

# Digital Signage Solutions

## Interactive and Intelligent Signage

- Overview
- Product Offerings
- Case Studies
- Product Selection



DeviceOn

Variety of Sizes & Easy Installation

Validated Leading Signage CMS

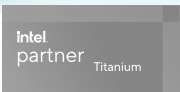
Optimal Performance & Flawless Playback



Entry Level	Ultra Slim	Multi-Display	Modular
 2 4K ULTRA HD	 4 8K ULTRA HD	 8 8K ULTRA HD	 3 4K ULTRA HD
DS-410	DS-085	DS-630	DS-202



Enabling an Intelligent Planet



www.advantech.com

# Interactive and Intelligent Digital Signage

Interactive digital signage is efficient and powerful; and gives businesses a creative opportunity to connect with their customers. Advantech digital signage solutions provide multiple technologies, value-added software, security, and backup solutions that are capable of changing the way businesses communicate with their customers. Indeed, these solutions provide relevant, real-time information and can lead to more sales.



## Revolutionary Technologies

- Choices of latest Intel, AMD, arm cutting edge platforms
- Ultra-slim, compact, modular form factors
- Fanless and active cooling options for vertical selection

## Value-Added Software

Value Added Software to be integrated into 3rd parties CMS software including:

- 4K/8K video up to 8 displays support
- Built-in DeviceOn for Display control management
- Interactive peripherals API support

## Security & Backup Support

- Built-in display content security and recovery mechanism
- Whitelisting security and remote system backup
- Optimizes playback setting to minimized downtime

## Digital Signage Solutions

### Entry Level



**DS-100**

Rockchip RK3399



**DS-410**

Intel® Celeron®  
J6412 quad-core

### Ultra Slim



**DS-066**

Intel® Celeron®  
J1900 quad-core



**DS-082**

AMD Ryzen™  
V1000/ R1000



**DS-085**

11th Gen. Intel® Core™  
i3/ i5/ i7/ Celeron®

## DeviceOn

Device Management

Content Management

Whitelisting and  
Backup Recovery



Departures			
Time	To	Gate	Passenger
16:00	LONDON	A10	CANCELLED
16:02	TOKYO	A03	ON TIME
16:05	BEIJING	A17	ON TIME
16:08	PARIS	B15	ON TIME



### Multi-Display



#### DS-580

Intel® Atom® E3950  
with NVIDIA®  
GT1030 GPU



#### DS-780

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



#### DS-630

AMD V2000  
RX6600

### SDM/OPS Modular



#### DS-202

8th Gen. Intel® Core™  
i3/ i5/ Celeron®



#### DS-211

Rockchip RK3399

# Palm-Sized Signage Solution



**Latest CPU Technology**  
Intel Atom® Celeron® J6412



**Real-Time Monitoring**  
Monitor edge signage devices from anywhere at anytime



**Mini Form Factors**  
Small footprint and slim design for easy and convenient installation



**Easy to Maintain**  
Update BIOS / Power Off / Restart system easily anywhere



## DS-410

Advantech's DS-410 boasts a small footprint and slim design that fits easily into limited space applications.

The DS-410 demonstrates Advantech's commitment to helping customers transform their businesses, and stay relevant in an increasingly digitized world.

### System Specifications

- 4GB/8GB LPDDR4 Memory
- M.2 SATA SSD storage
- M.2 for Wi-Fi
- Supports 2 x COM and 2 x Ethernet ports

### System Diagram



# The Most Slim 4 x 4K Signage Solution

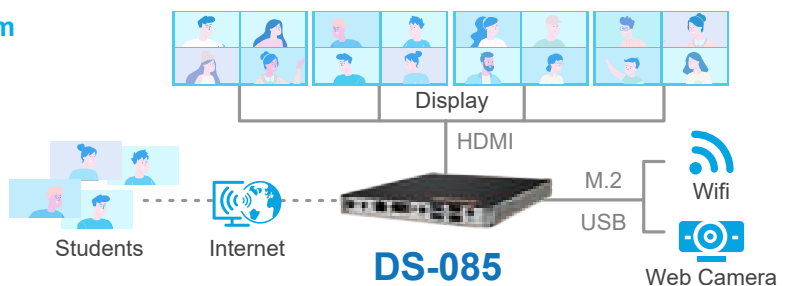


At just 19 mm thick, DS-085 is the world's slimmest digital signage player powered by 11th Gen Intel® processors. This thin and powerful signage player is equipped with 4 x HDMI displays capable of up to 4K resolution. Advantech SignageCMS and DeviceOn are also on offer for free.

