

DS-086

8K60/ 4x4K60 Digital Signage Player

Preliminary



Features

- Power by Intel Core Ultra 5 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 10 Tops NPU

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 7/24 hours operation in public space.

Specifications

		DS-086GB-U1A1E	DS-086GB-U0A1E
Processor	Chipset	Intel® Core™ Ultra 5, 125H	Intel® Core™ Ultra 5, 135U (Vpro version)
	BIOS	AMI uEFI 256 Mbit	
Memory	Technology	DDR5 4800/5600Mhz Support	
	Max. Capacity	24GB per DIMM	
	Socket	2 x SO-DIMM	
CPU TDP		28W	15W
Thermal Solution		PWM control by Smart Fan	
NPU	AI Engine	Intel® AI Boost, 10 TOPs	
	Graphics Engine	Intel® Arc™ graphics	Intel® Graphics
Display	HDMI Ports	4 x 4K60 (4 x 3840*2160)	
	HDMI note	HDMI1 8K60 (7860*4320)	
Ethernet	Controller	Intel® Ethernet Controller I226	Intel® Ethernet Controller I226 w/ Vpro
	Interface	2.5 Gigabit LAN Controller	
	Connector	1 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	Reserve for OEM demand	
Storage	M.2	1 x 2242 M Key (NVME)	
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	
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 21H2 LTSC X64	
	Linux	Win11 LTSC (coming soon) supported by project	
Certifications	EMC	CE/FCC Class B, BSMI, UKCA	
	Safety	UL, CB, BSMI	

Technical drawing of the R1251 12V 1.25A power supply unit, showing front, top, and side views with dimensions in mm and inches.

Front View Dimensions:

- Overall Width: 212.40 [8.36]
- Overall Height: 177 [6.97]
- Mounting Hole Spacing (Left): 24.50 [0.96], 26 [1.02], 76 [2.99], 38 [1.50]
- Mounting Hole Spacing (Right): 45.64 [1.80], 85.71 [3.37]
- Internal Widths: 180 [7.09], 85.71 [3.37], 47.14 [1.86]
- Output Terminal Spacing: 5.25 [0.21], 3.75 [0.15]
- Output Terminal Width: 83.50 [0.14], 81.25 [0.07]
- Output Terminal Hole Diameter: $\varnothing 4.10 [0.16]$
- Output Terminal Mounting Hole Diameter: $\varnothing 4.10 [0.16]$

Top View Dimensions:

- Overall Width: 212.40 [8.36]
- Overall Height: 106.70 [4.20]
- Mounting Hole Spacing (Left): 24.50 [0.96], 26 [1.02], 76 [2.99], 38 [1.50]
- Mounting Hole Spacing (Right): 45.64 [1.80], 85.71 [3.37]
- Internal Widths: 180 [7.09], 85.71 [3.37], 47.14 [1.86]
- Output Terminal Spacing: 5.25 [0.21], 3.75 [0.15]
- Output Terminal Width: 83.50 [0.14], 81.25 [0.07]
- Output Terminal Hole Diameter: $\varnothing 4.10 [0.16]$
- Output Terminal Mounting Hole Diameter: $\varnothing 4.10 [0.16]$

Side View Dimensions:

- Overall Width: 212.40 [8.36]
- Overall Height: 10.70 [0.42]
- Mounting Hole Spacing (Left): 24.50 [0.96], 26 [1.02], 76 [2.99], 38 [1.50]
- Mounting Hole Spacing (Right): 45.64 [1.80], 85.71 [3.37]
- Internal Widths: 180 [7.09], 85.71 [3.37], 47.14 [1.86]
- Output Terminal Spacing: 5.25 [0.21], 3.75 [0.15]
- Output Terminal Width: 83.50 [0.14], 81.25 [0.07]
- Output Terminal Hole Diameter: $\varnothing 4.10 [0.16]$
- Output Terminal Mounting Hole Diameter: $\varnothing 4.10 [0.16]$

Diagram of the rear panel showing the following ports and labels from left to right:

- USB 3
- USB 4
- HDMI 4
- HDMI 3
- HDMI 2
- HDMI 1
- Power button (indicated by a circle with a dot)

Part Number	Description
DS-086GB-U0A1E	MTL 135U Vpro, 2 x 2.5 Gb LAN, IR, Barebone
DS-086GB-U1A1E	MTL 125H, 1 x 2.5 Gb LAN, Barebone
DS-086GB-U0A1U	MTL 135U Vpro, 2 x 2.5 Gb LAN, IR, Barebone
DS-086GB-U1A1U	MTL 125H, 1 x 2.5 Gb LAN, Barebone

Part Number	Description
20706WX1VS0122	Win 10 2021 LTSC value for Ultra-5

Part Number	Description
	1 x DS-086
	1 x Wall Mount brackets
	1x 19V power adapter

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)

Part Number	Description
SQF-C4MV2-128GDEDM	PCIe/NVMe M.2 2242 128G
SQF-C4MV2-256GDEDM	PCIe/NVMe M.2 2242 256G
SQR-SD5N8G5K6HNGAG	SODIMM DDR5 5600 8GB
SQR-SD5N16G5K6HNAG	SODIMM DDR5 5600 16GB
SQR-SD5N24G5K6KM	SODIMM DDR5 5600 24GB

Part Number	Description