

ARK-2150L Intel® 3rd Generation Core i3-3217UE/i7-3517UE High Performance Fanless Embedded Box PC

Preliminary



Features

- Intel® Core™ i3 and i7 processors + Intel QM77 PCH, 1 x DDR3/DDR3L
- SO-DIMM support up to 8 GB
- DirectX11, OpenGL3.1, OpenCL1.1, dual independent display: VGA + HDMI/DisplayPort
- Supports Intel AMT8.0,
- Supports up to 2 x GbE, 2 x USB 3.0, 4 x USB 2.0 and 4 x COMs ports
- Supports 1 x internal mSATA socket and 1 x 2.5" HDD drive bay
- Lockable DC input jack
- Supports iManager, SUSIAccess and Embedded Software APIs
- IP40

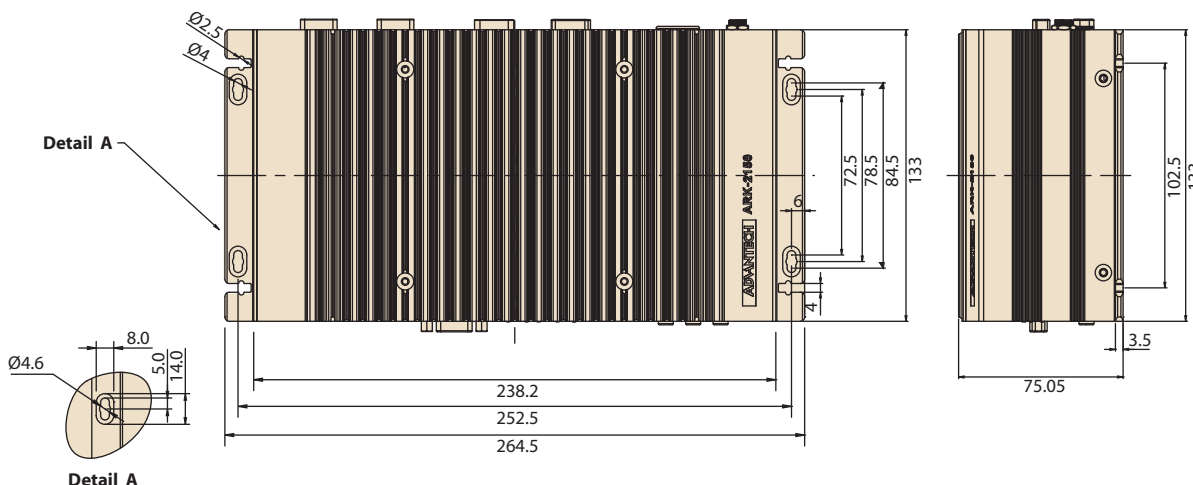


Specifications

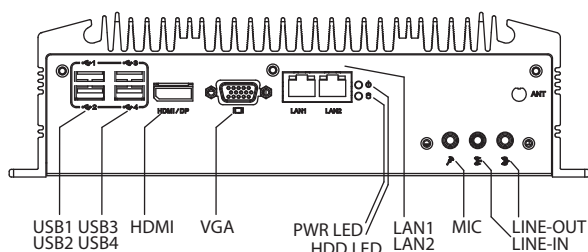
		ARK-2150-S6A1E	ARK-2150-S7A1E
Processor System	CPU	Intel ULV Core i3 3217UE	Intel ULV Core i7 3517UE
	Max. Speed	Dual Core 1.6 GHz	Dual Core 1.7 GHz (Max Turbo Frequency 2.8 GHz)
	L3 Cache	3 MB	4 MB
	System Chipset	Intel QM77	
	BIOS	AMI EFI 64Mbit	
Memory	Technology	DDR3 1600MHz, DDR3L 1333 MHz	
	Max. Capacity	8 GB	
	Socket	1 x 204-pin SO-DIMM	
	Chipset	Intel QM77 Integrated GFX Gen 7	
Graphics	Graphic Engine	DirectX11, OpenGL 3.1, and Open CL 1.1 Hardware decode acceleration: AVC/H.264, M PEG-2, VC-1	
	VGA	Integrated 340.4MHz RAMDAC, Max resolution up to 2048 x 1536 @ 75Hz	
	HDMI	Supports HDMI 1.4 for HD Video playback Max resolution up to 2560 x 1600 @ 60Hz on DisplayPort, Max resolution up to 1920 x 1200 @ 60Hz on HDMI	
	Dual Display	Yes, VGA + HDMI or VGA + DisplayPort	
Ethernet	LAN1	10/100/1000 Mbps Intel 82579LM Ethernet controller, support Wake On Lan	
	LAN2	10/100/1000 Mbps Intel 82583V Ethernet controller, support Wake On Lan	
Audio	Interface	Realtek ALC892, High Definition Audio. Line-out, Mic-in, Line-in	
I/O Interface	Serial Ports	2 x RS-232 ports, 2 x RS-232/422/485 port with auto flow control	
	USB Interface	2 x USB 2.0 ports and 4 x USB 2.0 ports	
Other	Digital I/O	8-bits programmable general purpose input/output	
	Watchdog timer	255 levels timer interval, setup by software	
Expansion	Mini PCIe	1 x Full-size Mini PCIe (Supports mSATA) 1 x Half-size Mini PCIe	
	HDD	Supports one drive bay for SATA 2.5" HDD (Compatible with 12.5mm height HDD)	
Storage	SSD	Supports one internal mSATA socket	
	Microsoft Windows	Windows 7, Windows 7 Embedded, XP Professional, XP Embedded, WinCE 7.0	
Software Support	Linux	Ubuntu 12.04	