## System Specifications

- 4 x independent 4K outputs via 4 x HDMI 2.0
- Slim design with only 19 mm thickness
- Fanless & cable-less design for easy maintenance

## System Diagram



# 8K Signage TV Wall

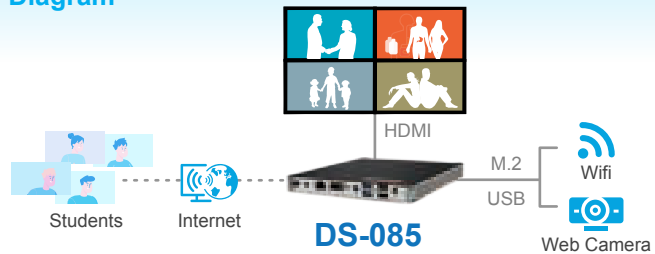
The DS-085 is the ultimate solution for your digital signage needs. It features 4 x HDMI 2.0 for TV walls and does not need pricey controllers. It supports 8K to enable the delivery of crisp content. The package also includes SignageCMS software to produce a complete and cost-effective solution.



## Features

- Support 4 x HDMI 2.0 x 4
- RED certification for Wi-Fi
- Slim design for easy system installation

## System Diagram



# Digital Menu Board

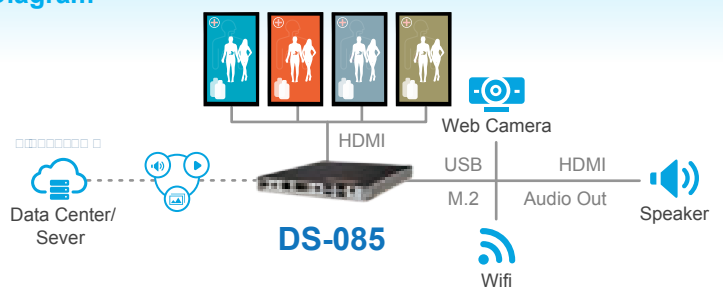
DS-085 is the ultimate cost-efficient solution for businesses looking to streamline their digital menu board setup. With its powerful 4 x HDMI ports, DS-085 eliminates the need for multiple signage players, saving both space and money.



## Features

- Support up to 4K digital menu board by 4 displays
- Diverse I/O available — including 4 x USB/1 x COM/ 2 x LAN
- Fanless design prevents dust issues

## System Diagram



# Interactive Kiosks

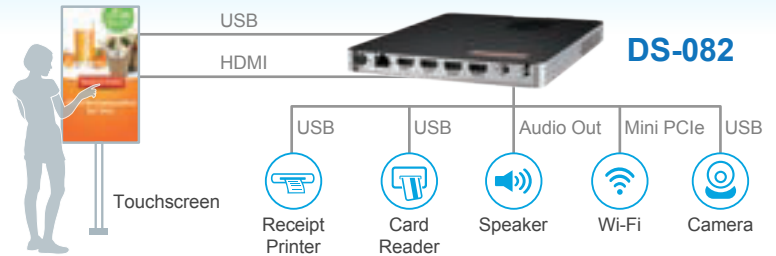
Bring your kiosk to life with the DS-082 and engage your audience like never before. DS-082 delivers powerful AMD V1000/R1000 graphics capabilities in a sleek and compact form factor. With exceptional graphics performance, this player is perfect for kiosks that require both power and space efficiency.



## Features

- Slim 19 mm thick design
- Fanless design prevents issues caused dust
- AMD Radeon Graphics with excellent performance

## System Diagram



# Flight Information Boards

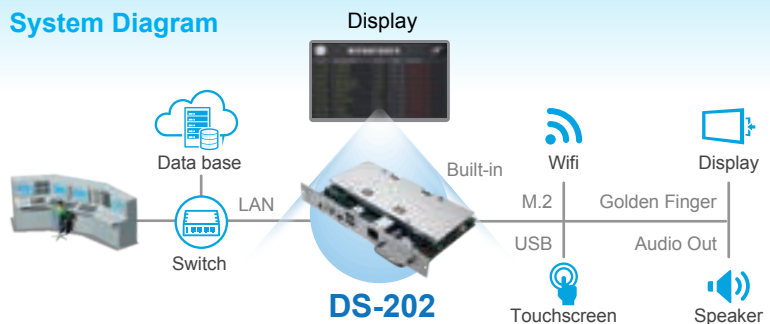
The Advantech DS-202 is a highly-cost-effective option for airport flight information boards. It features an 8th Gen. Intel® Core i3/i5/ Celeron® processor and complies with the Intel Smart Display Modules standards. This powerful combination offers exceptional performance and reliability — making it the perfect choice for any airport looking to upgrade their flight information displays.



