DS-086

Intel METEOR LAKE U & H High Performance AI PC Box for Display Solution



Features

- Powered by Intel® Core™ Ultra 5 / Ultra 7 processors
- HDMI 2.1 supports up to 8K@60Hz / 4K@60Hz output
- Dual-channel DDR5 memory with smart fan thermal design
- Dual 2.5GbE LAN, RS-232, and multiple USB ports
- AI acceleration supported by 11 TOPS NPU, compatible with major AI frameworks
- Support iVisionSuite
- TPM 2.0 supported: Firmware TPM (fTPM) by default; discrete TPM available as an optional BOM item upon project request
- Intel® vPro® platform for enterprise-grade security, high performance, and remote manageability

WISE-PaaS/SignageCMS WISE-DeviceOn

Introducton

DS-086 is a TV wall signage player that is suitable for AI or Intercalative and signage applications. Equipped with Smart Fan & thin design. It is able to be installed in narrow spaces for 24/7 hours operation in public space. Intel Vpro for IT remote control or Hardware EDID for TV Wall application, are in different sku for filed demands.

Specifications

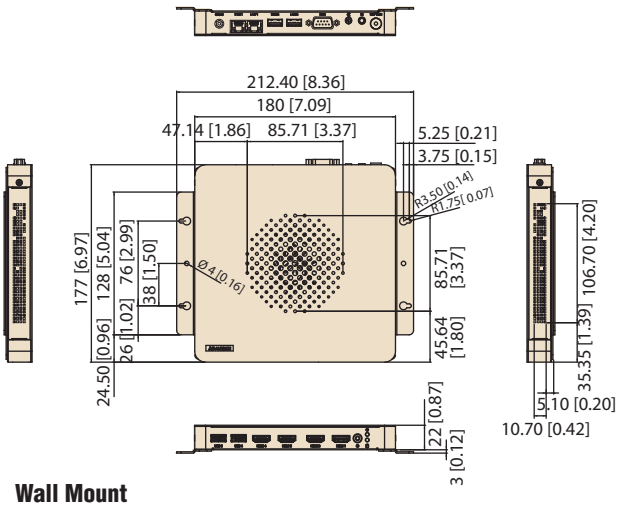
		DS-086GB-U0A1E	DS-086GB-U1A1E	DS-086GB-U2A1E	DS-086GB-U3A1E	DS-086GB-U1A5E
Processor	Chipset	Intel® Core™ Ultra 5, 135U (Vpro version)	Intel® Core™ Ultra 5, 125H	Intel® Core™ Ultra 5, 125U	Intel® Core™ Ultra 5, 135H (Vpro version)	Intel ® Core™ Ultra 5, 125H
	BIOS	AMI uEFI 256 Mbit				
Memory	Technology	DDR5 4800/5600Mhz Support				
	Max. Capacity	48GB (24GB per SO-DIMM)				
	Socket	2 x SO-DIMM				
CPU TDP		15W	28W	15W	28W	28W
Thermal Solution		PWM control by Smart Fan				
NPU	AI Engine	Intel® AI Boost, 11 TOPs				
Display	Graphics Engine	Intel® Graphics	Intel® Arc™ graphics	Intel® Graphics	Intel® Arc™ graphics	Intel® Arc™ graphics
	HDMI Ports	4 x 4K60 (HDMI 2.1 TMDS)				2 x 4K60 (HDMI 2.1 TMDS)
	HDMI Port1 Note	1 x 8K60 (up to HDMI 2.1 FRL). EDID coexistence is not supported				2 x 4K60
	CEC	HDMI-CEC				
Ethernet	Controller	i226V+i226LM	i226LM	i226LM	i226V+i226LM	i226LM
	Interface	2.5 Gigabit LAN Controller				
	Connector	2 x RJ45 (Vpro @ LAN1)	1 x RJ45	2 x RJ45	2 x RJ45 (Vpro @ LAN1)	2 x RJ45
I/O Interfaces	Audio	1 x (Line-Out or Mic-In)				
	USB	2 x USB 3.2 Gen1, 2 x USB 2.0				
	Serial Port (RS-232)	1 X RS232 (Tx, Rx)				
	LED Indicators	1 x Power, 1 x SSD Access				
	IR Phone Jack	1 x IR (Reserve for OEM Demand)	--	1 x IR (Reserve for OEM Demand)	1 x IR (Reserve for OEM Demand)	1 x IR
	EDID_CLR	--	--	1 x EDID_CLR	--	1 x EDID_CLR
Expansion	M.2	2242 M-Key (PCIex4) 2230 E Key (PCIe & USB2.0), Limited PN to support Wireless Ant Connector				
Power Requirement	Input Voltage	19 V DC-in (ATX/AT mode)				
Watchdog Timer	Output	Interrupt, system reset				
	Interval	255-level timer interval, setup by software				
Trusted Platform Module	TPM2.0	fTPM (default), dTPM by Project Support				
Physical Characteristics	Mounting	Wall Mount				
	Dimensions (W x D x H)	177 x 180 x 22 mm				
	Weight	0.9 kg				
Environment	Operating Temperature	0 ~ 50°C (without air flow)				
	Storage Temperature	-20 ~ 85°C (-4~140°F)				
	Relative Humidity	95% @ 40 °C (non-condensing), operating				
Operating System	Operating System	Win10 LTSC X64, Win11 LTSC X64				
	Linux	supported by project				
Certifications	EMC	CE/FCC Class B, BSMI, UKCA				
	Safety	UL, CB, BSMI				

