

AES-1021

Intel Elkhart Lake Atom x6425E Wide-Temp CPU
DIN rail Fanless Computers, DC +9~48V Input
HDMI/DP, 3LAN(2PoE), 2USB3/4USB2, 2/4COM



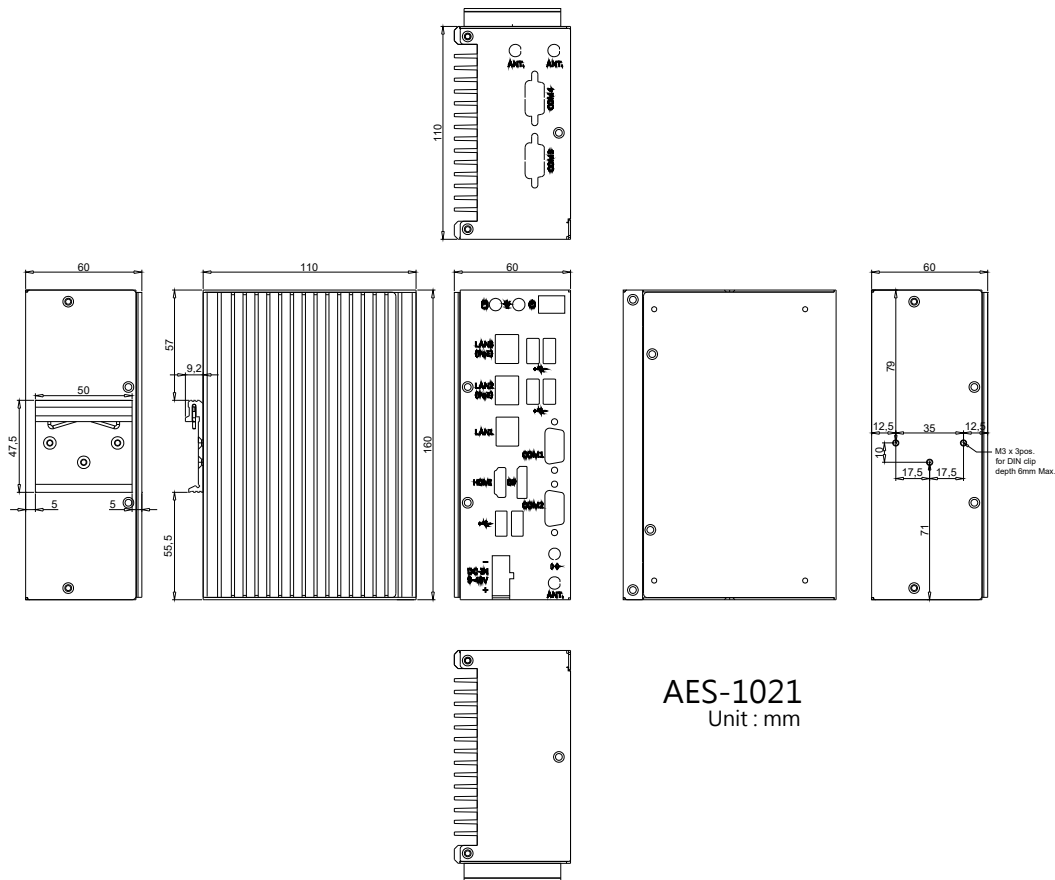
Features

- Fanless Box PC supports operating wide temperature -20°C ~ +70°C with Intel Elkhart Lake Atom x6425E QC CPU
- Supports DDR4 3200MHz, 1xSO-DIMM, up to 32GB system memory
- 1 x DP++, 1 x HDMI, 2x USB 3.2, 4x USB 2.0, option 1x Line-out
- 1 x Intel 2.5GbE by I226-LM, 2 x Intel i210 GbE support option PoE
- COM1/2 by RS-232/422/485, option COM3/4 by RS-232/422/485
- Onboard M.2 M/E-Key, option TPM 2.0
- DC +9~48V input, option 60W(12V/5A), 120W(24V/5A) power adapter
- Supports Microsoft Windows 10 IoT 64bit (Ent 2019 LTSC)
- Designed for extreme operating environment as factory applications

