EBPC-5250

Embedded Box PC Chassis for 5.25" Biscuit SBC



Features

- Built-in 180 W, ATX, AC-to-DC power supply
- Supports maximum expansion of three PC-104 or PC-104-Plus cards
- Supports maximum two PCI expansion slots
- Two dummy I/O metal plates for quick and convenient customized I/O extension
- Supports drive space of one slim optical CD/DVD device (Optional)
- Anti-vibration design of one 3.5" HDD bay
- · Compact, robust, simple and modularized service-friendly design

Introduction

The EBPC-5250 series is a rugged, compact and advanced Embedded PC system chassis that is designed for 5.25" Biscuit Embedded SBCs. The EBPC-5250 series has a specially designed universal I/O board that can carry commonly used control and communication I/O ports from the motherboard's onboard pin headers to the chassis cutout. The EBPC-5250 series also has Universal Display I/O that supports a dual LVDS, one DVI, one S-Video and one composite video port. The EBPC-5250 series reserves space for two PCI Expansion slots, three PC-104 or PC-104-Plus interface cards. In addition, two dummy I/O plates allow easy customization of I/O-port cutouts by wiring the pin headers of PC-104, PC-104-Plus or PCI expansion cards to them. The EBPC-5250 series has a specially cushioned 3.5-inch hard disk drive bay that absorbs vibration to ensure maximum reliability under harsh conditions. The compact dimensions of the EBPC-5250 series make it easy to mount on walls in space-limited environments.

Universal, Comprehensive and flexible I/O expansion feature

- Built-in universal I/O features for all common control, communication and display I/O ports plus easy external access.
- Room to expand via I/O by PC-104, PC-104-Plus or PCI interface expansion cards.
- Dual dummy I/O plates allow customization of additional I/O ports

Compact, Robust Construction

- Robust, heavy-duty metal cast construction
- Modularized design offers maximum space efficiency and superior electromagnetic compatibility
- A specially cushioned design absorbs vibrations to protect the 3.5-inch HDD for maximum reliability

Optimized Integration

- Simple service-friendly design
- Quick installation, easy expansion and maintenance
- Long life cycle support for protect continuity to secure investment

Specifications

Chassis Construction

COM1~COM4

Construction
Rugged and Compact of Advanced Embedded Wall-

Mountable PC system chassis

• Material SECC

Front External Access of Universal I/O ports

■ Audio Line_In 1 x Front-access Line_In port by a 3.5 Ø audio jack

connecto

Audio Line_Out
1 x Front-access Line_out port by a 3.5 Ø audio jack connector

connector

■ Audio Mic_In 1 x Front-access Mic_In port by a 3.5 Ø audio jack connector

PS/2
1 x Front-access Mini DIN mouse connector
1 x Front-access Mini DIN keyboard connector

4 x Front-access Mini Din Reyboard connector

connectors as COM1~COM4

Printer
1 x Front-access Printer port by a DB-25 female

connector

• **GPIO** 1 x Front-access GPIO port by a DB-15 female

connector

• VGA 1 x Front-access VGA port by a DB-15 female

connector

• **FELAN** 1 x Front-access Fast Ethernet port by a RJ-45

connector

• **USB** 4 x Front-access USB ports by 2 pairs of double-stack

of Mini DIN connectors

Giga LAN
1 x Front-access Gigabit Ethernet port by a RJ-45

connector

External Access of Universal Display I/O

Front



Rear



Rear External Access of Universal Display I/O ports

LVDS1 1 x Rear-access LVDS Port by DB-26 female Connector LVDS2 1 x Rear-access LVDS Port by DB-26 female Connector DVI 1 x Rear-access DVI Port by a DB-24 female connector

Note: The EBPC-5250L series models do not support Rear External Access of Universal Display I/O ports

System SBC board Support

Support and Compatible with Advantech 5.25-inch Compatible SBC

Biscuit Boards of PCM-9582F, PCM-9587F,

PCM-9584F

Drive Bay

 HDD Bay 1 x 3.5-inch drive space

 Optical Drive Bay Optional support of one slim drive bay space CF Socket Optional support of 1 x CompactFlash Socket from system SBC board

Cooling System

System FAN One 60 x 60 x 20 mm of DC brushless fan

 Venting Hole Venting holes located on front, left, and rear back for

air flow convection

Power Supply

 Output Rating AC 180W, ATX

• Input Voltage (Typical) AC 100 ~ 240 V, 4-2 A, 50 ~ 60 Hz Output Voltage DC 3.3 V @ 16.8 A, DC 5 V @ 12.0 A, DC 12 V @ 10.0 A, DC 5 VSB @ 2.0 A,

