

ARK-3534D

Intel® Core™ 12th/13th/14th Gen i3/i5/i7/i9 LGA1700 Expansion Fanless Box PC

NEW



Features

- Support Intel® Core™ 12th/13th/14th Gen. i3/i5/i7/i9 processor
- Triple independent display: HDMI + HDMI + Optional Display
- DDR5 SO-DIMM ECC/non-ECC memory support up to 64 GB
- 9-36V_{DC} wide range power input
- Up to 3sets 2.5" hard drive bays, support Intel® SW RAID
- Support up to 4x GbE, 8x USB, 8x COM, 2x CANBus, 16bit DIO, TPM2.0
- SUSI API, WISE-DeviceOn, Trellix and Acronis bundled
- Support Windows 11 IoT Enterprise LTSC



WISE-DeviceOn SUSI API



Specifications

14 th Generation Processor	CPU	i9-14900	i7-14700	i5-14500	i5-14400	i3-14100					
	P-core Frequency	2.0-5.4GHz	2.1-5.3GHz	2.6-5.0GHz	2.5-4.7GHz	3.5-4.7GHz					
	L3 Cache	36MB	33MB	24MB	20MB	12MB					
	Cores	24	20	14	10	4					
	TDP	65W	65W	65W	65W	60W					
	Chipset	R680E									
	BIOS	AMI EFI 256Mbit									
13 th and 12 th Generation Processor	CPU	i9-13900E	i7-13700E	i5-13500E	i3-13100E	i9-12900E	i7-12700E	i5-12500E	i3-12100E	G6900E	
	P-core Frequency	1.8-5.2GHz	1.9-5.1GHz	2.4-4.6GHz	3.3-4.4GHz	2.3-5.0GHz	2.1-4.8GHz	2.9-4.5GHz	3.2-4.2GHz	3.0GHz	
	L3 Cache	36MB	30MB	24MB	12MB	30MB	25MB	18MB	12MB	4MB	
	Cores	24	16	14	4	16	12	6	4	2	
	TDP	65W	65W	65W	60W	65W	65W	65W	60W	46W	
	Chipset	R680E									
	BIOS	AMI EFI 256Mbit									
Memory	Technology	DDR5 4800 MHz									
	Max. Capacity	64 GB									
	Socket	2 x 262-pin ECC/nonECC SO-DIMM									
Graphics	Chipset	Intel® UHD Graphics 770									
	Graphic Engine	DirectX 12, OpenGL 4.5									
		HW Encode: H.265/HEVC, H.264/MPEG-4 AVC, MPEG-2, JPEG/MJPEG and VP8.									
		HW Decode: H.265/HEVC, H.264/MPEG-4 AVC, MPEG-2, VC-1/WMV9, JPEG/MJPEG, VP8 and VP9									
	HDMI	2 HDMI port, HDMI 2.0 for HD video playback, 4096x2160@60Hz									
	Optional 3rd Display module	DVI-D / DP / HDMI Display Port									
	Triple Display	HDMI+HDMI + 3rd display module									
Ethernet	LAN1	10/100/1000 Mbps Intel i219-LM GbE, support Wake On Lan									
	LAN2/3/4	10/100/1000/2500 Mbps Intel i225-LM GbE, support Wake On Lan									
Audio	Interface	Realtek ALC888S, High Definition Audio, Line-out/Mic-in (switch)									
Others	Watch dog Timer	255-level timer interval, setup by software									
	TPM	TPM 2.0 (by optional AMO-I029A)									
I/O Interface	Serial Port	4 x RS-232/422/485 port with auto flow control, 2 x RS-232 (additional COM7/8 2 x RS-232 by optional cable)									
	USB	8 x USB 3.2 (4 x Gen2, 4 x Gen1) 1 x Internal USB2.0 (Optional)									
	DIO	16bit DIO (by optional cable)									
Expansions	CANBus	2 ports by optional cable									
	M.2	1 x M2. 2230 E key and 1 x M.2 2280 B key with SIM holder #1									
	Add-on Card Slot	2 Slot PCI + 1 Slot PCIe16, Support add-on card power consumption up to 120W for PCIe x16 slot (If card power power consumption over 30W for add-on cards, please bundled with AMO-3508 kit for power and thermal solutions)									
		Maximum card size	110mm (H) x 180mm (L)								

#1 SIM holder and M.2 slot are hardware interfaces 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.

