

2024—2025 Edition

# DIGITAL SIGNAGE PLAYERS



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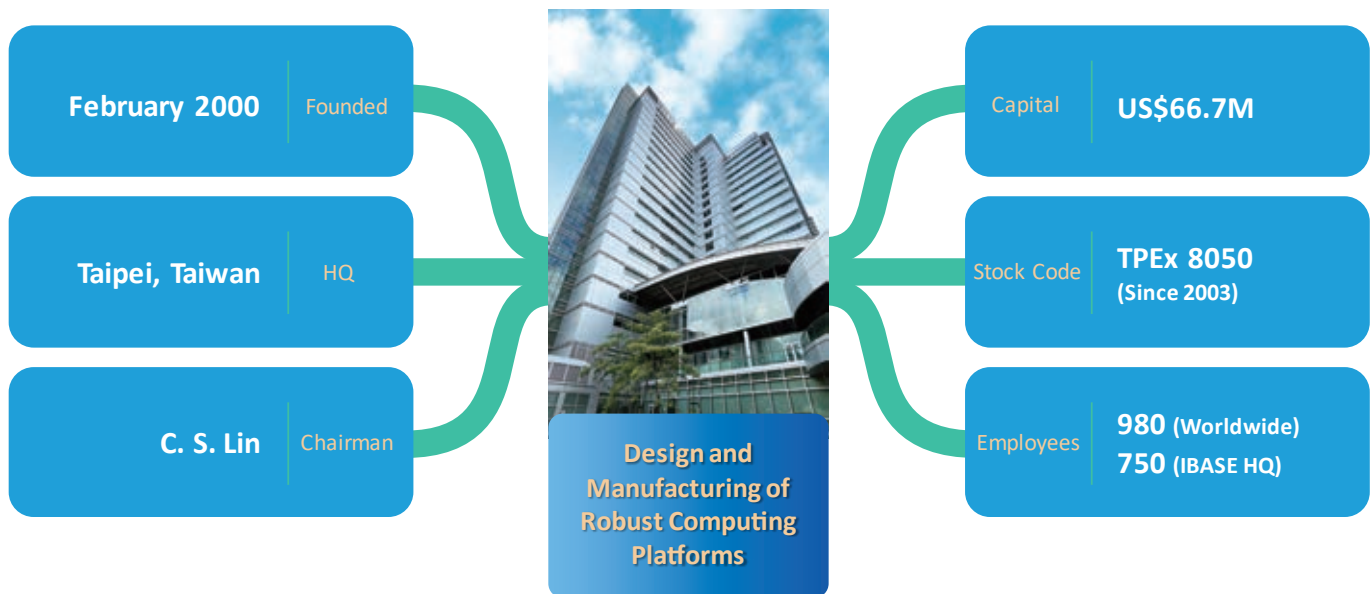
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# About IBASE



## Company Profile

IBASE Technology specializes in the design and manufacture of robust industrial PC, products since its establishment in 2000. IBASE carries out manufacturing and quality control at its own facilities in Taiwan that are certified with ISO 9001, ISO 13485, ISO 14001 and ISO 27001 standards. Current offerings comprise x86 and RISC-based industrial motherboards, embedded systems, panel PCs, network appliances and digital signage players. The company is publicly listed in the Taipei Exchange (TPEX: 8050) and is now a leading global provider of innovative industrial and embedded computing solutions.



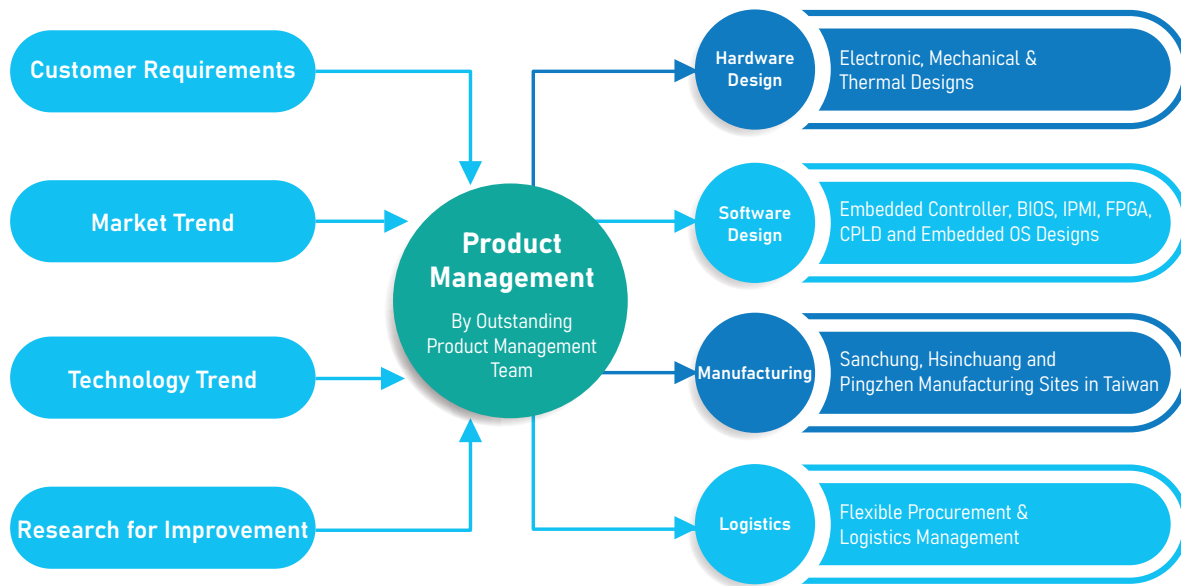
## Core Competence

IBASE has three manufacturing sites in Taiwan, with two in New Taipei City and another one in Taoyuan City. We manufacture and implement strict quality control to supply excellent industrial computer products that are 100% made in Taiwan. In addition to off-the-shelf products, IBASE also specializes in OEM/ODM/JDM services, tailoring products to fully meet customers' expectations and the needs of various applications. With manufacturing and quality control capabilities recognized by major international companies, IBASE boasts of strong innovative R&D teams and flexible and timely products delivery.




# Design & Manufacturing Services

Set up to become a global leading provider of embedded board and system solutions, IBASE manufacturers and supplies cutting-edge products based on the latest technologies to match market demands. Our R&D and product management teams have the expertise to design and develop products that are innovative and meet customers' requirements and design specifications. We attach great importance to research and development, investing heavily in manpower and resources to continuously provide high-quality innovative products. IBASE is also committed to compliance with environmental policies by working to prevent pollution with non-use of banned or restricted substances in our production process and products, helping our customers respond to their environmental challenges.



## IBASE Manufacturing Sites

Design & Manufacturing in Taiwan




**SANCHUNG**

- Board Production
- Validation

3,124 m<sup>2</sup> / 945 Ping

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**HSINCHUANG**

- System Assembly
- Validation

6,070 m<sup>2</sup> / 1,840 Ping

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**PINGZHEN**

- Board Production
- System Assembly
- Validation

18,481 m<sup>2</sup> / 5,591 Ping

**Total Size**

**297,891 Square-feet**  
(27,675 m<sup>2</sup> / 8,376 Ping)

**Capacity**

- SMT Line x 7
- DIP Assembly Line x 4
- System Assembly Line x 10
- Cleanroom x 2
- Burn-in Room x 20


**PCBA**

**80K/month** (In-house Production) + Outsourcing


**System Assembly**

**50K/month** (In-house Production) + Outsourcing


**Certifications**




ISO 9001











ISO 14001



ISO 13485



ISO 27001

# PDPC & OOB Management Features

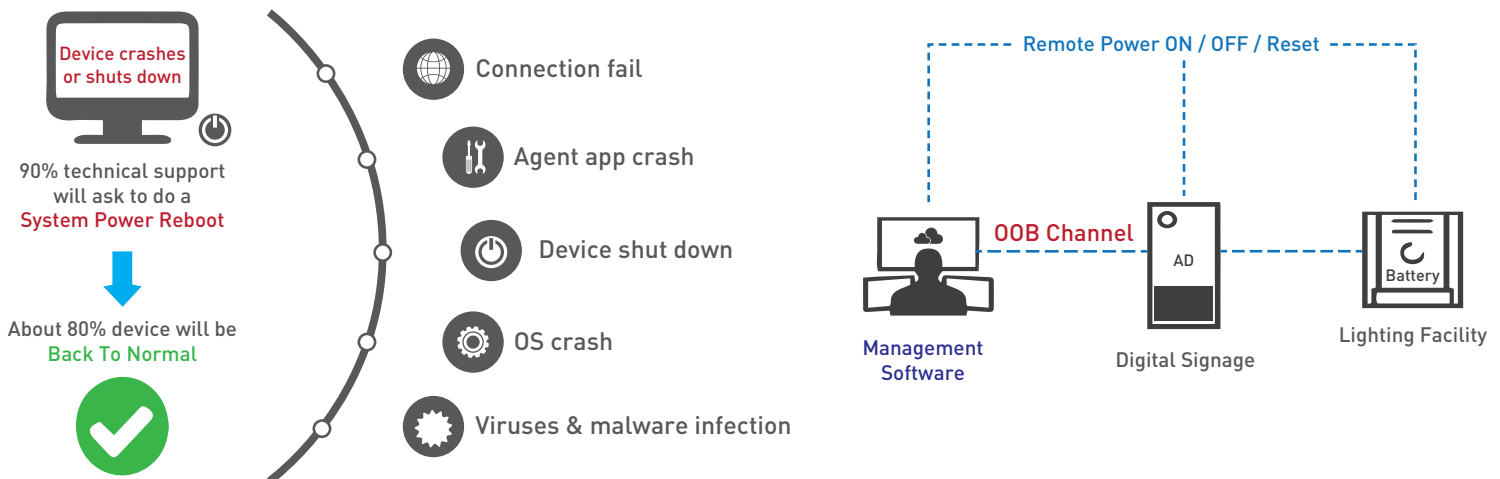
## Peripheral Device Power Control (PDPC)

Peripheral Device Power Control (PDPC) plays a role in enhancing security related to unauthorized access and data protection. Our PDPC design uses software control to power down peripherals (USB power source based) connected to an external USB type A port or internal M.2 slot. The user can simply turn off the peripheral power and then turn it on by software to restore the peripheral device to its normal functioning state.



## Out-of Band (OOB)

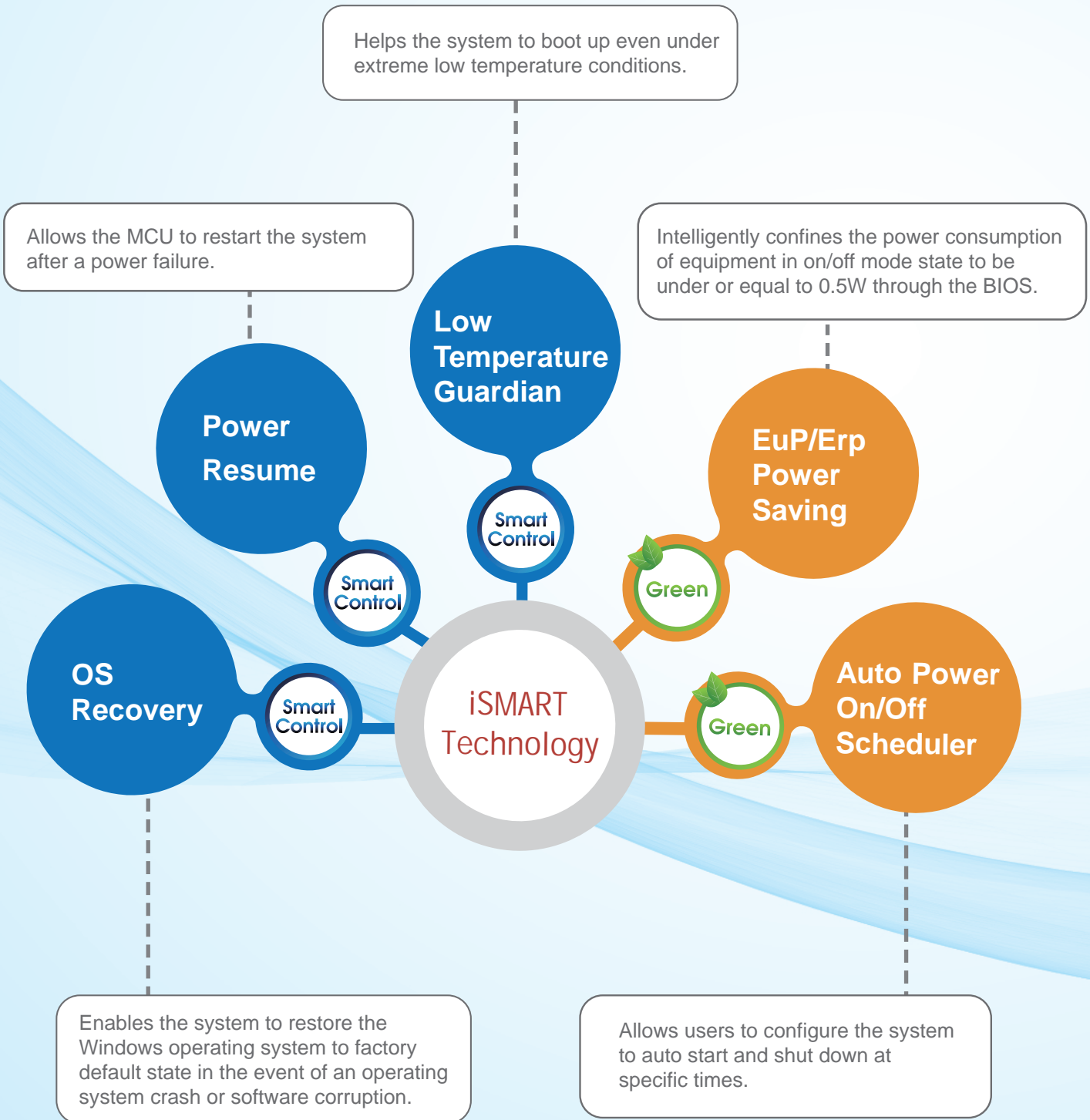
OOB allows a system administrator to monitor and manage servers and other network-attached equipment by remote control regardless of whether the machine is powered on or whether an OS is installed or functional.



