

ARK-1550

Intel® 4th Generation Core i5 4300U/ Celeron 2980U SoC Slim and Panel Mountable Fanless Box PC



Features

- Intel® Dual Core Celeron 2980U 1.6 GHz / Core i5 4300U 1.9 GHz SoC
- One Swappable 2.5" SATA HDD Bay and mSATA slot
- Triple Independent Displays by VGA + HDMI + LVDS (LVDS option)
- Optional VESA / DIN Rail Mounting kits
- Supports 2 x Intel GbE and 1 x GPIO
- Built-in 1 x full size MiniPCle
- Lockable DC jack design
- Supports SUSIAccess and WISE-PaaS software pack
- Support Intel Turbo Boost Technology 2.0 in Core i5 4300U



WISE-DeviceOn SUSI API



Specifications

		ARK-1550-S6A1E	ARK-1550-S9A1E
Processor System	CPU	Intel Celeron 2980U Dual Core	Intel i5-4300U Dual Core
	Frequency	1.6 GHz	1.9 GHz (Up to 2.9 GHz w/ Turbo Boost 2.0 enabled)
	L3 Cache	2 MB	3 MB
	BIOS	AMI EFI 128 Mbit	
Memory	Technology	DDR3L 1333 MHz	DDR3L 1600 MHz
	Max. Capacity	8 GB	
	Socket	1 x 204-pin SO-DIMM	
Graphics	Chipset	Intel HD Graphics	Intel GT2-4400 Graphics
	Graphic Engine	DirectX11.1, OpenGL 4.0, and OpenCL 1.2	
	VGA	Up to 1920 x 1200 at 60 Hz	
	HDMI	Lockable HDMI connector, up to 4096 x 2304 at 24 Hz (Lockable HDMI cable optional)	
Audio	LVDS (Option)	Dual channel 24-bit LVDS, max resolution up to 1920 x 1200 with 60Hz (Support by T-Part or CTOS)	
	Main System	Realtek ALC888S, High Definition Audio (HD), Line-in, Line out, Mic-in	
Ethernet	LAN #1	10/100/1000 Mbps Intel I218 GbE, support Wake on LAN	
	LAN #2	10/100/1000 Mbps Intel I210 GbE, support Wake on LAN	
I/O Interface	Serial Ports	1 x RS-232 & 2 x RS-232/422/485 (BIOS selectable)	
	USB Interface	2 x USB 2.0 & 2 x USB3.0	
	GPIO	8 bit GPIO	
Other	Watchdog timer	255-level timer interval, setup by software	
Expansion	Mini PCIe	1 x Full-size Mini PCIe, support mSATA storage or WWAN module*	
Storage	2.5" Drive Bay	1 x Swappable 2.5" SATA drive bay (Max Height 9.5 mm)	
	mSATA	Leverage MiniPCle #1 slot	
Software Support	Microsoft Windows	Windows 10, Windows 8, Windows 7, WES8, WES7	
	Linux	Support (by Project)	
Power Requirement	Power Type	ATX/AT	
	Power Input Voltage	12 V _{DC}	
	Minimum Power Input	12V, 5A	
	Power Adaptor	AD to DC, DC 12V/5A, 60W (Optional)	
Power Consumption	Typical	5.64W	10.56W
	Max.	15.12W	28.2W
Mechanical	Construction	Aluminum housing	
	Mounting	Desk/Wall Mounting (Standard), VESA & DIN-Rail Mounting Kit (Optional)	
	Dimensions (W x H x D)	223 x 46.6 x 133.0 mm (8.69" x 1.81" x 5.18")	
Environment	Operating Temperature	With extended temperature SSD/mSATA/RAM : -20 ~ 55° C with 0.7m/s air flow	
	Storage Temperature	With standard temperature HDD/SSD/mSATA/RAM peripherals: 0 ~ 40° C with 0.7m/s air flow	
	Relative Humidity	-40 ~ 85° C (-40 ~ 185° F)	
	Vibration During Operation	95% @ 40° C (non-condensing)	
	Shock During Operation	With mSATA/SSD: 3 Grms, IEC 60068-2-64, random, 5 ~ 500 Hz, 1 hr/axis	
Regulation	EMC	With mSATA/SSD: 30G, IEC 60068-2-27, half sine, 11 ms duration	
	Safety	CE/FCC Class A, CCC, BSMI	
		UL, CCC, BSMI, CB	

* This is the hardware interface for wireless communication integration only. System level RF certification is not available.

