

EBPC-3500

Embedded Box PC chassis for 3.5" Biscuit SBC

PRELIMINARY



Features

- Built-in DC-to-DC power supply, accept DC 12V~24V power input source, ATX supported
- Allow one PCI-104 card or one MIO card expansion
- Anti-Vibration of one 2.5" HDD drive bay
- Easy installation of HDD and DRAM
- Two Dummy I/O Metal Plate for quick and convenient customized I/O extension
- Compact, Robust construction
- Simple and modularized service-friendly design

Introduction

EBPC-3500 series is a rugged and compact of advanced Embedded PC system chassis, and it is designed to suit for 3.5-inch Biscuit Embedded SBC boards. With an easy customized and changeable design of front metal I/O faceplate, that to made EBPC-3500 can equip with different models of Advantech's 3.5-inch Biscuit board.

The EBPC-3500 series advanced Embedded PC system chassis is default built-in a special design of universal I/O board that can carry all possible of common used I/O functional feature ports out to the chassis cutout from motherboard's onboard pin header. It also reserves a room space support the expansion by PC-104, PCI-104 or MIO interface card; in addition, two dummy I/O plates allows easy customization to get I/O port-cutouts by wiring the I/O interface pin-headers of PC-104, PCI-104 or MIO interface card to them.

The EBPC-3500 series advanced Embedded PC system chassis carries a special cushioned design on 2.5-inch hard disk drive bay that absorbs vibration to ensure maximum reliability under harsh conditions. With its compact dimensions that make the EBPC-3500 series Embedded PC chassis kit can be wall-mounted or applied in space-limited and harsh environment.

The EBPC-3500 series advanced Embedded PC system chassis allows for wide range power input of DC 12V~24V, and it also supports ATX which offers system integrations the flexibility and excellent power management for various embedded application environments.

Universal, Comprehensive and flexible I/O expansion feature

- Built-in universal features I/O that can carry all possible of common I/O functional feature ports out and access from chassis externally
- Easy changeable and customizable of front metal faceplate to suit for various of 3.5-inch biscuit SBC boards
- Reserving room space to expands the I/O by PC-104, PCI-104 or MIO interface card
- Dual dummy I/O plates allows customization for expanding additional I/O feature ports

Wide range of DC Power Input, ATX Supported

- The EBPC-3500 series advanced Embedded PC system chassis allows for a wide range power input of DC 12V~24V, and it also supports ATX which offers system integrators the flexibility and excellent power management for various embedded application environments.

Compact, Robust construction

- Robust, heavy-duty metal cast construction.
- Modularized design offers maximum space efficiency and well Electromagnetic Compatibility.
- A special cushioned design that absorbs vibration of 2.5-inch HDD to ensure maximum reliability.

Optimized Integration

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

Specifications

Chassis Construction

- **Construction** Rugged and Compact of Advanced Embedded Wall-Mountable PC system chassis
- **Material** SECC, with painting

Universal I/O ports

- **Parallel** 1 * rear-access LPT port by a DB-25 female connector
- **GPIO** 1 * rear-access GPIO port by a DB-15 female connector
- **COM** 1 * rear-access COM port by a DB-9 male connector
- **LAN** 1 * rear-access LAN port by a RJ-45 connector
- **USB** 2 * rear-access USB ports by a pair of double-stack of mini-DIN connectors
- **Audio Line_In** 1 * rear-access Line_In port by a 3.5 Ø audio jack connector
- **Audio Mic_In** 1 * rear-access Mic_In port by a 3.5 Ø audio jack connector
- **Audio Line_Out** 1 * rear-access Line_out port by a 3.5 Ø audio jack connector

Rear External Access of Universal I/O ports



System SBC board Support

- **Support and Compatible SBC** Support and Compatible with Advantech 3.5-inch Biscuit Boards of PCM-9380F, PCM-9386F (EBPC-3500-80CE, EBPC-3500-80SE), PCM-9381F, PCM-9387F (EBPC-3500-81CE, EBPC-3500-81SE), PCM-9375F (EBPC-3500-75CE, EBPC-3500-75SE), PCM-9377F (EBPC-3500-77CE, EBPC-3500-77SE)

Drive Bay

- **HDD Bay** 1*2.5-inch drive space
- **CF Socket** Optional support of 1*Compact Flash Socket from system SBC board

Cooling System

- **System FAN** 1*40mm x 40mm x 20mm of VAPO-Bearing fan
- **Venting Hole** Venting holes located on Top Cover, right/left side-plate and rear back for air flow convection

