

# ARK-3403

## Low Power Intel® Atom™ D510/D525 with PCI/PCIe Expansion and Dual SATA HDDs

**NEW**



## Specifications

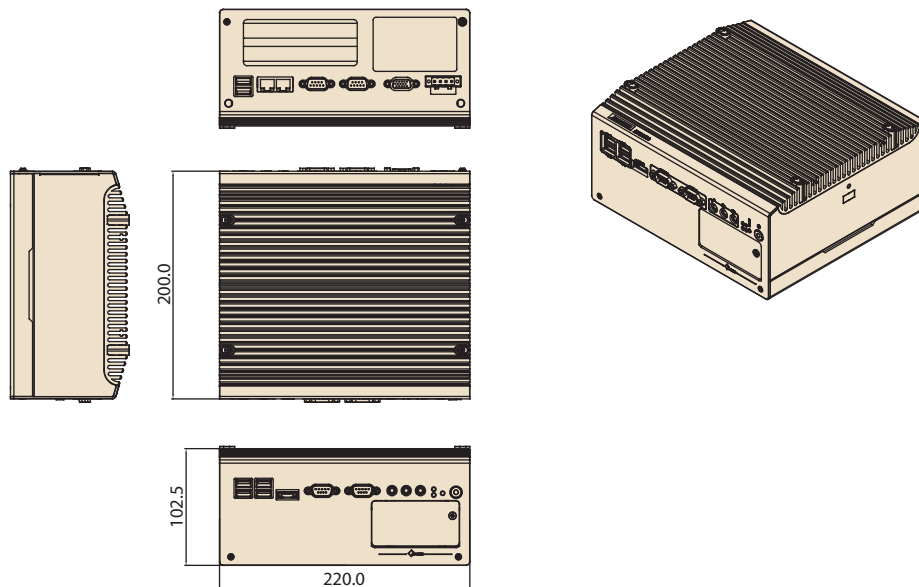
## Features

- Intel® Atom™ D510/D525 dual core up to 1.8 GHz fanless embedded IPC
- Supports VGA and LVDS dual display and support for widescreens with high resolution
- Supports 2 GbE, eSATA, 6 USB 2.0, audio and 4 COM ports
- Two internal 2.5" SATA HDD drive bays
- Supports 2 x Mini PCIe, 2 x PCI/PCIe expansion interfaces for diverse applications
- Easy integration, easy maintenance, and wide input voltage range
- IP40

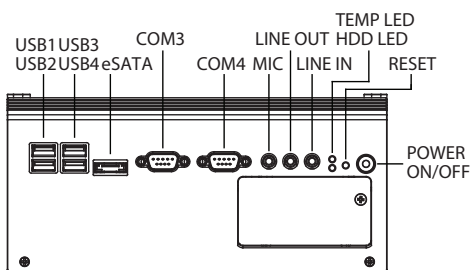
Processor System	CPU	Intel Atom D510 processor	Intel Atom D525 processor
	Max. speed	1.66 GHz	1.8 GHz
	System Chipset	Intel ICH8M Chipset	
Memory	BIOS	AMI 16 MB SPI BIOS	
	Technology	DDR2 667 MHz	
	Max. Capacity	2 GB	
Graphics	Socket	1 x 200-pin SODIMM	
	Chipset	Intel 3.5 Gen Integrated Graphic Engine + 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 , RS-485 w/ auto flow control, 2 extra RS-232 ports (optional)	
	USB Interface	6 x USB ports, Compliant with USB 2.0	
	Parallel Port	Supports D-sub 25-pin connector (optional)	
	Digital I/O	Support 16-bit digital IO (optional)	
Other	Thermal Alarm	Yellow LED lighting	
	Watchdog Timer	255-level 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) Supports maximum dimension of 167 mm (width) x 106 mm (length) for expansion PC board	
	Mini PCI/Mini PCIe	2 x Mini PCIe	
Storage	HDD	Supports drive bay space for 2 x SATA 2.5" HDD (9.5 mm height only)	
	SSD	Supports CompactFlash socket for type I/II CompactFlash disk	
Software Support	Microsoft Windows	Windows 7, XP Professional, XP Embedded, WinCE 6.0	
	Linux	Fedora 12	
Power Requirement	Power Type	AT/ATX	
	Power Input Voltage	12 V <sub>DC</sub> ~ 24 V <sub>DC</sub>	
	Minimum Power Input	12 V <sub>DC</sub> ~ V <sub>DC</sub> @ 4.6 A ~ 2.4 A	
Power Consumption	Power Adapter	AC to DC, DC19V/7.89A, 150W(Optional)	
	Typical	Typical 13 W (Intel Atom D510 1.66 GHz w/o expansion)	
	Max.	Max. 15 W (Intel Atom D510 1.66 GHz 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 extend temperature peripherals CompactFlash disk: -10 ~ 55° C With extend temperature peripherals 2.5-inch hard disk -10 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

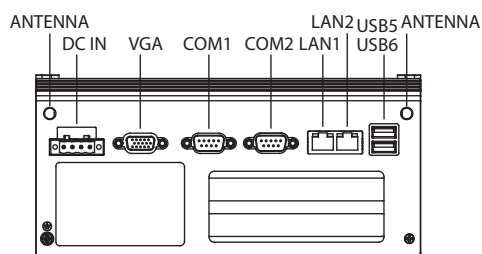
Unit: mm (inch)



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



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



## Packing List

Part Number	Description
-	1 x ARK-3403 unit
-	1 x Driver/Utility CD/Manual
1960014487T00C	2 x desk/wall mount plate
1652003234	1 x 4-pin phoenix DC power connector

## Ordering Information

Part Number	Description
ARK-3403-D5A1E	Intel Atom D510 1.66 GHz compact embedded box IPC, w/ VGA, 2 x Giga LAN, 6 x USB 2.0, 4 x COM, 2 Mini PCIe, Audio
ARK-3403-D6A1E	Intel Atom D525 1.8 GHz compact embedded box IPC, w/VGA, 2 x GLAN, 6 x USB2.0 4 x COM, 2 Mini PCIe, audio

## Optional Items

Part Number	Description
1757002161	AC-to-DC adapter, DC19 V/7.89A 150 W, with phoenix power plug, 0 ~ 40° C for home and office use
1702002600	Power cable 3-pin 180 cm, USA type
1702002605	Power cable 3-pin 180 cm, EU type
1702031801	Power cable 3-pin 180 cm, UK type
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
1700017944	LVDS cable for ARK-3403
1700009407	DIO cable D-SUB 25P(M)/2*10P-1.25 15cm
AMO-R010E	2 slot riser card, 1 x PCIe x1 + 1 x PCI
AMO-R013E	2 slot riser card, 2 x PCI
AMO-R009E	2 slot riser card, 2 x PCIe x1

## Embedded OS

Part Number	Description
2070009923	WinCE 6.0 ARK-3403 ENG
2070009030	XPE WES2009 Luna Pier V4.0 ENG