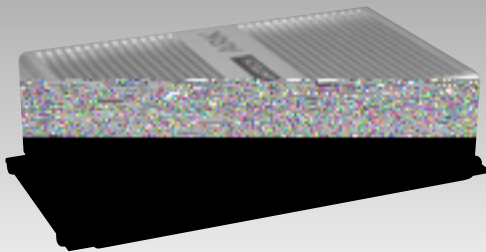


# ARK-3383

## Seven USB 2.0, Four Serial and Dual LAN Fanless Embedded Box Computer

**NEW**



### Features

- Seven built-in USB 2.0 ports and four serial ports, enable comprehensive communication and connectivity capacity
- Built-in Ultra Low Voltage or Low Voltage Intel® Celeron®/Intel® Pentium® M processor
- Sealed construction with fanless operation, low power consumption
- Accepts wide range of DC power input from DC 12 V ~ 24 V, ATX supported
- Anti-vibration to ensure maximum reliability
- Easy integration, easy maintenance, few parts

### Introduction

The ARK-3383 fanless Embedded Box Computer combines seven USB 2.0 ports, four 4 serial ports and dual fast Ethernet as well as other industrial features into a rugged, compact Aluminum chassis for intensive control and communication based applications. The fanless operation provides noise protection for the platform to be deployed in external environments. The ARK-3383 Embedded Box Computer is ideally suited for diversified embedded applications, all electronics are protected in a compact sealed housing for embedded and standalone applications, where space and environmental conditions are critical:

### Specifications

#### Processor Core Logic System

<b>CPU</b>	Intel Ultra Low Voltage or Low Voltage Pentium M or Celeron M Processors: ULV Celeron M 600 MHz (ARK-3383-1M0A1) LV Pentium M 1.1 GHz (ARK-3383-1S1A1) LV Pentium M 1.4 GHz (ARK-3383-1S4A1)
<b>System Chipset</b>	Intel 852GM GMCH or Intel 855GME chipset Intel ICH4 chipset, 400 MHz FSB
<b>BIOS</b>	4 Mbit Flash BIOS, supports Plug & Play, APM 1.2
<b>System Memory</b>	One 200-pin SO-DIMM socket

#### Display

<b>Chipset</b>	Integrated graphics built-in Intel 852GM or 855GME GMCH, utilizing Intel Extreme Graphics2 technology
<b>Display Memory</b>	Dynamic video memory allocation up to 32 MB
<b>Display Interface</b>	CRT Interface 36-bit LVDS interface, optional support up to 48-bit

#### Ethernet

<b>Ethernet Controller</b>	Two Intel 82551ER 10/100BaseT Ethernet controllers
----------------------------	--

#### USB

<b>USB Controller</b>	Integrated USB 2.0 controller on built-in Intel ICH4 chipset supports USB1-USB3 One NEC uD720101 PCI USB 2.0 controller supports USB4-USB 7
-----------------------	--

#### Serial Port

<b>Serial Interface</b>	Built-in Winbond 83627HF Super I/O controller COM1-COM2 Built-in SMSC SCH3114 LPC Serial Ports Controller Supports COM3-COM4
-------------------------	---

#### Other

<b>Watchdog Timer</b>	255 level timer interval, setup by software
<b>Keyboard/Mouse</b>	Supports PS/2 Mouse and PS/2 Keyboard

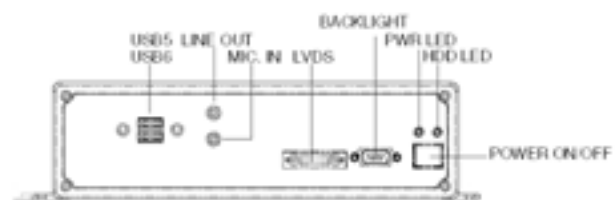
#### Storage

- Supports Single 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
- 2 x USB 2.0 Connectors

#### Front Panel External I/O Mechanical Layout/Drawing



## Rear Panel External I/O

- One Full Functional RS-232 Serial Ports as COM1
- Three Serial Ports Support RS-232/422/485 Interfaces as COM 2, COM3 and COM4

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

- 2 x RJ45 Ports: Supports Dual Fast Ethernet Connection

- 5 x USB 2.0 Connectors

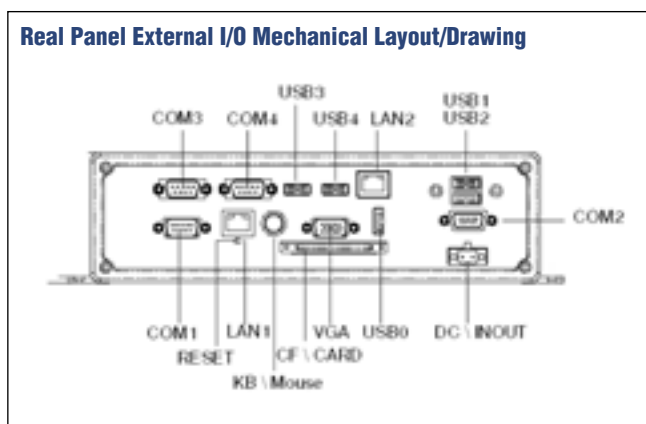
- 1 x PS/2 Connector

- 1 x Reset Button

- 1 x VGA/CRT Connector

- 1 x Phoenix Type Power Input Connector

Real 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 x 69.2 x 137.25 mm (10.41" x 2.72" x 5.4")
- Weight** 2 KG

