

DS-086

8K60/ 4x4K60 Digital Signage Player



Features

- Power by Intel Core Ultra 5, 7 CPU
- HDMI 2.1 8K60/4K60 Ports Support
- Dual-CH DDR5 & Smart Fan Design
- Dual 2.5 Gb LAN, RS232 & USB ports
- AI Frameworks support by 11 Tops NPU
- Support iVisionSuite
- TPM2.0: Firmware TPM (fTPM) by default; discrete TPM chip available as a BOM option based on project request
- vPro® for enterprise-grade security, high performance, remote manageability

WISE-PaaS/SignageCMS WISE-DeviceOn

Introduction

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
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)
	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
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
	HDMI Ports	4 x 4K60 (HDMI 2.1 TMDS)			
	HDMI Port1 Note	1 x 8K60 (up to HDMI 2.1 FRL). EDID coexistence is not supported			
	CEC	HDMI-CEC			
Ethernet	Controller	i226V+i226LM	i226LM	i226LM	i226V+i226LM
	Interface	2.5 Gigabit LAN Controller			
	Connector	2 x RJ45 (Vpro @ LAN1)	1 x RJ45	2 x RJ45	2 x RJ45 (Vpro @ LAN1)
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)
	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	0~40°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			

Ordering Information

Processor	Part Number	Description
MTL 125H	DS-086GB-U1A1E	MTL 125H, 1 x 2.5 Gb LAN, Audio and RS-232, Barebone
	DS-086GB-U1A1U	MTL 125H, 1 x 2.5 Gb LAN, Audio and RS-232, Barebone, MIT
	DS-086GB-U1A2E	MTL 125H, 1 x 2.5 Gb LAN, Antenna Mounting Hole, Audio and RS-232, Barebone
	DS-086GB-U1A2U	MTL 125H, 1 x 2.5 Gb LAN, w/ Ant H, Audio, and RS-232 Barebones, TW
	DS-086GB-U1A3E	MTL125H, 2 x 2.5 Gb LAN, EDID, IR, Audio, Barebones
	DS-086GB-U1A4E	MTL 125H, 2 x 2.5 Gb LAN, IR, Audio and RS-232, Barebone
MTL 125U	DS-086GB-U2A1E	MTL 125U, 2 x 2.5 Gb LAN, EDID, IR, Audio and RS-232, Barebone
	DS-086GB-U2A1U	MTL 125U, 2 x 2.5 Gb LAN, EDID, IR, Audio and RS-232, Barebone, MIT
MTL 135H	DS-086GB-U3A1E	MTL 135H Vpro, 2 x 2.5 Gb LAN, IR, Audio and RS-232, Barebone
	DS-086GB-U3A1U	MTL 135H Vpro, 2 x 2.5 Gb LAN, IR, Audio and RS-232, Barebone, MIT
	DS-086GB-U3A3E	MTL 135H, 2 x 2.5 Gb LAN, EDID, IR, Audio and RS-232 Barebones
MTL 135U	DS-086GB-U0A1E	MTL 135U Vpro, 2 x 2.5 Gb LAN, IR, Audio and RS-232, Barebone
	DS-086GB-U0A1U	MTL 135U Vpro, 2 x 2.5 Gb LAN, IR, Audio and RS-232, Barebone, MIT
	DS-086GB-U0A2E	MTL 135U Vpro, 2 x 2.5 Gb LAN, Audio, IR, RS232 and Antenna Mounting Hole, barebone
	DS-086GB-U0A2U	MTL 135U Vpro, 2 x 2.5 Gb LAN, Audio, IR, RS232 and Antenna Mounting Hole, barebone, MIT
MTL 155U	DS-086GB-U6A1E	MTL 155U, 2 x 2.5 Gb LAN, EDID, Audio and RS-232, dTPM, Barebone
	DS-086GB-U6A3E	MTL 155U, 2 x 2.5 Gb LAN, Audio, w/ Ant H, dTPM, Barebones

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-SD5N8G5K6HNGAG	SODIMM DDR5 5600 8GB
SQR-SD5N16G5K6HNGAG	SODIMM DDR5 5600 16GB
SQR-SD5N24G5K6M	SODIMM DDR5 5600 24GB

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

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