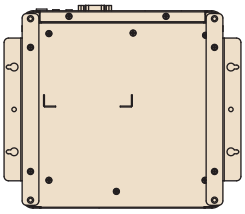
All product specifications are subject to change without notice.

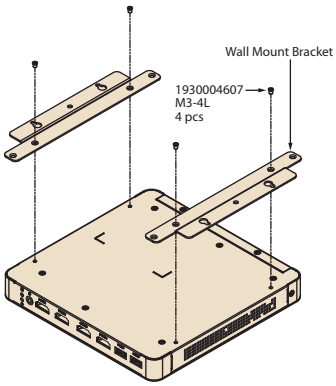
Last updated: 23-Nov-2026

Dimensions

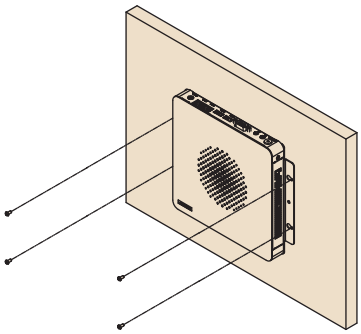
Unit: mm [inch]



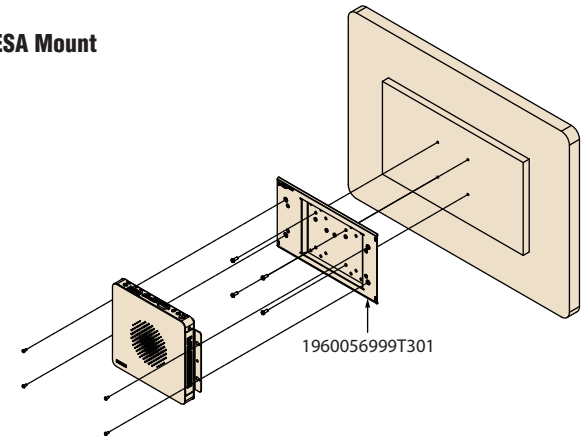




Wall Mount



VESA Mount



Front View

1 LAN



2 LAN



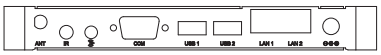
2 LAN w/ EDID



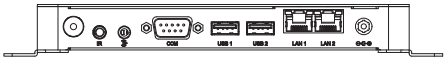
1 LAN w/ Ant. Hole



2 LAN w/ Ant. Hole



2 HDMI, 2 DP w/o Ant. Hole



Rear View











Ordering Information

Part No.	CPU	Processor Series	HDMI (CEC)	USB	RJ-45	RS-232	Audio	EDID	IR	DP	M.2	Ant Hole	Power Input	Operating Temp.	Origin
DS-086GB-U0A1E	135U	Intel® Core™ Ultra 5	4	4	2	1	1	NA	1	NA	2	NA	19V	0~40°C	China
DS-086GB-U0A1U	135U	Intel® Core™ Ultra 5	4	4	2	1	1	NA	1	NA	2	NA	19V	0~40°C	Taiwan
DS-086GB-U0A2E	135U	Intel® Core™ Ultra 5	4	4	2	1	1	NA	1	NA	2	Yes	19V	0~40°C	China
DS-086GB-U0A2U	135U	Intel® Core™ Ultra 5	4	4	2	1	1	NA	1	NA	2	Yes	19V	0~40°C	Taiwan
DS-086GB-U1A1E	125H	Intel® Core™ Ultra 5	4	4	1	1	1	NA	0	NA	2	NA	19V	0~40°C	China
DS-086GB-U1A1U	125H	Intel® Core™ Ultra 5	4	4	1	1	1	NA	0	NA	2	NA	19V	0~40°C	Taiwan
DS-086GB-U1A2E	125H	Intel® Core™ Ultra 5	4	4	1	1	1	NA	0	NA	2	Yes	19V	0~40°C	China
DS-086GB-U1A2U	125H	Intel® Core™ Ultra 5	4	4	1	1	1	NA	0	NA	2	Yes	19V	0~40°C	Taiwan
DS-086GB-U1A3E	125H	Intel® Core™ Ultra 5	4	4	2	1	1	Yes	1	NA	2	NA	19V	0~40°C	China
DS-086GB-U1A3U	125H	Intel® Core™ Ultra 5	4	4	2	1	1	Yes	1	NA	2	NA	19V	0~40°C	Taiwan
DS-086GB-U1A4E	125H	Intel® Core™ Ultra 5	4	4	2	1	1	NA	1	NA	2	NA	19V	0~40°C	China
DS-086GB-U1A4U	125H	Intel® Core™ Ultra 5	4	4	2	1	1	NA	1	NA	2	NA	19V	0~40°C	Taiwan
DS-086GB-U1A5E	125H	Intel® Core™ Ultra 5	2	4	2	1	1	1	1	2	2	NA	19V	0~40°C	China
DS-086GB-U1A5U	125H	Intel® Core™ Ultra 5	2	4	2	1	1	1	1	2	2	NA	19V	0~40°C	Taiwan
DS-086GB-U2A1E	125U	Intel® Core™ Ultra 5	4	4	2	1	1	Yes	1	NA	2	NA	19V	0~40°C	China
DS-086GB-U2A1U	125U	Intel® Core™ Ultra 5	4	4	2	1	1	Yes	1	NA	2	NA	19V	0~40°C	Taiwan
DS-086GB-U3A1E	135H	Intel® Core™ Ultra 5	4	4	2	1	1	NA	1	NA	2	NA	19V	0~40°C	China