## Features

- 8th Gen. Intel® Core i3/i5/ Celeron®
- Fanless design prevents dust issues
- Supports up to 3 x displays (HDMI/DP/miniDP)

## System Diagram



# Main Street Shopping Windows

DS-100 is a compact and fanless signage player powered by the Arm-based Cortex A73 Rockchip RK3399 CPU. This makes it an ideal choice for retail stores' shopping windows or vertical pillars/walls. Its 24/7 playback test and support for direct AT boot-up make it easy to turn on/off.



## Features

- Arm-Based CPU, RK3399 with Mali-T860 GPU
- 4K VP9 and 4K 10bits H265/H264 video decode
- Support up to 1-2 HDMI TV in Android OS
- Supports USB 2.0 and SD card extension

## System Diagram



# Casino Slot Machines

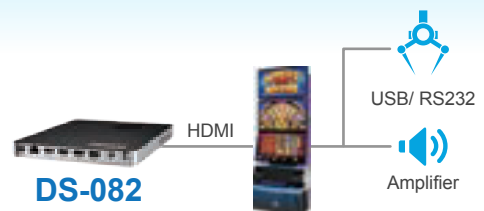
The Slim DS-082, equipped with an AMD CPU. It offers enhanced visual effects for 2D games in casinos and providing an immersive experience for players. Additionally, it comes in both fan and fanless versions — catering to different gaming system needs.



## Features

- AMD Ryzen™, AMD Ryzen™ Embedded R1606G with Radeon™ Vega 3 Graphics
- Fanless or Fanned design integrated into a 19 mm thick chassis
- 3~4 x HDMI, 1 x SPDIF/Line Out for multi-display gaming machines
- 1 x RS232 to control gaming machine interactive equipment

## System Diagram





# Food Court Menu Boards

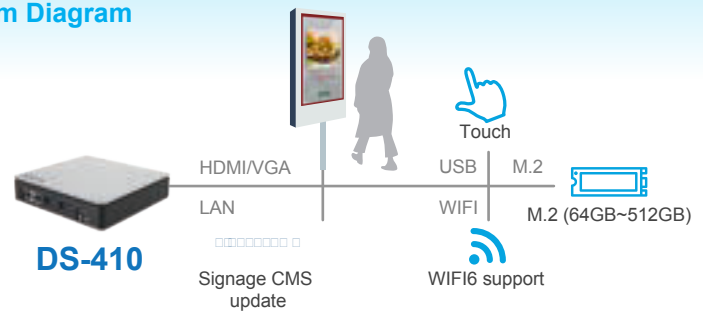
With the compact and powerful DS-410 Mini PC, restaurant customers can easily stay informed and entertained while waiting in line. Equipped with HDMI, VGA, and USB ports for touch screen functionality, the DS-410 allows for manual board displays and advertisements, increasing revenue for businesses.



## Features

- Intel® Celeron® J6412 quad-core
- Small and stylish die-cast design
- Fanless design avoids issues caused by long-term dust accumulation

## System Diagram



# Avoid Hacker Attacks in Important Places

DS-085 supports Triellx Application Control whitelist protection as an optional feature. This blocks unauthorized application execution. Additionally, it comes with Acronis Cyber Backup that offers exclusive ransomware defense technology called Active Protection.



## Features

- Additional purchase of Triellx service blocks unauthorized media.
- Additional purchase of Acronis provides ransomware defense technology



