DS-580

4K Digital Signage Player with Integrated nVIDIA GT Graphics for Independent Quad Displays

Features

- Integrated NVIDIA® GeForce® GT 1030 graphics for ultra HD playback
- Powered by Intel® Atom™ Processor E3950
- Quad independent HDMI outputs
- Expandable via M.2 and miniPCIe
- Reserve TPM 2.0 for security application
- Content management software built-in
- Decode for HEVC/WMV9/VP9
- Low power & fanless signage player

intel® Security

Acronis **WISE-PaaS/DeviceOn** **WISE-PaaS/SignageCMS**

Windows 10   nVIDIA. intel intel
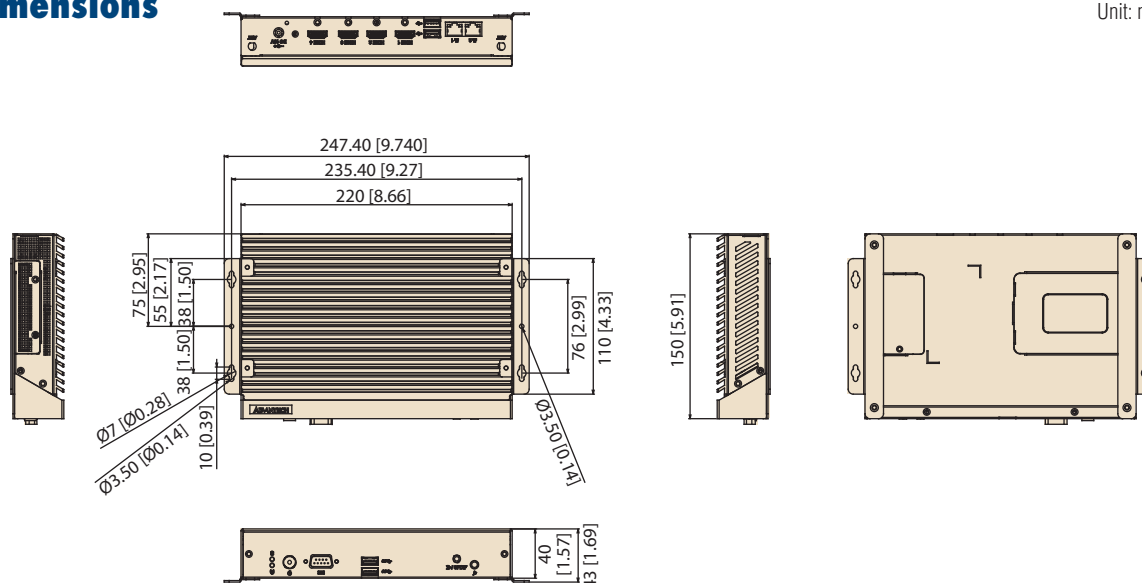
Introduction

Advantech DS-580 is a Ultra HD signage player powered by an Intel® Atom™ Processor E3950 with integrated NVIDIA® GeForce® GT 1030 graphic engine for Ultra HD. This GT 1030 graphic engine's award-winning NVIDIA Pascal™ architecture, powerful graphics engine, and state-of-the-art technologies give you the performance upgrade you need to drive today's most demanding applications. DS-580 not only has four HDMI ports to support each independent display in 4K @ 30HZ playback, it can also play single video content in 4K @ 60Hz playback via the HDMI 2.0 port. With dual LAN to enable interconnectivity and Mini PCIe/M.2 E-key/TPM 2.0 for extending applications. Its storage can be easily maintained via slide-in chassis design. DS-580 is the ideal solution for multi-display applications in stores, stadiums, hotel lobbies, restaurants, and other public spaces.
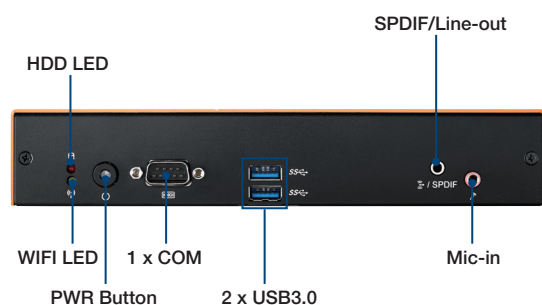
Specifications

