ARK-4170

Modular and Stackable system, Intel® Celeron® 400 MHz processor, -40 ~ +80° C, Fanless, Embedded Box Computer

NEW

Features

- Intel® Celeron® 400MHz
- Two serial ports and two USB 1.1 ports
- VGA, LAN, LPT and KB/MS ports
- Embedded 1 GB onboard Flash and 512 MB Industrial DDR SDRAM
- XP Embedded solution
- Ultra small size, robust construction with fanless operation
- Modularized and Stackable design
- Dust and fungus resistant
- Customization service

Introduction

Advantech's ARK stackable System PC/104-base box computers feature industrial grade components that have passed extra strict testing and quality assurance for higher reliability and longer operating life. Many industrial applications demand high shock/vibration resistance and an extended range of temperature endurance for computers that must operate in inhospitable and remote environments. The ARK Stackable System combine all these crucial capacities in space efficient, modular aluminum enclosures. Advantech's stackable enclosures are the most versatile and rugged solution on the market today.

ARK-4170 is an all-in-one industrial computer with Intel Celeron 400 MHz processor, supporting up to two USB 1.1 ports, two RS-232 connectors, LAN and VGA functions. The ARK stackable series is ultra compact and suitable for a great variety of critical applications. It offers superior resistance against harsh environments that generate dust and moisture.

Specifications

Processor Core Logic System

- CPU   Embedded Intel Celeron 400MHz
- System Chipset   VIA Twister + VT82C686B
- BIOS   Award 256KB Flash BIOS
- System Memory   1 x 200-pin SODIMM Socket supports DDR SDRAM up to 512 MB

Display

- VIA VT8606
- Supports CRT Display with external VGA connector
- Supports 2-channel 36-bit LVDS LCD display (internal pinhead)

Ethernet

- Ethernet Controller   Intel 82551ER 10/100 Base-T Ethernet Controller

Serial ports

- USB Interface   2 x USB 1.1 ports
- COM Interface   2 x RS-232 ports

Other

- WatchDog Timer   1.6-second interval watchdog timer, set up by software
- Keyboard/Mouse   PS/2 mouse and PS/2 keyboard

Software Support

- Embedded Windows CE 5.0, Windows XP embedded

Environmental

- **Operation Temperature**   -40° C ~ 80° C
- **Vibration During Operation**   7 Grms, 60068-2-64, random, 5 ~ 500 Hz, 1 Oct./min, 1 hr/axis.
- **Shock During Operation**   70 G, IEC 60068-2-27, half sine, 11ms duration
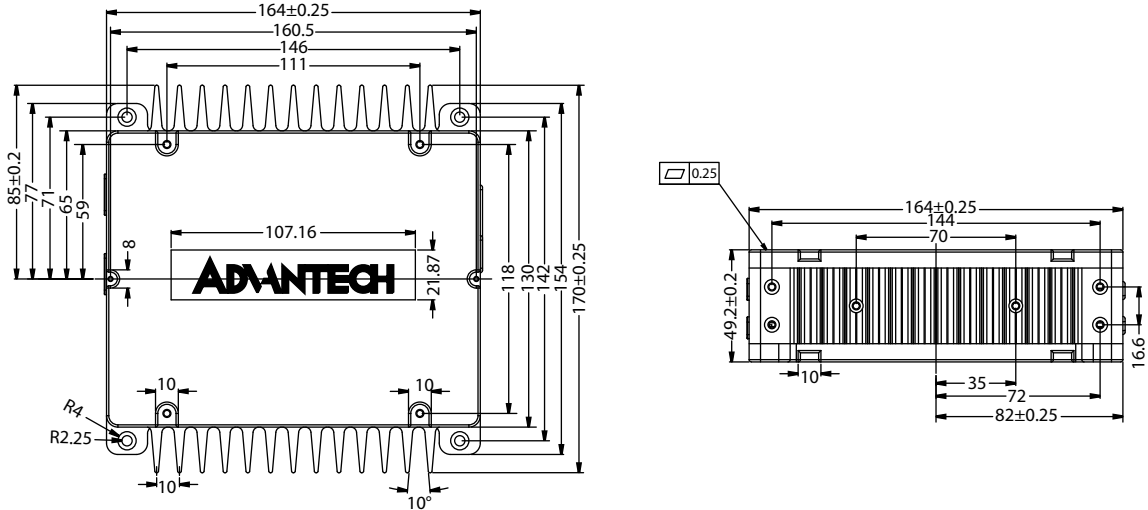- **Certification**   CE, FCC, UL