## iSMART

### Intelligent Energy-Saving Technology

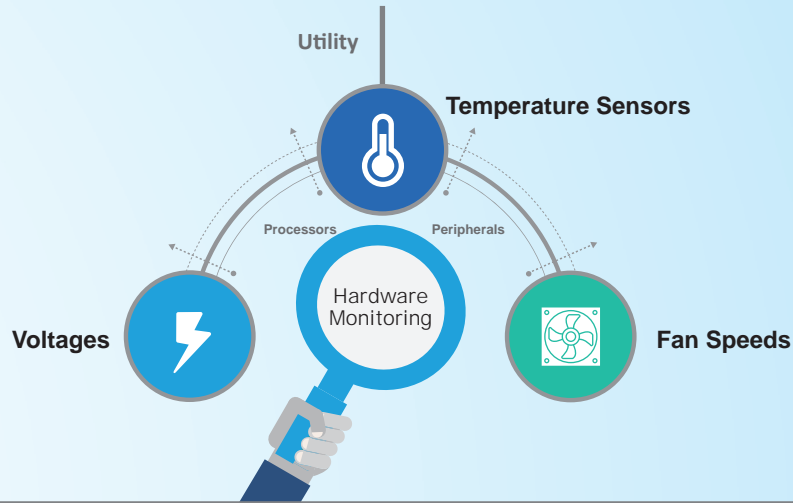
An intelligent energy-saving technology providing automatic power on/off scheduling to protect systems and make them use power more efficiently.



# Observer

## Remote Monitoring Technology

A hardware remote monitoring utility used for monitoring voltages, temperature sensors and fan speeds remotely.



# iCONTROL

## Intelligent Control Technology

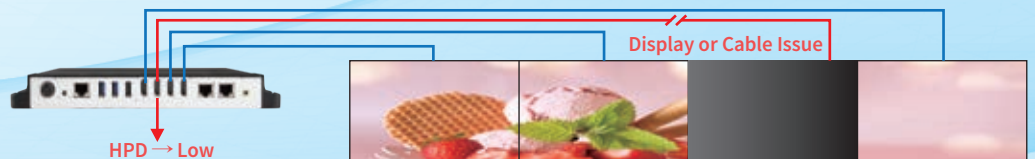
An intelligent control technology featuring hardware EDID emulation, display status monitoring and HDMI-CEC functions

### Hardware EDID Emulation



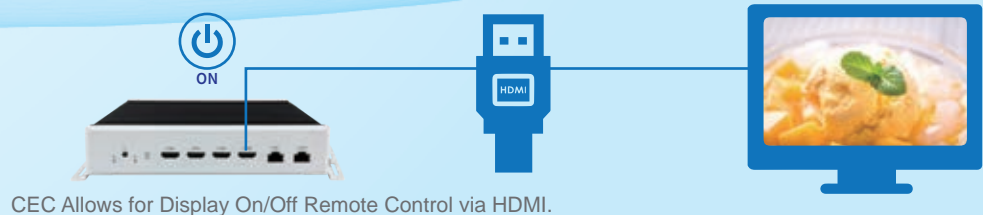
The hardware EDID (extended display identification data) emulation function prevents screen convergence issues due to cable disconnections, and erroneous wrong settings or digital playback software settings.

### Display Status Monitoring



Built-in display monitoring function helps to continuously monitor display status from the field sites.

### HDMI-CEC Function



CEC Allows for Display On/Off Remote Control via HDMI.

# Digital Signage Applications

## High Quality Signage Players that Cater to Your Needs

IBASE supplies a comprehensive range of digital signage players for single and multiple large displays and for a variety of venues such as restaurants, retail stores, banks, schools, airports, and shopping malls to convey dynamic information and targeted promotions.

We provide entry, mid-range to extreme performance digital signage players to project sophisticated displays in UHD/4K/8K single screens or multiple video walls, using advanced remote management to refresh content and increase uptime while lowering costs. We offer high-quality, high-performance video wall players as well as bar-type panel PC technologies for in-store advertisement, digital menu board, and video wall display applications.

We also offer innovative digital out-of-home (DOOH) systems suitable for outdoor deployments. These reliable platforms support 24-hour operation in an extended temperature range from  $-40^{\circ}\text{C}$  to  $+75^{\circ}\text{C}$  ( $-40^{\circ}\text{F}$  to  $+167^{\circ}\text{F}$ ), with IP65/IP68 rated enclosure to make them dust-tight and water-resistant. Even in tough conditions, IBASE's outdoor signage solutions deliver the same performance as their indoor counterparts, while providing dirt and dust and resistance. They are excellent choices for harsh and outdoor digital signage applications.



# iBASE

Digital Signage Applications

## Public Venue



- Airport Flight Schedule
- Building Directory
- Safety Alert Sign

## Retail Environment



- Digital Menu Board
- Video Wall Signage
- POS & Kiosk

## Advertisement



- Digital Wall Sign
- Multimedia Ad
- Outdoor Ad

## Education



- Events Announcement
- Intelligent Classroom
- School Wayfinder

## Internal Communication



- Meeting & Conference
- Reception Display
- Situation Room

# Strategic Software Partners

IBASE works closely with the industry-leading digital signage software and analytics companies to develop complete hardware turnkey solutions for fast and easy deployment in entertainment and public venues including shopping malls, restaurants, retail stores, airports, banks and hotels. Our solutions with user-friendly utilities extend the functionality of your business to increase sales and improve brand loyalty by creating and sharing compelling visual content, as well as providing information and entertainment to your target audience.



# Signage Player Selection Guide

A full range of product choices is available for different customer requirements that include entry-level, mid-range or high-performance players with fanless or segregated ventilation designs. From single to multiple output displays, with passive or active cooling, IBASE signage players cater to the needs of customers for different applications and environments.

Screens	1	2	3	4	6	8-16
8-16 screens Video Wall						SP-63ER* SI-62S*
6 screens Video Wall					SI-626 SI-62S*	
4 screens Video Wall				SI-624* SI-614* SI-654(-N) SI-334 SI-324(-N)		
8K Video Playback	SI-624* SI-614* SP-63ER* SI-62S*					
4K Video Playback	SI-626 SE-603-N SI-324(-N) SI-642-N SI-613 SI-623-N SI-212-N SI-111-N ISR500	SI-663(-N) SI-654(-N) SI-334		SP-63ER* SI-624* SI-614*		
FHD / Flash	ISR500 SI-111-N SW-101-N SI-12	SI-212-N SE-103-N SE-102-N SI-642-N ISR500	SE-603-N SI-323-N SI-613 SI-623-N	SI-654(-N) SI-334 SI-324(-N)	SI-626	SP-63ER*

Fanless Design	Segregated Airflow Design	H/W EDID Emulation Function	HDMI-CEC function
PDPC (Peripheral Device Power Control)	OOB (Option)	* with Nvidia/AMD/Matrox GPU card	

# Comparison Table

## Extreme Performance Video Wall Player



Models	SI-626	SI-624	SI-614	SI-62S
Mainboard	MBD626	MBD624	MBD614	MI998AF
CPU	7th/6th Gen Intel® Core™ / Pentium® / Celeron® Mobile Processor	13th/12th Gen Intel® Core™ processors	7th/6th Gen Intel® Core™ / Pentium® / Celeron® Desktop Processor	9th/8th Gen Intel® Core™ / Pentium® / Celeron® Desktop Processor
Chipset	HM170/QM170 PCH	R680E/Q670E	H110 PCH	Q370 PCH
Operating System	Windows 7 (64-bit) Win10 IoT Enterprise (64-bit) Linux Ubuntu 14.04.2 LTS (64-bit) Linux Ubuntu 15.04 (64-bit)	Win10 IoT Enterprise (64-bit) Linux Ubuntu (64-bit)	Win10 IoT Enterprise (64-bit) Linux Ubuntu (64-bit)	Win10 IoT Enterprise (64-bit) Linux Ubuntu (64-bit)
Memory	2x DDR4-2133 SO-DIMM, Dual channel, Max 32GB	2x DDR4 SO-DIMM, Max 64GB (supports ECC by CPU SKU)	2x DDR4-2133 SO-DIMM, Dual channel, Max 32GB	2x DDR4 SO-DIMM, Max. 32GB (supports ECC by CPU SKU)
Graphics	AMD E8860 GPU with 128-bit wide, 2GB GDDR5, 72Gbps	NVIDIA MXM Graphics	NVIDIA MXM Graphics	Intel® HD Graphics P630
Display	6x HDMI 1.4b	1x HDMI 1.4 (console) 4x DP	4x DP 1.3 certificate(1.3/1.4 ready) 1x HDMI 1.4 (console)	1x DVI-D 1x HDMI 1x DP (console)
Video Capability	6x FHD or 1x 4K	4x 4K or 1x 8K (with NV MXM module)	4x 4K or 1x 8K	1x 4K or 1x 8K (with GPU card )
Ethernet	2x Realtek RTL8111H-CG	1x Intel® I226LM 1x Intel® I210	1x Intel® I219V	1x Intel® I219LM 1x Intel® I211AT/ I210AT
Expansion Slots	1x M.2 E-Key (2230) 1x M.2 M-Key (2280) 1x Mini PCI-E (Full-size) 1x SIM card slot	2x M.2 M-Key (2280) 1x M.2 E-Key (2230) 1x M.2 B-key (3052) 1x UIM/SIM card slot	1x M.2 M-Key (2280) 1x M.2 B-Key (3042) 1x Mini PCI-E (Full-size) 1x SIM card slot	1x M.2 E-Key (2230) 1x M.2 M-Key (2280) 1x PCI-E (x16) or 2x PCI-E (x8) based on PCI-E x16 connectors
USB	3x USB 3.0	2x USB 3.1 2x USB 3.2	4x USB 3.0	6x USB 3.0 2x USB 2.0
Storage	1x 2.5 SATA HDD/SSD slots	2x 2.5 SATA HDD/SSD slots	2x 2.5 SATA HDD/SSD slots	2x 2.5 SATA SSD slots (supports RAID 1)
iSMART	Yes	Yes	Yes	-
H/W EDID	Yes	Yes	-	-
HDMI-CEC	-	-	-	-
Fanless	Segregated flow ventilation	-	Segregated flow ventilation	Segregated flow ventilation
Certification	CE, FCC class-B, LVD, cULus	CE, FCC Class-B, UKCA ,cULus, CCC	CE, FCC class-B, cULus	CE, FCC class-B, LVD
Dimensions	290mm(W) x 222mm(D) x 29.9mm(H)	329.2mm(W) x 210mm(D) x 73.1mm(H)	256.4mm(W) x 173.2mm(D) x 73.1mm(H)	406mm(W) x 345mm(D) x 93mm(H)
Weight	2.2kg (4.85lbs)	3.8kg (8.38lbs)	3kg (6.6lbs)	8kg (17.64lbs)
Operating Temperature	0°C~ 45°C (32°F~113°F)	0°C~ 45°C (32°F~113°F)	0°C~ 45°C (32°F~113°F)	0°C~ 45°C (32°F~113°F)
Power Supply	150W power adaptor	270W power adaptor	220W power adaptor (270W for NV1080 GPU card)	Internal 500W PSU
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# Comparison Table

## Mid-Range Signage Player



Models	SP-63ER	SI-663	SI-663-N	SI-654
<b>Mainboard</b>	MBD63E	MBD663	MBD663	MBD654
<b>CPU</b>	8th Gen Intel® Core™ / Pentium® / Celeron® Desktop Processor	13th/12th Gen Intel® Core™ / Celeron® U-series Processor TDP<=28W	13th/12th Gen Intel® Core™ / Celeron® U-series Processor TDP<=28W	11th Gen Intel® Core™ / Celeron® U-Series Processor
<b>Chipset</b>	Intel® Q370 PCH	SoC Integrated	SoC Integrated	SoC Integrated
<b>Operating System</b>	Win10 IoT Enterprise (64-bit) Linux Ubuntu (64-bit)	Win10 IoT Enterprise (64-bit) Linux Ubuntu (64-bit)	Win10 IoT Enterprise (64-bit) Linux Ubuntu (64-bit)	Win10 IoT Enterprise (64-bit) Linux Ubuntu (64-bit)
<b>Memory</b>	2x DDR4-2666 DIMM, Max. 64GB	2xDDR5 4800 SODIMM slots, Max. 64GB	2xDDR5 4800 SODIMM slots, Max. 64GB	2x DDR4-3200 SO-DIMM, Dual channel, Max. 64GB
<b>Graphics</b>	Integrated Intel® HD Graphics	Intel® Iris Xe Graphics	Intel® Iris Xe Graphics	Intel® Gen12 Graphics
<b>Display</b>	16x HDMI 1.3 (w/o audio)	1x HDMI 2.0 1x DP++ 1.4 1x DVI-D	1x HDMI 2.0 1x DP++ 1.4 1x DVI-D	4x HDMI 2.0
<b>Video Capability</b>	8x FHD or 4x 4K or 1x 8K	2x 4K	2x 4K	2x 4K
<b>Ethernet</b>	1x Intel® I219LM 1x Intel® I211AT/ I210AT	1x Intel® 226LM	1x Intel® 226LM	1st: 1x Intel® I211AT/ I210AT 2nd: 1x Intel® I219LM (I7/I5) 1x Intel® I219V (I3)
<b>Expansion Slots</b>	1x MiniPCI-E 1x M.2 M-Key (2280) 1x M.2 E-Key (2230) 1x MXM slot for NVIDIA GPO card	1x M.2 E-Key (2230) 1x M.2 B-Key (3042) 1x UIM/SIM card slot 1x M.2 M-Key (2280)	1x M.2 E-Key (2230) 1x M.2 B-Key (3042) 1x UIM/SIM card slot 1x M.2 M-Key (2280)	1x M.2 B-Key (3042) 1x M.2 E-Key (2230) 1x UIM/SIM card slot
<b>USB</b>	6x USB 3.0	3x USB 3.2 1x USB 2.0	3x USB 3.2 1x USB 2.0	1x USB 2.0 3x USB 3.1
<b>Storage</b>	2x 2.5SATA HDD/SSD slots (supports RAID 1)	1x M.2 M-key (2280) supports NVMe	1x M.2 M-key (2280) supports NVMe	1x M.2 M-Key (2280) supports NVMe
<b>IS MART</b>	Yes	Yes	Yes	Yes
<b>H/W EDID</b>	Yes	-	-	Yes
<b>HDMI-CEC</b>	-	-	-	Yes
<b>Fanless</b>	-	Yes	Segregated flow ventilation	Segregated flow ventilation
<b>Certification</b>	CE, FCC class-B, cULus	CE/FCC Class-B/CCC/UL	CE/FCC Class-B/CCC/UL	CE, FCC class-B, UKCA, cULus, LVD
<b>Dimensions</b>	395mm(W) x 438mm(D) x 88mm(H)	175mm(W) x 212mm(D) x 37mm(H)	175mm(W) x 212mm(D) x 37mm(H)	200.8mm(W) x 139.3mm(D) x 41.2mm(H)
<b>Weight</b>	9.5kg (20.9lbs)	TBD	TBD	1.7kg (3.7lbs)
<b>Operating Temperature</b>	0°C~ 45°C (32°F~113°F)	0°C~45°C(32°F~104°F)	0°C~45°C(32°F~104°F)	0°C~ 45°C (32°F~113°F)
<b>Power Supply</b>	Internal 850W PSU	84W power adaptor	84W power adaptor	84W power adaptor
<b>Page No.</b>	p. 23	p. 26	p. 27	p. 28

