ARK-3420

Intel® Core™ 2 Duo Box IPC with PCIe Expansion and Dual SATA HDDs



Features

- Fanless, Intel® Core™ 2 Duo Processor Compact Embedded Box IPC
- Dual display and support for wide screen with high resolution
- Supports 2 GbE, eSATA, 6 USB 2.0 and 4 COM ports
- Two internal 2.5" SATA HDD drive bays
- Various expansion Interfaces for diverse applications
- 6 programmable function keys
- Easy integration, easy maintenance, and wide input voltage range
- IP40 Rating

Specifications

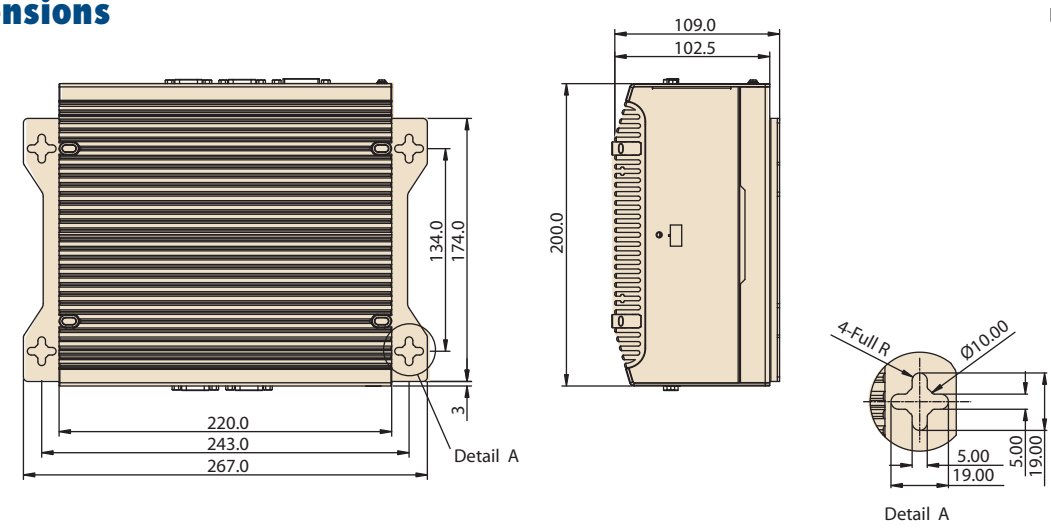
Processor System	CPU	Intel Core 2 Duo	Mobile Intel Celeron
	Max. Speed	L7500 (1.6 GHz)	550 (2.0 GHz)
	System Chipset	Intel GME965 + ICH8-M Chipset	
	Front Side Bus	800 MHz	533 MHz
	BIOS	Award 4 MB Flash BIOS	
Memory	Technology	DDR2 533/667 MHz (GME965)	
	Max. Capacity	4 GB	
	Socket	2 x 200-pin SODIMM	
Graphics	Chipset	Integrated graphics built in Intel GME965, Mobile Intel Graphics Media Accelerator X3100	
	Interfaces	CRT Interfaces (Optional by Cable) DVI Interfaces, compliant with DVI 1.0 48-bit LVDS Interfaces (Optional)	
Ethernet	LAN 1	10/100/1000 Mbps Ethernet controller, supports Wake On LAN	
	LAN 2	10/100/1000 Mbps Ethernet controller, supports Wake On LAN	
Audio	Amplifier	Dual output 2.2 W amplifier	
	Interfaces	Spkr-out, Mic-in, Line-in	
I/O Interfaces	Serial Interfaces	2 x RS-232 ports and 2 x RS-232/422/485 ports (RS-485 with autoflow control)	
	USB Interfaces	6 x USB ports, Compliant with USB 2.0	
	eSATA Interfaces	1 x eSATA port	
	Parallel Port	Supports D-sub 25-pin connector (optional by cable)	
	Digital I/O	Supports 16 bit Digital I/O (optional)	
Other	Thermal Alarm	Yellow LED lighting	
	Watchdog Timer	255 level timer interval, setup by software	
	Function Key	6 programmable function keys	
Expansion	ISA/PCI/PCIe Slot	2 slots PCI (default); 2 slots PCIe x1 (optional) 1 slot PCI and 1 slot PCIe x1 (optional); 1 slot PCI and 1 slot PCIe x4 (optional) Supports maximum dimension of 167 mm (width) x 106 mm (length) for expansion PC board	
	Mini PCI/Mini PCIe	1 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	Vista, XP Professional, XP Embedded, WinCE 6.0	
	Linux	Fedora 9.0	
Power Requirements	Power Type	AT/ATX	
	Power Input Voltage	9 V_{DC} ~ 34 V_{DC}	
	Minimum Power Input	9 V-34 V ⎓ 6.0 A-1.5 A	
	Power Adapter	AC to DC, DC19 V/7.89 A, 150 W (Optional)	
Power Consumption	Typical	Typical 29 W (CPU is Intel Core 2 Duo L7500 1.6 GHz and w/o expansion)	
	Max.	Max. 35 W (CPU is Intel Core 2 Duo L7500 1.6 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	