Mechanical

- **Construction**   Aluminum housing
- **Mounting**   Wall-mounting
- **Dimension**   164 mm x 170 mm x 49.2 mm
- **Weight**   2 kg

Power

- **Power Supply Voltage**   AT/ATX; +5 V ±5%, +12 V ±5%(Optional) (5V only, 12V optional for PC104 add on card and LCD inverter)
- **Power Consumption Typical**   2.43 A @ +5 V (ULV Celeron 400 MHz CPU)
  0.02 A @ +12 V (ULV Celeron 400 MHz CPU)
  Max: 2.47 A @ +5 V (ULV Celeron 400 MHz CPU)
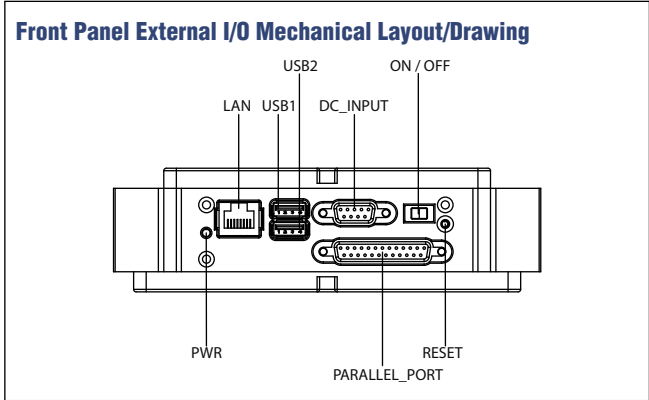 0.06 A @ +12 V (ULV Celeron 400 MHz CPU)
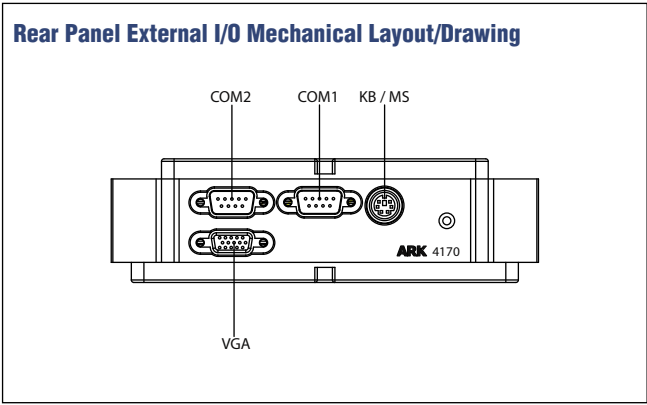
Dimensions

Unit: mm

Front Panel External I/O

- 1 x RJ-45 Ethernet port
- 2 x USB 1.1 connector
- 1 x DC input connector
- 1 x Parallel port
- 1 x Power On/Off switch
- 1 x Reset Button
- 1 x Power LED light

Front Panel External I/O Mechanical Layout/Drawing

Rear Panel External I/O

- 2 x RS-232 Serial Ports
- 1 x VGA/CRT Connector
- 1 x PS/2 Connector for PS/2 Keyboard and Mouse

Rear Panel External I/O Mechanical Layout/Drawing

Packing List

- 1 x ARK-4170 Unit
- 1 x PS/2 Keyboard/Mouse Cable
- 1 x AT power cable
- 1 x Utility CD
- 1 x Startup Guide
- 1 x Power Adapter

Ordering Information

Part No.	CPU	CRT	10/100	USB1.1	RS-232	LPT	KB/MS	Audio	Onboard Flash	Memory	Operation Temp.	Embedded OS
ARK-4170Y-AJ0A1E	Intel Celeron 400 MHz	Yes	1	2	2	Yes	Yes	--	Industrial grade 1 GB	Industrial grade 512 MB	-40 ~ 80° C	XP Embedded
ARK-4170Y-BJ0A1E	Intel Celeron 400 MHz	Yes	1	2	2	Yes	Yes	--	Industrial grade 128 MB	Industrial grade 256 MB	-40 ~ 80° C	Windows CE