		DS-580
Processor System	CPU	Intel® Atom™ Processor E3950
	System Chipset	Integrated in CPU
	L2 Cache	2 MB
	BIOS	AMI uEFI 64-Mbit
Memory	Technology	2 x DDR3L 204-pin DIMM**
	Max. Capacity	16 GB (up to 8 GB per SODIMM)
Graphic & Display Tech.	Graphic Engine	HDMI-1 and HDMI-2: NVIDIA® GeForce GT 1030 HDMI-3 and HDMI-4: Intel® HD Graphics 505
	Graphic Memory	2GB GDDR5
	Resolution	HDMI 2.0: up to 3840 x 2160 @ 60Hz HDMI 1.4: up to 3840 x 2160 @ 30Hz (HDMI-4 supports CEC function)
	Output	2 x HDMI 1.4, 2 x HDMI 2.0
	Multi Display	Up to 4 simultaneous outputs
	Video Format	Decode for H.264,VC-1,WMV9,H.265/HEVC,VP8,VP9,JPEG/MJPEG,MPEG2(only for Yocto project Linux) Encode for H.264,MVC,WMV9,H.265/HEVC,VP8,VP9,JPEG/MJPEG
Storage	SATA	1 x 2.5-inch SATA III HDD/SSD
Ethernet	Interface	Gigabit LAN controller
	Controller	1 x Intel I211-AT, 1 x Realtek 8111G
I/O Interface	LAN	2 (RJ-45)
	USB 2.0	2
	USB 3.0	2
	Audio	1 x audio phone jack for Mic In, 1 x SPDIF/Line Out (supports jack sensing via OS settings)
	Serial	1 x RS-232
Expansion	Mini PCIe	1 x Full Size MiniPCIe support mSATA; w/SIM holder, support WWAN module (USB interface)
	M.2	* 1 x M.2 1630/2230 E-Key for wireless module
Trusted Platform Module	TPM 2.0	Option
Power Requirement	Power Consumption	Idle mode: 19 W (w/o expansion) Full mode: 27 W (w/o expansion)
	Input Voltage	19 V DC in (ATX/AT mode, default ATX)
Watchdog Timer	Output	Interrupt, system reset
	Interval	Programmable using WISE-PaaS/EdgeSense
Physical Characteristics	Mounting	Wall mount kits for LCD or plasma panels
	Dimensions (W x H x D)	220 x 40 x 150 mm
	Weight	1.7 kg
Environment	Operating Temperature	0 ~ 40 °C (w/ HDD), with 0.7m/s air flow 0 ~ 50 °C (w/ SSD) with 0.7m/s air flow
	Relative Humidity	95% @ 40° C (non-condensing)
Software Development Kit	Operating System	Supports Microsoft Windows 10
	Linux	By project
Certification	EMC	CE, FCC Class B, BSMI
	Safety	UL, CCC, BSMI, CB (No RED certification)

ADVANTECH **Digital Signage Player**

Dimensions

Unit: mm [inch]

247.40 [9.740]
235.40 [9.27]
220 [8.66]

75 [2.95]
55 [2.17]
38 [1.50]

76 [2.99]
110 [4.33]

150 [5.91]

Ø7 [Ø0.28]
Ø3.50 [Ø0.14]
38 [1.50]
10 [0.39]
Ø3.50 [0.14]

40 [1.57]
43 [1.69]

Front View

HDD LED

SPDIF/Line-out

WIFI LED   1 x COM

PWR Button   2 x USB3.0

Mic-in

Rear View

DC IN

2 x HDMI 2.0

ANT   HDMI 1   HDMI 2   HDMI 3   HDMI 4   DC 19V   ANT

2 x LAN

2 x USB2.0

2 x HDMI 1.4
Only HDMI-4 support CEC
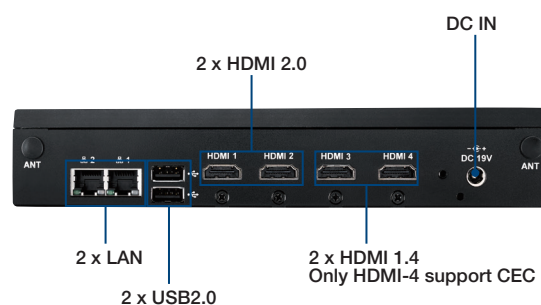
Packing List

Part Number	Description
-	1 x DS-580 unit
-	1 x Power adapter (DC 19 V/3.42A 65 W)
-	1 x Bracket set for fixing power adapter plug
-	2 x Mounting brackets
-	2 x User manual
-	1 x Content management software

Power Cord

Part Number	Description
1700001524	3-pin power cord (US)
170203183C	3-pin power cord (EU)
170203180A	3-pin power cord (UK)
1702031836	3-pin power cord (AU)
1700008921	3-pin power cord (Japan)
1700019146	3-pin power cord (China)

Ordering Information

Part Number	Description
DS-580GB-S6A2E	DS-580 E3950 with graphic, barebone

Mounting Kits

Part Number	Description
AMK-V005E	VESA mount kit (generic for ARK-DS/DS)

Embedded OS

Part Number	Description
20706WX9ES0037	img W10 19EL DS-580 64b 1809 ENU

Optional Items

Part Number	Description
EWM-W163M201E	Advantech Brand, 802.11 a/b/g/n/ac, Atheros QCA6174A-5, 2T2R, with BT4.2 (Low energy operation) (A-E key)
EWM-W160M201E	Advantech Brand, 802.11 b/g/n, Realtek RTL8188EE, 1T1R (2-antenna) (A-E Key)