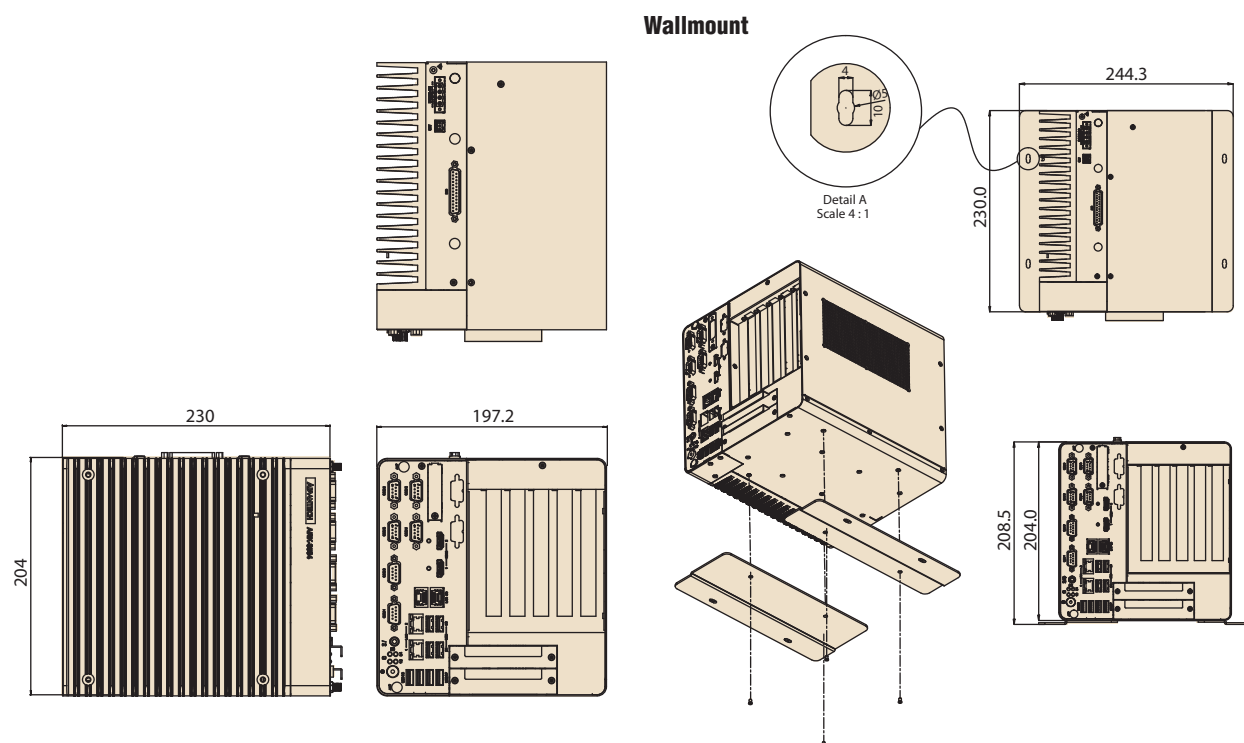
Last updated: 3-Oct-2025

Specifications (Cont.)

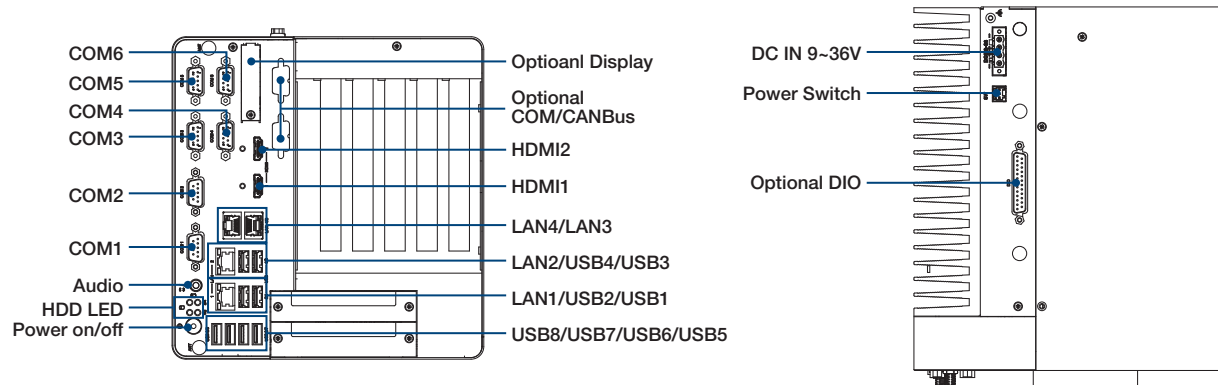
Storage	HDD	2 x 2.5" SATAIII 15mm height HDD bay support Intel SW RAID (Up to 3 x 2.5" SATAIII HDD bays)
	NVME	1 x PCIe2 (Share with M.2 2280 B key)
Software Support	Microsoft Windows	Windows 10 /11
	Linux	Ubuntu
Power Requirements	Power Type	AT/ATX
	Power Input Voltage	9-36V
	Power Adapter	AC to DC, 230W (Optional)
Power Consumption (CPU/Memory Only)	Typical	56.1W
	Max.	92.4W
Mechanical	Construction	Aluminum housing
	Mounting	Desk mounting
	Dimensions (W x H x D)	197.2 x 204 x 230 mm
	Weight	6.41 Kg
Environment	Operating Temperature	Up to 65W processor with extended temp peripherals: -20 ~ 60° C with 0.7m/s air flow with HDD: 0 ~ 40° C with 0.7m/s air flow
	Storage Temperature	-40 ~ 85° C
	Relative Humidity	95% @ 40° C (non-condensing)
	Vibration During Operation	With SSD: 3 Grms, IEC 60068-2-64, random, 5 ~ 500 Hz, 1 hr/axis.
	Shock During Operation	With SSD: 30 G, IEC 60068-2-27, half sine, 11 ms duration
	EMC	CE/FCC Class B, CCC, BSMI
	Safety	CB, UL, CCC, BSMI

