ARK-3389

Intel[®] Pentium[®] M **Fanless Embedded Box Computer**



Features

- Built-in Ultra Low Voltage Intel® Celeron® or Low Voltage Intel Pentium® M processor
- Sealed construction with fanless operation
- Anti-Vibration to ensure maximum reliability
- Easy integration, easy maintenance, few parts, and wide range of power source



Introduction

The ARK-3389 fanless Embedded Box Computer is the ideal application ready system platform solution. All electronics are protected in a robust, compact sealed housing for embedding into a housing, or as a stand-alone application, where space is critical and the environment is harsh.

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-3380 can be used under space critical installation conditions

Highly Scalable Performance with Low Power Consumption

· Pentium M class processors bring high computing performance with low power consumption

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.

ARK-BTOS Service

The ARK-3389 can be configured with the Advantech ARK-MIO Application Kit and Advantech certificated peripherals, in cooperation with the Advantech ARK-BTOS Service to suit diverse application fields.

ARK-DTOS Service

Distinctive customized system design and hardware expansions can be implemented project by project using Advantech ARK-DTOS service.

Specifications

Processor Core Logic System

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- CPU	Intel uFCBGA 479-pin of Ultra Low Voltage Celeron or
	Intel Pentium M Low Voltage Processor
	ULV Celeron M 600 MHz (ARK-3389-1M0A1)
	LV Pentium M 1.1 GHz (ARK-3389-1S1A1)
	LV Pentium M 1.4 GHz (ARK-3389-1S4A1)
 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 SODIMM sockets,
	1 x DDR 200-pin SODIMM, Max. 1 G
Display	
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Ethernet

 Ethernet Controller Intel 82551ER 10/100BaseT Ethernet Controller

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

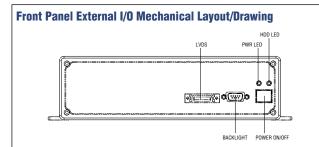
Integrated graphics built-in Intel 852GM GMCH, or unipset Intel 855GME GMCH, utilizing Intel Extreme Graphics 2 technology Display Memory Dynamic Video Memory Allocation up to 32 MB **Display Interface CRT** Interface 36-bit LVDS interface

ARK-3389

(P/N: 1700060202)

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



Mechanical

- Construction Aluminum housing Mounting Din-Rail mounting
- Desk/wall-mounting Dimensions (W x H x D) 264.5 x 69.2 x 137.25 mm

2 kg

46 W

7 A @ 125 V

- (10.41" x 2.72" x 5.4")
- Weight

Power Supply

- Output Rating
- Fuse Rating
- 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 to 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,

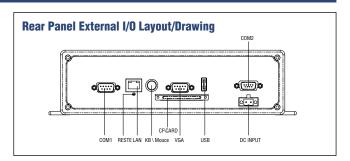
- 1 Oct./min, 1 hr/axis.
- Shock During Operation When system is equipped with CompactFlash disk only: 50 G, IEC 60068-2-27, half sine, 11 ms duration When system is equipped with hard disk : 20 G, IEC 60068-2-27, half sine, 11 ms duration CE, FCC
- EMC Approved
- Safety Approved

Rear Panel External I/O

1 x Serial Port: Supports RS-232 Interface as COM1

UL

- 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 supported via replacing the internal cable and adjusting the jumper inside of system)
- 1 x RJ45 Port: Support Ethernet Connection
- 1 x PS/2 Connector: Supports PS/2 Keyboard and PS/2 Mouse
- I x Reset Button
- 1 x VGA/CRT Connector
- 1 x USB 2.0 Connector
- 1 x Phoenix Type of Power Input Connector



Packing list

- 1 x ARK-3389 Unit
- 1 x DIN-Rail Mounting Kit
- 1 x PS2 Keyboard/Mouse Cable
- 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-3389-1M0A1E ULV Celeron M 600 MHz Embedded Box Computer. with VGA/LVDS, Fast Ethernet, 1 x RS-232,
- 1 x RS-232/422/485 LV Pentium M 1.1 GHz Embedded Box Computer, with ARK-3389-1S1A1E VGA/LVDS. Fast Ethernet. 1 x RS-232. 1 x RS-232/422/485
- ARK-3389-1S4A1E LV Pentium M 1.4 GHz, Embedded Box Computer, with VGA/LVDS, Fast Ethernet, 1 x RS-232, 1 x RS-232/422/485

Optional Items

- 1757000222 AC-to-DC Adapter, DC19 V/3.42 A 65 W, with Phoenix Power Plug, 0 $\stackrel{\scriptstyle \cdot}{\sim}$ 45° C for Home and Office Use
- 1700001947 Power cable 2P 180 cm, USA for ARK-338X
- 1700001948 Power cable 2P 180 cm, Europe for ARK-338X Power cable 2P 180 cm, UK for ARK-338X
- 1700001949

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- 2070000521 XPE SP1 OS Image and License for ARK-3380/1/2/9, English Version (440 MB)
- XPE SP2 OS Image and License for ARK-3380/1/2/9, 207000636 English Version (600 MB)
 - XPE SP1 OS Image and License for ARK-3380/1/2/9, Traditional Chinese Version(477 MB) XPE SP2 OS Image and License for ARK-3380/1/2/9,
- 207000637 Japanese Version (600 MB)
- **Dimensions** Unit: mm (inch)