DS-084

Ultra-slim Digital Signage Player with 3/4 Display Output (2K/4K Support)
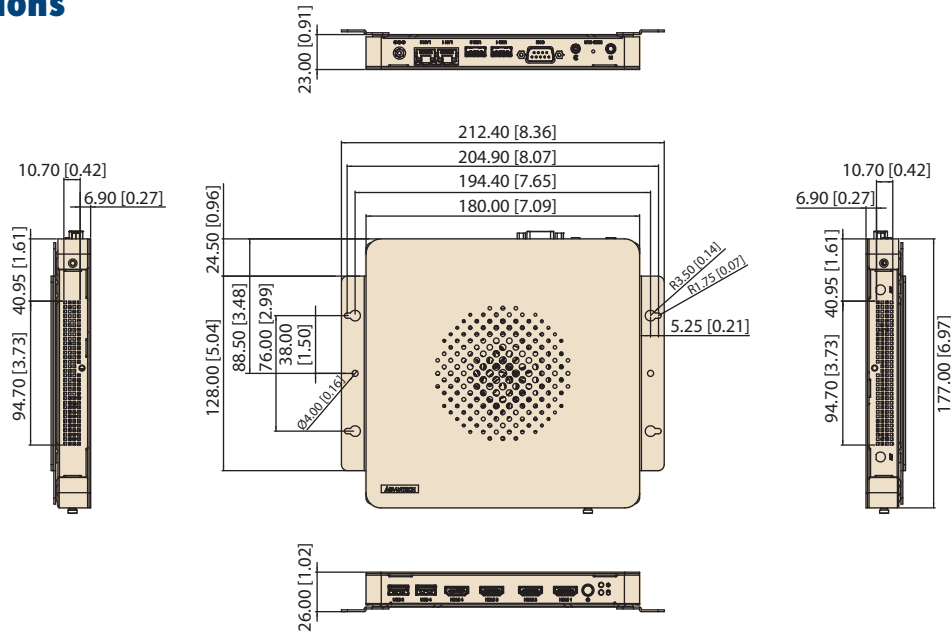
Preliminary

Features

- Power by AMD Ryzen R2000 processor
- Powerful graphic engine - AMD Radeon HD graphics
- 23mm-thin chassis ideal for space-limited installation
- 3/4 HDMI support up to 4K output; resolution up to 4K (3840 x 2160)
- Cable-less design for easy maintenance
- Supports DeviceOn/SignageCMS for intuitive signage content managing, remote monitoring and control
- Supports Out-of-Band (OOB) remote management upon request
- Equipped with firmware TPM (fTPM) by default; discrete TPM 2.0 available as a BOM option based on project request

McAfee™ Acronis WISE-PaaS/SignageCMS WISE-DeviceOn

Windows 10   Windows 11

Introducton

Measuring at 23 mm thick, DS-084 is a slim digital signage player powered by AMD Ryzen R2000 series. This thin-andpowerful signage player is equipped with 3 or 4 HDMI display which is capable to achieve up to 4K resolution, and delivers a premium visual experience when graphics performance really matters. Advantech DeviceOn/SignageCMS, Web-based content management software support in Windows11.

