DS-354

Modern AI-ready PCs, combining high-performance AMD Ryzen™ 8000-series Zen CPU cores



Features

- AMD RYZEN™ Embedded 8000, Hi-Performance Zen4 CPU up to 8C / 16T
- AMD Radeon™ RDNA 3 graphics with integrated XDNA NPU, up to 16 TOPS AI performance
- 1 x HDMI 2.1 (FRL, up to 8K) and 3 x HDMI 2.1 (TMDS, up to 4K@60Hz)
- 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 and EDID Lock
- 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

Windows 11

Introducton

DS-354 is designed for modern AI-ready PCs, featuring high-performance Zen CPU cores, integrated RDNA graphics, and built-in AI acceleration. It delivers strong computing power, efficient power management, and enhanced AI capabilities—making it ideal for productivity, multimedia, and edge applications.

Specifications

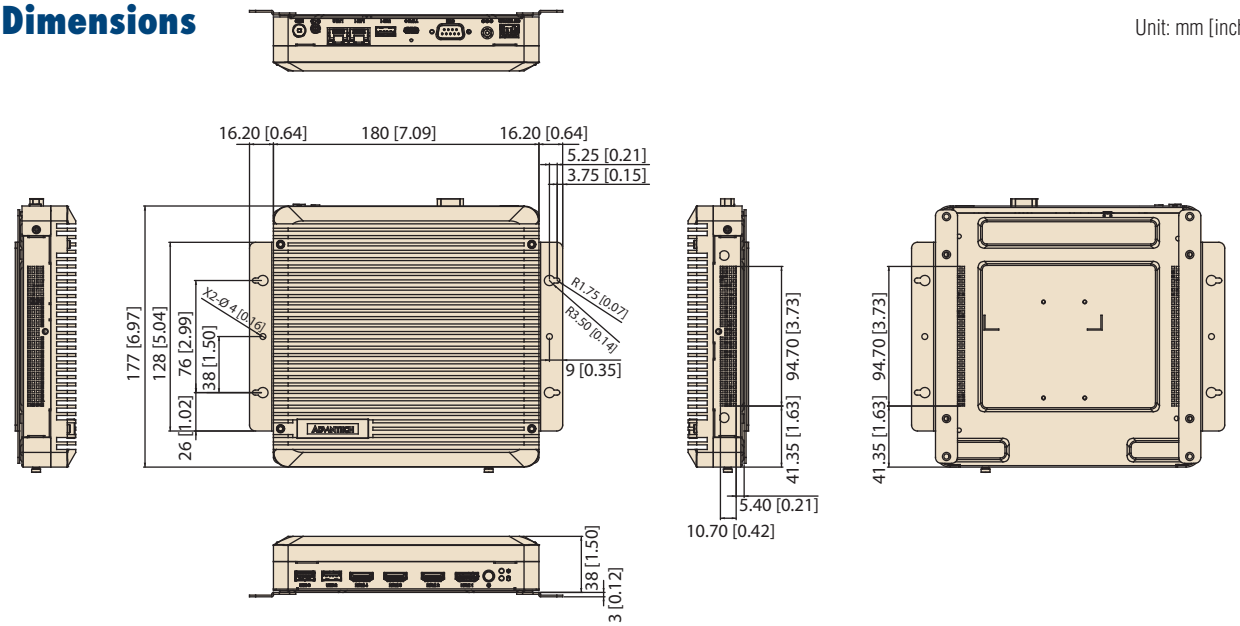
		DS-3540F-U0A1E	DS-3540F-U1A1E
Processor	Processor	AMD R8640 (6 Cores/ 12 Threads)	AMD R8840 (8 Cores/ 16 Threads)
	Chipset	Integrated in SOC	
	BIOS	AMI uEFI 256 Mbit	
Memory	Technology	DDR5 5600MHz	
	Max. Capacity	96GB (48GB per SO-DIMM)	
	Socket	2 x 260-pin SODIMM	
CPU TDP		20W	20W
Thermal Solution		Fanless	Fanless
Display	Graphics Engine	AMD Radeon (8 GPU Compute Units)	AMD Radeon (12 GPU Compute Units)
	Output (HDMI EDID Lock support)	1 x HDMI 2.1 (FRL, up to 8K) and 3 x HDMI 2.1 (TMDS, up to 4K@60Hz)	1 x HDMI 2.1 (FRL, up to 8K) and 3 x HDMI 2.1 (TMDS, up to 4K@60Hz)
	Resolution	FRL, up to 8K and TMDS, up to 4K@60Hz	
Ethernet	Controller	Intel I210: 10/100/1000 Mbps LAN, supporting Wake-on-LAN and OOB management via EdgeBMC Intel I226: 10/100/1000/2500 Mbps LAN, supporting Wake-on-LAN	
	Interface	Gigabit LAN Controller	
	Connector	2 x RJ-45	
I/O Interfaces	Audio	Realtek ALC888S, High Definition Audio 3.5mm Audio jack sense (Line or Mic-in)	
	USB	1 x USB 3.2 Gen1, 2 x USB2.0, 1 x USB-C (support 1x 20Gbps, DP ALT mode, 15W)	
	Serial Port	1 x RS-232 (support High speed COM)	
	Switch/button	1 x Power on/off button	
	Remote Switch	1 x EDID_CLR button	
	LED Indicators	1 x Power, 1 x Storage Access	
Expansion	M.2	2 x 2230 E Key PCIe Gen3;USB 2.0 for WiFi/Bluetooth or Hailo module 1 x 2280 M Key PCIe Gen3 (X2) (BOM option) for Hailo module	
Storage	M.2	1 x M.2 2242 M Key PCIe Gen4 (X4) for NVMe	
Power Requirement	Power Management	ACPI 3.0	
	Input Voltage	12-24V (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 177 x 38 mm	
	Weight	1.7 kg	
Environment	Operating Temperature	-20 ~ 60°C (-4 ~ 140°F) with 0.7 m/s airflow	
	Relative Humidity	95% @ 40°C (non-condensing), operating	
Software Support		DeviceOn/Edge BMC/SUSI	
Operating System	Operating System	Windows 11 IoT LTSC	
	Linux	supported by project	
Certifications	EMC	CE, FCC Class B, CCC, BSMI, UKCA	
	Safety	UL, CB, CCC, BSMI, UKCA (No RED certification)	

