

# ARK-3403

## Valuable Performance Solution with Intel® Atom™ D510, PCI/PCIe Expansion and Dual SATA HDDs for Embedded Controller Applications



### Features

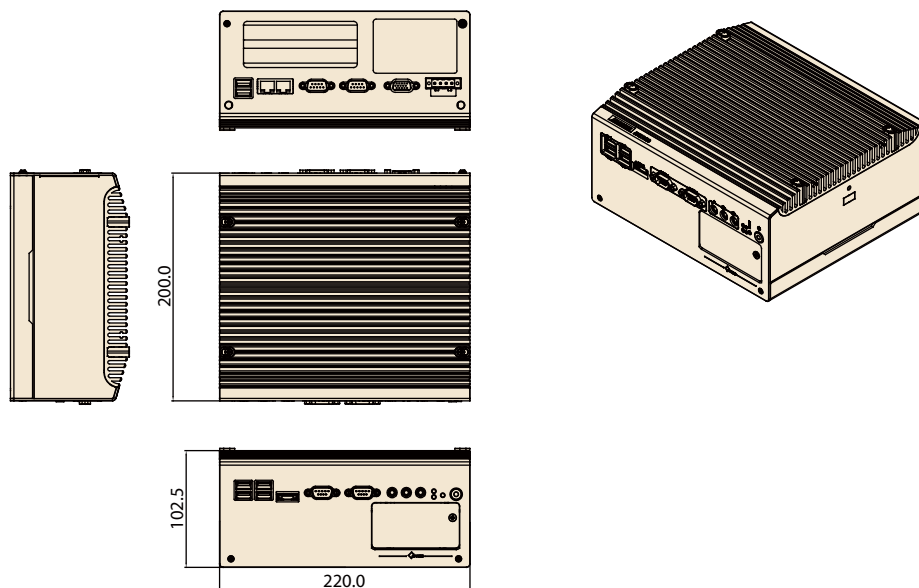
- Fanless, Intel® Atom™ D510 Dual Core 1.66 GHz Embedded Box IPC
- VGA and LVDS dual display and support for wide screen with high resolution
- Support 2 GbE, eSATA, 6 USB 2.0, audio and 4 COM ports
- Two internal 2.5" SATA HDD drive bays
- Two MiniPCIe & two PCI/PCIe x1 expansion interfaces for diverse applications
- Easy integration, easy maintenance, and wide input voltage range
- IP40

