ARK-3382

Four LAN Fanless Embedded Box Computer

Features

- Four 10/100 Base-T Fast Ethernet ports, with lan bypass support on LAN 2 and LAN 3
- Built-in Intel® Ultra Low Voltage Celeron® or Intel Pentium® M Low Voltage processor
- Sealed fanless construction
- Anti-Vibration to ensure maximum reliability
- Easy Integration, easy maintenance, few parts
- Wide range of power source

Microsoft® Windows® Embedded   CE   FCC   LISTED c UL us E190881

Introduction

The ARK-3382 fanless Embedded Box Computer combines four LAN port interfaces and other industrial features into a rugged, compact metal chassis for Gigabit network intensive based applications. The fanless operation provides noise protection when deployed in external environments. The ARK-3382 fanless Embedded Box Controller is ideally suited for embedded PC applications. All electronics are protected in a compact sealed housing for convenient deployment where space and environment are critical.

Multiple LAN Port Capacity

The multiple LAN port interfaces consists of four Fast Ethernet networking ports, in addition to the LAN bypass function to prevent network problems when the platform shuts down, designed for security gateway applications.

Highly Robust Casting Construction

- Fanless operation in aluminum sealed construction
- A special cushioned design that absorbs vibration to ensure maximum reliability under harsh conditions

Highly Compact Size

- With its maximum mounting height of 69 mm, the ARK-3382 can be used under space critical installation conditions

Optimized Integration

- Few parts, easy integration, easy maintenance to reduce investment
- Systems are supplied "Ready-to-Run"
- Long life cycle support for product continuity

Wide Range of Power Sources

- Wide range of DC 12 V ~ 24 V power source offers flexibility of power input for various automation environments.

High Computing Performance

Scalable Low Voltage and Ultra Low Voltage Pentium M class processor systems with Ethernet networking capability which gives high computing performance

Specifications

Processor Core Logic System

- **CPU** — Intel Ultra low voltage Celeron or Intel Pentium M low voltage processor
  ULV Celeron M 600 MHz (ARK-3382-1M0A1)
  LV Pentium M 1.1 GHz (ARK-3382-1S1A1)
  LV Pentium M 1.4 GHz (ARK-3382-1S4A1)

- **System Chipset** — Intel® 852GM GMCH or Intel 855GME chipset
  Intel® ICH4 chipset
  400 MHz FSB
- **BIOS** — 4 Mbit Flash BIOS, supports Plug & Play, APM 1.2
- **System Memory** — 1 x 200-pin SO-DIMM sockets
  1 x 200-pin DDR S)-DIMM, Max. 1 G

Display

- **Chipset** — Integrated graphics with built-in Intel 852GM GMCH, or Intel 855GME GMCH, utilizing Intel Graphics 2 technology
- **Display Memory** — Dynamic video memory allocation up to 32 MB
- **Display Interface** — CRT Interface
  36-bit LVDS interface

Ethernet

- **Ethernet Controller** — 1 x Intel 82551ER 10/100Base-Tx Fast Ethernet controller as LAN1
  3 x Realtek® RTL8139DL 10/100Base-Tx Ethernet controller as LAN2, LAN 3 and LAN4
  LAN Bypass support on LAN 2 and 3

Other

- **Watchdog Timer** — 255 levels timer interval, setup by software
- **Keyboard/Mouse** — Supports PS/2 mouse and PS/2 keyboard
- **USB** — USB 2.0 compliant

Software Options

Windows XP Embedded, Windows 2000/XP

Storage

Supports drive bay space for 2.5" HDD

Supports CompactFlash socket for type I/II CompactFlash disk

Front Panel External I/O

- 1 x LVDS Port by D-Sub Connector
- 1 x Backlight On/Off Control Connector
- 1 x Power On/Off Button

Front Panel External I/O Mechanical Layout/Drawing
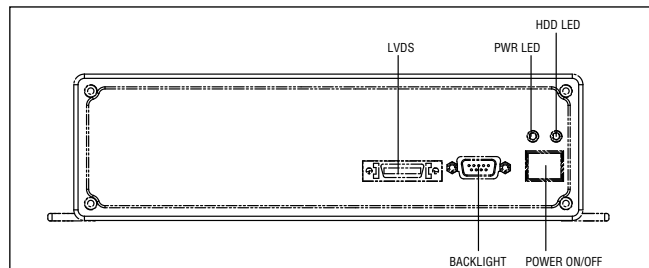
Mechanical

