ARK-7480

All-In-One, High Performance Embedded Box computer

NEW

RoHS COMPLIANT 2002/95/EC   Microsoft® Windows® Embedded   CE   FCC   LISTED c(UL)us E190081

Features

- Support Embedded Intel® Pentium®4/Celeron®D processor
- CRT, DVI, LVDS, display interface with Dual Display capability
- Anti-vibration to HDD and PC Board to ensure maximum reliability
- One side access for all external wiring connections, easy integration, and easy maintenance
- Supports wall mount in horizontal or vertical direction

Introduction

The ARK-7480 Embedded Box Computer is an All-In-One, powerful and robust unit. The high performance ARK-7480 series is powered by high performance embedded Intel Pentium4 or CeleronD processors up to 2.8 GHz. It supports DDR SDRAM up to 2 GB. The ARK-7480 offers three PCI vacancy slots for user expansion. The ARK-7480 Embedded Box Computer supports abundant I/O ports: six USB 2.0 ports, six COM ports, as well as DVI, LVDS and VGA display interface with a drive bay for accessing 3.5" HDD. An optional external storage expansion kit can be added for CDROM, Card Readers. It is ideally suitable for diversified embedded system applications requiring highest processor performance and high expandability, such as machine automation, and industrial plant and cabinet integration.

Six USB Ports, Six Serial Ports, and Dual LAN Port Capacity for intensive control and communication

- The ARK-7480 supports six USB 2.0 ports, enabling access to USB peripherals such as storage subsystems, security ID devices, card readers, bar code scanners, multifunction printers and scanners individually dedicated or shared among users via the network, making the best of USB device investments
- The ARK-7480 is equipped with dual fast Ethernet and a six serial ports, including one RS-232/422/485 serial port and five RS-232 serial ports that enable communication and control at the field level for measurement and operator control of diverse automations, such as Embedded Device Servers for storage, image printing, medical applications, as well as security and access control for POI/POS/Kiosk

Compact, Extremely Robust Construction

- Robust, heavy-duty metal cast construction; modularized design offers maximum space efficiency
- Rubber anti-vibration card-holder for PC expansion boards to ensure maximum reliability
- A special cushioned design that absorbs vibration of HD to ensure maximum realibility

Highly Optimized Integration

- Simple and modularized service-friendly design
- Quick installation, easy expansion and maintenance
- Systems are supplied to "Ready-to-Run"
- Long life cycle support for product continuity to secure investment

Specifications

Processor System

- **Processor Support** — Support Socket 478, Embedded Intel Celeron D and Pentium 4 up to 2.8 GHz
- **System chipset** — Intel 852 GME Graphics Memory Controller Hub (GMCH) Chipset / Intel ICH4 Chipset
- **BIOS** — 4 Mbit Flash BIOS, supports Plug&Play, APM 1.2
- **System memory** — Built-in 2 x 184-pin DIMM sockets, support DDR SDRAM up to 2 GB

Display

- **Chipset** — Integrated Graphics built-in Intel 852 GME GMCH chipset, utilizing Intel Extreme Graphics 2 technology
- **Display Memory** — Dynamic video memory allocation up to 64 MB
- **Display Interface** — CRT Interface / 36-bit LVDS interface / DVI Interface, compliant with DVI specification 1.0

Ethernet

- **Ethernet Controller** — Dual Intel 82551 ER 10/100BaseT Ethernet Controllers
- **Ethernet Interface** — Built-in Dual RJ45 ports as LAN1 and LAN2

Audio

- **Audio Controller** — Built-in Audio controller on Intel ICH4 Chipset Realtek® ALC202 AC97 Codecl / AC97 3D surround stereo sound, Dual 2.2 W Amplifier
- **Audio interface** — Built-in Line-in and Line-out connectors

Others

- **Watchdog timer** — 255 levels timer interval, setup by software
- **Keyboard/Mouse** — Two mini-DIN connectors support PS/2 keyboard and PS/2 mouse

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- **Serial Ports** Support 6 x serial ports:
  COM1, COM3, COM4, COM5 and CM6: RS-232
  COM2: RS-232/422/485 by internal Jumper selection
- **Parallel Port** 1 x Parallel port
- **USB 2.0 Ports** Support 6 x USB 2.0 Ports for model ARK-7480-100A1
  Support 4 x USB 2.0 Ports for model ARK-7480-200A1

