

# ARK-3360F

Intel® Atom™ N450/D510 with  
3 GbE, Isolated COM & wide range power  
Fanless Box PC



## Features

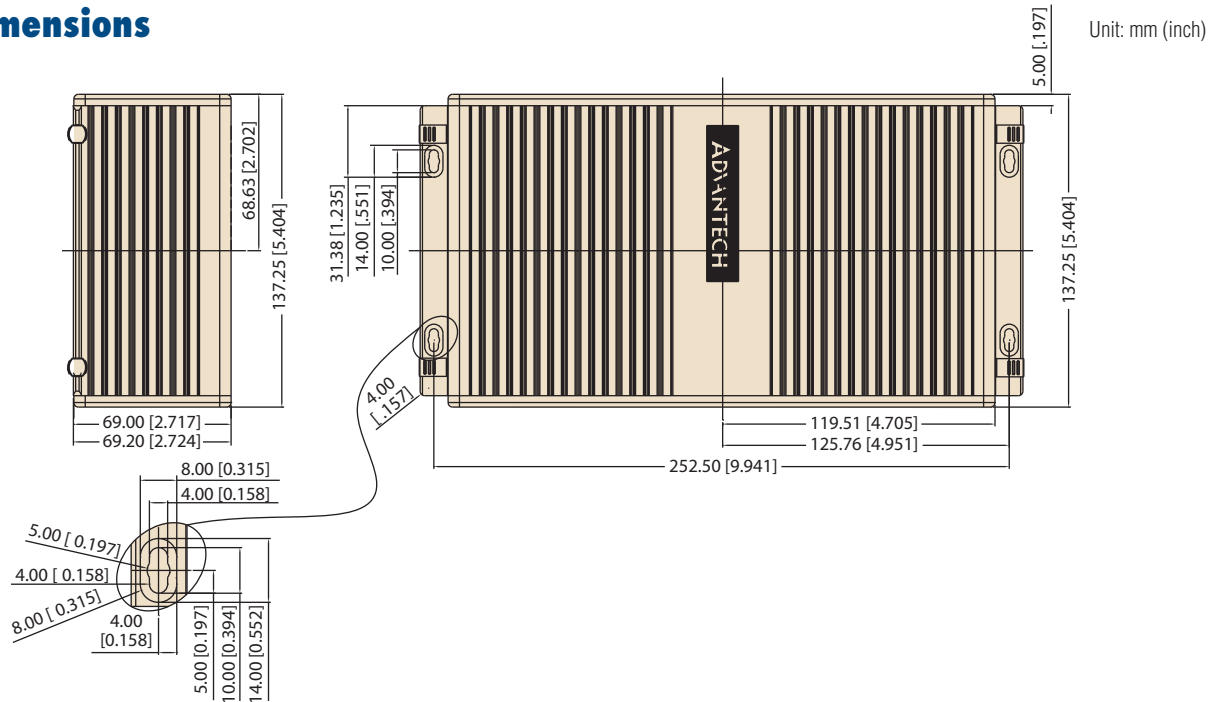
- Intel® Atom™ N450/D510 1.66 GHz Embedded Box PC
- Mini PCIe and Mini PCI expansion for communication module, i.e. HSDPA, WLAN
- Supports 12 ~ 24 V wide range DC input
- Supports up to 3 x GbE, 6 x USB 2.0 and 6 x COMs ports
- Serial ports support RS-485 auto flow control and isolation (up to 7.5Kv)
- Easy integration, easy maintenance, and wide input voltage range
- IP40 sealed design
- Supports SUSIAccess and Embedded Software APIs



