

Smart Digital Signage Solutions

The Best Fit for your Signage Network

- / Value Proposition
- / Product Portfolio
- / Software
- / Case Studies
- / Selection Guide



ADVANTECH

Enabling an Intelligent Planet

www.advantech.com



Empowering Smart Digital Signage Applications

Digital signage is now a vital link to connect advertisers with viewers for a more direct engagement and experience. Advantech smart digital signage solution covers most business and environmental needs, from single store to central management, commercial to industrial applications. Managing digital signage deployed in remote locations and ensuring their reliability and uptime can be challenging. Advantech provides pre-integrated hardware and software solutions with content management, device monitoring, and content security software for a flexible range of applications in retail, quick service restaurant, transportation and education fields.

Key Benefits



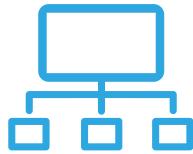
Diversified Product Offering

- Low Power to Performance
- 2 to 6 multi-displays
- Windows / Android Support



Reliable & Secured Operation

- Cableless Design
- Optimized Thermal Solution
- Proven Modular Compatibility



Simplified Signage Manageability

- Content Management
- Device Management
- AI Acceleration Toolkit



Flexible Customization

- Strong Technical Know-how
- Timely Delivery
- Global Support



Management Built-in



Remote Device Management **WISE-PaaS/DeviceOn**

With WISE-PaaS/DeviceOn's intuitive interface, you can monitor device health, take real-time actions (i.e. power on/off), troubleshoot problems, and send software and firmware updates over-the-air (OTA) on-site and remotely at scale.



Content Management **WISE-PaaS/SignageCMS**

Advantech WISE-PaaS/SignageCMS software is a smart, sophisticated content creation and dispatch tool. Customers can remotely manage up to 500 signage devices.

Solution Ready Platforms

Entry Level

DS-100

ARM Cortex-A72 +
ARM Cortex-A53



DS-370

Intel Celeron J1900



Ultra Slim

DS-081

6th Gen. Intel Core i3/ i5
7th Gen. Intel Core i5/ Celeron



DS-082

AMD Ryzen V1807B/
V1605B/ R1606G



DS-066

Intel Celeron J1900



Multi-display

DS-780

6th Gen.
Intel Core i3/ i5/ i7/ Celeron



DS-580

Intel AtomProcessor E3950



DS-980

6th Gen. Intel Core i3/ i5/ i7/ Celeron
7th Gen. Intel Core i3/ i5/ i7/ Celeron



Modular Design

DS-200

8th Gen. Intel Core
i3/ i5/ Celeron



DS-280

6th Gen.
Intel Core i3/ i5/ i7



Application Stories



Enabling Customer Engagement in Retail Stores

Today, in-store signage has become a powerful tool to connect shoppers and retailers and communicates in a high-impact way. Our customer was looking for a six-displays signage solution capable of independent content playback, 24/7 operation, remote content management and monitoring. Advantech DS-980 provides ultimate expansion capability with a low profile graphic card via PCIe x16 slot and allows flexible configurations and manages content across multiple displays.



Key Benefits

- The best C/P solution for six-display signage
- Flexible configurations: 1x6, 6x1, 2x3, 3x2
- Supports up to 4K resolution and playback
- Built-in content management, remote monitoring functions



Enhancing the Customer Experience with Self-ordering Kiosks

Self-ordering kiosks are becoming more prevalent in quick service restaurants for their easy access menus that ensure prompt order processing at peak times. Our customer, one of the leading QSR brands, chose and implemented DS-081 into their self-ordering kiosks for its ultra slim design, high performance, five-year warranty, ready UL agency approvals, custom BIOS, and turnkey semi-custom computing solution.



Key Benefits

- Slim and easy integration design
- Supports dual UHD/FHD outputs
- Ready UL agency approvals
- Customization services



Advantech Lands Flight Information Display System for World's Largest Airport

Istanbul's new airport is expected to have the world's largest single terminal building, covering 1.3 million square feet and capable of handling 90 million passengers annually and serving around 100 airlines. To guarantee real-time delivery of information and provide the best 24/7 service to passengers, a secure and reliable FIDS system was required. For this project, Advantech DS-280 perfectly met customer's requirements and high standards. The cableless 4K signage player can drive three larger format displays and allows easy installation and removal for maintenance with OPS designs.