All product specifications are subject to change without notice.

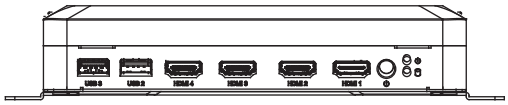
Last updated: 2-Nov-2026

Dimensions

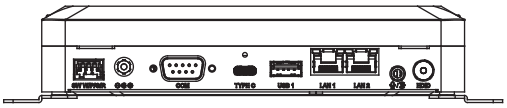
Unit: mm [inch]



Front View



Rear View



Ordering Information

Part Number	Description
DS-3540F-U0A1E	AMD R8640 4 HDMI, 2 LAN, 4 HDMI, EDID, OOB, Audio, Power SW, TypeC
DS-3540F-U1A1E	AMD R8840 4 HDMI, 2 LAN, 4 HDMI, EDID, OOB, Audio, Power SW, TypeC
DS-3540F-U0A1U	AMD R8640, 4 x HDMI w/ EDID, Barebone, MIT
DS-3540F-U1A1U	AMD R8840, 4 x HDMI w/ EDID, Barebone, MIT

Packing List

Part Number	Description
-	1 x DS-354
96PSA-A65W19V1-3	1 x 19V power adapter
1960057740T002	2 x Wall Mount brackets and screws

Optional Items

Part Number	Description
96PSA-A84W12V1-4	12V power adapter
96DL-FSP090-AAAN3	24V power adapter
AMK-V025E	Mounting Kit (VESA/Pole Mount Bracket/Adapter Kit)
EWM-W179M201E	IEEE 802.11ax (2.4GHz+5GHz+6GHz)+BT 5.3, 2T2R
1751000648-01	RF Cable SMA/F-R MHF4L/113 BLK L100mm
1751000635-01	RF Cable SMA/F-R MHF4L/113 BLK L200mm
AIW-512-I	2 x WiFi 6E Dipole ANTENNA

Note: If Wi-Fi is required, the package must include the module, antenna, and antenna cable.

RAM & Storage

Part Number	Description
SQR-SD5I8G5K6SNGPB	SODIMM DDR5 5600 8GB 1Gx16 (-40~95°C) Samsung
SQR-SD5I16G5K6SNPB	SODIMM DDR5 5600 16GB 2Gx8 (-40~95°C) Samsung
SQF-C4MV2-128GDEDM	SQF M.2 2242 720-D 128G 3D TLC BiCS5 (-20~85°C)
SQF-C4MV2-256GDEDM	SQF M.2 2242 720-D 256G 3D TLC BiCS5 (-20~85°C)
SQF-C4MV2-512GDEDM	SQF M.2 2242 730-D 512G 3D TLC BiCS5 (-20~85°C)

Embedded CMS

Part Number	Description
server(virtual):32ASDSC3SWPR01	SignageCMS Windows Server Pro License/300 client
server(sticker):36ASDSC3SWPR01	SignageCMS Windows Server Pro License/300 client
client(virtual):32ASDSC3CWPR01	SignageCMS Windows Pro Client License
client(sticker):36ASDSC3CWPR01	SignageCMS Windows Pro Client License

Embedded OS

Part Number	Description
TBD	Win11 LTSC Entry 64b 24H2 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)