### Specifications

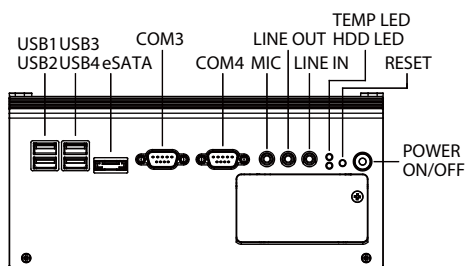
Processor System	CPU	Intel® Atom D510
	Max. speed	1.66 GHz
	System Chipset	Intel™ ICH8M Chipset
	BIOS	AMI™ 16Mbit, SPI
Memory	Technology	DDR2 667 MHz
	Max. Capacity	2 GB
	Socket	1 x 200-pin SODIMM
Graphics	Chipset	Intel 3.5 Gen Integrated Graphic Engine + GFX core
	Interface	CRT Interface 18-bit LVDS interface(Optional)
Ethernet	LAN 1	10/100/1000 Mbps Ethernet controller, support Wake On LAN
	LAN 2	10/100/1000 Mbps Ethernet controller, support Wake On LAN
Audio	Amplifier	-
	Interface	Line-out, Mic-in, Line-in
IO interface	Serial Interface	4 COM, 2 x RS-232 and 2 x RS-232/422/485 port w/ RS-485 auto flow control (2 optional RS-232 for cable type)
	USB Interface	6 x USB ports, (with optional 2 additional) Compliant with USB 2.0
Others	Digital I/O	Support 16 bit Digital IO (optional)
	Thermal alarm	Yellow LED lighting
	Watchdog timer	255 levels timer interval, setup by software
Expansion	ISA/PCI/PCIe Slot	1 Slot PCI and 1 Slot PCIe x1 (default); 2 Slots PCIe x1 (optional); 2 Slots PCI (optional)
	Mini PCI/Mini PCIe	2 x Mini PCIe
	HDD	Supports drive bay space for 2 x SATA 2.5" HDD
Storage	SSD	Supports CompactFlash socket for type I/II CompactFlash disk
Software support	Microsoft Windows	Win 7, XP Professional, XP Embedded, WinCE
	Linux	Fedora 11
Power requirement	Power Type	AT/ATX
	Power Input Voltage	12 VDC ~ 24 V <sub>DC</sub>
	Minimum Power Input	12 CV - 24 V <sub>DC</sub> @ 3.0 A - 1.5 A
	Power Adapter	AC to DC, DC19V/7.89A, 150W(Optional)
Power consumption	Typical	Typical 13W (CPU is INTEL ATOM D510 1.66 GHz and w/o Expansion)
	Max.	Max. 15W (CPU is INTEL ATOM D510 1.66 GHz and w/o Expansion)
Mechanical	Construction	Aluminum housing
	Mounting	Desk/wall-mounting
	Dimensions (W x H x D)	220 mm x 102.5 mm x 200 mm (8.66" x 4.04" x 7.87" )
	Weight	4 kg (8.8 lb)
Environment	Operating Temperature	With Industrial Grade CompactFlash disk: -20 ~ 55° C With 2.5-inch extended temperature hard disk -20 to 45° C, with air flow
	Storage Temperature	-40 ~ 85° C (-40 ~ 185°F)
	Relative Humidity	95% @ 40° C (non-condensing)
	Vibration Loading During Operation	With CompactFlash disk: 5 Grms, IEC 60068-2-64, random, 5 ~ 500 Hz, 1 Oct./min, 1 hr/axis. 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	With CompactFlash disk: 50 G, IEC 60068-2-27, half sine, 11 ms duration With hard disk: 20 G, IEC 60068-2-27, half sine, 11 ms duration
	EMC	CE/FCC Class A, CCC, BSMI
	Safety Certifications	UL, CCC, BSMI

## Dimensions

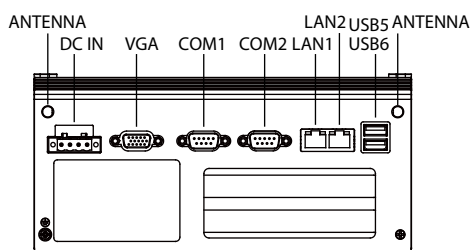
Unit: mm



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



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



## Packing List

Part Number	Description
-	1 x ARK-3440 Unit
1960014487T00C	2 x Desk/Wall mount plate
1652003234	1 x 4-pin Phoenix DC power connector
-	1 x Utility CD

## Ordering Information

Part Number	Description
ARK-3403F-D5A1E	Intel Atom D510 1.66 GHz Compact Embedded Box IPC, w/ VGA, 2 x GLAN, 6 x USB2.0, 4 x COM, 2 MiniPCIe, Audio

## Optional Items

Part Number	Description
1757002161	AC-to-DC Adapter, DC19 V/7.89A 150W, with Phoenix Power Plug, 0 ~ 40° C for Home and Office Use
1702002600	Power cable 3-pin 180 cm, USA type
1700004713	CABLE DVI-I to DVI and CRT
1700008871	COM Cable D-SUB 9P(M)/IDE#2 10P-2.0 20 cm
1700018187	LPT Cable 2 x 13p-2.0/D-SUB 25P(F) 20 cm for ARK-3440
1702002605	Power cable 3-Pin 180 cm, EU type
1702031801	Power cable 3-Pin 180 cm, UK type
1700017944	LVDS cable for ARK-3403

## Embedded OS

Part Number	Description
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