Key Benefits

- OPS compliant design for easy integration and maintenance
- Supports up to three displays
- Dual LAN with Intel AMT remote management
- Professional experience in the FIDS industry

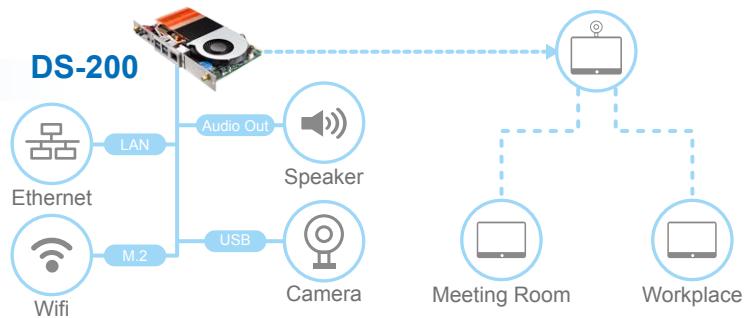


Smart Display Module for Interactive Conference Signage

Our customer was building a large format, 4K interactive display systems for video conference and public use. Therefore, 24-hour operation, remote monitoring, and easy-to-maintain design are required. Advantech DS-200, a small foot-print yet powerful Intel SDM based signage module was adopted as a sophisticated video conference server and display high-quality video, image and audio between multiple locations. It can be easily plugged into customer's display and is scalable for system expansion. With built-in Intel VPro functions, DS-200 allows IT staff to monitor, manage, and repair remotely, regardless of operating system health or computer power state.

Key Benefits

- Plug & Play
- Powerful performance with Intel 8th Generation H series CPU
- Built with V-Pro
- Easy maintain



Digital Signage Solutions

Entry Level Series



Ultra Slim Series



Model Name		DS-100	DS-100 Lite	DS-370	DS-066	DS-081	DS-082
Processor System	CPU	Dual-core Cortex-A72 & Quad-core Cortex-A53	Dual-core Cortex-A72 & Quad-core Cortex-A53	Intel Celeron J1900	Intel Celeron J1900	Intel Core i5-7200U Intel Core i5-6300U Intel Core i3-6100U Intel Celeron 3965U	AMD V1807B AMD V1605B AMD R1606G
	BIOS	-	-	AMI uEFI 64 Mbit	AMI uEFI 64 Mbit	AMI uEFI 128 Mbit	AMI uEFI 128Mbit
	Chipset	-	-	Integrated in CPU	Integrated in CPU	Integrated in CPU	Integrated in CPU
Memory	Technology	LPDDR3 1600MHz	LPDDR3 1600MHz	DDR3L 1333MHz	DDR3L 1333MHz	DDR4 2133MHz	DDR4 3200MHz (V1807B) DDR4 2400MHz (V1605B) DDR4 2400MHz (R1606G)
	Max. Capacity	2GB on board	2GB on board	8GB (4GB per SODIMM)	8GB (4GB per SODIMM)	32GB (16GB per SO-DIMM)	32GB (16GB per SO-DIMM)
	Socket	-	-	2 x 204-pin SODIMM	2 x 204-pin SODIMM	2 x 260-pin SODIMM	2 x 260-pin SODIMM
Display	Controller	-	-	CPU Integrated	CPU Integrated	CPU Integrated	CPU Integrated
	Graphic Engine	Mali-T860MP4	Mali-T860MP4	Intel HD Graphics	Intel HD Graphics	Intel HD Graphics 620/610/520	AMD Radeon HD graphics