Specifications

AES-1021 Series Key Features		AES-1021M-M0M00P0	AES-1021P-M0M00P0	AES-1021N-M0M00P0
Processor System	CPU Max./Base Speed	Up 3.0GHz/2.0GHz	Up 3.0GHz/2.0GHz	Up 3.0GHz/1.3GHz
	L2 Cache / Core	1.5MB, 4-Core	1.5MB, 4-Core	1.5MB, 2-Core
	CPU/ TDP	Atom x6425E / 12W	Atom x6425E / 12W	Atom x6211E / 6W
	BIOS	AMI UEFI 256Mbit		
Security	Graphics Processor	Intel UHD Graphics		
	TPM	TPM2.0(option)		
Expansion Slot	M.2 M-Key	1 x M.2 M-Key 2242/2280 (PCIe x2 Gen3/SATA 3.0) Slot		
	M.2 E-Key	1 x M.2 E-Key 2230(PCIe x1 Gen3/USB 2.0) for Wireless		
Memory	Specification (SO-DIMM)	1 x DDR4 3200MHz SO-DIMM 8GB (Max. up to 32GB), option wide temperature		
Graphics	DP	1 x DP++, resolution up to 4096x2160 @ 60Hz		
	HDMI	1 x HDMI, resolution up to 4096x2160@30Hz		
Ethernet	LAN Gigabit Controller	1 x 2.5GbE LAN (Intel I226-LM)		
	PoE	2 x GbE LAN (Intel i210)	2x PoE IEEE 802.3at(30W)	2 x GbE LAN (Intel i210)
Storage	M.2 M-Key	1 x M.2 M-Key 2242/2280(PCIe x2 Gen3/SATA 3.0)		
System Rear I/O	DP	1 x DP++		
	HDMI	1 x HDMI		
	LAN1	1 x RJ45 (2.5GbE)		
	LAN2/3 (option PoE)	2 x RJ45 (GbE) 2	2 x RJ45(PoE)	2 x RJ45(GbE)
	USB 3.2 Type A	2 x USB 3.2(Gen 2)		
	USB 2.0 Type A	4 x USB 2.0		
	COM1/COM2	2 x DB-9 (RS-485/422/232)		
	System Power Input	1 x DC input by 2-pin connector, +9~48Vdc Input (+/-10% DC)		
	Power-On Button	1 x Moment button switch to turn-on system		
	System Power LED	1 x LED for system power status		
	HDD LED	1 x LED for SSD data access status		
	Audio(option)	1 x Audio port (Line-out) by option		
I/O Options	COM3/COM4(option)	2 x DB-9 (RS-232/422/485) by option		
	Antenna(option)	3 x Antenna holes (options)		
	Windows 64-bit	Win 10 IoT 64-bit		
Operation System	Linux 64-bit	Ubuntu 19.04 / 20.04; Fedora 30; RHEL 7.6/8.0/8.2; SUSE Leap/SLES		
Watchdog Timer	Output and Interval	System reset, programmable 1 ~ 255 sec/min; 1 sec. or 1min. /step		
Power Requirement	DC Input	9~48Vdc input (option +12V/5A 60W, +24V/5A 120W adapter)		
Environment	Operating Temperature	-20°C ~ 70°C (-4°F ~ 158°F)		
	Air Flow condition	65°C ~70°C (149°F ~158°F) w/0.7m/s air flow and by x6425E CPU		
	Storage Temperature	-40 ~ 85°C (-40°F ~ 185°F)		
Physical Size	Dimensions	160mm(W) x 110mm(D) x 60mm(H) / 60mm(W) x 110mm(D) x 160mm(H)		
Packing Size	Dimensions	Single Pack: 24cm(W) x15cm(D) x16cm(H), Bulk Pack: 55cm(W) x 42cm(D) x 33cm(H)		
Weight	N.W / G.W.	Single packed: 1.1Kg / 1.5Kg		
	G.W.	Bulk packed: 16Kg (10 pcs per Bulk Pack Carton)		
Certifications	EMC	CE/FCC Class B		

Dimensions Outlook



AES-1021
Unit : mm

Ordering Information

Part Number	CPU	HDMI/DP	2.5GbE/GbE	PoE	USB3.1	USB 2.0	COM	DDR4 RAM	M.2 M-Key	60/120W PSU
AES-1021M-M0M00P0	x6425E	1/1	1/2	0	2	6	2	Option	Option	Option
AES-1021N-M0M00P0	x6211E	1/1	1/2	0	2	6	2	Option	Option	Option
AES-1021P-M0M00P0	x6425E	1/1	1/2PoE	2	2	6	2	Option	Option	Option
AES-1021P-M8PA8P0	X6425E	1/1	1/2PoE	2	2	6	2	8GB	M.2 2280 128GB NVMe	Option

Optional Items

Part Number	Description
SODIMM-DDR4- M8	204-Pin SODIMM DDR4-3200 8GB
M.2-SA8(2280)/M.2-SB6	M.2 2280 SATA3 2280 128GB TLC / 256GB TLC
M.2-PA8(2280)/M.2-PB6(2280)	M.2 2280 PCIe2 Gen3 128GB NVMe / 256GB NVMe
M.2-NA8(2242)/M.2-NB6(2242)	M.2 2242 PCIe2 Gen3 128GB NVMe / 256GB NVMe
AC-9260	M.2 2230 (E-KEY) Wi-Fi Module, Intel AC9260 802.11abgn + Bluetooth 5.0, dual band 2T2R
DHAN3-60W-2P	AC-DC 60W Adapter, 90V~264Vac input by C14 socket, DC 12V@5A output with 2-pin phoneix connector
96PSA-A120W24T2	AC-DC 120W Adapter, 90V~264Vac input by C14 socket, DC 24V@5A output with 2-pin phoneix connector
WMB-110	Wall Mount Bracket 110 Kits with Screws
AES-DRC050-01	DIN Rail Clip for AES-1021/1030/1060 series