

Cabled PCI Express
PCI Express bus slot Expansion Adapter(Host PC)
ECH-PCI-CE-H4D



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

Features

PCI bus (5V/32bit 33MHz) slots can be added to your PC.
Four PCI bus (5V/32bit 33MHz) slots can be added.
This expansion chassis is connected to a PC using an optional expansion adapter.

Short-type PCI bus boards can be connected.
You can connect four short-type [176.5 (L) x 107 (H) mm] PCI bus boards.

The product can install within the panel or the device
DIN rail mounting mechanism is equipped as standard with the product, making it easy to install the product within the panel or the device.

Steel chassis with cooling fan.
Steel chassis with cooling fan suitable for use in fields

A wide range of power supplies (10.8 - 31.2VDC) supported
As the product supports a wide range of power (10.8 - 31.2VDC), it can be used in a variety of power environments.

Expansion adapter (Option)

Expansion Adapter for Express Card Slot : EAD-CE-EC
Expansion Adapter for PCI Express Slot : EAD-CE-LPE

Check the CONTEC's Web site for more information on these expansion adapters.

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-PCI-CE								
	-H2B	-H2C	-F2B	-H4B	-F4B	-H4D	-H4A	-H7A	-H13A
EAD-CE-EC	○	○	○	○	○	○	○	×	×
EAD-CE-LPE	○	○	○	○	○	○	○	○	○

Expansion adapter	Expansion chassis ECH-PCI-CE2		Expansion chassis ECH-PE-CE			Expansion chassis ECH-PE-CE2
	-H4A	-H7A	-H2B	-F2B	-F4A	-F4A
EAD-CE-EC	○	×	○	○	×	×
EAD-CE-LPE	○	○	○	○	○	○

This product is an expansion chassis that adds PCI bus slots to a PC. It can add PCI bus slots by connecting an optional expansion adapter (EAD-CE-LPE, EAD-CE-EC). The board that can be mounted is short-type [176.5 (L) x 107 (H) mm] PCI bus boards.

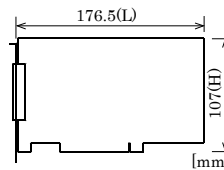
It is easy to install the product within the panel or device using DIN rail mounting jigs.

Specifications

Specification

Item	ECH-PCI-CE-H4D	
Compatible bus	PCI Local Bus Specification Rev2.3 (+5Vtype)	
Address space	32bit memory address, I/O address	
Interrupt level	INTA - INTD	
Bus operating clock	33MHz (Max)	
Number of user-available slots	4 slots (short size)	
Acceptable board sizes (mm)	176.5(L) x 107(H)	
Power supply		
Expansion slot supplied power (The output current must not exceed the value on the right)	+5VDC	10A (Max)
	+3.3VDC	4A (Max)
	+12VDC	2A (Max)
	-12VDC	0.6A (Max)
Rated input voltage	12 - 24VDC	
Range of input voltage	10.8 - 31.2VDC	
Power consumption	12V 10.0A (Max), 24V 5.0A (Max)	
Outside dimensions (mm)	120.2(W) x 144(H) x 239.6(L) (without rubber feet)	
Weight	1.74 kg	

Outside dimensions of acceptable board (Max.)



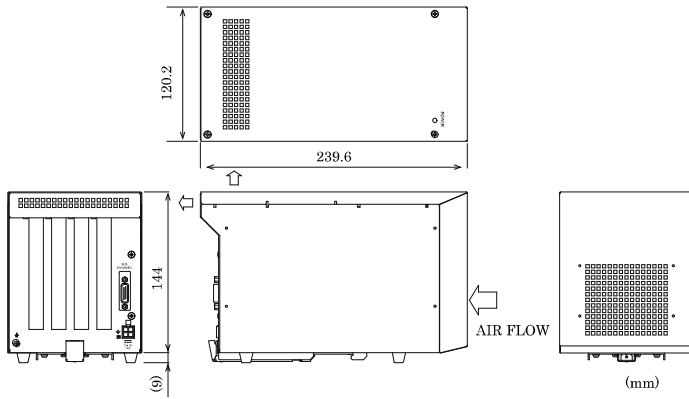
Environmental specification

Item	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	None
Line-noise resistance	Line noise*1 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)
Vibration resistance	Sweep resistance*1*2 10 - 57Hz / semi-amplitude 0.075 mm, 57 - 150Hz/1.0G 40 min. each in x, y, and z directions (JIS C60068-2-6-compliant, IEC60068-2-6-compliant)
	Impact resistance*1*2 10G, half-sine shock for 11 ms in x, y, and z directions (JIS C60068-2-27-compliant, IEC60068-2-27-compliant)
Grounding	Class D grounding (previous class 3 grounding), SG-FG / continuity
Standard	VCCI Class A, FCC Class A, CE Marking (EMC Directive Class A), RoHS Directive

*1 When PS5R-SG24 (manufactured by IDEC) is used for the DC power supply unit.

*2 The examination was done by 2.44kg of gross weight.

Physical Dimensions



Packing List

- Expansion chassis [ECH-PCI-CE-H4D]...1
- This User's Manual ...1
- Slot cover ...3
- Board fixed screw ...4
- Rubber feet ...4
- Rubber feet fixed screw ...4
- Power Connector ...1
- Contact...4

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 boards that can be used. Be sure to check the following restrictions before use.

< Restrictions of PC >

This product uses the PCI-to-PCI Bridge to extend the bus. The PCI boards 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 board 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 boards can be plugged into any expansion slot in this product.

- 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
- Some boards, even PCI-compliant ones, may not work depending on their specifications