	Graphic Memory	-	-	Shared system memory	Shared system memory	Shared system memory	Shared system memory
	Multiple Display	Dual	Dual	Dual	Dual	Dual	4 (V series) 3 (R series)
	Interface	HDMI x 2	HDMI x 2	HDMI x 1, DP+ x 1, VGA x1	HDMI x 2	HDMI 1.4 x 2	HDMI 2.0 x 4 (V series) HDMI 2.0 x 3 (R series)
Expansion Interface	Max. Resolution	4096 x 2304 @ 60Hz	4096 x 2304 @ 60Hz	2048 x 1280 @ 60Hz	1920 x 1080 @ 60Hz	4096 x 2304 @ 24Hz	4096 x 2304 @ 60Hz
	M.2	1 (2230 E key)	1 (2230 E key)	-	1	-	1 (2242 M key) for Storage 1 (2230 E key) for Wi-Fi
	Mini PCIe	-	-	2	-	1	-
	PCIe x16	-	-	-	-	-	-
Ethernet	Micro SD Card	1	1	-	-	-	-
	Connector	RJ-45 x 2	RJ-45 x 1	RJ-45 x 2	RJ-45 x 1	RJ-45 x 2	RJ-45 x 1
Audio	Connector	1 (Line-out)	1 (Line-out)	2 (SPDIF/ Line-out, Mic-in), supports Jack Sense	1 x Line-out, 1 x Mic in, supports Jack Sense	1 (SPDIF/ Line-out/Mic-in), supports Jack Sense	1 (SPDIF/ Line-out/Mic-in), supports Jack Sense
WatchDog Timer		Yes	Yes	Yes	Yes	Yes	Yes
Storage	SATA	-	-	1 x 2.5" SATA II HDD/SSD	1 x 2.5" SATA II HDD/SSD	1 x 2.5" SATA III HDD/SSD	-
	mSATA	-	-	Yes, colay Mini PCIe	-	Yes, colay Mini PCIe	-
	eMMC	16GB	16GB	-	-	-	-
I/O	USB3.0	1	1	1	1	4	2
	USB2.0	1 (OTG)	1 (OTG)	3	3	-	2
Power	COM Port	1 (Console Port)	-	2 (RS-232)	1(RS-232)	1(RS-232)	1 (RS-232)
	Power Supply	DC 12V input	DC 12V input	DC 19V input	DC 19V input	DC 19V input	DC 19V input
Environment	Operational Temperature	0 ~ 60°C	0 ~ 60°C	HDD: 0 ~ 40°C SSD: 0 ~ 50°C (with 0.7m/s airflow)	HDD: 0 ~ 40°C SSD: 0 ~ 50°C (with 0.7m/s airflow)	HDD: 0 ~ 40°C (with 0.7m/s airflow)	0 ~ 40°C (with 0.7m/s airflow)
	Physical Characteristics	Dimensions (L x W x H)	135 x 130 x 29 mm	115 x 110 x 20 mm	204 x 118.2 x 44.2 mm	180 x 190 x 19 mm	180 x 190 x 19 mm
Operating System		Android 7.1.2, Debian 9 (Linux 4.4 Kernel)	Android 7.1.2, Debian 9 (Linux 4.4 Kernel)	Microsoft Windows, Linux (Option)	Microsoft Windows, Linux (Option)	Microsoft Windows, Linux (Option)	Microsoft Windows, Linux (Option)
Certifications	EMC	CE, FCC Class B, CCC, BSMI	CE, FCC Class B, CCC, BSMI	CE, FCC Class B, CCC, C-Tick, BSMI	CE, FCC Class B, CCC, BSMI	CE, FCC Class B, CCC, BSMI	CE, FCC Class B, CCC, BSMI
	Safety	UL, CB, CCC, BSMI	UL, CB, CCC, BSMI	UL, CB, CCC, BSMI	UL, CB, CCC, BSMI	UL, CB, CCC, BSMI	UL, CB, CCC, BSMI