DS-086GB-U3A1U	135H	Intel® Core™ Ultra 5	4	4	2	1	1	NA	1	NA	2	NA	19V	0~40°C	Taiwan
DS-086GB-U3A3E	135H	Intel® Core™ Ultra 5	4	4	2	1	1	Yes	1	NA	2	NA	19V	0~40°C	China
DS-086GB-U3A3U	135H	Intel® Core™ Ultra 5	4	4	2	1	1	Yes	1	NA	2	NA	19V	0~40°C	Taiwan
DS-086GB-U6A1E	155U	Intel® Core™ Ultra 7	4	4	2	1	1	Yes	1	NA	2	Yes	19V	0~40°C	China
DS-086GB-U6A1U	155U	Intel® Core™ Ultra 7	4	4	2	1	1	Yes	1	NA	2	Yes	19V	0~40°C	Taiwan
DS-086GB-U6A3E	155U	Intel® Core™ Ultra 7	4	4	2	1	1	NA	1	NA	2	NA	19V	0~40°C	China
DS-086GB-U6A3U	155U	Intel® Core™ Ultra 7	4	4	2	1	1	NA	1	NA	2	NA	19V	0~40°C	Taiwan

Packing List

Part Number	Description
	1 x DS-086
1960057740T002	2 x Wall Mount brackets and screws
96PSA-A65W19V1-3	1x 19V power adapter
1990012452S000	4x Rubber Foot and screws

Optional Accessory

Part Number	Description
1960056999T301	VESA Mount BKT

Storage and DRAM

Part Number	Description
SQF-C4MV2-128GDEDM	PCIe/NVMe M.2 2242 128G
SQF-C4MV2-256GDEDM	PCIe/NVMe M.2 2242 256G
SQF-C4MV2-512GDEDM	PCIe/NVMe M.2 2242 512G
SQR-SD5N32G5K6HNAG	SODIMM DDR5 5600 32GB 1.1v 2Gx8 (0-95 °C)
SQR-SD5S8G5K6SNGA	SODIMM DDR5 5600 8GB 1.1v 1Gx16 (-20-95 °C)
SMI-SD5V8GN56-CC	Semi Ind D5 SO DIMM 5600 8GB 1Gx16 0~85 °C
SMI-SD5V16GN56-CB	Semi Ind D5 SO DIMM 5600 16GB 1Gx8 0~85 °C

Power Cord

Part Number	Description
1700001524	3-pin power cord (US)
170203183C	3-pin power cord (EU)
170203180A-01	3-pin power cord (UK)
1700008921	3-pin power cord with PSE (Japan)
1700019146	3-pin power cord (CCC)
1700018553	3-pin power cord (AU)
1700024849-01	3-pin power cord (TW)

Embedded OS

Part Number	Description
20706WLV1S0072	Win11 2024 LTSC value for Ultra-5
20706WX1VS0135	Win10 2021 LTSC value for Ultra-5
20706U24DS0060	UbuntuD DS-086 64b 24.04 ENU

Optional Modules / Expansion Support

Part Number	Description
AIW-170BQ 1751000654-01 1751000412-01 AIW-512 x2	WCN6856/QCA2066 Wi-Fi 6E M.2 Key E solution, cable and antenna by project support
EWM-W179M201E 1751000654-01 1751000412-01 AIW-512 x2	IEEE 802.11 ax (2.4GHz+5GHz) + BT5.2, 2T2R, M.2 Key E solution, cable and antenna by project support

Note: All modules are certified; system-level certification depends on project integration