

# ARK-3360L

## Intel® Atom™ N450/D510 with Multiple I/O High Value Fanless Box PC



### Features

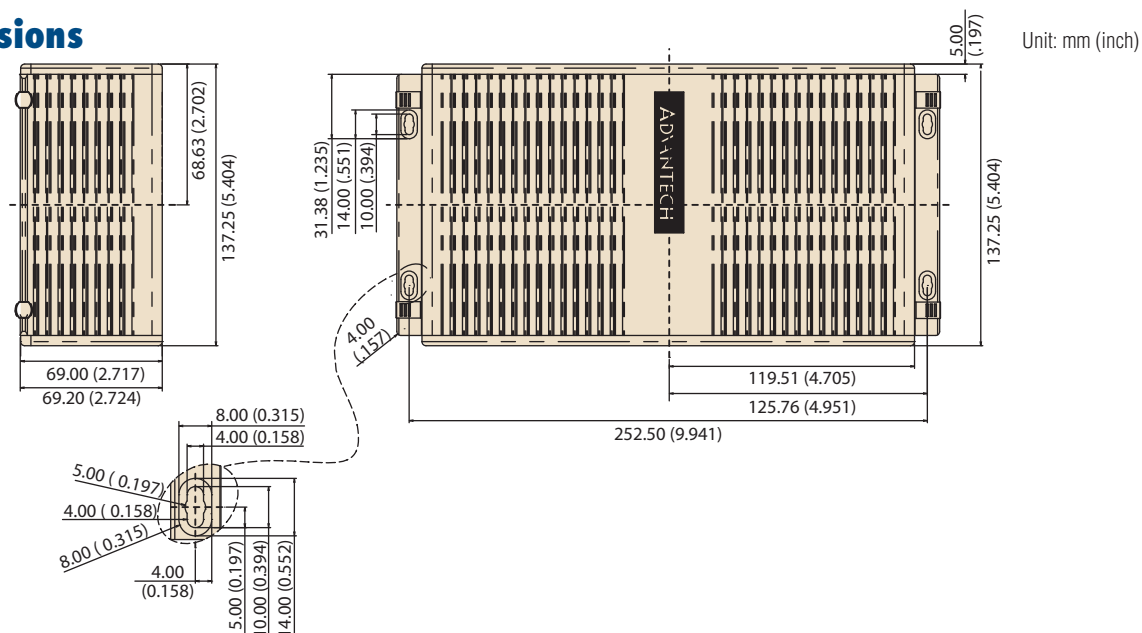
- Intel® Atom™ N450/D510 1.66 GHz Fanless Embedded Box PC
- Supports extend temperature -40 ~ 70° C (ARK-3360LZ-N4A1E)
- Mini PCIe expansion for communication module, i.e. HSDPA, WLAN
- Dual display and supports for wide screen with high resolution
- Supports up to 2 x GbE, 6 x USB 2.0 and 4 x COMs ports
- Serial port RS-485 auto-flow support
- Easy integration, easy maintenance
- Supports SUSIAccess and Embedded Software APIs
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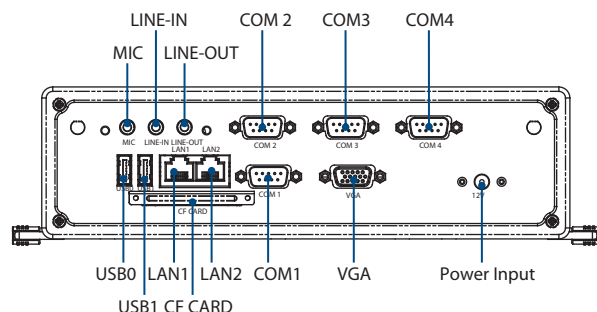
### Specifications

