.

## **Function Specifications**

Item	ECH-PCI-DE-H2B	ECH-PCI-DE-F2B	ECH-PCI-DE-H4B	ECH-PCI-DE-F4B		
Compatible bus	PCI Local Bus Specification Rev2.3 (+5V type)					
Address space	32-bit memory address, I/O address					
Interrupt level	INTA - INTD					
Bus operating clock	33MHz (Max.)					
Number of user-available slots	2 slots (short size)	2 slots (long size)	4 slots (short size)	4 slots (long size)		
Acceptable board sizes (mm)	176.5(L) x 107(H)	313.8(L) x 107(H)	176.5(L) x 107(H)	313.8(L) x 107(H)		
Power supply						
Expansion slot supplied power (The output current must not exceed the value on the right.)	+5VDC +3.3VDC +12VDC -12VDC	3VDC 3A (Max.) *1 2VDC 1.5A (Max.)				
Maximum total power capacity	60W					
AC input line voltage *2	100 - 240VA					
AC line frequency	47 - 63Hz					
AC power input current	2A(90VAC)					
Physical dimensions (mm)	71.0(W) x 144.0(H) x 222.0(L) (without rubber feet)	71.0(W) x 144.0(H) x 360.0(L) (without rubber feet)	112.0(W) x 144.0(H) x 222.0(L) (without rubber feet)	112.0(W) x 144.0(H) x 360.0(L) (without rubber feet)		
Weight	1.2 kg	1.6 kg	1.5 kg	2.0 kg		
Outside dimensions of AC adapter(mm)	85(W) x 50(H) x 15	5(L)		I		
Cable length of AC adapter	1.2m					
AC cable	1.8m with 2P ground					
Weight of AC adapter	2.5m 3P					

- \*1 The sum of +5VDC and +3.3VDC must not exceed 35W.
- \*2 AC input line voltage range: 90 264VAC

## Physical Dimensions of Acceptable Card (Max.)

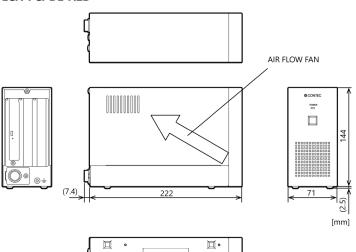


#### **Environmental Specification**

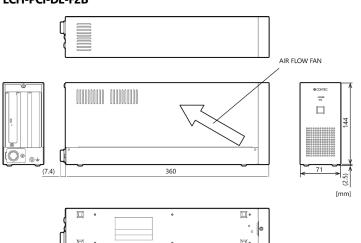
Н	tem	Specification			
Operating temperature		0 - 50°C			
Operating humidity		20 - 80%RH (No condensation)			
Storage temperature		0 - 60°C			
Storage humidity		10 - 90%RH (No condensation)			
Floating dust particles		Not to be excessive			
Corrosive gases		Not to be excessive			
Line-noise resistance	Line noise	AC line / ±2kV Signal line / ±1kV (IEC61000-4-4 Level 3,EN61000-4-4 Level 3)			
	Static electricity resistance	Contact discharge / ±4kV (IEC61000-4-2 Level 2, EN61000-4-2 Level 2) Atmospheric discharge / ±8kV (IEC61000-4-2 Level 3, EN61000-4-2 Level 3)			
Grounding		Class D grounding (previous class 3 grounding)			
Standard		VCCI Class A, FCC Class A			

## **Physical Dimensions**

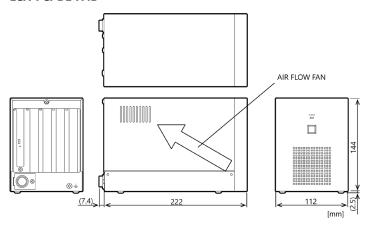
#### ECH-PCI-DE-H2B



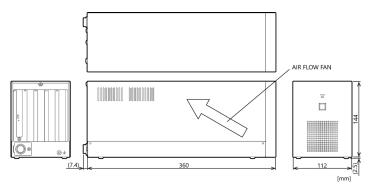
## ECH-PCI-DE-F2B



#### ECH-PCI-DE-H4B



#### ECH-PCI-DE-F4B



#### **CAUTION**

 When using this chassis, keep it at least 20mm away from any object such as the wall for cooling purposes.

## Product Configuration List

Product ...1

Setup Guide ... 1

Warranty Certificate ...1

Serial Number Label ...1

Power Cable...1

AC adapter...1

Slot Cover...2

ECH-PCI-DE-x2B...2, ECH-PCI-DE-x4B...4

Card fixed screw...2

ECH-PCI-DE-x2B...2, ECH-PCI-DE-x4B...4

## Expansion adapter (Optional Product)

Expansion Adapter for PCI Express Slot

: EAD-DE-LPE

# Combinations of Expansion Adapters and Expansion Chassis

The expansion adapters and expansion chassis can be used in the following combinations:

Expansion adapter		Expansion chassis ECH-PE-DE					
	-H2B	-F2B	-H4B	-F4B	-H4D	-H13A	-H2B
EAD-DE-LPE	0	0	0	0	O*1	0	0

 $<sup>{\</sup>rm *1}$  The ECH-PCI-DE-H4D has no linkage function with the PC power-ON/OFF.



## Restrictions

This product is used in a combination with the optional expansion adapter. The following restrictions apply to the situation when the expansion adapter is connected to the expansion chassis.

This product has restrictions on the types of PCs and cards that can be used. Be sure to check the following restrictions before use.

#### < Restrictions of PC>

This product use the PCI-to-PCI Bridge to extend the bus. The PCI cards plugged in PCI slots in this product are recognized if the PCI-to-PCI bridge is recognized by the BIOS in the PC used. Ask the PC vendor for whether the BIOS recognizes the PCI-to-PCI bridge.

#### < Restrictions on transfer rate >

When the expansion chassis accommodates a card that performs high-speed transfer such as bus mastering, the overall transfer rate may be lower than that of PCI bus slots in the main unit of a desktop PC. This is caused by bus extension by the PCI-to-PCI Bridge. The transfer rate may vary with the system configuration and the type of the PC.

#### < Restrictions of PCI board>

None of the following types of boards can be used in any expansion slot in the expansion chassis of PCI bus.

- · Video display board (VGA board)
- · Board to connect a PCI bus expansion chassis
- Board explicitly stated not to be used with the PCI-to-PCI Bridge