- **Construction** — Aluminum housing
- **Mounting** — Din-Rail mounting / Desk/wall-mounting
- **Dimensions (W x H x D)** 264.5 mm x 69.2 mm x 137.2 5 mm (10.41" x 2.72" x 5.4")
- **Weight** — 2 kg

Power Supply

- **Output Rating** — 46 W
- **Input Voltage** — 12 VDC ~ 24 VDC, Typical 12 VDC @ 4.5 A, 16 VDC @ 3.4 A, 19 VDC @ 2.9 A, 24 VDC @ 2.3 A

Environment Specifications

- **OperatingTemperature** When system is equipped with Industrial Grade CompactFlash disk only -20 ~ 60° C. When system is equipped with 2.5-inch hard disk 0 ~ 45° C
- **Relative Humidity** 95 % @ 40 °C (non-condensing)
- **Vibration Loading During Operation** When system is equipped with CompactFlash disk only: 5 Grms, IEC 60068-2-64, random, 5 ~ 500 Hz, 1 Oct./min, 1 hr/axis. When system is equipped with 2.5-inch hard disk: 1 Grms, IEC 60068-2-64, random, 5 ~ 500 Hz, 1 Oct./min, 1 hr/axis.
- **Shock During Operation** When system is equipped with CompactFlash disk only : 50 G, IEC 60068-2-27, half sine, 11 ms duration. When system is equipped with hard disk : 20 G, IEC 60068-2-27, half sine, 11 ms duration
- **EMC Approved** — CE, FCC
- **Safety Approved** — UL

Rear Panel External I/O

- 1 x RS-232 Series Port as COM1
- 1 x Serial Port Supports RS-232/422/485 interface as COM2 (Note: The default setting of COM2 is RS-232. The RS-422/485 mode of COM2 can be support via replacing the internal cable and adjust the jumper inside of system)
- 4 x RJ45 Port: Supports Four Fast Ethernet Connectors
- 1 x PS/2 Connector
- 1 x Reset Button
- 1 x VGA/CRT Connector
- 1 x USB 2.0 Connector
- 1 x Phoenix Type Power Input Connector

Rear Panel External I/O Layout/Drawing
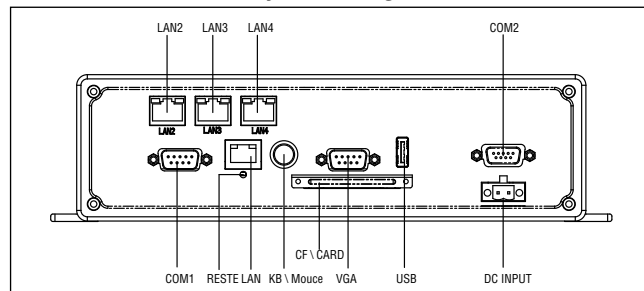
Packing list

- 1 x ARK-3382 Unit
- 1 x DIN-Rail Mounting Kit
- 1 x PS2 Keyboard/Mouse Cable (P/N: 1700060202)
- 1 x Utility CD
- 1 x Flat Cable support RS-485/RS-422 mode for COM2 serial port (P/N: 1700001967)
- 1 x 2-P Phoenix to DC-Jack power cable (P/N: 1700001394)

Ordering Information

- **ARK-3382-1M0A1** ULV Celeron M 600 MHz Embedded Box Computer, with VGA/LVDS, Four 10/100Baset Fast Ethernet
- **ARK-3382-1S1A1** LV Pentium M 1.1 GHz Embedded Box Computer, with VGA/LVDS, Four 10/100Baset Fast Ethernet
- **ARK-3382-1S4A1** LV Pentium M 1.4 GHz, Embedded Box Computer, with VGA/LVDS, Four 10/100Baset Fast Ethernet

Optional Items

- **1757000222** AC-to-DC Adapter DC19 V/3.42 A 65 W, with Phoenix Power Plug, 0° C ~ 45° C for Home and Office Use
- **1700001947** Power cable 2-pin 180 cm, USA for ARK-338X
- **1700001948** Power cable 2-pin 180 cm, Europe for ARK-338X
- **1700001949** Power cable 2-pin 180 cm, UK for ARK-338X
- **2070000521** XPE SP1 OS Image and License for ARK-3380/1/2/9, English Version (440 MB)
- **2070000636** XPE SP2 OS Image and License for ARK-3380/1/2/9, English Version (600 MB)
- **2070000574** XPE SP1 OS Image and License for ARK-3380/1/2/9, Traditional Chinese Version (477 MB)
- **2070000637** XPE SP2 OS Image and License for ARK-3380/1/2/9, Japanese Version (600 MB)

Dimensions

Unit: mm