Trellix Acronis DeviceOn SignageCMS

# Digital Signage Solutions

## Entry-Level Series

## Ultra-Slim Series



Model Name		DS-100	DS-100 Lite	DS-410	DS-082	DS-085S	DS-085L
Processor	CPU	Rockchip RK3399	Rockchip RK3399	Intel® Celeron® J1900	AMD Ryzen™ V1807B AMD Ryzen™ V1605B AMD Ryzen™ R1606G	Intel® Core™ i7-1165G7 Intel® Core™ i5-1135G7 Intel® Core™ i3-1115G4E Intel® Celeron® 6305E	"Intel® Core™ i7-1165G7 Intel® Core™ i5-1135G7 Intel® Core™ i3-1115G4E Intel® Celeron® 6305E"
	BIOS	-	-	AMI uEFI 64 Mbit	AMI uEFI 128Mbit	AMI uEFI 128 Mbit	AMI uEFI 128 Mbit
	Chipset	-	-	Integrated with CPU	Integrated with CPU	Integrated with CPU	Integrated with CPU
Memory	Technology	LPDDR3 1600MHz	LPDDR3 1600MHz	LPDDR4 3733Mhz	DDR4 2400MHz	DDR4 2666MHz	DDR4 2666MHz
	Max. Capacity	2 GB on board	2 GB on board	4GB/8GB on Board	32 GB (16 GB per SODIMM)	32 GB (16 GB per SODIMM)	32 GB (16 GB per SODIMM)
	Socket	-	-	-	2 x 260-pin SODIMM	2 x 260-pin SODIMM	2 x 260-pin SODIMM
Display	Controller	-	-	Integrated with CPU	Integrated with CPU	Integrated with CPU	Integrated with CPU
	Graphics Engine	Mali-T860MP4	Mali-T860MP4	Intel HD Graphics	AMD Radeon HD graphics	Intel® Iris® Xe Graphics	Intel® Iris® Xe Graphics
	Graphics Memory	-	-	Shared system memory	Shared system memory	Shared system memory	Shared system memory
	Multiple Display	2	2	2	4 (V series) 3 (R series)	4	4
	Interface	1 x HDMI 2.0, 1 x HDMI 1.4	1 x HDMI 2.0, 1 x HDMI 1.4	1 x HDMI 2.0 1 x VGA	4 x HDMI 2.0 (V series) 3 x HDMI 2.0 (R series)	4 x HDMI 2.0	4 x HDMI 2.0
Max. Resolution	3840 x 2160 @ 60Hz	3840 x 2160 @ 60Hz	4096 x 2304 @ 60Hz	4096 x 2304 @ 60Hz	4096 x 2304 @ 60Hz	4096 x 2304 @ 60Hz	
Expansion Interface	M.2	1 x 2230 E key	1 x 2230 E key	1 x 2242 M key for storage 1 x 2230 E key for Wi-Fi	1 x 2242 M key for storage 1 x 2230 E key for Wi-Fi	1 x 2242 M key for storage 1 x 2230 E key for Wi-Fi	1 x 2242 M key for storage 1 x 2230 E key for Wi-Fi
	Mini PCIe	-	-	-	-	-	-
	PCIe x16	-	-	-	-	-	-
	Micro SD Card	1	1	-	-	-	-
Ethernet	Connector	2 x RJ-45	1 x RJ-45	2 x RJ45	1 x RJ-45	2 x RJ-45	2 x RJ-45
Audio	Connector	1 x Line-out	1 x Line-out	-	1 x SPDIF/Line-out/Mic-in with jack sense support	1 x SPDIF/Line-out/Mic-in	1 x SPDIF/Line-out/Mic-in
WatchDog Timer		Yes	Yes	Yes	Yes	Yes	Yes
Storage	SATA	-	-	-	-	-	-
	mSATA	-	-	-	-	-	-
	eMMC	16 GB eMMC on board	16 GB eMMC on board	-	-	-	-
I/O	USB 3.0	1	1	2	2	2	2
	USB 2.0	1	1	-	2	2	6
	COM	1 x Console port	-	2 x RS-232	1 x RS-232	1	2
Power	Power Supply	DC 12V input	DC 12V input	DC 19V input	DC 19V input	DC 19V input	DC 19V input
Environment	Operating Temperature	0-45 °C	0-45 °C	HDD: 0-40 °C SSD: 0-45 °C (with 0.7m/s airflow)	HDD: 0-40 °C (with 0.7m/s airflow)	0-40 °C (with 0.7m/s airflow)	0-55 °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	124 x 116 x 26 mm	180 x 190 x 19 mm	180 x 190 x 19 mm	210 x 178 x 40 mm
Operating System		Android 7.1.2	Android 7.1.2	Microsoft Windows, Linux (optional)	Microsoft Windows, Linux (optional)	Microsoft Windows, Linux (optional)	Microsoft Windows, Linux (optional)
Certifications	EMC	CE, FCC Class B, CCC, BSMI	CE, FCC Class B, CCC, BSMI	CE, FCC Class B, CCC, 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.

## Integrated Software



### Multimedia Management Software

<b>System Management</b>	Web interface, multimedia management, user-friendly interface, remote management
<b>Interactive Content Editing</b>	Add/edit/delete the interactive button or interactive content.
<b>Dispatch Management</b>	Remote dispatch, player overview, group dispatch, schedule dispatch, history search
<b>Account Management</b>	Add/edit/delete user, user name/password/description/main, account permissions



### Device Monitoring and Management

<b>Device Management</b>	Instant device monitoring and troubleshooting, regular inspections, predictive maintenance, data acquisition, device management
<b>Monitoring &amp; Control</b>	Real-time monitoring, device list and status, SW/HW health monitoring, HDD predictive maintenance, system screen lost events
<b>Update Management</b>	OTA upgrade support, software remote patching and upgrade, update status report
<b>Alert &amp; Action</b>	SMS notifications, email notifications, event log