# Comparison Table

## Mid-Range Signage Player



Models	SI-654-N	SI-642-N	SI-623-N	SI-613
<b>Mainboard</b>	MBD654	MBD642	MBD623	MBD613
<b>CPU</b>	11th Gen Intel® Core™ / Celeron® U-Series Processor TDP<=15W	8th Gen Intel® Core™ / Pentium® / Celeron® Mobile Processor (TDP<=25W)	7th/6th Gen Intel® Core™ / Pentium® / Celeron® Mobile Processor	7th/6th Gen Intel® Core™ / Pentium® / Celeron® Desktop Processor
<b>Chipset</b>	SoC Integrated	SoC Integrated	HM170/QM170 PCH	H170/Q170 PCH
<b>Operating System</b>	Win10 IoT Enterprise (64-bit) Linux Ubuntu (64-bit)	Win10 IoT Enterprise (64-bit) Linux Ubuntu (64-bit)	Win7 (64-bit) Win8.1 (64-bit) Win10 IoT Enterprise (64-bit) Linux Fedora / Ubuntu (64-bit) (Installation)	Win7 (64-bit), Win8.1(64-bit) Win10 IoT Enterprise (64-bit) Linux Fedora / Ubuntu (64-bit) (Installation)
<b>Memory</b>	2x DDR4-3200 SO-DIMM, Dual channel, Max. 64GB	2x DDR4-2400 SO-DIMM, Dual channel, Max. 32GB	2x DDR4-2133 SO-DIMM, Dual channel, Max 32GB	2x DDR4-2133 SO-DIMM, Dual channel, Max 32GB
<b>Graphics</b>	Intel® Gen12 Graphics	Intel® UHD Graphics 620	Intel® HD Graphics 530	Intel® HD Graphics 530
<b>Display</b>	4x HDMI 2.0	1x HDMI 2.0 1x DP++	1x HDMI 2.0 2x HDMI 1.4	3x HDMI 2.0
<b>Video Capability</b>	2x 4K	2x FHD or 1x 4K	3x FHD or 1x 4K	3x FHD or 1x 4K
<b>Ethernet</b>	1st: 1x Intel® I211AT/ I210AT 2nd: 1x Intel® I219LM (I7/I5) 1x Intel® I219V (I3)	1x Intel® I219LM 1x Intel® I211AT /I210AT	1x Intel® I219LM for QM170 1x Intel® I219V for HM170	1x Intel® I219LM for Q170 1x Intel® I219V for H170
<b>Expansion Slots</b>	1x M.2 B-Key (3042) 1x M.2 E-Key (2230) 1x UIM/SIM card slot	1x M.2 B-Key (3042) 1x M.2 E-Key (2230) 1x UIM/SIM card slot	1x M.2 B-Key (3042) 1x M.2 M-Key (2280) 1x Mini PCI-E (Full-size) 1x SIM card slot	1x M.2 B-Key (3042) 1x Mini PCI-E (Full-size) 1x SIM card slot
<b>USB</b>	1x USB 2.0 3x USB 3.1	4x USB 3.1	2x USB 3.0 2x USB 2.0	2x USB 3.0 2x USB 2.0
<b>Storage</b>	1x M.2 M-Key (2280) supports NVMe	1x M.2 M-Key (2280)	1x 2.5SATA HDD/SSD	1x M.2 M-Key (2280)
<b>iSMART</b>	Yes	Yes	Yes	Yes
<b>H/W EDID</b>	Yes	-	Yes	Yes
<b>HDMI-CEC</b>	Yes	-	-	-
<b>Fanless</b>	Yes	Yes	Yes	Segregated flow ventilation
<b>Certification</b>	CE, FCC class-B, UKCA ,cULus, CCC, LVD	CE, FCC class-B, cULus, CCC, LVD	CE, FCC class-B, cULus, CCC, LVD	CE, FCC class-B, cULus, BSMI, LVD
<b>Dimensions</b>	200.8mm(W) x 139.3mm(D) x 41.2mm(H)	175mm(W) x 119.3mm(D) x 31mm(H)	215.6mm(W) x 215.6mm(D) x 40mm(H)	215.6mm(W) x 215.6mm(D) x 31.5mm(H)
<b>Weight</b>	1.7kg (3.7lbs)	1kg (2.2lbs)	2.4kg (5.29lbs)	2.2kg (4.85lbs)
<b>Operating Temperature</b>	0°C~ 45°C (32°F~113°F)	0°C~ 45°C (32°F~113°F)	0°C~ 45°C (32°F~113°F)	0°C~ 45°C (32°F~113°F)
<b>Power Supply</b>	84W power adaptor	84W power adaptor	84W power adaptor	150W power adaptor
<b>Page No.</b>	p. 29	p. 30	p. 31	p. 32

# Comparison Table

## Mid-Range Signage Player



SI-334	SI-324	SI-324-N	SI-323-N
MBD334	MBD324	MBD324	MBD323
AMD Ryzen™ Embedded V2000 Processor	AMD Ryzen™ Embedded V1000 Processor	AMD Ryzen™ Embedded Next-Gen of R2000 / V1000 Processor (TDP<=25W)	AMD Ryzen™ Embedded Next-Gen of R1000 / R2000 Processor
SoC integrated	SoC Integrated	SoC Integrated	SoC Integrated
Win11 IoT Enterprise (64-bit) Win10 IoT Enterprise (64-bit) Linux Ubuntu(64-bit)	Win10 IoT Enterprise (64-bit) Linux Ubuntu (64-bit)	Win10 IoT Enterprise (64-bit) Linux Ubuntu (64-bit)	Win10 IoT Enterprise(64-bit) Linux Ubuntu (64-bit)
2x DDR4-3200, SO-DIMM, Dual channel, Max. 64GB	2x DDR4-2400 SO-DIMM, Dual channel, Max. 32GB	2x DDR4-2400 SO-DIMM, Dual channel, Max. 32GB	2x DDR4-2400 SO-DIMM, Dual channel, Max. 32GB
Next-gen AMD Vega GPU integrated	Next-gen AMD Vega GPU integrated	Next-Gen AMD Radeon™ HD GPU integrated	Next-Gen AMD Radeon™ HD GPU integrated
4x HDMI 2.0	4x HDMI 2.0	4x HDMI 2.0	3x HDMI 2.0
4x FHD or 1x 4K	4x FHD or 1x 4K	4x FHD or 1x 4K	3x FHD or 1x 4K
2x Realtek RTL8111H-CG	2x Realtek RTL8111H-CG	2x Realtek RTL8111H-CG	2x Realtek RTL8111H-CG
1x M.2 B-Key (3052) 1x M.2 E-Key (2230) 1x UIM/SIM card slot	1x M.2 E-Key (2230) 1x Mini PCI-E (Full-size) 1x SIM card slot	1x M.2 E-Key (2230) 1x Mini PCI-E (Full-size) 1x SIM card slot	1x M.2 E-Key (2230) 1x Mini PCI-E (Full-size) 1x SIM card slot
3x USB 3.1	2x USB 3.0 1x USB 2.0	2x USB 3.0 1x USB 2.0	2x USB 3.0 1x USB 2.0
1x M.2 M-Key (2280)	1x M.2 M-Key (2280)	1x M.2 M-Key (2280)	1x M.2 M-Key (2280)
Yes	Yes	Yes	Yes
Yes	Yes	Yes	Yes
Yes	-	-	-
Segregated flow ventilation	Segregated flow ventilation	Yes	Yes
CE, FCC class A, UKCA, cULus, CCC	CE, FCC class-B, cULus, BSMI, CCC	CE, FCC class-B, cULus	CE, FCC class-B, cULus
269mm(W) x 193mm(D) x 31.5mm(H)	269mm(W) x 193mm(D) x 31.5mm(H)	215.8mm(W) x 164mm(D) x 45mm(H)	215.8mm(W) x 164mm(D) x 45mm(H)
2.1kg (4.63lbs)	2.1kg (4.63lbs)	1.5kg (3.31lbs)	1.5kg (3.31lbs)
0°C~ 45°C (32°F~113°F)	0°C~ 45°C (32°F~113°F)	0°C~ 45°C (32°F~113°F)	0°C~ 45°C (32°F~113°F)
150W power adaptor	150W power adaptor	84W power adaptor	84W power adaptor
p. 33	p. 34	p. 35	p. 36

# Comparison Table

## Entry-Level Signage Player



Models	SI-212-N	SI-111-N	SI-12-J19
Mainboard	MBD212	MBD111	IB812
CPU	Intel® Atom® X7000/ Pentium® / Celeron® Processor	Intel® Atom® X6000/ Pentium® / Celeron® Processor	Intel® Atom® Processor J1900 SoC (22nm); Quad-Core @ 2.0GHz
Chipset	SoC Integrated	SoC Integrated	SoC Integrated
Operating System	Win10 IoT Enterprise (64-bit) Linux Ubuntu (64-bit)	Win10 IoT Enterprise (64-bit) Linux Ubuntu (64-bit)	Win7 (32/64-bit), Win8, Win8.1, WEI8.1, WEC 2013, Win10 IoT Enterprise (32/64-bit)
Memory	1x DDR5 SO-DIMM, Max. 32GB	2x DDR4-3200 SO-DIMM, Max. 32GB, supports IB ECC	2x DDR3L-1333 SO-DIMM Dual channel, Max. 8GB
Graphics	Intel® Gen12 Graphics	Intel® Gen11 Graphics	Intel® Gen7 Graphics
Display	2x HDMI 2.0b	1x HDMI 2.0b	2x HDMI 1.4a
Video Capability	2x FHD or 1x 4K	1x 4K	1x FHD
Ethernet	1x Intel® I210IT	1x Intel® I226IT	1x Realtek RTL8111H-CG
Expansion Slots	1x M.2 E-Key (2230)	1x M.2 E-Key (2230)	1x Mini PCI-E (Full-size) 1x SIM card slot
USB	3x USB 3.2	3 x USB (Gen 2)	2x USB 2.0 1x USB 3.0
Storage	1x M.2 M-Key(2280)	1x M.2 M-Key (2280)	1x mSATA
iSMART	Yes	Yes	iSmart3.12
H/W EDID	Yes	-	-
HDMI-CEC	Yes	-	-
Fanless	Yes	Yes	Yes
Certification	CE, FCC Class-B, UKCA, cULus & CCC	CE, FCC Class-B, UKCA, cULus & CCC	CE, FCC class-B, VCCI class-B, cULus, BSMI, LVD
Dimensions	TBD	260mm(W) x 181.4mm(D) x 25mm(H)	190mm(W) x 130mm(D) x 19.5mm(H)
Weight	TBD	TBD	0.8kg (1.76lbs)
Operating Temperature	-10°C~50°C(14°F~122°F)	-10°C ~ 50°C (14°F~122°F) for SI-111-N -20°C ~ 70°C (-4°F~158°F) for SI-111-N11E	0°C~ 45°C (32°F~113°F)
Power Supply	60W power adaptor	60W power adaptor	60W power adaptor
Page No.	p. 37	p. 38	p. 39

# Comparison Table

## Outdoor Signage Player



Models	SE-603-N	SE-103-N	SE-102-N
<b>Mainboard</b>	MBD603	MBD103	MBD102
<b>CPU</b>	11th Gen Intel® Core™ / Celeron® U-series Processor TDP<=28W	Intel® Atom® X6000/ Pentium® / Celeron® Processor	Intel® Atom® x7 / x5, Pentium® / Celeron® Processor
<b>Chipset</b>	SoC Integrated	SoC Integrated	SoC Integrated
<b>Operating System</b>	Win10 IoT Enterprise (64-bit) Linux Ubuntu (64-bit)	Win10 IoT Enterprise (64-bit) Linux Ubuntu (64-bit)	Win10 IoT Enterprise (64-bit) Linux Ubuntu (64-bit)
<b>Memory</b>	2x DDR4-3200 SO-DIMM, Max. 64GB, supports IBECC	2x DDR4-3200 SO-DIMM, Max. 32GB, supports IBECC	2x DDR3L-1866 SO-DIMM Dual channel, Max. 8GB
<b>Graphics</b>	Intel® Gen12 Graphics	Intel® Gen11 Graphics	Intel® HD Graphics 505
<b>Display</b>	1x HDMI 2.0b 1x DP (support DP++) 1x DVI-D	3x HDMI 2.0b	2x HDMI 1.4b
<b>Video Capability</b>	2x 4K	2x FHD or 1x 4K	2x FHD
<b>Ethernet</b>	1x Intel® I226IT	1x Intel® I210IT for x6000 series 1x Intel® I210AT for N/J6000 series	1x Intel® I210IT Gigabit LAN controller for EXXXX series 1x Intel® I210AT Gigabit LAN controller for NXXXX series
<b>Expansion Slots</b>	1x M.2 E-Key (2230) 1x M.2 B-Key (3052) 1x UIM/SIM card slot	1x M.2 B-Key (3052) 1x M.2 E-Key (2230) 1x UIM/SIM card slot	1x Mini PCI-E (Full-size) 1x SIM card slot
<b>USB</b>	1 x USB 2.0 3 x USB 3.1 (Gen 2)	3x USB	3x USB 3.0
<b>Storage</b>	1x M.2 M-key (2280) supports NVMe	1x M.2 M-Key (2280)	1x mSATA
<b>iSMART</b>	Yes	Yes	Yes
<b>H/W EDID</b>	-	Yes	Yes
<b>HDMI-CEC</b>	-	Yes	-
<b>Fanless</b>	Yes	Yes	Yes
<b>Certification</b>	CE, FCC Class-B, UKCA, cULus & CCC	CE, FCC class-B, UKCA, cULus	CE, FCC Class-B, cULus, LVD
<b>Dimensions</b>	262mm(W) x 134mm(D) x 51.8mm(H)	260mm(W) x 181.4mm(D) x 25mm(H)	190mm(W) x 130mm(D) x 19.5mm(H)
<b>Weight</b>	TBD	1.7Kg (3.75lbs)	0.9kg (1.98lbs)
<b>Operating Temperature</b>	-40°C~ 75°C (-40°F~167°F)	-40°C~ 75°C (-40°F~167°F)	-40°C~70°C (-40°F~158°F) for Exxxx CPU 0°C~45°C (32°F~113°F) for Nxxxx CPU
<b>Power Supply</b>	60W power adaptor`	60W power adaptor	60W power adaptor
<b>Page No.</b>	p. 40	p. 41	p. 42