Note: “-” means Not Applicable (N/A)

WISE-PaaS/SignageCMS

Content Management Software

Media Type	Image, Video, Scrolling Text, Bulletin Board, Time, Flash, PowerPoint, Webpage, PDF
Program Management	Customize Program Layouts, Program Preview, Urgent Cast
Output	Portrait/Landscape Display, Multi-screen Output, Audio Output
Schedule Management	Daily/Weekly/Monthly Schedule, Appointment Dispatch, Dispatch Records
Remote Player Management	Unlimited Multipoint Dispatching, Player Group Setting Remote Power on/off (Intel AMT), Remote Software Upgrade, Auto Shutdown Setting, Hardware Monitoring, Software Monitoring, Screenshot Real-time Monitoring
System Management	Authorization Setting, Simultaneous Editing, System backup/ Recovery, Resume Download, Differential Download, App Monitoring
Operating System	Server: Windows 7 or above Windows Server 2008 or above Client: Windows 7 (Embedded/POSReady)

Multi-Display Series



Modular Series



Model Name		DS-580	DS-780	DS-980	DS-200	DS-280
Processor System	CPU	Intel Atom™ x7-E3950	Intel Core i7-6600U Intel Core i5-6300U Intel Core i3-6100U Intel Celeron-3955U	Intel Core i7-6700TE Intel Core i5-6500TE Intel Core i3-6100TE Intel Celeron G3900TE	Intel Core i5 8400H Intel Core i3 8100H Intel Celeron G4930E	Intel Core i7-6822EQ Intel Core i5-6442EQ Intel Core i3-6102EQ Intel Celeron G3902E
	BIOS	AMI uEFI 64 Mbit	AMI uEFI 128 Mbit	AMI uEFI 128 Mbit	AMI uEFI 128 Mbit	AMI uEFI 128 Mbit
	Chipset	Integrated in CPU	Integrated in CPU	Intel Q170	Intel QM370	Intel QM170
Memory	Technology	DDR3L 1866MHz	DDR4 2133MHz	DDR4 2133MHz	DDR4 2400MHz	DDR4 2133MHz
	Max. Capacity	16 GB (8 GB per SODIMM)	32GB (16GB per SODIMM)	32GB (16GB per SODIMM)	32GB (16GB per SODIMM)	32GB (16GB per SODIMM)
	Socket	2 x 204-pin SODIMM	2 x 260-pin SODIMM	2 x 260-pin SODIMM	2 x 260-pin SODIMM	2 x 260-pin SODIMM
Display	Controller	NVIDIA GeForce GT1030	CPU Integrated	CPU Integrated	CPU Integrated	CPU Integrated
	Graphic Engine	-	Intel HD Graphics 520/510	Intel HD Graphics 530	Intel UHD Graphics 630	Intel HD Graphics 630/530
	Graphic Memory	16GB GDDR5 (on board memory)	Shared System Memory	Shared system memory	Shared System Memory	Shared system memory
	Multiple Display	Four	Triple	Triple+	Triple	Triple
	Interface	HDMI 2.0 x 2, HDMI 1.4 x 2	HDMI 2.0 x 1, HDMI 1.4 x 2	HDMI 2.0 x 1, HDMI 1.4 x 2	PCIe x8 (98 fingers) x 1, mini-DP++ x 1	JAE TX25 80-pin x 1, HDMI 2.0 x1, DP x1
	Max. Resolution	3840 x 2160 @ 60Hz	4096 x 2160 @ 60Hz	4096 x 2160 @ 60Hz	4096 x 2304 @ 60Hz	4096 x 2304 @ 60Hz
Expansion Interface	M.2	1 (2230 E key)	1 (2230 E key)	1 (2230 E key)	1 (2242 M key) for Storage 1 (2230 E key) for Wi-Fi	-
	Mini PCIe	1 x Full Size MiniPCIe support mSATA; w/SIM holder, support WWAN module (USB interface)	1	1	-	1
	PCIe x16	-	-	1	-	-
Ethernet	Connector	RJ-45 x 2	RJ-45 x 2	RJ-45 x 2	RJ-45 x 1	RJ-45 x 2
Audio	Connector	2 (SPDIF/ Line-out, Mic-in), supports Jack Sense	1(SPDIF/ Line-out/ Mic-in), supports Jack Sense	2 (SPDIF/ Line-out, Mic-in), supports Jack Sense	1(SPDIF/ Line-out/ Mic-in), supports Jack Sense	1 (Line-out), supports Jack Sense
WatchDog Timer		Yes	Yes	Yes	Yes	Yes
Storage	SATA	1 x 2.5-inch SATA III HDD/SSD	1 x 2.5" SATA III HDD/SSD	1 x 2.5" SATA III HDD/ SSD (top); 1 x 2.5" SATA III SSD (bottom), supports RAID 0/1	-	1 x 2.5" SATA III HDD/ SSD
	mSATA	Yes, colay Mini PCIe	Yes, colay Mini PCIe	Yes, colay Mini PCIe	-	Yes, colay Mini PCIe
I/O	USB3.0	2	4	4	5 (Front Bracket x 4, SDM Connection x 1)	3
	USB2.0	2	-	2	-	-
	COM Port	1 (RS-232)	1 (RS-232)	1 (RS-232)/ 2 (RS-485 & 422 with extension cable)	1 (RS-232) via SDM Connection, Tx/Rx Only	-
Power	Power Supply	DC 19V input	DC 19V input	DC 12V input	DC 12V input (via SDM Connection)	DC 12V-19V input (via OPS connector)
Environment	Operating Temperature	HDD: 0 ~ 40°C SSD: 0 ~ 50°C (with 0.7m/s airflow)	0 ~ 40°C (with 0.7m/s airflow)	0 ~ 40°C	0 ~ 55°C	HDD: 0 ~ 40°C SSD: 0 ~ 50°C
Physical Characteristics	Dimensions (L x W x H)	220 x 150 x 40 mm	235 x 175 x 35 mm	267.6 x 205 x 88 mm	175 x 100 x 20 mm (SDM-L compliant)	200 x 119 x 30 mm
Operating System	Windows 10, Linux (Option)		Microsoft Windows, Linux (Option)	Microsoft Windows, Linux (Option)	Microsoft Windows, Linux (Option)	Microsoft Windows, Linux (Option)
Certifications	EMC	CE, FCC Class B, CCC, BSMI	CE, FCC Class B, CCC, BSMI	CE, FCC Class B, CCC, BSMI	CE, FCC Class B	CE, FCC Class B, CCC, BSMI
	Safety	UL, CB, CCC, BSMI	UL, CB, CCC, BSMI	UL, CB, CCC, BSMI	LVD	UL, CB, CCC