DC -12 V @ 0.8 A

Power Input Connector Front access of 2-pole Phoenix type of DC power input

connector

Power ON/OFF One Power On/Off switch, ATX supported

Mechanical Specification

Mounting Supports table mount and wallmount

Built-in wallmount kit included

 System Indicator 1*Power on LED (Green)

1*HDD LED (Red)

- Weight Net 2.5 kg

Dimension 248 mm (Width) x 118 mm (Height) x 298 mm (Depth)

Environmental Specification

Operation Temperature Temperature: 0° C ~ 45° C

Relative Humidity Humidity: 0% ~ 95% (none-condesing) When EBPC-5250 series advanced Embedded PC **Vibration Loading During Operation** system chassis is equipped with Advantech 5.25"

Biscuit SBC board: 1Grms, IEC 60068-2-64, random,

5 ~ 500 Hz, 1 Oct./mm, 1hr/axis.

• Shock During Operation When EBPC-5250 series advanced Embedded PC

system chassis is equipped with Advantech 5.25" Biscuit SBC board: 20 G, IEC 60068-2-27

 EMC Certification Design to meet CE/FCC Class A **EMS Certification** Design to meet UL Certification

Ordering Information

EBPC, chassis kit for PCM-9582F and PCM-9387F EBPC-5250-82CE EBPC-5250L-82CE EBPC chassis kit, EBPC-5250-82CE without Universal

Display I/O ports

EBPC-5250-82SE EBPC-5250-82CE assembly with PCM-9582F-00A1E

SBC

EBPC-5250-84CE EBPC, chassis kit for PCM-9584

EBPC-5250L-84CE EBPC chassis kit, EBPC-5250-84CE without Universal

Display I/O ports

EBPC-5250-84SE EBPC-5250-84CE assembly with PCM-9584FG-00A1E

Note: The EBPC-5250L series models do not support Rear External Access of Universal Display I/O ports

Optional Items

CompactFlash Disk

96FMCFI-1G-IT-HA HAGIWARA 1 GB Industrial Grade CompactFlash Disk 96FMCFI-1G-ET-TR Transcend 1 GB Industrial Grade CompactFlash Disk 96FMCFI-1G-IT-SS SILICON 1 GB Industrial Grade CompactFlash Disk 96FMCFI-2G-IT-SS SILICON 2 GB Industrial Grade CompactFlash Disk 96FMCFI-2G-ET-TR Transcend 2 GB Industrial Grade CompactFlash Disk 96FMCFI-4G-ET-TR Transcend 4 GB Industrial Grade CompactFlash Disk

CPU

Intel uFCPGA478 CPU Celeron M 1.3 GHz / 512KB 96MPCM-1.3F4-5K4T

RH80536GC0332M

96MPPM-1.6F4-1M4T Intel uFCPGA478 CPU Pentium M 1.6 GHz / 1MB

RH80535GC0251M

96MPPM-1.8F4-2M4T Intel uFCPGA478 CPU Pentium M 1.8 GHz / 2MB

RH80536GC0332M

DDR SODIMM SDRAM

96SD-256M266NN-TR TRANSCEND 200-Pin DDR266 256MB (G) 9680000994 TRANSCEND 512 MB DDR333 SODIMM

64MB x 64MB 200-pin

96SD-1G333NN-TR TRANSCEND 200-pin SODIMM SDRAM DDR333 1 GB 96SD-1G400NN-TR TRANSCEND 200-pin SODIMM SDRAM DDR400 1 GB

DDR2 SODIMM SDRAM

96SD2-512M533NN-TR TRANSCEND 200-pin DDR2-533 512 MB 96SD2-1G533NN-TR TRANSCEND 200-pin DDR2-533 1 GB

2.5-inch IDE Hard Disk Drive

96ND40G-I-SG5K1 Seagate 40 GB IDE 2.5" HDD, 5400 RPM, ST94813A 96ND60G-I-SG5K Seagate 60 GB IDE 2.5" HDD, 5400 RPM, ST96812A 96ND80G-I-SG5K1 Seagate 80 GB IDE 2.5" HDD 5400 RPM, ST980815A

3.5-inch IDE Hard Disk Drive

96HD80G-I-WD7K1 Western Digital Hard drive 80 GB 3.5" IDE 7200RPM 96HD120G-I-WD7K Western Digital Hard drive 120 GB 3.5" IDE 7200RPM