# Comparison Table

## Outdoor Signage Player

## Waterproof Player



Models	SI-12	SW-101-N	ARD-048-N
<b>Mainboard</b>	IB812	SGT-MB3	IB919AF-8365
<b>CPU</b>	Intel® Atom® Processor E3845 SoC (22nm); Quad-Core @ 1.91GHz	Intel® Atom® Processor E3845 SoC (22nm); Quad-Core @ 1.91GHz	Intel® Core™ i5-8365UE Processor 1.6GHz~4.1GHz
<b>Chipset</b>	SoC Integrated	SoC Integrated	SoC Integrated
<b>Operating System</b>	Win7 (32/64-bit), Win8, Win8.1, WEI8.1, WEC 2013, Win10 IoT Enterprise (32/64-bit)	Win7 32/64-bit, Win8, Win8.1, WEI8.1, WEC 2013 Win10 IoT Enterprise (32/64-bit)	Win10 IoT Enterprise (64-bit) Linux Ubuntu (64-bit)
<b>Memory</b>	2x DDR3L-1333 SO-DIMM Dual channel, Max. 8GB	1x DDR3L-1333 SO-DIMM, Max 8GB	2x DDR4L-2400 SO-DIMM Dual channel Max 32GB
<b>Graphics</b>	Intel® Gen7 Graphics	Intel® HD Graphics	Intel® UHD Graphics 620
<b>Display</b>	2x HDMI 1.4a	1x HDMI (C3 connector)	1x HDMI 1.4b 1x DP 1.2
<b>Video Capability</b>	1x FHD	1x FHD	1x 4K
<b>Ethernet</b>	1x Realtek RTL8111H-CG	1x Realtek RTL8111H-CG	1x Intel® I219LM (M12 connector)
<b>Expansion Slots</b>	1x Mini PCI-E (Full-size) 1x SIM card slot	1x mPCI-E (x1) socket 1x mSATA socket for mSATA SSD	1x M.2 E-Key (2230)
<b>USB</b>	2x USB 2.0 1x USB 3.0	2x USB 2.0 (M12 connector)	2x USB2.0 (M12 connector)
<b>Storage</b>	1x mSATA	1x mSATA	1x mSATA
<b>iSMART</b>	Yes	Yes	-
<b>H/W EDID</b>	-	-	-
<b>HDMI-CEC</b>	-	-	-
<b>Fanless</b>	Yes	Yes	Yes
<b>Certification</b>	CE, FCC class-B, VCCI, class-B, cULus, BSMI	CE, FCC class-B, cULus	CE, FCC Class-B
<b>Dimensions</b>	190mm(W) x 130mm(D) x 19.5mm(H)	227mm(W) x 192mm(D) x 70mm(H)	1250mm(W) x 280mm(D) x 49.7mm(H)
<b>Weight</b>	0.8kg (1.76lbs)	2.8kg (6.17lbs)	17.58kg (38.76lbs)
<b>Operating Temperature</b>	-30°C~ 60°C (-22°F~140°F)	-40°C~ 75°C (-40°F~167°F)	-25°C~ 40°C (-13°F~104°F)
<b>Power Supply</b>	60W power adaptor	Option	180W power adaptor
<b>Page No.</b>	p. 39	p. 43	p. 44

# Comparison Table

## All-in-One Bar-Type Signage Panel PC



Models	ARD-042-N	ARD-037-N	ARD-028-NA
Mainboard	IB811F-420	IB811F-420	IB811F-420
CPU	Intel® Pentium® Quad-Core N4200 1.1GHz~2.5GHz	Intel® Pentium® Quad-Core N4200 1.1GHz~2.5GHz	Intel® Pentium® Quad-Core N4200 1.1GHz~2.5GHz
Chipset	SoC Integrated	SoC Integrated	SoC Integrated
Operating System	Win10 IoT Enterprise (32/64-bit)	Win10 IoT Enterprise (32/64-bit)	Win10 IoT Enterprise (32/64-bit)
Memory	2x DDR3L-1866 SO-DIMM Dual channel Max 8GB	2x DDR3L-1866 SO-DIMM Dual channel Max 8GB	2x DDR3L-1866 SO-DIMM Dual channel Max 8GB
Graphics	Intel® Gen9 Graphics	Intel® Gen9 Graphics	Intel® Gen9 Graphics
Display	1x HDMI 1.4b 1x DP1.2	1x HDMI 1.4b 1x DP1.2	1x HDMI 1.4b 1x DP 1.2
Video Capability	1x FHD	1x FHD	1x FHD
Ethernet	1x Intel® I210IT 1x Intel® I210AT	1x Intel® I210IT 1x Intel® I210AT	1x Intel® I210IT 1x Intel® I210AT
Expansion Slots	1x M.2 B-Key (3042)	1x M.2 B-Key (3042)	1x M.2 B-Key (3042)
USB	4x USB3.0	4x USB3.0	4x USB3.0
Storage	1x mSATA	1x mSATA	1x mSATA
iSMART	-	-	-
H/W EDID	-	-	-
HDMI-CEC	-	-	-
Fanless	Yes	Yes	Yes
Certification	CE, FCC Class-B	CE, FCC Class-B, cULus	CE, FCC class-B, cULus
Dimensions	928.10mm(W) x 66.50mm(D) x 281.90mm(H)	928.10mm(W) x 66.50mm(D) x 281.90mm(H)	729.10mm(W) x 54mm(D) x 170.80mm(H)
Weight	9.0kg (19.84lbs)	9.0kg (19.84lbs)	5.4kg (11.9lbs)
Operating Temperature	0°C~ 40°C (32°F~104°F)	0°C~ 40°C (32°F~104°F)	-25°C ~ 55°C (-13°F ~ 131°F)
Power Supply	180W power adaptor	180W power adaptor	84W power adaptor
Page No.	p. 45	p. 46	p. 47

# Comparison Table

## ARM-Based Signage Player

Coming soon



Models	ISR500	ISR301	ISR215
Mainboard	IBR500 SBC	IBR210	IBR215
CPU	MediaTek Genio 700: 2x A78 2.2GHz L2 256KB, 6x A55 2.0GHz L2 128KB Genio 510: 2x A78 2.0GHz L2 256KB, 4x A55 2.0GHz L2 128KB	NXP i.MX 8M - ARM Cortex-A53 Quad 1.3GHz	NXP i.MX 8M Plus - ARM Cortex-A53 Quad 1.6GHz
Chipset	SoC Integrated	Integrated	Integrated
Operating System	Linux Yocto 5.15 Android 13	Yocto 2.5 Android 9 UBUNTU 18.04 evaluation Other OS supports by request	Yocto v3.0 Android 11 Other OS supports by request
Memory	LPDDR4 4000MT/s on-board 4GB	1x 3GB DDR4 on board	3GB LPDDR4 on board
Graphics	ARM Mali-G57 MC3, OpenGL ES 1.1/2.0/3.2, Vulkan 1.0/1.1 ARM Mali-G57 MC2, Vulkan 1.1, OpenGL ES 3.2, and OpenCL™ 2.2	GC7000Lite OpenGL ES 1.1, 2.0, 3.0, 3.1, Open CL 1.2, and Vulkan	GC7000UL OpenGL ES 3.1, Vulkan Open CL™ 1.2 FP Vivante GC520L (2D)
Display	1x HDMI (4K60) 1x HDMI (FHD60)	1x HDMI 2.0a 1x Dual channel LVDS	1x HDMI 2.0a
Video Capability	1x 4K	4Kp60	1080p60
Ethernet	1x RTL8211E-VB-CG	1x RJ45 GbE LAN	2x RJ45 GbE LAN
Expansion Slots	1x M.2 E-Key (2230)	1x M.2 E-Key (2230) w/ USB, SDIO, UART, PCI-E 1x Mini PCI-E (USB only) w/ SIM Socket	1x M.2 B-Key (3052) w/ SIM socket (for 5G)
USB	1x USB2.0 1x USB 3.1	2x USB 2.0 Type-A(Edge) 1x Mini-USB OTG(Edge)	2x USB 3.0 Type-A 1x Mini-USB OTG
Storage	128GB eMMC 5.1 Flash	16GB eMMC on board (Default)	16GB eMMC on board (Default)
iSMART	-	-	-
H/W EDID	-	-	-
HDMI-CEC	-	-	-
Fanless	Yes	Yes	Yes
Certification	CE, FCC Class-B	CE/ FCC Class-B	CE/ FCC Class-B
Dimensions	TBD	172mm(W) x 162mm(D) x 36mm(H)	119mm(W) x 82mm(D) x 36mm(H)
Weight	TBD	0.8kg (1.76lbs)	0.8kg (1.76lbs)
Operating Temperature	-10°C~50°C(14°F~122°F)	-10°C~ 60°C (14°F ~ 140°F)	-10°C~ 60°C (14°F ~ 140°F)
Power Supply	60W power adaptor	60W power adaptor	60W power adaptor
Page No.	p. 48	p. 50	p. 49



## Features

- iSMART intelligent energy-saving & Observer remote monitoring technologies
- 13th/12th Gen Intel® Core™ i7/i5/i3 Pentium® / Celeron® QC/DCprocessors
- 4x DDR4-3200 U-DIMM, Max. 128GB
- 1x HDMI 1.4 for console, 4x DisplayPort
- 1x M.2 E-Key (2230) for Wi-Fi, Bluetooth or capture card options
- 1x M.2 B-Key (3052), for 5G options
- 2x M.2 NVMe SSD drive bay
- Supports OOB function via I210 LAN port (option)
- Supports TPM 2.0
- Compact and rugged design

## Specifications

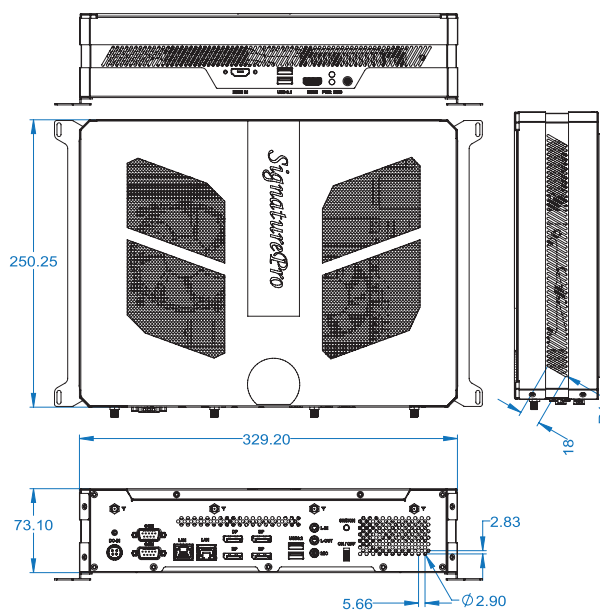
System Mainboard	MBD624
CPU	13th/12th Gen Intel® Core™ processors
CPU Socket	LGA1700
Chipset	Q670E/ R680E PCH
Memory	4x DDR4-3200 U-DIMM, Max. 128GB
Graphics	NVIDIA Ampere Architecture MXM GPU card/ up to 5888 CUDA cores/ 17.66 TFLOPS peak FP32 performance/ 184 Tensor Cores
LAN	2x Gigabit LAN
Expansion Slots	1x M.2 E-Key (2230) 1x M.2 B-Key (3052) 2x M.2 M-Key (2280/ Supports NVMe) 1x UIM/SIM card slot 1x MXM 3.1 Type-B
I/O Interface	1x HDMI 1.4 for console 4x DisplayPort 2x USB 3.1 2x USB 3.2 2x RJ45 for Gigabit LAN COM1&COM2: RS-232/422/485 (jumperless selection) 1x Audio connector for Line-in/out/MIC 1x Power / HDD LED 1x Power button 1x Power jack connector
Auto Control and Monitoring	Watchdog Timer: 256 segments, 0, 1, 2...255 (sec/min)
Power Requirement	+19V DC
Construction	SGCC
Weight	3.8kg (8.38lbs)
Chassis Color	Black and white
Storage	2x M.2 NVMe SSD drive bay
Power Supply	330W power adapter
Mounting	Standard system bracket
Dimensions	329.2mm(W) x 210mm(D) x 73.1mm(H) 129.6"(W) x 82.6"(D) x 28.7"(H)
Operating Temperature	0°C~ 45°C (32°F~113°F)
Storage Temperature	-20°C ~ 80°C (-4°F~176°F)
Relative Humidity	5%~90% @45oC (non-condensing)

Vibration	SSD: 5 grms / 5~500Hz / random operation
Certification	CE/FCC class-B, UL, LVD & CCC
Operating System	Windows 10 / Linux

## Ordering Information

SI-624	Signage Player with MBD624 with 13th Gen Intel® i7-13700 (2.1~4.1GHz) processor, 1x Nvidia MXM A2000 GPU card, 1x M.2 128GB, 2x 8GB DDR4-3200 U-DIMM and 330W power adapter
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## Dimensions





## Features

- 9th/8th Gen Intel® Core™ / Pentium® / Celeron® Desktop Processors
- 2x DDR4 SO-DIMM, Max. 32GB (supports ECC by CPU SKU)
- Intel® Processor integrated Graphics, supports DVI-D, HDMI, DisplayPort
- Dual Intel® Gigabit LAN
- 6x USB3.0, 2x USB2.0, 4x COM, 4x SATA III
- 1x M.2 E-Key (2230) for Wi-Fi, Bluetooth or capture card options
- 1x M.2 M-Key (2280) for Storage or other options
- Watchdog timer, Digital I/O, iAMT (11.6), TPM (2.0)
- 1x PCI-E (x16) or 2x PCI-E (x8) based on PCI-E x16 Connectors for Matrox / AMD / Nvidia GPU card options