All product specifications are subject to change without notice

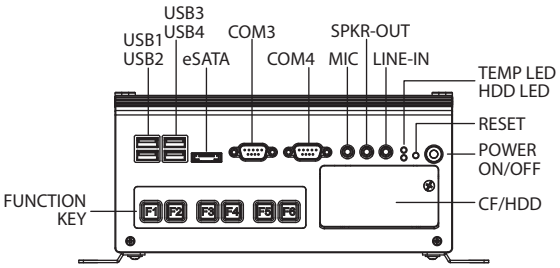
Last updated : 25-Apr-2011

Dimensions

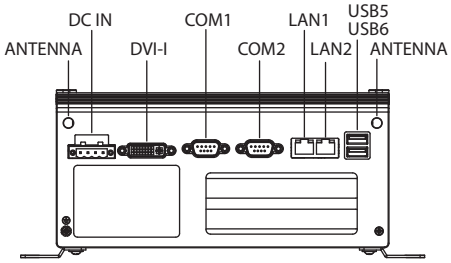
Unit: mm (inch)



Front Panel External I/O Mechanical Layout/Drawing



Rear Panel External I/O Mechanical Layout/Drawing



Packing List

Part Number	Description
-	1 x ARK-3420 Unit
-	1 x Driver/Utility CD/Manual
1960014487T00C	2 x Desk/Wall mount plate
1652003234	1 x 4-pin Phoenix DC power connector
1654000446	1 x DVI-I to CRT connector

Ordering Information

Part Number	Description
ARK-3420F-S6A1E	Intel Core 2 Duo L7500 1.6 GHz Compact Embedded Box IPC
ARK-3420F-U0A1E	Mobile Intel Celeron 550 2.0 GHz Compact Embedded Box IPC

Optional Items

Part Number	Description
1757002161	AC-to-DC Adapter, DC19 V/7.89 A 150 W, 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-D and CRT
1700009398	LVDS Cable for ARK-3420
1700009396	LVDS power Cable for ARK-3420
1700009399	Digital I/O Cable for ARK-3420
1700009397	Printer Cable for ARK-3420
AMO-R002E	2 slot riser card, 2 x PCIex1
AMO-R003E	2 slot riser card, 2 x PCI
AMO-R004E	2 slot riser card, 1 x PCIex4 + 1 x PCI
AMO-R005E	2 slot riser card, 1 x PCIex1 + 1 x PCI

Embedded OS

Part Number	Description
2070006511	Windows XP WES for ARK-3420 V4.0 ENG
2070006512	Windows XP WES for ARK-3420 V4.0 ENG_CHT_CHS_JPN
2070006513	Windows XP WES for ARK-3420 V4.0 ENG_FRE_GER_ITA
2070006510	Windows CE 6.0 Pro ARK-3420 V1.1 ENG