DS-382

Intel® Core Processor Series 3 Fanless Box PC



Features

- Intel® Wildcat Lake-U processor, up to 41 TOPS AI capabilities
- Book-sized Fanless System
- 3 Independent Display: 1 x HDMI + 1 x DP + 1 x USB Type C
- Versatile I/O: 2 x LAN, 6 x USB3, 1 x USB-C, 3 x COM, 2 x Audio, 1 x Terminal Block
- Suitable for outdoor usage: -20 to 60°C wide temperature and 12-24V wide voltage
- Equipped with firmware TPM (fTPM) by default; discrete TPM 2.0 available as a BOM option based on project request

WISE-PaaS/SignageCMS **WISE-DeviceOn**

Specifications

Model Name		DS-3820F-U0A1E	DS-3820F-U1A1E	DS-3820F-U2A1E
Processor System	CPU	Intel® Core™ 3 304	Intel® Core™ 5 320	Intel® Core™ 7 350
	Frequency	1.5GHz	1.5GHz	1.5GHz
	Max. Frequency	4.3GHz	4.6GHz	4.6GHz
	Core Number	5, 1P+4LPE	6, 2P+4LPE	6, 2P+4LPE
	CPU TDP	15W	15W	15W
	System Chipset	Integrated in CPU		
Memory	Technology	DDR5 6400 MHz SODIMM		
	Max. Capacity	64GB		
	Socket	Single Slot		
Thermal Solution		Fanless		
Display	Graphics Engine	Intel UHD graphics		
	Output	1 x HDMI 2.1 TMDS 1 x DP1.4 1 x USB-C (Alt) Supports 2 x 4K UHD and 1 x FHD Resolution in Triple Display scenario		
	Max. Resolution	3840x2160 @60Hz		
	CEC	BOM Option (By project support)		
I/O Interfaces	Ethernet	2 x Intel i226 (2.5GbE)		
	USB Type A	6 x USB 3.2 Gen1, 5V/0.9A		
	USB Type C	1 x USB 3.2 Gen1, support DP alt mode 1.4a 4K 60Hz, 5V-3A		
	Serial Ports	3 x Powered COM (RS-232, DB9), (Setting via jumpers; default: 0V)		
	Audio	2 x 3.5mm Audio Jack for jack sense Audio1: Line in Audio2: Line out/ Mic in		
	LED Indicators	1 x Power, 1 x Storage Access		
Expansion	M.2	1 x M.2 2242/2280 M Key (PCIex2) 1 x M.2 2242 M Key (PCIex1) 1 x M.2 2230 E Key (PCIex1 & USB2.0)#1		
Power Requirement	Power Management	ACPI 3.0		
	Input Voltage	12 - 24V DC-in (ATX/AT mode)		
Trusted Platform Module	TPM2.0	fTPM 2.0, Default TPM 2.0 (NPCT764AAEYX), BOM option by project support		
Watchdog Timer	Output	Interrupt, system reset		
	Interval	255-level timer interval, setup by software		
Physical Characteristics	Mounting	Wall Mount		
	Dimensions (W x D x H)	180 x 150 x 35 mm		
	Weight	TBD		
Environment	Operating Temperature	-20 ~ 60°C / -4 ~ 140°F (with 0.7m/s air flow)		
	Relative Humidity	95% @ 40°C (non-condensing), operating		
Operating System	Operating System	Windows 11 IoT LTSC		
	Linux	supported by project		
Certifications	EMC	CE/FCC Class B, BSMI, CCC		
	Safety	UL, CB, BSMI, UKCA, CCC		