## Specifications

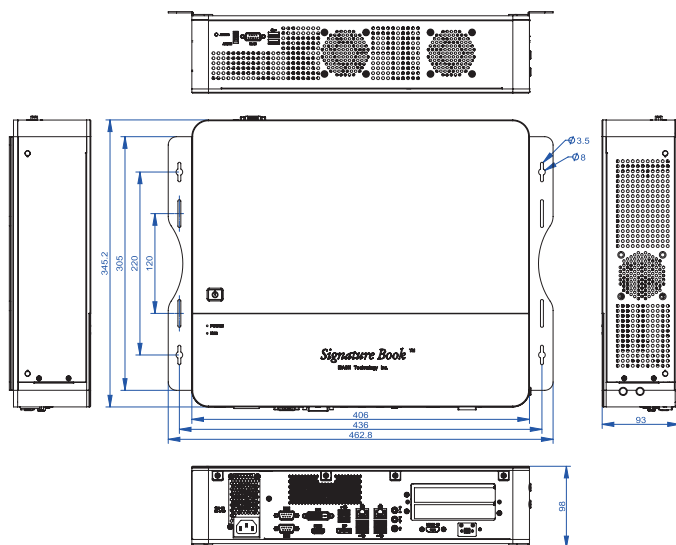
System Mainboard	MI998AF
CPU	9th/8th Gen Intel® Core™ Desktop Processors TDP <= 65W
CPU Socket	LGA1151
Chipset	Q370 PCH
Memory	2x DDR4 SO-DIMM, Max. 32GB (supports ECC by CPU SKU)
Graphics	Integrated Intel® HD Graphics P630
LAN	1x Intel® I219LM Gigabit LAN controller 1x Intel® I211AT/ I210AT PCI-E Gigabit LAN (as 2nd LAN)
Expansion Slots	1x M.2 E-Key (2230) 1x M.2 M-Key (2280) 1x PCI-E (x16) or 2x PCI-E (x8) based on PCI-E x16 connectors for Matrox / AMD / NVIDIA Graphics card
I/O Interface	Supports DVI-D, HDMI(1.4), DisplayPort(1.2) 6x USB 3.0, 2x USB 2.0 1x GPIO port 2x RJ45 for Gigabit LAN COM1 & COM2 for RS232/422/485 3x Microjack audio connectors for Mic, Line-in and Line-out 1x HDMI in for the capture card option 1x Power/ HDD LED, 1x power button 1x Terminal block for external power button 1x Reset button, 1x DC 12V output
Auto Control and Monitoring	Watchdog Timer: 256 segments, 0, 1, 2...255 (sec/min)
Power Requirement	AC 110V~240V
Construction	Aluminum + SGCC
Weight	8kg (17.64lbs)
Chassis Color	Black & white
Storage	2x 2.5" SATA SSD slots with RAID 1
Power Supply	Internal 500W PSU
Mounting	Standard system bracket
Dimensions	406mm(W) x 345mm(D) x 93mm(H) 17.16"(W) x 15.9"(D) x 3.66"(H)
Operating Temperature	0°C ~ 45°C (32°F ~ 113°F)
Storage Temperature	-20°C ~ 80°C (-4°F ~ 176°F)
Relative Humidity	10%~90% (non-condensing)
Vibration	mSATA: 5 grms / 5~500Hz / random operation

Certification	CE, FCC class-B
Operating System	Windows® 10(64-bit) Ubuntu (64-bit)

## Ordering Information

SI-62S	Signage Player with MI998AF with Intel® Core™ i7-8700 processor, 1x IP119 PCI-E (x16) riser card, 2x 8GB DDR4 memory, 1x 2.5" SSD 128GB & 500W PSU
SI-62S-2P	Signage Player with MI998AF with Intel® Core™ i7-8700 processor, 1x IP421 with 2x PCI-E x8 (PCI-E x16 connectors) riser card, 2x 8GB DDR4 memory, 1x 2.5" SSD 128GB & 500W PSU

## Dimensions



# SP-63ER

## Extreme Performance Video Wall Signage Player

8th Gen Intel® Core™ Desktop Processor Video Wall Signage Player with MXM Graphics and up to 16x HDMI



SignaturePro



### Specifications

System Mainboard	MBD63E
CPU	8th Gen Intel® Core™ i7/i5/i3 Desktop Processors, up to 4.7GHz
CPU Socket	LGA1151
Chipset	Intel® Q370 PCH
Memory	2x DDR4-2666/ 2400 DIMM, Max. 64GB
Graphics	Intel® HD Graphics P630/ MXM GTX Graphics card
LAN	LAN 1: Intel® I219LM GbE LAN 2: Intel® I211AT/ I210AT GbE
Expansion Slots	1x Mini PCI-E 1x M.2 M-Key (2280) 1x M.2 E-Key (2230) 1x MXM slot (for NVIDIA Graphics card)
I/O Interface	Up to 16x HDMI 1.3 with hardware EDID emulation (with GTX1080 MXM Graphics card) 4x USB 3.1 ports 1x USB 3.0 ports 2x RJ45 for Gigabit LAN 1x D-Sub for RS232 2x Audio connectors for Line-out/Mic-in 1x Power/HDD LED 1x Power button 1x AC power inlet
Auto Control and Monitoring	Watchdog Timer: 256 segments, 0, 1, 2...255 (sec/min)
Power Requirement	AC 110V ~ 240V
Construction	SGCC
Weight	9.5Kg (20.9lbs)
Chassis Color	Black & white
Storage	2x SATA III 2.5" HDD Dock (supports RAID 1)
Power Supply	AC 110V~240V
Mounting	Standard system bracket
Dimensions	395mm(W) x 438mm(D) x 88mm(H) 15.5"(W) x 17.2"(D) x 3.46"(H)
Operating Temperature	0°C ~ 45°C (32°F ~ 113°F)
Storage Temperature	-20°C ~ 80°C (-4°F ~ 176°F)
Relative Humidity	5~90% @ 45°C, (non-condensing)
Vibration	mSATA: 5 grms / 5~500Hz / random operation
Certification	CE, FCC Class-B, cULus
Operating System	Windows 10 IoT Enterprise(64-bit)

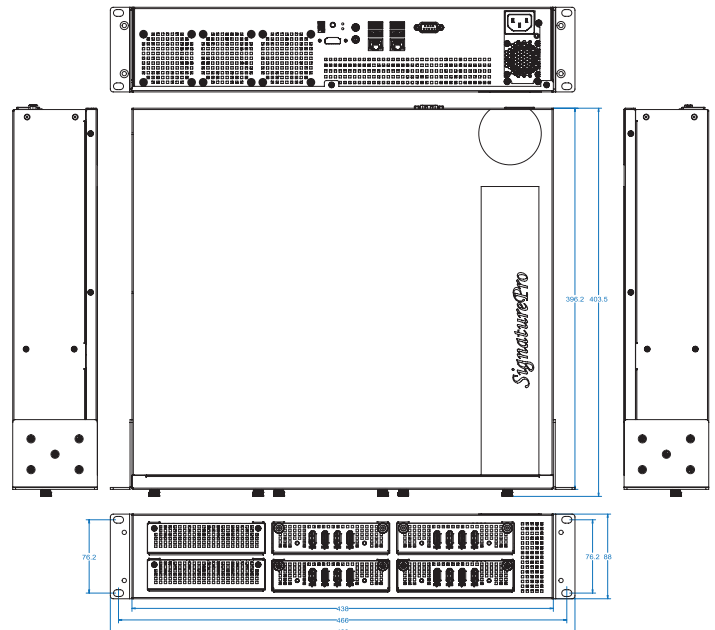
### Features

- iSMART intelligent energy-saving & Observer remote monitoring technologies
- Perfect for displaying 8K/12K video wall or menu board contents
- Supports 8th Gen Intel® Core™ Desktop Processors
- Up to 16x HDMI 1.3 (w/o Audio) with built-in hardware EDID emulation function
- Various Video Wall combination settings
- Compact and Robust Design

### Ordering Information

SP-63ER-16	Intel® Core™ i7-8700 Processor (12M cache, up to 3.2GHz), 1x MXM NV GTX 1080 8G GDDR5X 256-bits GPU card, 16x HDMI output, 2x 8GB DDR4-2666/2400 SO-DIMM, 2x 128GB SATA III 2.5" HDD Dock, 850W PSU
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### Dimensions





## Features

- iSMART intelligent energy-saving & Observer remote monitoring technologies
- 7th Gen Intel® Core™ i7/i5/i3/ Pentium® / Celeron® Desktop Processors
- NVIDIA MXM Graphics card (Type-B, up to 150W)
- 2x DDR4-2133 SO-DIMM, Dual channel, Max. 32GB
- 1x HDMI 1.4 for console, 4x DisplayPort
- 1x Mini PCI-E (full-size) for Wi-Fi, Bluetooth, 4G LTE or capture card options
- 1x M.2 B-Key (3042) for 4G LTE options
- 2x 2.5" SATA III SSD drive bay
- Compact and rugged design

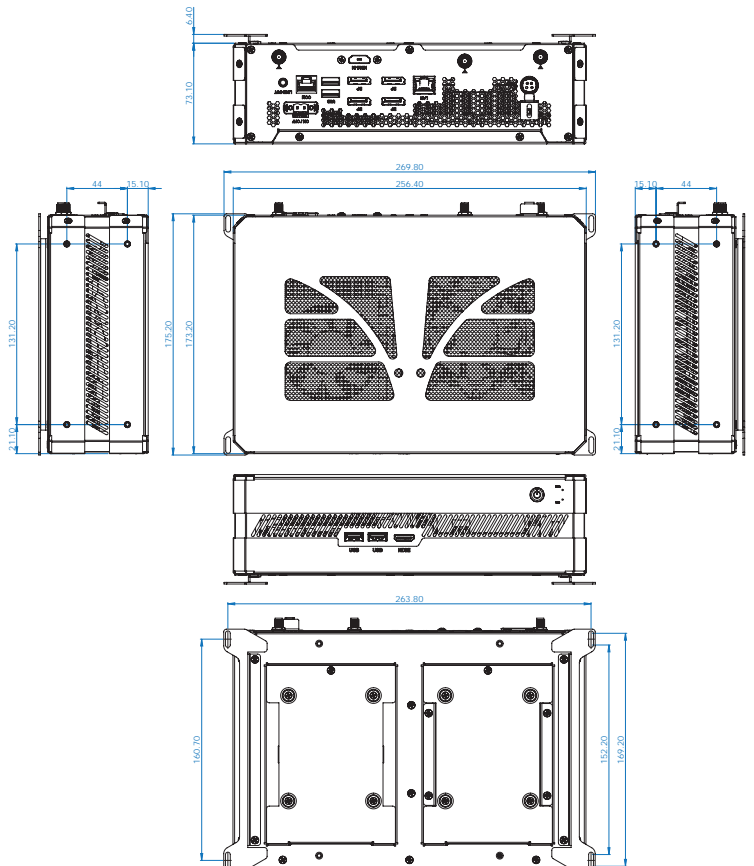
## Specifications

System Mainboard	MBD614
CPU	7th Gen Intel® Core™ Desktop Processors
CPU Socket	LGA1151
Chipset	H110 PCH
Memory	2x DDR4-2133 SO-DIMM, Dual channel, Max. 32GB
Graphics	NVIDIA MXM Graphics
LAN	1x Intel® I219V Gigabit LAN controller
Expansion Slots	1x Mini PCI-E (full-size) 1x M.2 B-Key (3042) 2x 2.5" drive bay for SATA III SSD 1x SIM card slot
I/O Interface	1x HDMI 1.4 for console 4x DisplayPort 4x USB 3.0 1x RJ45 for Gigabit LAN 1x RJ45 for RS-232 serial port 1x Audio connector for Line-out 1x Power / HDD LED 1x Power button 1x Power jack connector 1x Terminal block for external power button
Auto Control and Monitoring	Watchdog Timer: 256 segments, 0, 1, 2...255 (sec/min)
Power Requirement	+19V DC
Construction	SGCC
Weight	3kg (6.6lbs)
Chassis Color	Black and white
Storage	1x M.2 M-Key (2280)
Power Supply	270W power adaptor
Mounting	Standard system bracket
Dimensions	256.4mm(W) x 173mm(D) x 73mm(H) 10.09"(W) x 6.81"(D) x 2.87"(H)
Operating Temperature	0°C ~ 45°C (32°F ~ 113°F)
Storage Temperature	-20°C ~ 80°C (-4°F ~ 176°F)
Relative Humidity	5%~90% @45oC (non-condensing)
Vibration	SSD: 5 grms / 5~500Hz / random operation
Certification	CE, FCC Class-B, UL
Operating System	Windows 10 / Linux

## Ordering Information

SI-614	Signage Player with MBD614 with Intel® Core™ i5-7500 processor (8M cache, up to 3.4 GHz), 1x MXM NV1050 4GB 128bit/GDDR5 GPU card, 2x 8GB DDR4, 128GB 2.5" SSD & 270W power adaptor.
SI-614-M	Signage Player with MBD614, 270W PSU w/o CPU, MXM GPU card memory & storage.

## Dimensions





## Features

- iSMART intelligent energy-saving & Observer remote monitoring technologies
- 6x HDMI 1.4b with independent Audio output
- Built-in hardware EDID emulation function with software setting mode
- 7th/6th Gen Intel® Core™ Mobile Processors
- 2x DDR4-2133 SO-DIMM, Dual channel, Max. 32GB
- Flexible VW display configuration setting
- 1x Mini PCI-E (full-size) for Wi-Fi, Bluetooth, 4G LTE or capture card options
- 1x M.2 E-Key (2230) for Wi-Fi, Bluetooth
- 1x M.2 M-Key (2280) for storage
- 2x RS232 serial ports
- Slim and segregated ventilation design

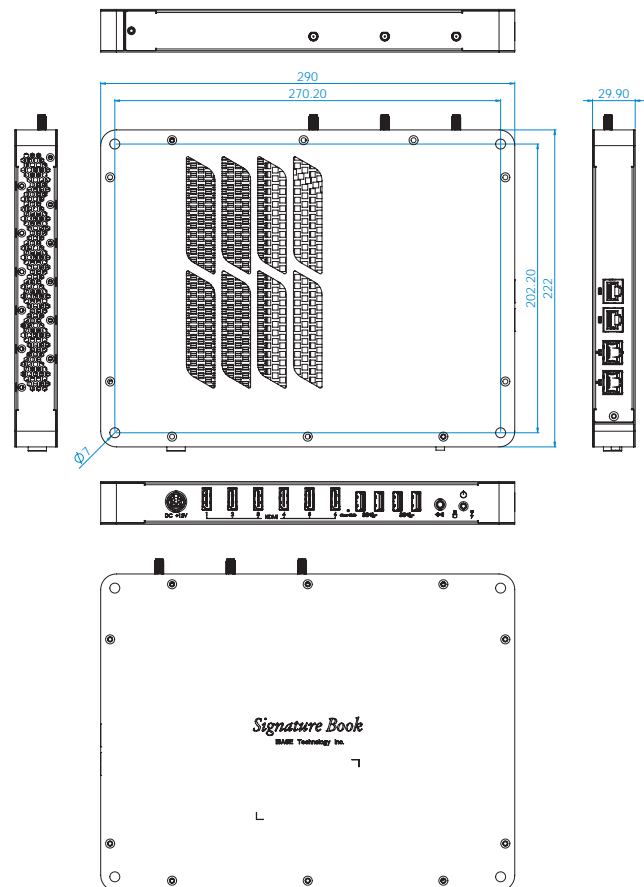
## Specifications

System Mainboard	MBD626
CPU	7th/6th Gen Intel® Core™ Mobile Processors TDP <=35W
CPU Socket	FCBGA1440
Chipset	HM170/ QM170 PCH
Memory	2x DDR4-2133 SO-DIMM, Dual channel, Max. 32GB
Graphics	AMD Radeon™ E8860 GPU
LAN	2x Realtek RTL8111H-CG Gigabit LAN controller
Expansion Slots	1x Mini PCI-E (full-size) 1x M.2 E-Key (2230) 1x M.2 M-Key (2280) 1x SIM card slot
I/O Interface	6x HDMI 1.4 with hardware EDID emulation 4x USB 3.0 2x RJ45 for Gigabit LAN 2x RJ45 for RS-232 serial port 1x Audio connector for Line-out/Mic-in 1x Power / HDD LED 1x Power button 1x Power jack connector
Auto Control and Monitoring	Watchdog Timer: 256 segments, 0, 1, 2...255 (sec/min)
Power Requirement	+12V DC
Construction	Aluminum + SGCC
Weight	2.2 kg (4.85 lbs)
Chassis Color	Black and white
Storage	1x 2.5" SSD/HDD
Power Supply	150W power adaptor
Mounting	Standard system bracket
Dimensions	290mm(W) x 222mm(D) x 29.9mm(H) 11.41"(W) x 8.74"(D) x 1.17"(H)
Operating Temperature	0°C ~ 45°C (32°F ~ 113°F)
Storage Temperature	-20°C ~ 80°C (-4°F ~ 176°F)
Relative Humidity	5%~90% @45oC (non-condensing)
Vibration	SSD: 5 grms / 5~500Hz / random operation
Certification	CE, FCC Class-B, cULus
Operating System	Win7(64-bit), Win10(64-bit) Enterprise, Linux Ubuntu 64-bit