Expansion

- **Expansion Slots** 3 x PCI Expansion Slots
  1 x miniPCI Slot, access from the bottom
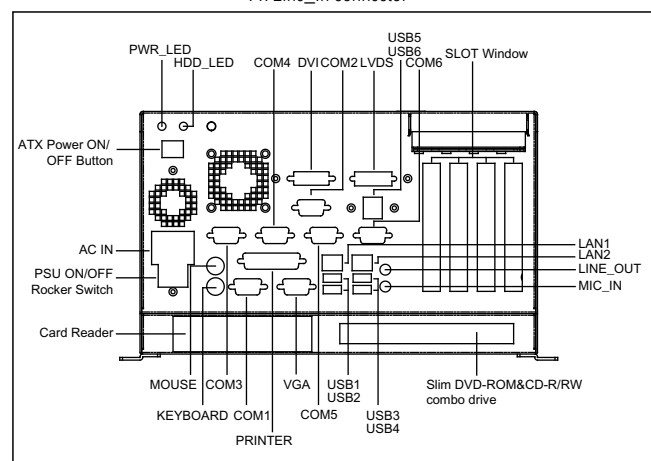 PCI Rev. 2.2 Compliant

Storage Dive Bay

- **SSD** Support 1 x CompactFlash socket for Type I/II
  CompactFlash disk
- **HDD drive** Support 1 x drive bay space for 3.5" HDD

Extended Dive Bay (only for Model ARK-7480-200A1)

- **Card Reader Drive** Built-in 1 x USB 2.0 interface of Card Reader drive,
  support SecureDigital Card, MultiMedia Card, Memory
  Stick(Pro), 3.3 V SmartMedia Card, xD-Picture Card,
  Type I/II CompactFlash Card, and IBM Microdrive
- **Optical Drive** Built in one Slim DVD-ROM&CD-R/RW of 8 D/
  24 W/24 E/24 R Combo Drive

Front Panel External I/O

- **One ATX Power On/Off Buttonl**
  1 x power supply rocker on/off switch
  1 x PS/2 Mouse connector
  1 x PS/2 Keyboard connector
  5 x RS-232 serial port as COM1, COM3, COM4, COM5
  and COM6 connector
  1 x RS-232/422/485 serial port connectors as COM2
  connector
  6 x USB 2.0 connectors as USB1~USB6
  2 x RJ-45 Connectors as LAN1 and LAN2
  1 x Printer port connector
  1 x VGA/CRT port Connector
  1 x DVI port connector
  1 x LVDS port connector
  1 x Speak_Out connector
  1 x Line_In connector

Internal AC-to-DC ATX Power supply unit

- **Output Rating** AC 250 W, ATX
- **Input Voltage** 110 VAC ~ 240 VAC
- **Power switch** One On/Off Rocker Switch

Mechanical

- **Construction** Aluminum-Metal housing
- **Mounting** Support Table mount and Wall-mount
- **Dimension** For Model ARK-7480-100A1:
  295 mm x 150 mm 260 mml
  For Model ARK-7480-200A1:
  295 mm x 180 mm x 260 mm
- **Weight** For Model ARK-7480-100A1:

Environmental Specifications

- **Operation Temperature** 0 ~ 45° C
- **Relative humidity** 95% @ 40° C (none-condensing)
- **Vibration Loading** 1 Grms, IEC 60068-2-64, random, 5 ~ 500 Hz,
  During Operation 10 Oct./min., 1hr/axis.
- **Shock During Operation** 10 G, IEC 60068-2-27, half sine, 11ms duration
- **Safety** UL, CB
- **EMC** CE/FCC

Packing List

- **1 x ARK-7480 Unit1 x Table Mounting Kit** (P/N: 1960003950 x 2 pieces)
- **1 x Wall Mounting Kit** (P/N: 1960003949 x 2 pieces)
- **1 x Utility CD**
- **1 x Table Mounting Kit** (P/N: 1960003950 x 2 pieces)
- **1 x IDE HDD Cable, 40/40/40, 60cm** (P/N: 1700001757)

Ordering Information

- **ARK-7480-100A1E** Socket 478, Pentium4 based Embedded Box Computer,
  with LVDS, DVI, 6 x USB 2.0, 1xRS-232, 5 x RS-232/
  422/485, Dual Fast Ethernet, Audio, and 3 PCI slots
- **ARK-7480-200A1E** Socket 478, Pentium4 based Embedded Box Computer,
  ARK-7480-100A1 with Extended Drive Bay

Optional Items

- **2070000635** XPE SP2 OS Image and License for ARK-7480, English
  Version (440 MB)

Dimensions

Unit: mm