		ARK-3360L-N4A1E	ARK-3360L-D5A1E
Processor System	CPU	Intel Atom N450 Single Core	Intel Atom D510 Dual Core
	Frequency	1.66 GHz	
	L2 Cache	512 KB	1 MB
	System Chipset	Intel ICH8-M	
Memory	BIOS	AMI 16 Mbit Flash BIOS	
	Technology	DDR2 667 MHz	
	Max. Capacity	2 GB	
Graphics	Socket	1 x 200-pin SO-DIMM	
	Chipset	Intel 3.5 Gen Integrated Graphic Engine	
Ethernet	Interface	VGA: N450 up to 1400 x 1050, D510 up to 2048 x 1536 18-bit LVDS interface (Optional)	
	LAN 1	10/100/1000 Mbps Intel 82567V GbE, support Wake On LAN	
Audio	LAN 2	10/100/1000 Mbps Intel 82583V GbE, support Wake On LAN	
	Amplifier	-	
IO interface	Interface	Line-in, Line-out, Mic-in	
	Serial Interface	3 x RS-232 port, 1 x RS-232/422/485 port w/Auto flow control	
Other	USB Interface	6 x USB ports, Compliant with USB 2.0	
	Digital I/O	8-bits	
Expansion	Watchdog timer	255-level timer interval, setup by software	
	Mini PCI	-	
Storage	Mini PCIe	1 x full-size Mini PCIe	
	HDD	Supports 1 x SATA 2.5" HDD Bay (support 9.5 mm height only)	
Software Support	SSD	Supports CompactFlash socket for type I/II CompactFlash disk	
	Microsoft Windows	Windows 7, XP Professional, XP Embedded, WinCE 6.0	
Power Requirement	Linux	Ubuntu 10.04, QNX 6.5, Vxwork 6.8	
	Power Type	AT/ATX	
	Power Input Voltage	12 V <sub>DC</sub> , ± 10%	
	Minimum Power Input	12 V, 1.12 A	
Power Consumption	Power Adapter	AC to DC, DC 12 V/3.0 A, 36 W (Optional)	
	Typical	11 W (with Intel Atom D510 at 1.66 GHz)	
Mechanical	Max.	15 W (with Intel Atom D510 at 1.66 GHz)	
	Construction	Aluminum housing	
	Mounting	DIN-rail mounting, Desk/wall-mounting	
	Dimensions (W x H x D)	264.5 mm x 69.2 mm x 137.25 mm (10.41" x 2.72" x 5.4")	
Environment	Weight	2 kg (4.4 lb)	
	Operating Temperature	With extended temperature peripherals: -20 ~ 60° C (-4 ~ 140°F); -40 ~ 70° C (-40 ~ 158° F) for ARK-3360LZ-N4A1E With 2.5-inch hard disk 0 to 45° C (32 ~ 112° F), with 0.7m/s 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, KC	
Safety Certifications	UL, CCC, BSMI, KC		

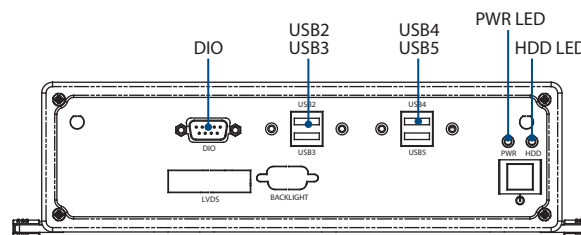
## Dimensions



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



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



## Ordering Information

Part No.	CPU	VGA	GbE	USB 2.0	RS-232	RS-232/422/485	DIO	Audio	Full-size MiniPCIe	CF	2.5" SATAII HDD Bay	Power Input	Operation Temp.
ARK-3360L-N4A1E	Intel Atom N450 1.66 GHz	Yes	2	6	3	1	8-bits	Lin-out, Line-in, MIC	1	1	1	12VDC	-20 ~ 60° C
ARK-3360L-D5A1E	Intel Atom D510 1.66 GHz	Yes	2	6	3	1	8-bits	Lin-out, Line-in, MIC	1	1	1	12VDC	-20 ~ 60° C
ARK-3360LZ-N4A1E	Intel Atom N450 1.66 GHz	Yes	2	6	3	1	8-bits	Lin-out, Line-in, MIC	1	1	1	12VDC	-40 ~ 70° C

## Packing List

Part Number	Description
-	1 x ARK-3360 Unit
-	1 x Driver/Utility CD/Manual
-	1 x User Manual (Simplified Chinese)
1960047289T001	Power adapter locker

## Embedded OS

Part Number	Description
2070009030	XPE WES2009 V4.0 ENG
2070009031	XPE WES2009 V4.0 MUI24

## Optional Items

Part Number	Description
96PSA-A36W12R1	AC-to-DC Adapter, DC 12V 3A 36W
96PSA-A60W12R1-1	AC-to-DC Adapter, DC 12V 5A 60W
1700008921	Power cable 3-Pin 180cm, with PSE for 96PSA-A36W12R1
170203180A	Power cable 3-Pin 180cm, UK type, for 96PSA-A36W12R1
170203183C	Power cable 3-Pin 180cm, EU type for 96PSA-A36W12R1
1700001524	Power cable 3-Pin 180cm, USA type for 96PSA-A36W12R1
1702002600	Power cable 3-pin 180cm, USA type, for 96PSA-A60W12R1-1
1702002605	Power cable 3-pin 180cm, EU type, for 96PSA-A60W12R1-1
1702031801	Power cable 3-pin 180cm, UK type, for 96PSA-A60W12R1-1
1960025333N011	VESA mounting bracket
9666K10000E	DIN-rail mounting kit