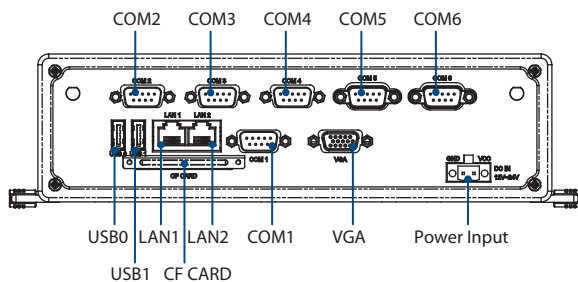
## Specifications

		ARK-3360F-N4A1E	ARK-3360F-D5A1E
Processor System	CPU	Intel Atom N450 (Single Core)	Intel Atom D510 (Dual Core)
	Frequency	1.66GHz	1.66GHz
	L2 Cache	512KB	1MB
	System Chipset	Intel ICH8-M	
	Front Side Bus	667 MHz	
	BIOS	AMI 16 Mbit Flash BIOS	
Memory	Technology	DDR2 667 MHz	
	Max. Capacity	2 GB	
	Socket	1 x 200-pin SO-DIMM	
Graphics	Chipset	Intel 3.5 Gen Integrated Graphic Engine	
	Interface	VGA: N450 up to 1400 x 1050, D510 up to 2048 x 1536 18-bit LVDS interface (Optional)	
Ethernet	LAN 1	10/100/1000 Mbps Intel 82567V GbE, support Wake On LAN	
	LAN 2	10/100/1000 Mbps Intel 82583V GbE, support Wake On LAN	
	LAN 3	10/100/1000 Mbps Intel 82541PI GbE, support Wake On LAN	
Audio	Amplifier	-	
	Interface	Line-in, Line-out, Mic-in	
IO interface	Serial Interface	1 x RS-232, 3 x RS-232/422/485, 2 x RS-422/485 with 7.5Kv isolation protection & auto flow control	
	USB Interface	6 x USB ports, Compliant with USB 2.0	
Other	Digital I/O	8-bits	
	Watchdog timer	255-level timer interval, setup by software	
Expansion	Mini PCI	1 x Mini PCI	
	Mini PCIe	1 x full-size Mini PCIe	
Storage	HDD	Supports 1 x SATA 2.5" HDD Bay (support 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	Ubuntu 10.04	
Power Requirement	Power Type	AT/ATX	
	Power Input Voltage	12 V <sub>DC</sub> ~ 24 V <sub>DC</sub>	
	Minimum Power Input	12V-24 V, 3.0A-1.5A	
	Power Adapter	AC to DC, DC19 V/3.42 A, 65 W(Optional)	
Power Consumption	Typical	12.12 W (with Intel Atom D510 at 1.66 GHz)	
	Max.	14.96 W (with Intel Atom D510 at 1.66 GHz)	
Mechanical	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")	
	Weight	2 kg (4.4 lb)	
Environment	Operating Temperature	With extended temperature peripherals: -20 ~ 60° C (32 ~ 140° F), with 0.7m/s air flow 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	

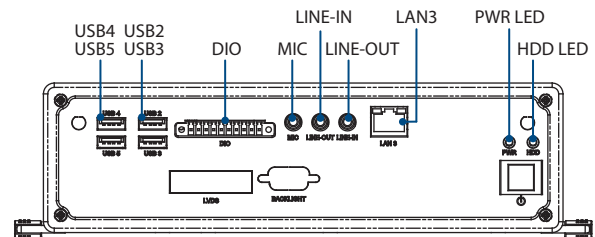
## Dimensions



### 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	RS-422/485	DIO	Audio	Full-size MiniPCIe	CF	2.5" SATAII HDD Bay	Power Input	Operation Temp.
ARK-3360F-N4A1E	Intel Atom N450 1.66 GHz	Yes	3	6	1	3	2 (with 7.5KV isolation)	8-bits	Lin-out, Line-in, MIC	1	1	1	DC 12V Lockable DC Jack	-20 ~ 60° C
ARK-3360F-D5A1E	Intel Atom D510 1.66 GHz	Yes	3	6	1	3	2 (with 7.5KV isolation)	8-bits	Lin-out, Line-in, MIC	1	1	1	DC 12V Lockable DC Jack	-20 ~ 60° C

Note: Memory, storage and operating system bundled by request.

## Packing List

Part Number	Description
-	1 x ARK-3360 Unit
-	1 x Driver/Utility CD/Manual
-	1 x User Manual (Simplified Chinese)
1700009001	1 x 2-pin Phoenix DC power connector

## Embedded OS

Part Number	Description
2070009030	XPE WES2009 V4.0 ENG
2070009031	XPE WES2009 V4.0 MUI24
2070009835	WES7E V5.0 ENG

## Optional Items

Part Number	Description
1757003659	AC-to-DC Adapter, DC19 V/3.42 A 65 W, with Phoenix Power Plug, 0 ~ 40° C for Home and Office Use
TBD	AC-to-DC Adapter, DC 12V/3.33A 40W, -20 ~ +70° C
1702002600	Power cable 3-pin 180cm, USA type, for extend temperature power adapter
1702002605	Power cable 3-pin 180cm, EU type, for extend temperature power adapter
1702031801	Power cable 3-pin 180cm, UK type, for extend temperature power adapter
1700001947	Power cable 2-pin 180 cm, USA type (For adapter 1757003659)
1700001948	Power cable 2-pin 180 cm, Europe type (For adapter 1757003659)
1700001949	Power cable 2-pin 180 cm, UK type (For adapter 1757003659)
1700002141	Power cable 2-pin 180 cm, PSE type (For adapter 1757003659)
1960025333N011	VESA mounting bracket
9666K10000E	DIN-rail mounting kit

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