Dimensions

Unit: mm



External I/O Mechanical Layout/Drawing



Ordering Information

Part No.	CPU	DDR5	Gbe	HDMI	Option 3rd display module	RS-232	RS-232/422/485	USB	M.2 B key	SIM	M.2 E Key	DC Input	Expansion
ARK-3534D-00A1	LGA1700 Socket Type	Up to 64GB	4	2	1	Up to 4	4	8	1	1	1	9-36V	PCIex4 + 2PCI + PCIex16

Note: CPU/Memory/Storage and operating system bundled by request.

Packing List

Part Number	Description
-	ARK-3534D Unit
-	User Manual (Simplified Chinese)
-	China RoHS
-	Desk mounting kit
36WSWPD0BUND11	WISE-DeviceOn
36WSWPD0B0D211	McAfee Application Control Lite/Acronis Backup 11.7 for Windows PC

Embedded OS

Part Number	Description
20706WX1HS0128	WIN10 IoT LTSC 21H2 64bit for i7/i9
20706WX1VS0128	WIN10 IoT LTSC 21H2 64bit for i3/i5
20706U22DS0031	UbuntuD ARK-3534 64b 22.04 ENU
20706U24DS0010	Ubuntu Desktop 24.04 LTS 64bit
20706WLH1S0017	WIN11 IoT LTSC 2024 for i7/i9
20706WLV1S0017	WIN11 IoT LTSC 2024 for i3/i5

ARK-3534D Optional Expansion Kit for add-on Cards

Part Number	Description
AMO-3509	ARK-3534D fan kit
AMO-3509A	ARK-3534D fan kit for Nvidia A2 tensor
XARK-DPS-150AB-15	Additional Power for add-on cards over 30Watts

*Please add this kit once the add-on card power consumption over than 30Watts

ARK-3534D Default SKU Option Items

Optional Item for Default SKU

Part Number	Description
96PSA-A230W24P4-3	AC to DC adapter, DC 24V 230W, -20 ~ 60 °C
1702002600	Power cable 3-pin 183cm, USA type
1702002605	Power cable 3-pin 183cm, EU type
1700032693-11	Power cable 3-pin 183cm, UK type
1700000237	Power cable, 3-Pin 183cm, PSE type
1700031864-01	16bits DIO Cable(CN : GPIO01)
1700026760-21	Internal USB Cable(CN: USB9 need additional 2 pcs of 1930008655)
1700029565-11	COM7/8 cable (add screws 193A200001*2)
1700030518-01	1 Port CANBus (add screws 193A200001*2)

ARK-3534D Optional HDD expansion Cable

Part Number	Description
1700033651-01	SATA cable for 3rd HDD/SSD (Screws 19310305C0*4pcs)

Optional Display Module

Part Number	Description
AMO-D001E	DVI-D module, support up to 1920x1080 @60Hz
AMO-D002E	DP module, support up to 4096x2160 @60Hz
AMO-D003E	HDMI module, support up to 1920x1080 @60Hz

Optional TPM Module

Part Number	Description
AMO-I029A	TPM 2.0 Infineon SLB9670V2.0