## Ordering Information

SI-626	Signage Player with MBD626 (w/ AMD E8860 GPU for 6x HDMI), with 6th Gen Intel® Core™ (Mobile) i7-7820EQ processor, 2x 4GB DDR4 SO-DIMM, 128GB SSD and 150W power adaptor
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## Dimensions



# SI-663

## Mid-Range Signage Player

13th/12th Gen Intel® Core™ Processor Signage Player  
with Intel® SoC Integrated Graphics and 1x HDMI 2.0/1x DP 1.4/1x DVI-D



### Features

- iSMART intelligent energy-saving technology - enables power on/off scheduling and power resume functions
- Supports 13th/12th Gen Intel® Core™ processors
- 1x HDMI 2.0 / 1x DP++ 1.4 / 1x DVI-D
- 2x DDR5-4800 SO-DIMM, dual channel, Max. 64GB
- 1x M.2 B-Key (3052) for 5G
- 1x M.2 E-Key (2230) for WiFi, Bluetooth or capture card options
- TPM 2.0, vPro and watchdog timer
- Industrial-grade robust and compact design

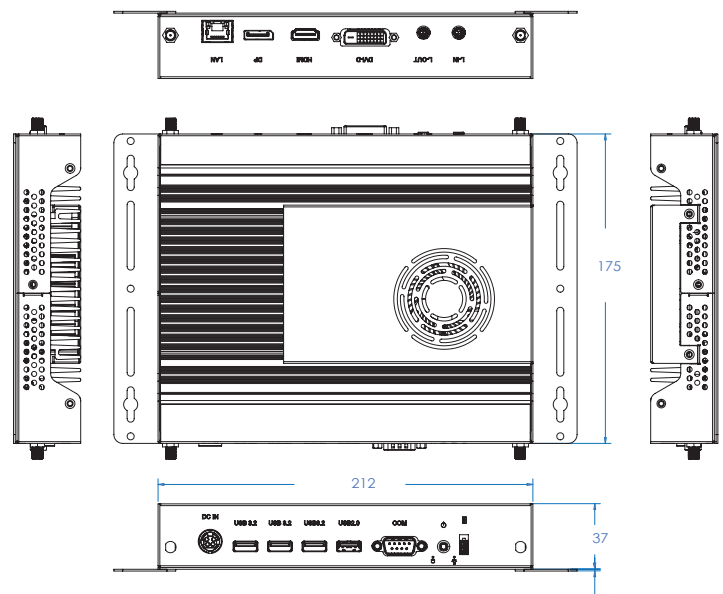
### Specifications

System Mainboard	MBD663
CPU	13th/12th Gen Intel® Core™ i / Celeron™ series (Raptor Lake PS / Alder Lake PS) processor TDP <= 28W
CPU Socket	LGA1700
Chipset	Integrated
Memory	2x DDR5 4800 SODIMM / Max. 64GB (without ECC support)
Graphics	Iris® Xe, up to 96EU
LAN	1x Gb LAN (Isolation/PXE support) (Intel® 226LM 2.5Gb with LAN Wakeup)
Expansion Slots	1x M.2 E-Key (2230) (WiFi-6E support) (2x PCI-E x1, USB 2.0) 1x M.2 B-Key (3052) (PCI-E x1, USB 2.0, USB 3.x) (supports Sierra LTE module). Refer to MBD603 1x UIM/SIM card slot 1x M.2 M-Key (2280) (PCI-E x4) 1x M.2 NVMe (PCI-E-3.0 x4 / SATA)
I/O Interface	1x HDMI 2.0 / 1x DP++ 1.4 / 1x DVI-D 3x USB 3.2 (USB Type-A) 1x USB 2.0 (USB Type-A) 1x RJ45 for Gigabit LAN 1x DB9 for RS232 serial port 2x Audio connectors for Line in/Line out 1x Power button 1x Power switch connector 1x Power jack (+12V DC) 2x LED for power & storage
Auto Control and Monitoring	Watchdog Timer: 256 segments, 0, 1, 2...255 (sec/min)
Power Requirement	+12V DC
Construction	Aluminum + SGCC
Weight	1.5Kg(3.3lbs)
Chassis Color	Black & White
Storage	1x M.2 M-key (2280)
Power Supply	150W power adapter
Mounting	Standard system bracket
Dimensions	175mm(W) x 212mm(D) x 37mm(H)
Operating Temperature	0°C~ 45°C (32°F~113°F)
Storage Temperature	-20° ~ 80°C (-4°F~176°F)
Relative Humidity	10%~90% (non-condensing)
Vibration	M.2: 5 grms / 5~500Hz / random operation
Certification	CE, FCC Class-B, cULus & CCC
Operating System	Windows 10 IoT Enterprise RS5 64-bit Linux Ubuntu 64-bit

### Ordering Information

SI-663	Intel® Core™ i7-1265UL Processor, 2x 8GB DDR5 4800 SO-DIMM memory, M.2 256GB and 150W power adapter
SI-MK3	VESA bracket

### Dimensions



# SI-663-N

## Mid-Range Signage Player

13th/12th Gen Intel® Core™ Processor Fanless Signage Player with Intel® SoC Integrated Graphics and 1x HDMI 2.0/1x DP1.4/1x DVI-D



### Features

- iSMART intelligent energy-saving technology - enables power on/off scheduling and power resume functions
- Supports 13th/12th Gen Intel® Core™ processor
- 1x HDMI 2.0 / 1x DP++ 1.4 / 1x DVI-D
- 2x DDR5-4800 SO-DIMM, dual channel, Max. 64GB
- 1x M.2 B-Key (3052) for 5G connectivity
- 1x M.2 E-Key (2230) for WiFi, Bluetooth or capture card options
- TPM 2.0, vPro and watchdog timer
- Industrial-grade robust, fanless and compact design

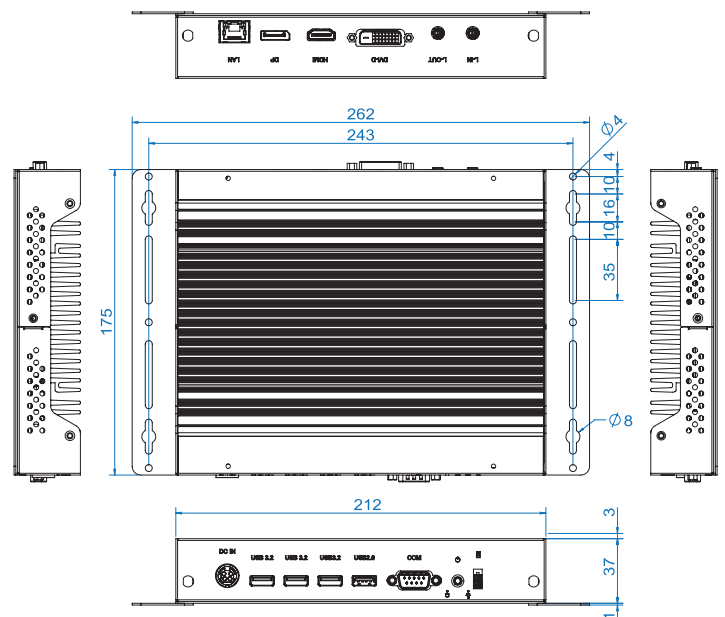
### Specifications

System Mainboard	MBD663
CPU	13th/12th Gen Intel® Core™ i / Celeron™ series (Raptor Lake PS / Alder Lake PS) processor TDP <= 28W
CPU Socket	LGA1700
Chipset	Integrated
Memory	2x DDR5 4800 SODIMM / Max. = 64GB (ECC not supported)
Graphics	Iris@ Xe, up to 96EU
LAN	1x Gigabit LAN (Isolation/PXE support) (Intel® 226LM 2.5Gb with LAN Wakeup)
Expansion Slots	1x M.2 E-Key (2230) (WiFi-6E support) (2x PCI-E x1, USB 2.0) 1x M.2 B-Key (3052) (PCI-E x1; USB 2.0, USB 3.x) (supports Sierra LTE module), refer to MBD603 1x UIM / SIM card slot 1x M.2 M-Key (2280) (PCI-E x4) 1x M.2 NVMe (PCI-E3.0 x4 / SATA)
I/O Interface	1x HDMI 2.0 / 1x DP++ 1.4 / 1x DVI-D 3x USB 3.2 (USB Type-A) 1x USB 2.0 (USB Type-A) 1x RJ45 for Gigabit LAN 1x DB9 for RS232 serial port 2x Audio connectors for Line in/Line out 1x Power button 1 x Power switch connector 1x Power jack (+12V DC) 2x LED for power & storage
Auto Control and Monitoring	Watchdog Timer: 256 segments, 0, 1, 2...255 (sec/min)
Power Requirement	+12V DC
Construction	Aluminum + SGCC
Weight	1.6Kg(3.5lbs)
Chassis Color	Black & White
Storage	1x M.2 M-key (2280)
Power Supply	150W power adapter
Mounting	Standard system bracket
Dimensions	175mm(W) x 212mm(D) x 37mm(H)
Operating Temperature	0°C ~ 45°C (32°F ~ 113°F)
Storage Temperature	-20° ~ 80°C (-4°F ~ 176°F)
Relative Humidity	10%~90% (non-condensing)
Vibration	M.2: 5 grms / 5~500Hz / random operation
Certification	CE, FCC Class-B, cULus & CCC
Operating System	Windows 10 IoT Enterprise R55 64-bit Linux Ubuntu 64-bit

### Ordering Information

SI-663-N	Intel® Core™ i7-1265UL Processor, 2x 8GB DDR5 4800 SO-DIMM memory, M.2 256GB and 150W power adapter
SI-MK3	VESA bracket

### Dimensions





## Specifications

System Mainboard	MBD654
CPU	11th Gen Intel® Core™ / Celeron® U-Series (TGL-U Platform) Processors
CPU Socket	BGA-1449
Chipset	SoC Integrated
Memory	2x DDR4-3200 SO-DIMM, Dual channel, Max. 64GB
Graphics	Gen12 integrated Graphics, Up to 96EU
LAN	1st: 1x Intel® I211AT/ I210AT 2nd: 1x Intel® I219LM (I7/I5) 1x Intel® I219V (I3)
Expansion Slots	1x M.2 E-Key (2230) 1x M.2 B-Key (3042) 1x UIM/SIM card slot
I/O Interface	4x HDMI 2.0 1x USB 2.0 (USB Type-A) 3x USB 3.1 @gen 2 (USB Type-A) 2x RJ45 for Gigabit LAN 1x RJ45 for RS232 serial port 1x Audio connector for Line-out 1x Power button 1x Power jack (+12V DC) 2x Power/HDD LED
Auto Control and Monitoring	Watchdog Timer: 256 segments, 0, 1, 2...255 (sec/min)
Power Requirement	+12V DC
Construction	Aluminum + SGCC
Weight	1.8 kg (3.7 lbs)
Chassis Color	Black & White
Storage	1x M.2 M-Key (2280) supports NVMe (PCI-E x4 / SATA)
Power Supply	84W power adaptor
Mounting	Standard system bracket
Dimensions	200.8mm(W) x 139.3mm(D) x 41.2mm(H) 7.90"(W) x 5.48"(D) x 1.62"(H)
Operating Temperature	0°C ~ 45°C (32°F ~ 113°F)
Storage Temperature	-20° ~ 80°C (-4°F ~ 176°F)
Relative Humidity	10%~90% (non-condensing)
Vibration	M.2: 5 grms / 5~500Hz / random operation
Certification	CE, FCC Class-B, UKCA, cULus, LVD
Operating System	Windows 10 IoT Enterprise RS5(64-bit) Linux Ubuntu(64-bit)

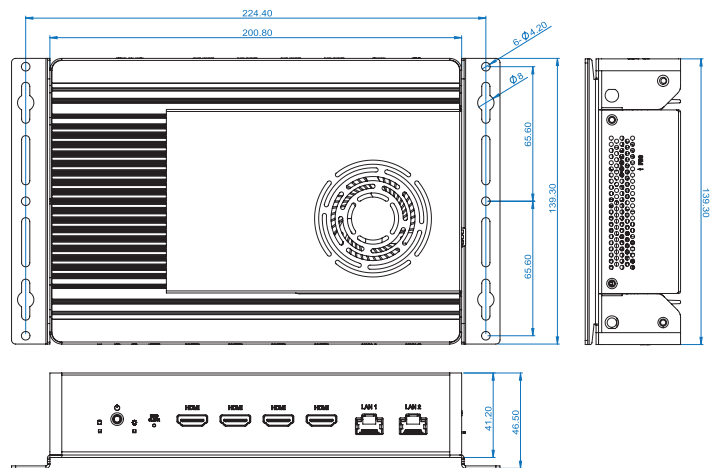
## Features

- iSMART intelligent energy-saving & Observer remote monitoring technologies
- 11th Gen Intel® Core™ U-Series Processors
- 4x HDMI 2.0 with independent audio output
- Built-in CEC and hardware EDID emulation functions with the software setting mode
- 2x DDR4-3200 SO-DIMM, Dual channel, Max. 64GB
- 1x M.2 B-Key (3042) for 4G LTE options
- 1x M.2 E-Key (2230) for Wi-Fi, Bluetooth or capture card options
- 1x M.2 M-Key (2280) for storage
- Supports Intel® iAMT(11.0), TPM 2.0 and watchdog timer
- Slim and segregated ventilation design