## Power Supply

- Output Rating** 46 W
- Fuse Rating** 7 A @ 125 V
- Input Voltage** 12 VDC ~ DC 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

- Operating Temperature** When system is equipped with Industrial Grade of Compact Flash Disk only is -20 °C ~ 60 °C  
When system is equipped with HDD is 0 °C ~ 45 °C
- Relative Humidity** 95% @ 40 °C (non-condensing)
- Vibration Loading** When system is equipped with Compact Flash Disk
- Duration Operation** only: 5Grms, IEC 60068-2-64, random, 5 ~ 500 Hz, 10Oct./min, 1hr/axis  
When system is equipped with 2.5-inch hard disk: 1Grms, IEC 60068-2-64, random, 5 ~ 500 Hz, 10Oct./min, 1hr/axis
- Shock During Operation** When system is equipped with CompactFlash Disk only: 50G, IEC 60068-2-27, half-sine, 11ms duration  
When system is equipped with hard disk: 20 G, IEC 60068-2-27, half-sine, 11 ms duration

## Shock

When system is equipped with CompactFlash disk only: 50G, IEC 60068-2-27, half sine, 11ms duration

When system is equipped with hard disk: 20 G, IEC 60068-2-27, half sine, 11 ms duration

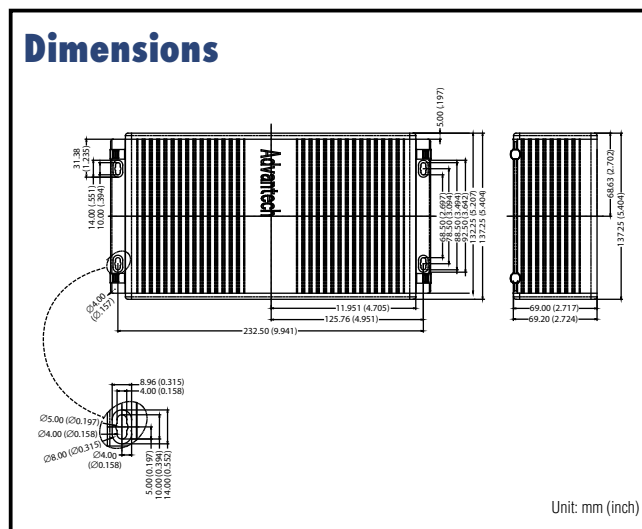
## EMC Approved Safety Approved

CE, FCC  
UL

## Ordering Information

- ARK-3383-1M0A1** ULV Celeron M 600 MHz Embedded Box Computer, with 1 x VGA, 1 x LVDS, 2 x LAN, 4 x COM, and 7 x USB 2.0
- ARK-3383-1S1A1** LV Pentium M 1.1GHz Embedded Box Computer, with 1 x VGA, 1 x LVDS, 2 x LAN, 4 x COM, and 7 x USB 2.0
- ARK-3383-1S4A1** LV Pentium M 1.4GHz Embedded Box Computer, with 1 x VGA, 1 x LVDS, 2 x LAN, 4 x COM, and 7 x USB 2.0

## Dimensions



Unit: mm (inch)

## Benefits

### Seven USB Ports and Four Serial Ports with Dual Fast Ethernet

ARK-3383 enables you to access USB peripherals such as storage subsystems, security ID devices, card readers, bar code scanners, multifunction printers and scanners individually dedicated or shared among users and configured via the network to maximize your USB device investment.

In addition to seven USB 2.0 ports, ARK-3383 is also equipped with dual fast Ethernet and four serial ports that make ARK-3383 an ideal solution to communicate with many field level devices and perform control operations for automation applications, such as embedded device servers for storage, image printing, medical applications and security & access control for POI/POS/Kiosks.

### Highly Scalable Performance with low power consumption

Scalable Low Voltage and Ultra Low Voltage of Pentium® M class processor system to bring high computing performance with low power consumption

### Highly Robust Casting Construction

Fanless operation in an Aluminum sealed construction

A special cushioned design that absorbs vibration ensures maximum reliability under harsh conditions

### Highly Compact Size

With its maximum mounting height of 69mm, the ARK-3383 can be used under space critical installation conditions

## Optimized Integration

Few parts, easy integration, and easy maintenance to reduce investment

Systems are supplied ready to run

Long life cycle support for product continuity

## Wide Range of DC Power Input, ATX Supported

The ARK-3383 allows for a wide range power input of DC 12 V ~ 24 V, and it also supports ATX which offers system integrators the flexibility and excellent power management for various embedded application environments.

## Applications

ARK-3383 is an ideal solution to communicate with many field level devices and perform control operations for automation applications.

Embedded Device Servers for Storage

Image Printing

Medical Applications

Security

POI/POS/KIOSK

## Application Examples