## Multi-Display Series Modular Series



Model Name		DS-630	DS-200	DS-202	DS-211
Processor	CPU	AMD V2748	Intel® Core™ i5-8400H Intel® Core™ i3-8100H Intel® Celeron® G4930E	Intel® Atom™ x6413E	Rockchip RK3399
	BIOS	AMI uEFI 128 Mbit	AMI uEFI 128 Mbit	AMI uEFI 128 Mbit	-
	Chipset	Intel Q170	Intel QM370	Integrated with CPU	-
Memory	Technology	DDR4 3200MHz	DDR4 2400MHz	DDR4 2666MHz	LPDDR4-3200
	Max. Capacity	32 GB (16 GB per SODIMM)	32 GB (16 GB per SODIMM)	32 GB (16 GB per SODIMM)	2GB/4GB on-board
	Socket	2 x 260-pin SODIMM	2 x 260-pin SODIMM	2 x 260-pin SODIMM	-
Display	Controller	Integrated with CPU	Integrated with CPU	Integrated with CPU	-
	Graphic Engine	AMD Radeon graphics	Intel UHD Graphics 630	Intel® UHD Graphics	Mali-T860MP4
	Graphics Memory	Shared system memory	Shared system memory	Shared system memory	-
	Multiple Display	4	3	3	2
	Interface	HDMI 2.0 x 2, DP++ type C x 2	1 x PCIe x8 (98 pin), 1 x Mini DP**	1 x PCIe x8 (98 pin), 1 x Mini DP++	1 x JAE TX25 (80 pin) 1 x HDMI 2.0
	Max. Resolution	4096 x 2160 @ 60Hz	4096 x 2304 @ 60Hz	4096 x 2304 @ 60Hz	3840 x 2160 @ 60Hz
Expansion Interface	M.2	1 x 2230 E key	1 x 2242 M key for storage 1 x 2230 E key for Wi-Fi	-	1
	Mini PCIe	-	-	-	1
	PCIe x 8	1	-	-	-
	Micro SD Card	-	-	-	1
Ethernet	Connector	2 x RJ-45	1 x RJ-45	1 x RJ-45	2 x RJ-45
Audio	Connector	2 (Line out + Mic/Line in)	1 x SPDIF/Line-out, Mic-in with jack sense support	1 x SPDIF/Line-out, Mic-in with jack sense support	-
WatchDog Timer		Yes	Yes	Yes	Yes
Storage	SATA	1 x M.2 2280 M Key (PCIe)	-	-	-
	mSATA	-	-	3 (2 x via bracket, 1 x SDM connector)	16GB /64GB eMMC on board
I/O	USB 3.0	6	5 (4 x via bracket, 1 x SDM connector)	8	1
	USB 2.0	-	-	0	1
	COM	2 x RS-232	1 x RS-232 via SDM connector (Tx/ Rx only)	1 x RS-232 via SDM connector (Tx/Rx only)	1 x RS-232
Power	Power Supply	DC 12V input	DC 12V input (via SDM Connection)	DC 12V input (via SDM Connection)	DC 12V input (via OPS connector)
Environment	Operating Temperature	0-40 °C	0-55 °C	0-55 °C	0-60 °C
Physical Characteristics	Dimensions (L x W x H)	357 x 357 x 99 mm	175 x 100 x 20 mm (SDM-L compliant)	175 x 100 x 20 mm (SDM-L compliant)	200 x 119 x 30 mm (OPS compliant)
Operating System		Microsoft Windows, Linux (optional)	Microsoft Windows, Linux (optional)	Microsoft Windows, Linux (optional)	Android 7.1.2
Certifications	EMC	CE, FCC Class B,	CE, FCC Class B	CE/FCC/VCCI/UKCA	CE, FCC Class B
	Safety	CB	N/A	CB	CCC

Note: "-" means not applicable.



### Whitelisting and Backup Recovery

Triellx	<b>Application Control</b>
	<ul style="list-style-type: none"> <li>Protect against zero-day attacks</li> <li>Proactive protection</li> </ul>
	<b>Change Control</b>
	<ul style="list-style-type: none"> <li>Access rights- who, when, what</li> <li>Prevent out-of-policy changes</li> </ul>

Acronis	<b>Easy Backup Solution</b>
	<ul style="list-style-type: none"> <li>Full image / Incremental backup</li> <li>Disk and partitions backup</li> </ul>
	<b>Powerful Recovery</b>
	<ul style="list-style-type: none"> <li>Disk/partition cloning</li> <li>Universal restore</li> </ul>