Power Supply

- **Power Source** DC Input 12 V_{DC} ~ 24 V_{DC},
- **Input Voltage (Typical)** 12 V_{DC} @ 4.5 A, 16 V_{DC} @ 3.4 A, 19 V_{DC} @ 2.9 A, 24 V_{DC} @ 2.3 A
- **Output Voltage** +5 V_{DC} @ 7 A, +12 V_{DC} @ 0.5 A, +5 VSB @ 1 A
- **Output Rating** 46 W
- **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** Support Table Mount and Wall Mount
Built-in 1*Wall Mount kit in product package
- **System Indicator** 1*Power on LED (Green)
1*HDD LED (Red)
- **Weight** Net 1Kg
- **Dimension** 230 mm (Width) x 70 mm (Height) x 175 mm (Depth)

Environmental Specification

- **Operation Temperature** Temperature: 0°C ~ 45°C
- **Relative Humidity** Humidity: 0% ~ 95% (none-condensing)
- **Vibration Loading During Operation** When EBPC-3500 series advanced Embedded PC system chassis is equipped with Advantech 3.5" Biscuit SBC board: 1Grms, IEC 60068-2-64, random, 5-500 Hz, 1 Oct./mm, 1hr/axis.
- **Shock During Operation** When EBPC-3500 series advanced Embedded PC system chassis is equipped with Advantech 3.5" Biscuit SBC board: I 20G, IEC 60068-2-27
- **EMC Certification** Design to meet CE/FCC Class A
- **EMS Certification** Design to meet UL Certification

Packing List

- 1 x EBPC-3500 Chassis Kit
- 1 x 2-P Phoenix to DC-Jack Power Cable (P/N: 1700001394)
- 1 x PS2 Keyboard/Mouse Cable (P/N: 1700060202)

Ordering Information

- **EBPC-3500-75CE** EBPC, chassis kit for PCM-9375F
- **EBPC-3500-75SE** EBPC-3500-75CE assembly with PCM-9375E-J0A1E
- **EBPC-3500-77CE** EBPC, chassis kit for PCM-9377F
- **EBPC-3500-77SE** EBPC-3500-77CE assembly with PCM-9377F-M0A1E
- **EBPC-3500-80CE** EBPC, chassis kit for PCM-9380F & PCM-9386F
- **EBPC-3500-80SE** EBPC-3500-80CE assembly with PCM-9380F-00A1E
- **EBPC-3500-81CE** EBPC, chassis kit for PCM-9381F & PCM-9387F
- **EBPC-3500-81SE** EBPC-3500-80CE assembly with PCM-9381F-00A1E

Optional Items

External AC-to-DC Adapter and Power Cable

- **1757000222** AC-to-DC Adapter DC19V/3.42A 65W, with Phoenix Power Plug, 0~45°C for Home and Office Use
- **1700001947** Power Cable 2-pin 180cm, USA type
- **1700001948** Power Cable 2-pin 180cm, Europe Type
- **1700001949** Power Cable 2-pin 180cm, UK Type

Embedded OS

- **2070000636** XPE SP2 OS Image and License for PCM-9380/1/6/7, English Version (600MB)

CompactFlash Disk

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

CPU

- **96MPCM-1.3F4-5K4T** Intel uFCPGA478 CPU Celeron M 1.3GHz/512K RH80536GC0332M
- **96MPPM-1.6F4-1M4T** Intel uFCPGA478 CPU Pentium M 1.6GHz/1M RH80535GC0251M
- **96MPPM-1.8F4-2M4T** Intel uFCPGA478 CPU Pentium M 1.8GHz/2M RH80536GC0332M

DDR SODIMM SDRAM

- **96SD-256M266NN-TR** TRANSCEND 200PIN SO-DDR266 256MB (G)
- **9680000994** PURCH 512MB DDR333 SODIMM 64M*64 200P
- **96SD-1G333NN-TR** TRANSCEND 200PIN SO-DIMM SDRAM DDR333 1GB
- **96SD-1G400NN-TR** TRANSCEND 200PIN SO-DIMM SDRAM DDR400 1GB

2.5-inch IDE Hard Disk Drive

- **96ND40G-I-FJ4K1** Fujitsu Hard drive 40G IDE 4200RPM RoHS
- **96ND60G-I-FJ4K1** Fujitsu Hard drive 60G IDE 4200RPM RoHS
- **96ND80G-I-FJ4K1** Fujitsu Hard drive 80G IDE 4200RPM RoHS
- **96ND100G-I-FJ4K** Fujitsu 100G IDE 2.5" 4200RPM HDD,MHV2100AT
- **96ND-120G-I-FJ4K** Fujitsu 120G IDE 2.5" 4200RPM HDD,MHV2120AT