

ARK-3520L

6th Gen. Intel® Core™ i3/ i5/ i7 Modular Expansion Fanless Box PC

NEW



Features

- 6th Gen. Intel® Core™ i3/i5/i7 mobile processor (BGA)
- Triple independent display: VGA + HDMI + Optional Display
- DDR4 SO-DIMM memory support up to 32 GB
- Option 9-36V power module compatible with all-in-one ordering
- Optional modular design for 2.5" hard drive bays : internal /removable (support up to 2 sets)
- Advantech iDoor module compatible
- Advantech EMIO miniPCIe module compatible with all-in-one ordering
- Advantech ARK Plus AMO-3xxx series module compatible



WISE-PaaS/RMM iManager

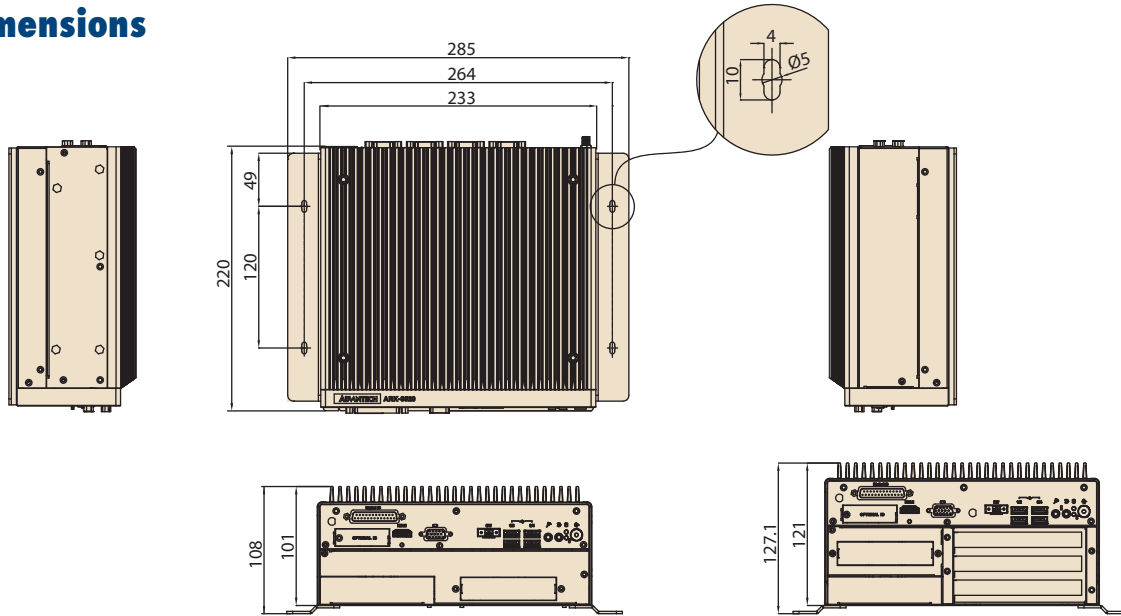


Specifications

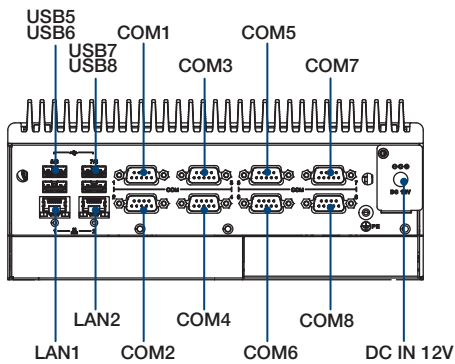
Processor System	CPU	Intel Core i7-6820EQ	Intel Core i5-6440EQ	Intel Core i3-6100E (support by T-P/N)
	Frequency	2.8 GHz (Quad Core)	2.7 GHz (Quad Core)	2.7 GHz (Dual Core)
	L3 Cache	8 MB	6 MB	3 MB
	Watts	45W	45W	35W
	System Chipset	Intel QM170		
	BIOS	AMI EFI 128Mbit		
Memory	Technology	DDR4 2133 MHz		
	Max. Capacity	32 GB		
	Socket	2 x 260-pin SO-DIMM		
Graphics	Chipset	Intel QM170 Integrated GFX Gen 9		
	Graphic Engine	Direct x 12, OpenGL 4.4 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		
	VGA	1920x1200@60Hz		
	HDMI	1 HDMI port, HDMI 1.4b for HD video playback, 3840x2160@30Hz		
	Optional 3rd Display module	DP / HDMI Display Port		
	Triple Display	VGA+HDMI + 3rd display module		
Ethernet	LAN1	10/100/1000 Mbps Intel I219-LM GbE, support Wake On Lan		
	LAN2	10/100/1000 Mbps Intel I210 GbE, support Wake On Lan		
Audio	Interface	Realtek ALC888S, High Definition Audio, Line-out, Mic-in		
Others	Watch dog Timer	255-level timer interval, setup by software		
	TPM	TPM 2.0 (Optional by project support)		
I/O Interface	Serial Port	4 x RS-232 ports, 4 x RS-232/422/485 port with auto flow control; COM 1,2 support 5V/12V power supply (by jumper)		
	USB	6 x USB 3.0 ports; 2 x USB 2.0 ports		
	DIO	16 bit DIO		
	P/S2	1 Port support by cable and bracket (Optional)		