	Power Type	AT/ATX	
Power Requirement	Power Input Voltage	12 V _{DC}	
	Minimum Power Input	12 V, 4 A	
	Power Adapter	AC to DC, DC12 V/5 A, 60 W (Optional)	
Power Consumption	Typical	TBD	
	Max.	TBD	
Mechanical	Construction	Aluminum housing	
	Mounting	Din-Rail mounting, Desk/wall-mounting, VESA mounting	
	Dimensions (W x H x D)	264.5 x 75.1 x 133.0 mm (10.41" x 2.96" x 5.24")	
	Weight	2.3 kg (5.07 lb)	
Environment	Operating Temperature	With extended temperature peripherals: -20 ~ 60° C (-4 ~ 140° F) with 0.7m/s air flow With 2.5-inch hard disk 0 ~ 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 During Operation	With SSD: 5 Grms, IEC 60068-2-64, random, 5 ~ 500 Hz, 1 hr/axis.	
	Shock During Operation	With SSD: 50 G, IEC 60068-2-27, half sine, 11 ms duration	
	EMC	CE/FCC Class A, CCC, BSMI	
	Safety Certifications	UL, CCC, BSMI	

Dimensions

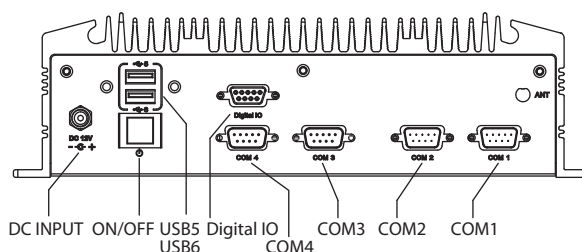
Unit: mm (inch)



Front Panel External I/O Mechanical Layout/Drawing



Rear Panel External I/O Mechanical Layout/Drawing



Ordering Information

Part No.	CPU	VGA	HDMI/DP	GbE	USB 3.0	USB 2.0	RS-232	RS-232/422/485	DIO	Audio	Half-size Mini PCIe	Full-size Mini PCIe*	2.5" SATAII HDD Space	Power Input	Operation Temp.
ARK-2150L-S6A1E	Intel Core i3 ULV 1.6GHz 3217UE DC, 17W	Yes	Yes	2	2	4	2	2	8-bits	Line-out, Line-in, MIC	1	1	1	12V Lockable DC Jack	-20 ~ 60° C
ARK-2150L-S7A1E	Intel Core i7 ULV 1.7GHz 3517UE DC, 17W	Yes	Yes	2	2	4	2	2	8-bits	Line-out, Line-in, MIC	1	1	1	12V Lockable DC Jack	-20 ~ 60° C

* Full-size Mini PCIe supports mSATA

Packing List

Part Number	Description
-	1 x ARK-2150 Unit
-	1 x Utility CD
-	1 x User Manual (Simplified Chinese)
-	1 x China RoHS

Ordering Information

Part Number	Description
ARK-2150L-S6A1E	Intel i3 3217UE 1.6GHz fanless EBC, VGA, HDMI, USB3.0, 4COM
ARK-2150L-D7A1E	Intel i7 3517UE 1.7GHz fanless EBC, VGA, HDMI, USB3.0, 4COM

Optional Items

Part Number	Description
1757003934	AC-to-DC Adapter, DC 12V/5A 60W, 0 ~ 40° C for Home and Office Use
1702002600	Power cable 3-pin 180 cm, USA type
1702031801	Power cable 3-pin 180 cm, UK type
1702002605	Power cable 3-pin 180 cm, Europe type
1700000237	Power cable 3-pin 180 cm, PSE
1960025333N00N	VESA mounting bracket
9666K10000E	DIN-rail mounting kit

Embedded OS

Part Number	Description
TBD	Image WES7E SP1 x32 V5.1 ATIP