## Ordering Information

SI-654-I7	Intel® Core™ i7-1185G7E processor (12M Cache, up to 4.40 GHz), 2x 4GB DDR4-3200 SO-DIMM, M.2 128GB and 84W power adaptor
SI-654-I5	Intel® Core™ i5-1145G7E processor (8M Cache, up to 4.1 GHz), 2x 4GB DDR4-3200 SO-DIMM, M.2 128GB and 84W power adaptor
SI-654-I3	Intel® Core™ i3-1115G4E processor (6M Cache, up to 3.9 GHz), 2x 4GB DDR4-3200 SO-DIMM, M.2 128GB and 84W power adaptor
SI-MK3B	TV Mount

## Dimensions



# SI-654-N

## Mid-Range Signage Player

11th Gen Intel® Core™ U-Series Processor Fanless Signage Player with Intel® SoC Integrated Graphics and 4x HDMI 2.0



SI-654-N VIDEO

## Features

- iSMART intelligent energy-saving & Observer remote monitoring technologies
- 11th Gen Intel® Core™ U-Series Processors
- 4x HDMI 2.0 with independent audio output
- Built-in CEC and hardware EDID emulation functions with the software setting mode
- 2x DDR4-3200 SO-DIMM, Dual channel, Max. 64GB
- 1x M.2 B-Key (3042) for 4G LTE options
- 1x M.2 E-Key (2230) for Wi-Fi, Bluetooth or capture card options
- 1x M.2 M-Key (2280) for storage
- Supports Intel® iAMT(11.0), TPM 2.0 and watchdog timer
- Industrial-grade robust fanless design

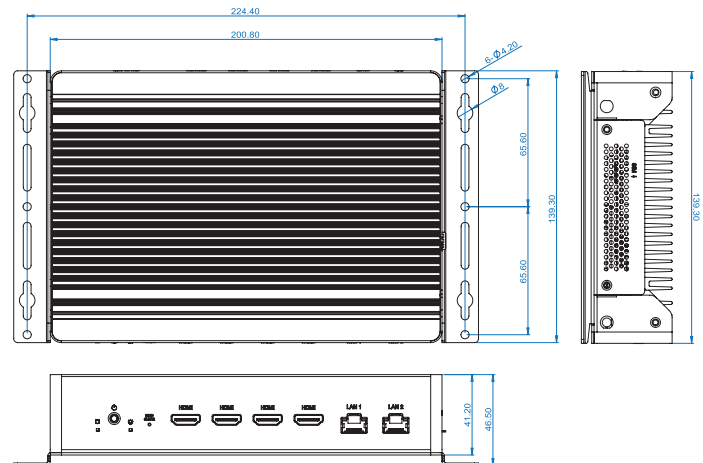
## Specifications

System Mainboard	MBD654
CPU	11th Gen Intel® Core™ / Celeron® U-Series (TGL-U Platform) Processors TDP <= 15W
CPU Socket	BGA-1449
Chipset	SoC Integrated
Memory	2x DDR4-3200 SO-DIMM, Dual channel, Max. 64GB
Graphics	Gen12 integrated Graphics, Up to 96EU
LAN	1st: 1x Intel® I211AT/ I210AT 2nd: 1x Intel® I219LM (I7/I5) 1x Intel® I219V (I3)
Expansion Slots	1x M.2 E-Key (2230) 1x M.2 B-Key (3042) 1x UIM/SIM card slot
I/O Interface	4x HDMI 2.0 1x USB 2.0 (USB Type-A) 3x USB 3.1 @gen 2 (USB Type-A) 2x RJ45 for Gigabit LAN 1x RJ45 for RS232 serial port 1x Audio connector for Line-out 1x Power button 1x Power jack (+12V DC) 2x Power/HDD LED
Auto Control and Monitoring	Watchdog Timer: 256 segments, 0, 1, 2...255 (sec/min)
Power Requirement	+12V DC
Construction	Aluminum + SGCC
Weight	1.7 kg (3.7 lbs)
Chassis Color	Black & White
Storage	1x M.2 M-Key (2280) supports NVMe
Power Supply	84W power adaptor
Mounting	Standard system bracket
Dimensions	200.8mm(W) x 139.3mm(D) x 41.2mm(H) 7.90"(W) x 5.48"(D) x 1.62"(H)
Operating Temperature	0°C ~ 45°C (32°F ~ 113°F)
Storage Temperature	-20° ~ 80°C (-4°F ~ 176°F)
Relative Humidity	10%~90% (non-condensing)
Vibration	M.2: 5 grms / 5~500Hz / random operation
Certification	CE, FCC Class-B, UKCA, cULus, CCC, LVD
Operating System	Windows 10 IoT Enterprise RS5(64-bit) Linux Ubuntu(64-bit)

## Ordering Information

SI-654-N7	Intel® Core™ i7-1185G7E processor (12M Cache, up to 4.40 GHz), 2x 4GB DDR4-3200 SO-DIMM, M.2 128GB and 84W power adaptor, TDP <= 15W
SI-654-N5	Intel® Core™ i5-1145G7E processor (8M Cache, up to 4.1 GHz), 2x 4GB DDR4-3200 SO-DIMM, M.2 128GB and 84W power adaptor, TDP <= 15W
SI-654-N3	Intel® Core™ i3-1115G4E processor (6M Cache, up to 3.9 GHz), 2x 4GB DDR4-3200 SO-DIMM, M.2 128GB and 84W power adaptor, TDP <= 15W
SI-MK3B	TV Mount

## Dimensions



# SI-642-N

## Mid-Range Signage Player

8th Gen Intel® Core™ U-Series Processor Fanless Signage Player with Intel® UHD Graphics 620 and 1x HDMI & DP



### Features

- iSMART intelligent energy-saving & Observer remote monitoring technologies
- 8th Gen Intel® Core™ U-Series Processors
- 1x HDMI 2.0 + 1x Active DisplayPort 1.2 with independent audio output
- 2x DDR4-2400 SO-DIMM, Dual channel, Max. 32GB
- 1x M.2 B-Key (3042) for 4G LTE options
- 1x M.2 E-Key (2230) for Wi-Fi or Bluetooth card options
- 1x M.2 M-Key (2280) for storage
- TPM 2.0, vPro and watchdog timer
- Slim & compact fanless design

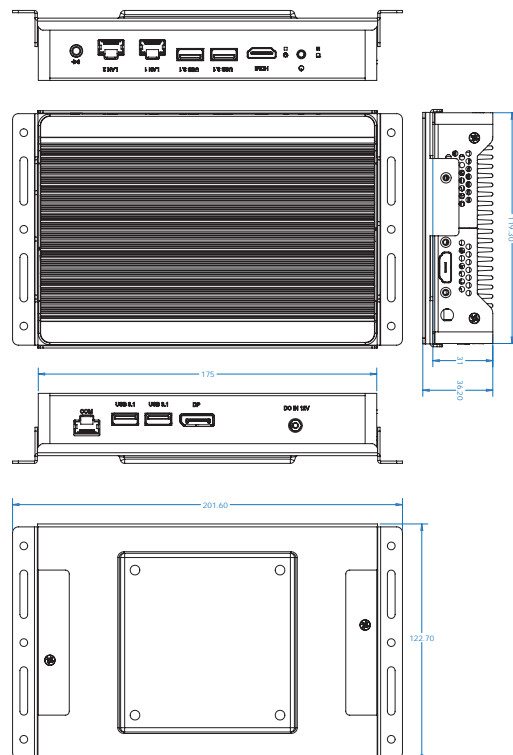
### Specifications

System Mainboard	MBD642
CPU	8th Gen Intel® Core™ U-Series Processors TDP<=25W
CPU Socket	FCBGA1528
Chipset	SoC Integrated
Memory	2x SO-DIMM DDR4-2400Hz, Dual channel, Max. 32GB
Graphics	Intel® UHD Graphics 620
LAN	1x Intel® I219LM Gigabit LAN 1x Intel® I211AT/ I210AT Gigabit LAN
Expansion Slots	1x B-Key (3042) 1x E-Key (2230)
I/O Interface	1x HDMI 2.0 1x DP 4x USB 3.1 (Gen2) 2x RJ45 for Gigabit LAN 1x RJ45 for RS232 serial port
Auto Control and Monitoring	Watchdog Timer: 256 segments, 0, 1, 2...255 (sec/min)
Power Requirement	+12V DC
Construction	Aluminum + SGCC
Weight	1kg (2.20 lbs)
Chassis Color	Black & White
Storage	1x M.2 E-Key (2280)
Power Supply	60W power adaptor
Mounting	Standard system bracket
Dimensions	175mm(W) x 119.3mm(D) x 31mm(H) 6.88"(W) x 4.69"(D) x 1.22"(H)
Operating Temperature	0°C ~ 45°C (32°F ~ 113°F)
Storage Temperature	-20° ~ 80°C (-4°F ~ 176°F)
Relative Humidity	10%~90% (non-condensing)
Vibration	M.2: 5 grms / 5~500Hz / random operation
Certification	CE, FCC Class-B, cULus, CCC, LVD
Operating System	Windows 10 IoT Enterprise RS5(64-bit) Linux Ubuntu(64-bit)

### Ordering Information

SI-642-NT	Intel® Core™ i7-8665UE processor (8M Cache, up to 4.40 GHz), 2x 4GB DDR4-2400 SO-DIMM, M.2 128GB and 60W power adaptor
SI-642-N8365T	Intel® Core™ i5-8365UE processor (6M Cache, up to 4.10 GHz), 2x 4GB DDR4-2400 SO-DIMM, M.2 128GB and 60W power adaptor
SI-642-N8145T	Intel® Core™ i3-8145UE processor (4M Cache, up to 3.90 GHz), 2x 4GB DDR4-2400 SO-DIMM, M.2 128GB and 60W power adaptor
SI-642-N4305T	Intel® Celeron® processor 4305UE (2M Cache, 2.00 GHz), 2x 4GB DDR4-2400 SO-DIMM, M.2 128GB and 60W power adaptor
SI-MK3C	VESA bracket

### Dimensions



# SI-623-N

## Mid-Range Signage Player

7th/6th Gen Intel® Core™ Mobile Processor Fanless Signage Player with Intel® HD Graphics 530 and 3x HDMI



SI-623-N VIDEO



## Specifications

System Mainboard	MBD623
CPU	7th/6th Gen Intel® Core™ Mobile Processors TDP <=35W
CPU Socket	FCBGA1440
Chipset	HM170/ QM170 PCH
Memory	2x DDR4-2133 SO-DIMM, Dual channel, Max. 32GB
Graphics	Intel® HD Graphics 530
LAN	1x Intel® I219LM Gigabit LAN controller for QM170 1x Intel® I219V Gigabit LAN controller for HM170
Expansion Slots	1x M.2 B-Key (3042) 1x M.2 M-Key (2280) 1x Mini PCI-E (full-size) 1x SIM card slot
I/O Interface	1x HDMI 2.0 + 2x HDMI 1.4 with hardware EDID emulation 2x USB 3.0, 2x USB 2.0 1x RJ45 for Gigabit LAN 1x RJ45 for RS-232 serial port 2x Audio connectors for Line-out/Mic-in 1x Power / HDD LED 1x Power button 1x Power jack connector
Auto Control and Monitoring	Watchdog Timer: 256 segments, 0, 1, 2...255 (sec/min)
Power Requirement	+12V DC
Construction	Aluminum + SGCC
Weight	2.4 kg (5.29 lbs)
Chassis Color	Black and white
Storage	1x 2.5" SATA HDD/SSD
Power Supply	84W power adaptor
Mounting	Slim design with wall mounting holes
Dimensions	215.6mm(W) x 215.6mm(D) x 40mm(H) 8.49"(W) x 8.49"(D) x 1.57"(H)
Operating Temperature	0°C~ 45°C (32°F~113°F)
Storage Temperature	-20°C ~ 80°C (-4°F~176°F)
Relative Humidity	5%~90% @45°C (non-condensing)
Vibration	SSD: 5 grms / 5~500Hz / random operation
Certification	CE, FCC Class-B, cULus, LVD
Operating System	Win7(64-bit), Win8.1(64-bit) & Win10(64-bit) Enterprise, Linux Fedora / Ubuntu(64-bit) (Installation)

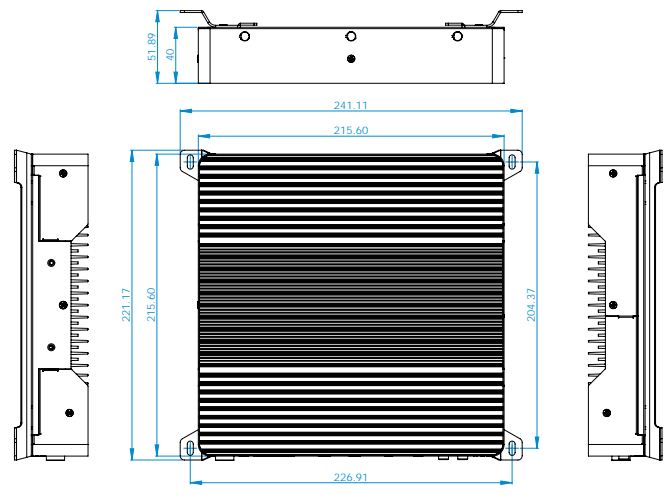
## Features

- iSMART intelligent energy-saving & Observer remote monitoring technologies
- iAMT(11.0), TPM1.2, vPro and watchdog timer
- 7th/6th Gen Intel® Core™ Mobile Processors
- Integrated Intel® HD Graphics 530
- 2x DDR4-2133 SO-DIMM, Dual channel, Max. 32GB
- 1x HDMI 2.0 + 2x HDMI 1.4 with independent audio output
- Built-in hardware EDID emulation function
- 1x M.2 B-Key (3042) for storage or 4G LTE options
- 1x M.2 M-Key (2280) for storage
- 1x Mini PCI-E (full-size) for Wi-Fi, Bluetooth or 4G LTE
- Compact and fanless design

## Ordering Information

SI-623-N	Book-Size Signage Player with MBD623 Intel® Core™ i7-6822EQ processor (8M Cache, up to 2.80 GHz), 2x 4GB DDR4-2133 SO-DIMM, 2.5" SATA SSD 128GB and 84W power adaptor
SI-MK3A	Mounting bracket

## Dimensions



# SI-613

## Mid-Range Signage Player

7th/6th Gen Intel® Core™ Desktop Processor Signage Player with Intel® HD Graphics 530 and 3x HDMI



### Features

- iSMART intelligent energy-saving & Observer remote monitoring technologies
- iAMT (11.0), TPM 1.2, vPro and watchdog timer
- 7th/6th Gen Intel® Core™ Desktop Processors
- Integrated Intel® HD Graphics 530
- 3x HDMI 2.0 with independent audio output
- Built-in hardware EDID emulation function
- 2x DDR4-2133 SO-DIMM, Dual channel, Max. 32GB
- 1x M.2 B-Key (3042) for storage or 4G LTE option
- 1x Mini PCI-E (full-size) for Wi-Fi, Bluetooth or 4G LTE