Note: “-” : means Not Applicable (N/A)

WISE-PaaS/ DeviceOn

Device Monitoring and Management

Device Management	IPC Device Management, Group View, Map View, HW Status Monitoring & Rule Setting, SW Process Monitoring & Rule Setting, Data Auto Report, Dashboard
Remote KVM	Remote KVM, Terminal Mode, Intel AMT Integration , Screenshot
Power Management	Remote On/Off, Hibernate, Power On/Off Scheduling
System Protection	McAfee White List Protection
System Recovery	Acronis Backup/Recovery, Backup/Recovery Scheduling, Hot-Key Recovery
Notification Center	Event Log, Email Notification, SMS Notification
Management Interface	Account/Role management, Mobile Mode, Web-Based Console
Others	RESTful API Web Service

WISE-PaaS/SignageCMS

WISE-PaaS/DeviceOn



Layout Editing



Scheduling



Dispatch



Remote Monitoring



Remote KVM



Security

Entry Series



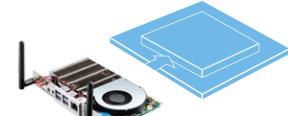
Ultra Slim Series



Multi-display Series



Modular Series



Regional Service & Customization Centers

China | Kunshan
86-512-5777-5666

Taiwan | Taipei
886-2-2792-7818

Netherlands | Eindhoven
31-40-267-7000

Poland | Warsaw
00800-2426-8080

USA | Milpitas, CA
1-408-519-3898

Worldwide Offices

Greater China

China

Toll Free	800-810-0345
Beijing	86-10-6298-4346
Shanghai	86-21-3632-1616
Shenzhen	86-755-8212-4222
Chengdu	86-28-8545-0198
Hong Kong	852-2720-5118

Taiwan

Toll Free	0800-777-111
Taipei & IoT Campus	886-2-2792-7818
Taichung	886-4-2372-5058

Middle East and Africa

Israel 072-2410527

Asia

Japan

Toll Free	0800-500-1055
Tokyo	81-3-6802-1021
Osaka	81-6-6267-1887
Nagoya	81-0800-500-1055

Korea

Toll Free	080-363-9494/5
Seoul	82-2-3660-9255

Singapore

Singapore	65-6442-1000
-----------	--------------

Malaysia

Kuala Lumpur	60-3-7725-4188
Penang	60-4-537-9188

Thailand

Bangkok	66-02-2488306-9
---------	-----------------

Vietnam

Hanoi	84-24-3399-1155
-------	-----------------

Indonesia

Jakarta	62-21-751-1939
---------	----------------

Australia

Toll Free	1300-308-531
Melbourne	61-3-9797-0100

India

Bangalore	91-80-2545-0206
Pune	91-94-2260-2349

Europe

Netherlands

Eindhoven	31-40-267-7000
Breda	31-76-523-3100

Germany

Toll Free	00800-2426-8080/81
Munich	49-89-12599-0
Düsseldorf	49-2103-97-855-0

France

Paris	33-1-4119-4666
-------	----------------

Italy

Milan	39-02-9544-961
-------	----------------

UK

Newcastle	44-0-191-262-4844
London	44-0-870-493-1433

Spain

Madrid	34-91-668-86-76
--------	-----------------

Sweden

Stockholm	46-0-864-60-500
-----------	-----------------

Poland

Warsaw	48-22-31-51-100
--------	-----------------

Russia

Moscow	8-800-555-01-50
St. Petersburg	7-812-332-5727;

Czech Republic

Ireland

Americas

North America

Toll Free	1-888-576-9668
Cincinnati	1-513-742-8895
Milpitas	1-408-519-3898
Irvine	1-949-420-2500
Ottawa	1-815-433-5100

Brazil

Toll Free	0800-770-5355
São Paulo	55-11-5592-5367

Mexico

Toll Free	1-800-467-2415
Mexico City	52-55-6275-2727

ADVANTECH

Enabling an Intelligent Planet

www.advantech.com

Please verify specifications before ordering. This guide is intended for reference purposes only.

All product specifications are subject to change without notice.

No part of this publication may be reproduced in any form or by any means, electronic, photocopying,

recording or otherwise, without prior written permission of the publisher.

All brand and product names are trademarks or registered trademarks of their respective companies.

© Advantech Co., Ltd. 2019

8600000481