

# ARK-2251

## Intel 13th Generation Core i3/i5/i7 Modular Fanless Box PC

Preliminary



### Features

- Intel 13th Core i3/i5/i7 processor
- Dual channel DDR5 SODIMM memory up to 64GB support
- Support NVMe with PCIe x4
- 3x GbE, 6x USB (2x independent), 6x COM, 2x CANbus, Dual HDMI
- M.2 E key and mPCIe interfaces support wireless module installation
- Support 12x iDoors for IO expansion
- Optional PoE module
- 12-24V wide Power input
- 20-60°C wide operating temperature
- WISE-DeviceOn supported for quick AI deployment at scale



WISE-DeviceOn

SUSI API

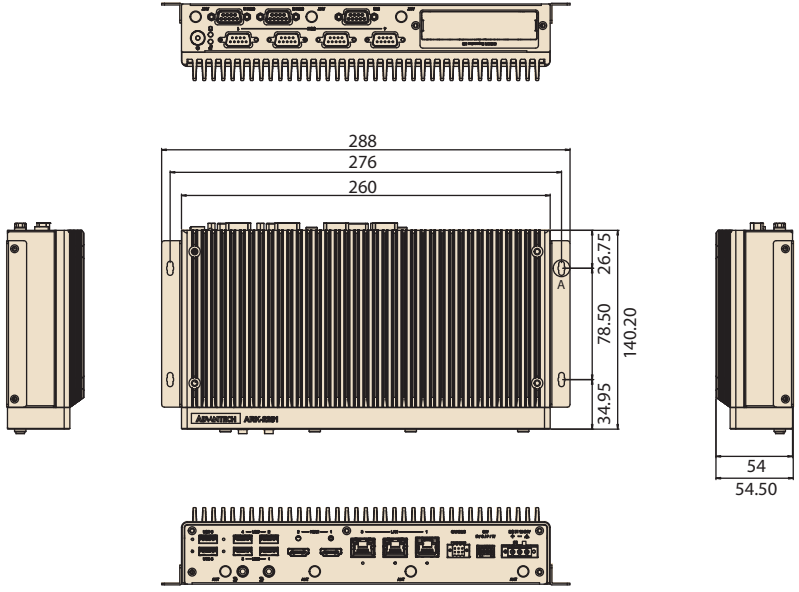


### Specifications

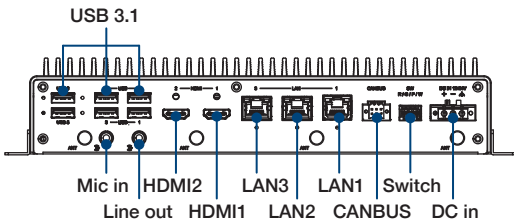
Processor System	CPU	13th Generation Intel® Core™ i Processor		
		Core i3-1315UE	Core i5-1335UE	Core i7-1365UE
	Frequency	1.2 GHz	1.3 GHz	1.7 GHz
	Core Number	2P+4E	2P+8E	2P+8E
	BIOS	AMI EFI 256Mbit		
Memory	Technology	DDR5 4800 MHz		
	Max capacity	64GB		
	Socket	2x 262-pin SODIMM		
Graphics	Chipset	Intel® Iris® Xe Graphics eligible		
	HDMI	Up to 4096 x 2304 @ 60Hz		
	Dual Display	2x HDMI		
Ethernet	LAN1	10/100/1000 Mbps Intel i219 GbE, support Wake On LAN		
	LAN2	10/100/1000/2500 Mbps Intel i226 GbE, support Wake On LAN (optional PoE module)		
	LAN3	10/100/1000/2500 Mbps Intel i226 GbE, support Wake On LAN (optional PoE module)		
Audio	Interface	Realtek ALC888S, High Definition Audio. Line-out, Mic-in		
I/O Interface	Serial Ports	6x RS-232/422/485		
	USB Ports	6x USB3.1 Gen 1 (2x are independent), 1 x internal USB2.0 for security dongle		
	GPIO	8-bit Programmable DIO		
	CANBus	2		
Expansion	Mini PCIe	1x Full-size Mini PCIe		
	M.2	2 (1x E key and 1x M key)		
Storage	NVME	1x M.2 M Key supporting NVME		
	mSATA	shared with mPCIe		
Other	WatchDog Timer	255 levels timer interval, setup by software		
	TPM	TPM 2.0 (Optional by AMO-I029)		
Software Support	Microsoft Windows	Windows 10 Enterprise		
	Linux	Ubuntu 20.04, others by project support		
Power Requirement	Power Type	ATX/AT		
	Power Input Voltage	12-24 V <sub>DC</sub>		
Power Consumption	Typical (OS idle mode)	to be confirmed		
	Max. (Full loading)	to be confirmed		
Mechanical	Construction	Aluminum/Iron		
	Mounting	Desk / Wall / VESA / DIN-Rail mounting		
	Dimensions (W x H x D)	260 x 54 x 140.2 mm (10.24" x 2.13" x 5.52")		
	Weight	to be confirmed		
Environment	Operating Temperature	With extended temp. peripherals: -20 ~ 60° C 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: 3 Grms, IEC60068-2-64, random, 5-500 Hz, 1hr/axis (with Wall Mount)		
	Shock during Operation	With SSD: 30 G, IEC-60068-2-27, half sine, 11 ms duration (with Wall Mount)		
	EMC	CE, FCC class B, CCC, BSMI		
Safety	CB, UL, CCC, BSMI			

**Dimensions**

Unit: mm



**Front Panel External I/O View**



**Rear Panel External I/O View**