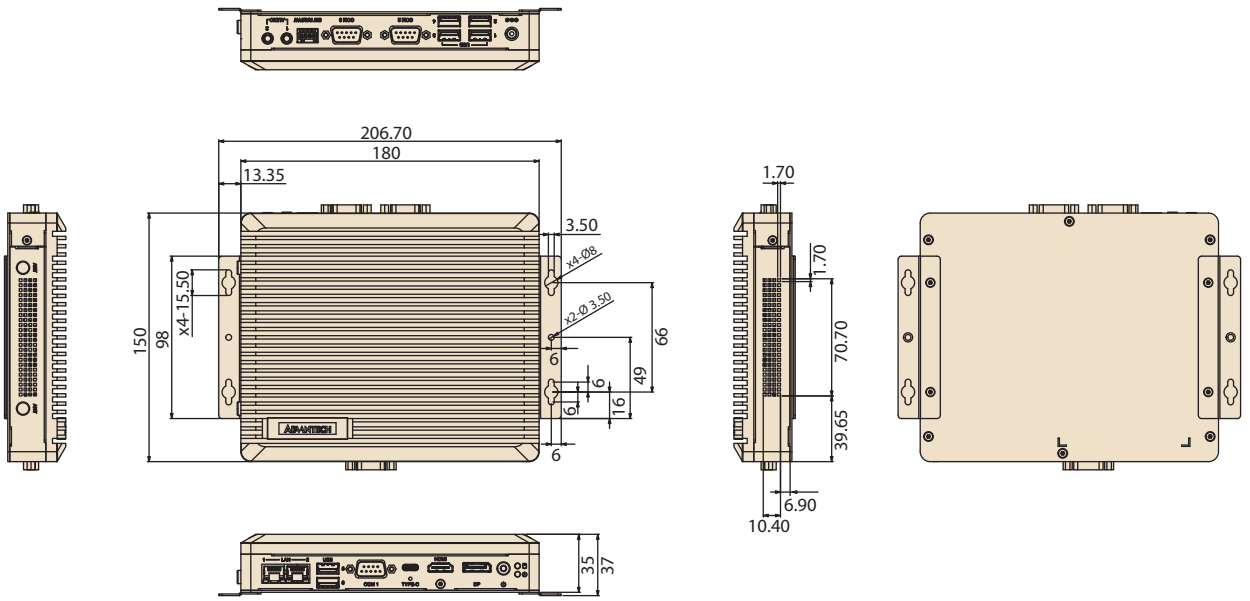
#1 M.2 E key slot are hardware interfaces for wireless communication integration only. RF Certification is not available.

All product specifications are subject to change without notice.

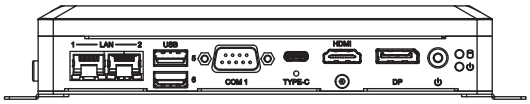
Last updated: 9-Nov-2026

Dimensions

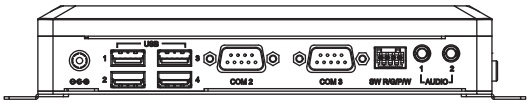
Unit: mm



Front View



Rear View



Ordering Information

Part No.	CPU	TDP	RAM	Display	LAN	USB	COM (RS-232)	M.2	Power Input	TPM 2.0	Made In
DS-3820F-U0A1E	Core 3 304	15W	Up to 64GB	1 x HDMI 1 x DP1.4	2 x Intel i226	6 x USB 3.2 Gen 1 (2.5G) 1 x USB-C: Support DP 1.4a + USB 3.2 Gen 1	3 x COM: RS-232	1 x M.2 2242 M Key (PCIex1) 1 x M.2 2242/2280 M Key (PCIex2) 1 x M.2 2230 E Key (PCIex1 & USB2.0)#1)	12-24V DC-IN	Y	China
DS-3820F-U0A1U										Y	Taiwan
DS-3820F-U1A1E	Core 5 320	15W								Y	China
DS-3820F-U1A1U										Y	Taiwan
DS-3820F-U2A1E	Core 7 350	15W								Y	China
DS-3820F-U2A1U										Y	Taiwan

Note: RAM / Storage and Operating System bundled by request