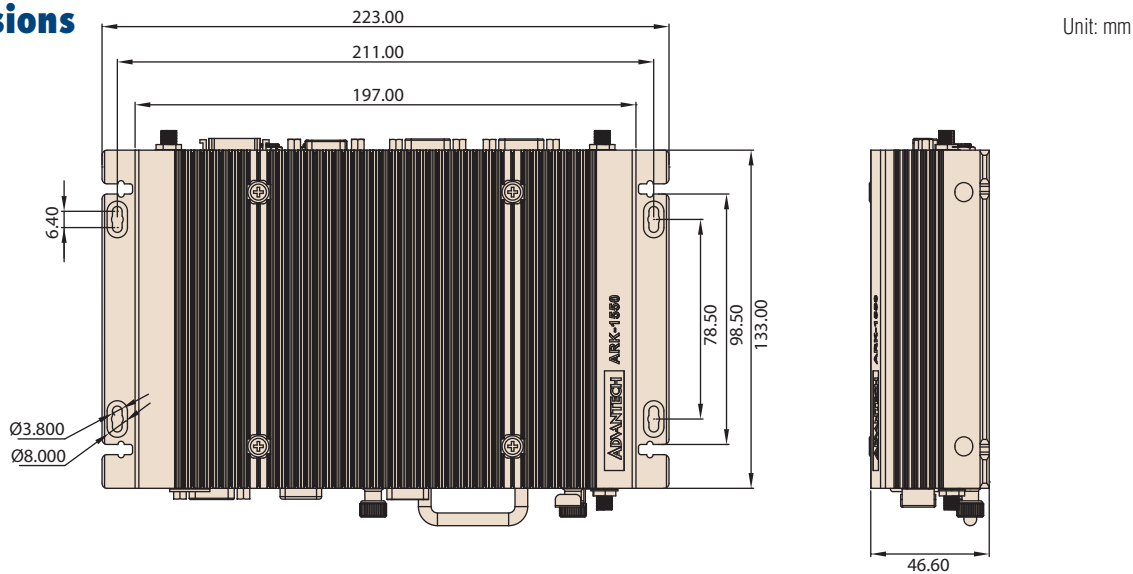
ADVANTECH

Fanless Embedded Box PCs

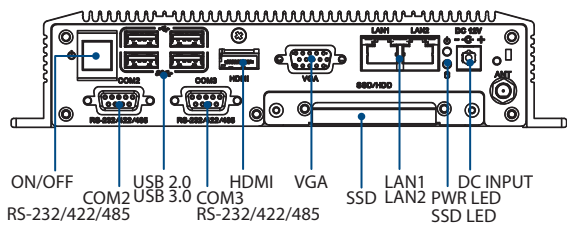
All product specifications are subject to change without notice.

Last updated: 6-Jan-2021

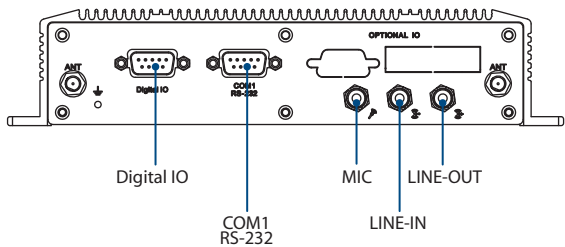
Dimensions



Front Panel External I/O



Rear Panel External I/O



Ordering Information

Part Number	Intel CPU	RAM	VGA	HDMI	GbE	USB 2.0	USB 3.0	GPIO	RS-232	RS-232/422/485	Audio	MiniPCIe	2.5" HDD bay	mSATA	Operating Temperature
ARK-1550-S6A1E	Intel Celeron 2980U 1.6GHz	Up to 8GB	1	1	2	2	2	1	1	2	Line in Line out Mic in	1 Full size w/SIM	1	1	-20 ~ 55° C
ARK-1550-S9A1E	Intel Core i5 4300U 1.9GHz														

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

Packing List

Part Number	Description
-	1 x ARK-1550 Unit
-	1 x User Manual (Simplified Chinese)
-	1 x Power bracket

Embedded OS

Part Number	Description
2070012825	WES7E 64bit with EN/JP/TC/SC (OS size around 11G)
2070012882	WE8S 64bit with EN/JP/TC/SC (OS size around 13G)
20706WX6VS0024	Win10 IoT Ent 64bit Eng 1709 LTSB EN (OS size around 11.4GB)

Optional Items

Part Number	Description
96PSA-A60W12R1-3	AC-to-DC Adapter, DC 12V/5A 60W, with DC Jack Plug
96PSA-A84W12V1-3	AC-to-DC Adapter, DC 12V/7A 84W, with DC Jack Plug
1702002600	Power cable 3-pin 183 cm, USA type
1702002605	Power cable 3-pin 183 cm, Europe type
1702031801	Power cable 3-pin 183 cm, UK type
1700000237	Power cable 3-pin 183 cm, PSE type
AMK-V004E	VESA mounting kit
AMK-R004E	DIN-rail mounting kit
AMO-I014E	LVDS Module w/ cables. (Support by T-Part or CTOS)
1700023855-01	1M lockable HDMI cable
1700023856-01	3M lockable HDMI cable

Online Download www.advantech.com/products