	Parallel Port	D-sub 25pin connector (Optional)		
	Mini PCIe	2 x Full-size Mini PCIe (1 x support mSATA, 1 x support SIM holder)		
Expansions	M.2	1 x E key for WiFi		
	i Door	1 set (Optional)		
	ARK Plus	AMO-3501E 3 Slot Riser Card for 2x PCI+1xPCIx4		
	HDD	1 x 2.5" SATAIII HDD Bay with Max Height 15mm, (1 internal 2.5" HDD Bay with one optional removable HDD Bay)		
Storage	mSATA	1 x mSATA socket (Share 1 Mini PCIe)		
	Microsoft Windows	Windows 10, Windows 8.1, Windows 7		
Software Support	Linux	By Project Support		
	Power Type	AT/ATX		
Power Requirements	Power Input Voltage	12V (9-36V as optional)		
	Power Adapter	AC to DC, 150W (Optional)		
	Typical	11.4W		
Power Consumption	Max.	68.4W	46.5W	42.75W
	Construction	Aluminum housing		
Mechanical	Mounting	Desk/wall-mounting		
	Dimensions (W x H x D)	220 x 101 x 233 mm (8.66" x 3.98" x 9.17")		
	Weight	4.8 kg (10.58 lb)		
	Operating Temperature	with extended temp peripherals: -20 ~ 60° C with 0.7m/s air flow with HDD: 0 ~ 40° C with 0.7m/s air flow		
Environment	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

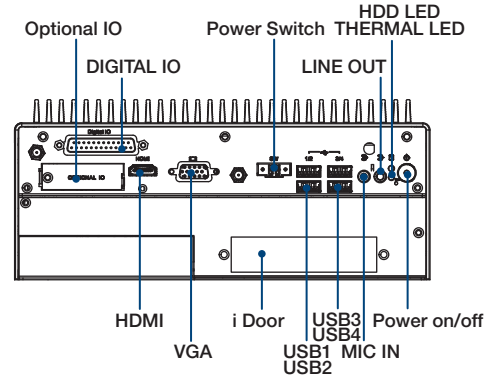
Unit: mm



Front Panel External I/O Mechanical Layout/Drawing



Rear Panel External I/O Mechanical Layout/Drawing



Ordering Information

Part No.	CPU	DDR4	VGA	HDMI	Option 3rd display module	RS-232/422/485	RS-232	USB 3.0	USB 2.0	MiniPCIe	SIM	DC input	Expansion
ARK-3520L-U8A1E	i7-6820EQ	up to 32G	1	1	1	4	4	6	2	2	1	12V	Optional
ARK-3520L-U7A1E	i5-6440EQ	up to 32G	1	1	1	4	4	6	2	2	1	12V	Optional

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

* ARK-3520L i3-6100E support by T-PN with MOQ 30pcs

Packing List

Part Number	Description
-	ARK-3520 Unit
-	User Manual (Simplified Chinese)
-	China RoHS
-	2pin power switch terminal block
1960075470N031	2 x mounting bracket

Embedded OS

Part Number	Description
2070014628	WES7E 64bit EN/JP/TC/SC
2070014627	WE8.1 64bit IndustryPro EN/JP/TC/SC
2070014899	Win10 Ent X64 (High End) for i7-6820EQ
2070014898	Win10 Ent X64 (Value) for i5-6440EQ