Specifications

		DS-0840B-U2A1E	DS-0840B-U1A1E	DS-0840B-U0A1E
Processor	Processor	AMD R2514 (4 Cores/ 8 Threads)	AMD R2314 (4 Cores/ 4 Threads)	AMD R2312 (2 Cores/ 4 Threads)
	Chipset	Integrated in SOC		
	BIOS	AMI uEFI 256 Mbit		
Memory	Technology	DDR4		
	Max. Capacity	32GB (16GB per SO-DIMM)		
	Socket	2 x 260-pin SODIMM		
CPU TDP		25W	25W	25W
Thermal Solution		Smart-Fan	Smart-Fan	Smart-Fan
Display	Graphics Engine	AMD Radeon (8 GPU Compute Units)	AMD Radeon (6 GPU Compute Units)	AMD Radeon (3 GPU Compute Units)
	Output	HDMI 2.1 TMDS x 3+HDMI 1.4 x 1	HDMI 2.1 TMDS x 3+HDMI 1.4 x 1	HDMI 2.1 TMDS x3
	Resolution	Up to 3840 x 2160 @60Hz , 4K playback by HW Codec		
Ethernet	Controller	Intel i210, Realtek RTL8111G		
	Interface	Gigabit LAN Controller		
	Connector	2 x RJ-45 10/100/1000 Mbps		
I/O Interfaces	Audio	1 x Line-out & 1 x Mic-in		
	HDMI (EDID support)	4	4	3
	USB	2 x USB 2.0, 2 x USB 3.2Gen1		
	Serial Port	1 x RS-232		
	Switch/button	1 x Power on/off button; 1 x EDID_CLR button		
	LED Indicators	1 x Power, 1 x SSD or Storage Access		
	IR	1x IR (Reserve for OEM Support)		
Storage	M.2	M.2 2242 M-Key SATA (NVMe PCIe x4 reserve for OEM support)		
Power Requirement	Power Management	ACPI 3.0		
	Input Voltage	19V 3.42A DC-in (ATX/AT mode)		
Trusted Platform Module	TPM2.0	fTPM 2.0, Default TPM 2.0 (NPCT760AABYX), 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 177 x 23 mm		
	Weight	0.9 kg (1.98 lb)		
Environment	Operating Temperature	0 ~ 40° C (32 ~ 104F) with 0.7 m/s airflow		
	Relative Humidity	95% @ 40° C (non-condensing), operating		
Operating System	Operating System	Win11/Win10 LTSC x64		
	Linux	supported by project		
Certifications	EMC	CE, FCC Class B, CCC, BSMI, UKCA		
	Safety	UL, CB, CCC, BSMI, UKCA (No RED certification)		

ADVANTECH **Digital Signage Player**

All product specifications are subject to change without notice.   Last updated: 8-Aug-2025

Dimensions

Unit: mm [inch]

Front View

Rear View

Ordering Information

Part Number	Description
DS-0840B-U0A1E	AMD R2312, 3 x HDMI w/ EDID, Fan, Barebone
DS-0840B-U1A1E	AMD R2314, 4 x HDMI w/ EDID, Fan, Barebone
DS-0840B-U2A1E	AMD R2514, 4 x HDMI w/EDID, Fan, Barebone
DS-0840B-U0A1U	AMD R2312, 3 x HDMI w/ EDID, Fan, Barebone, TW
DS-0840B-U1A1U	AMD R2314, 4 x HDMI w/ EDID, Fan, Barebone, TW
DS-0840B-U2A1U	AMD R2514, 4 x HDMI w/EDID, Fan, Barebone, TW

Packing List

Part Number	Description
-	1 x DS-084
-	1 x 19V 3.42A Power adapter
-	2 x Wall Mount Brackets
-	4 x Rubber foot and screws
-	4 x DDR4 Thermal pads

RAM & Storage

Part Number	Description
SQR-SD4S4G3K2HNPG	Memory, SQ, DDR4 4GB
SQR-SD4S8G3K2HNBG	Memory, SQ, DDR4 8GB
SQR-SD4S16G3K2HNBG	Memory, SQ, DDR4 16GB
SQF-S4BV1-64GDSDC	Storage, M.2 2242, SQ, 64GB
SQF-S4BV1-128GDSDC	Storage, M.2 2242, SQ, 128GB
SQF-S4BV1-256GDSDC	Storage, M.2 2242, SQ, 256GB
SQF-S4BV2-512GDSDC	Storage, M.2 2242, SQ, 512GB

Embedded OS

Part Number	Description
20706WLE1S0095	Win11 LTSC Entry 64b 24H2 ENU
20706WX1ES0142	Win10 LTSC Entry 64b 21H2 ENU

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)