SI-613 VIDEO



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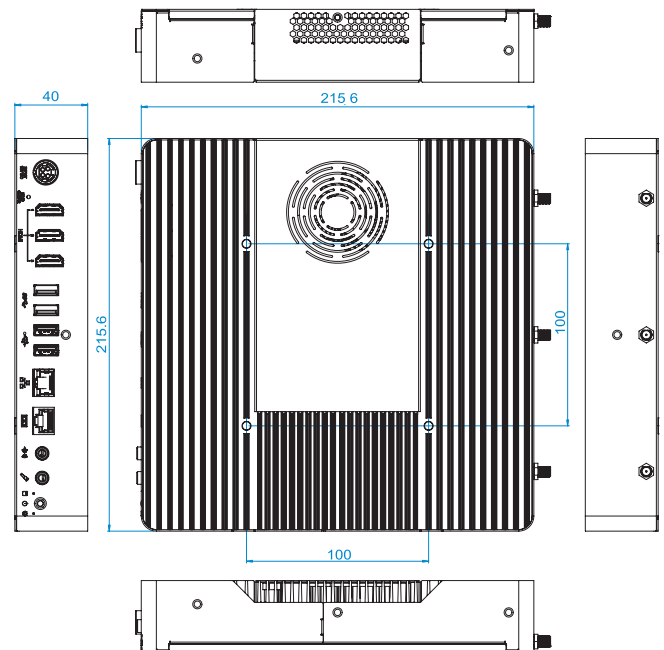
### Specifications

System Mainboard	MBD613
CPU	7th/6th Gen Intel® Desktop Processors (14nm monolithic) TDP <=65W
CPU Socket	LGA1151(Socket H4)
Chipset	H170/Q170 PCH
Memory	2x DDR4-2133 SO-DIMM, Dual channel, Max. 32GB
Graphics	Integrated Intel® HD Graphics 530
LAN	1x Intel® I219LM Gigabit LAN controller for Q170 1x Intel® I219V Gigabit LAN controller for H170
Expansion Slots	1x M.2 B-Key (3042) 1x Mini PCI-E (full-size) 1x SIM card slot
I/O Interface	3x HDMI 2.0 with hardware EDID emulation 2x USB 3.0 2x USB 2.0 1x RJ45 for Gigabit LAN 1x RJ45 for RS-232 serial port 2x Audio connectors for Line-out/Mic-in 1x Power / HDD LED 1x Power button 1x Power jack connector
Auto Control and Monitoring	Watchdog Timer: 256 segments, 0,1,2...255 (sec/min)
Power Requirement	+12V DC
Construction	Aluminum + SGCC
Weight	2.2 kg (4.85 lbs)
Chassis Color	Black & white
Storage	1x M.2 M-Key (2280)
Power Supply	150W power adaptor
Mounting	Slim design with wall mounting holes
Dimensions	215.6mm(W) x 215.6mm(D) x 40mm(H) 8.49"(W) x 8.49"(D) x 1.57"(H)
Operating Temperature	0°C ~ 45 °C (32 ~ 113 °F) (CPU TDP <=45W) 0°C ~ 40°C (32°F~104°F) (CPU TDP=65W)
Storage Temperature	-20°C ~ 80°C (-4°F~176°F)
Relative Humidity	5~90% @ 45°C, (non-condensing)
Vibration	M.2: 5 grms / 5~500Hz / random operation
Certification	CE, FCC Class-B, cULus, BSMI, LVD
Operating System	Win7 32/64-bit, Win8.1(64-bit), Win10(64-bit) Enterprise

### Ordering Information

SI-613-QT	Book-Size Signage Player with MBD613-QT (Q170) with Intel® Core™ i7-6700 processor (8M Cache, up to 4.00 GHz), 2x 4GB DDR4-2133 SO-DIMM, M.2 64GB & 150W power adaptor
SI-MK3A	Mounting bracket

### Dimensions





## Features

- AMD Ryzen™ Embedded V2000 Series Processors
- Vega GPU with up to 7 Compute units
- 4x HDMI 2.0 with independent audio output support
- iSMART intelligent energy-saving & Observer remote monitoring technologies
- Built-in CEC and hardware EDID emulation functions with the software setting mode
- 2x DDR4-3200 SO-DIMM, dual channel, Max. 64GB
- 1x M.2 B-Key for 5G or LTE options
- 1x M.2 E-Key for Wi-Fi, Bluetooth or capture card options
- 1x M.2 M-Key for storage
- Supports TPM 2.0 and watchdog timer
- Slim and segregated flow ventilation design

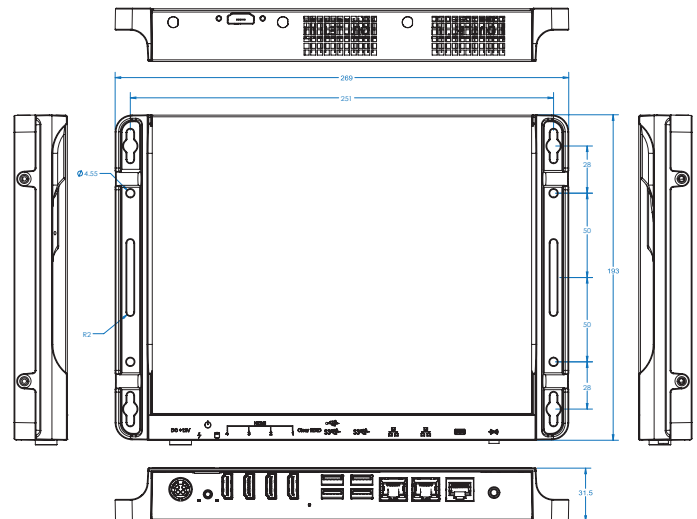
## Specifications

System Mainboard	MBD334
CPU	AMD Ryzen™ Embedded V2000 Series Processors
CPU Socket	FP6 BGA package, 25mm x 35mm
Chipset	SoC integrated
Memory	2x DDR4-3200, SO-DIMM, Dual channel, Max. 64GB
Graphics	Next-gen AMD Vega GPU integrated
LAN	2x Realtek RTL8111H-CG Gigabit LAN controller
Expansion Slots	1x M.2 E-Key (2230) 1x M.2 B-Key (3052) 1x UIM/SIM card slot
I/O Interface	4x HDMI 2.0 with hardware EDID emulation & CEC function 4x USB 3.1 @gen 2 (USB Type-A) 2x RJ45 for Gigabit LAN 1x RJ45 for RS-232 serial port 1x Audio connector for Line-out 1x Power button 1x Power jack (+12V DC) 2x Power/HDD LED
Auto Control and Monitoring	Watchdog Timer: 256 segments, 0, 1, 2...255 (sec/min)
Power Requirement	+12V DC-in
Construction	Aluminum + SGCC
Weight	2.1 kg (4.63 lbs)
Chassis Color	Black & white
Storage	1x M.2 M-Key (2280)
Power Supply	150W power adaptor
Mounting	Slim design with wall mounting holes
Dimensions	269mm(W) x 193mm(D) x 31.5mm(H) 10.59"(W) x 7.59"(D) x 1.24"(H)
Operating Temperature	0°C ~ 45°C (32°F ~ 113°F)
Storage Temperature	-20°C ~ 80°C (-4°F ~ 176°F)
Relative Humidity	10%~90% (non-condensing)
Vibration	M.2: 5 grms / 5~500Hz / random operation
Certification	CE, FCC Class A, UKCA, cULus, CCC
Operating System	Win11 IoT Enterprise(64-bit) Win10 IoT Enterprise(64-bit) Linux Ubuntu(64-bit)

## Ordering Information

SI-334	Signage Player with MBD334 w/ AMD Ryzen™ Embedded V2748 4.25GHz/2.9GHz; 2x 4GB DDR4-3200 SO-DIMM, M.2 128GB, 150W power adaptor
SI-334-46	Signage Player with MBD334 w/ AMD Ryzen™ Embedded V2546, 3.95GHz/3.0GHz; 2x 4GB DDR4-3200 SO-DIMM memory, M.2 128GB, 150W power adaptor
SI-MK3A	Mounting bracket
SI-1U-AD	1U Rackmount kit
HDMI Cable Holder	SI-334 HDMI bracket kit

## Dimensions





SI-324 VIDEO



## Specifications

System Mainboard	MBD324
CPU	AMD Ryzen™ Embedded V1000 Series Processors
CPU Socket	FP5 BGA package, 37x29mm
Chipset	SoC integrated
Memory	2x DDR4-2400 SO-DIMM, Dual channel, Max. 32GB
Graphics	Next-gen AMD Vega GPU integrated
LAN	2x Realtek RTL8111H-CG Gigabit LAN controller
Expansion Slots	1x Mini PCI-E (full-size) 1x M.2 E-Key (2230) 1x SIM card slot
I/O Interface	4x HDMI 2.0 with hardware EDID emulation 2x USB 3.0, 1x USB 2.0 2x RJ45 for Gigabit LAN 1x RJ45 for RS-232 serial port 1x Audio connectors for Line-out 1x Power / HDD LED 1x Power button 1x Power jack connector
Auto Control and Monitoring	Watchdog Timer: 256 segments, 0, 1, 2...255 (sec/min)
Power Requirement	+12V DC-in
Construction	Aluminum + SGCC
Weight	2.1 kg (4.63 lbs)
Chassis Color	Black & white
Storage	1x M.2 M-Key (2280)
Power Supply	150W power adaptor
Mounting	Slim design with wall mounting holes
Dimensions	269mm(W) x 193mm(D) x 31.5mm(H) 10.59"(W) x 7.59"(D) x 1.24"(H)
Operating Temperature	0°C ~ 45°C (32°F ~ 113°F)
Storage Temperature	-20°C ~ 80°C (-4°F ~ 176°F)
Relative Humidity	10%~90% (non-condensing)
Vibration	M.2: 5 grms / 5~500Hz / random operation
Certification	CE, FCC Class-B, cULus, CCC
Operating System	Win10 IoT Enterprise (64-bit) Linux Ubuntu (64-bit)

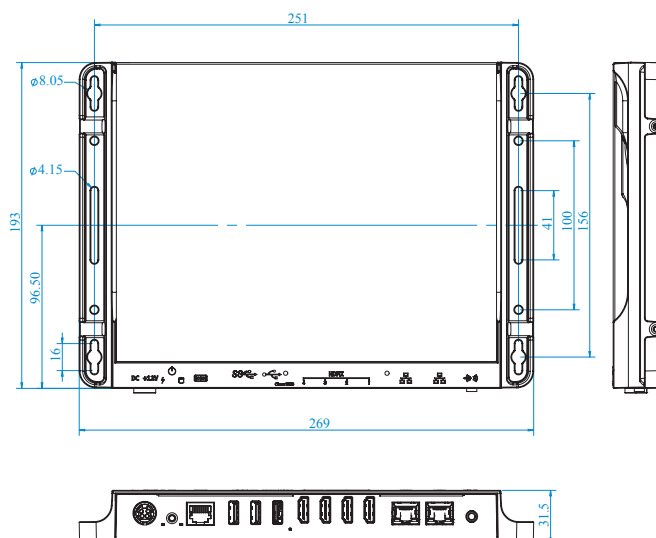
## Features

- iSMART intelligent energy-saving & Observer remote monitoring technologies
- AMD Ryzen™ Embedded V1000 Series Processors
- Vega GPU with up to 11 compute units
- 4x HDMI 2.0 with independent Audio output support
- Built-in hardware EDID emulation function with the software setting mode
- 2x DDR4-2400 SO-DIMM, Dual channel, Max. 32GB
- 1x Mini PCI-E (full-size) for Wi-Fi, Bluetooth, 4G LTE or capture card options
- 1x M.2 E-Key (2230) for Wi-Fi and Bluetooth options
- 1x M.2 M-Key (2280) for storage
- Segregated flow ventilation design

## Ordering Information

SI-324	Signage Player with MBD324 w/ AMD Ryzen™ Embedded V1807B 3.35GHz/3.8GHz ;2x 4GB DDR4-2400 SO-DIMM, M.2 128GB, 150W power adaptor
SI-324-R8	Signage Player with MBD324-R8 w/ AMD Ryzen™ Embedded V1807B 3.35GHz/3.8GHz ;2x 4GB DDR4-2400 SO-DIMM, M.2 128GB, 150W power adaptor
SI-324-16	Signage Player with MBD324 w/ AMD Ryzen™ Embedded V1605B 2.0GHz/3.6GHz ;2x 4GB DDR4-2400 SO-DIMM, M.2 128GB, 150W power adaptor
SI-324-16R8	Signage Player with MBD324-R8 w/ AMD Ryzen™ Embedded V1605B 2.0GHz/3.6GHz ;2x 4GB DDR4-2400 SO-DIMM, M.2 128GB, 150W power adaptor
SI-MK3A	Mounting bracket
SI-1U-AD	1U Rackmount kit
HDMI Cable Holder	SI-304/SI-324 HDMI bracket kit

## Dimensions



# SI-324-N

## Mid-Range Signage Player

AMD Ryzen™ Embedded R2000 / V2000 Series Processor Fanless Signage Player with AMD Vega GPU and 4x HDMI



SI-324-N VIDEO

### Specifications

System Mainboard	MBD324
CPU	AMD Ryzen™ Embedded V1000 2.0GHz/3.6GHz or R2000 2.1GHz/3.5GHz Processors (TDP <= 25W)
CPU Socket	FP5 BGA package, 35mm x 25mm, 0.8mm pitch
Chipset	SoC integrated
Memory	2x DDR4-2400 SO-DIMM, Dual channel, Max. 32GB
Graphics	Next-Gen AMD Radeon™ HD GPU integrated
LAN	2x Realtek RTL8111H-CG Gigabit LAN controller
Expansion Slots	1x Mini PCI-E (full-size) 1x M.2 E-Key (2230) 1x SIM card slot
I/O Interface	4x HDMI 2.0 with hardware EDID emulation 2x USB 3.0, 1x USB 2.0 2x RJ45 for Gigabit LAN 1x RJ45 for RS-232 serial port 1x Audio connectors for Line-out 1x Power / HDD LED 1x Power button 1x Power jack connector
Auto Control and Monitoring	Watchdog Timer: 256 segments, 0, 1, 2...255 (sec/min)
Power Requirement	+12V DC-in
Construction	Aluminum + SGCC
Weight	1.5kg (3.31lbs)
Chassis Color	Black & white
Storage	1x M.2 M-Key (2280) (SATA signal only)
Power Supply	84W power adaptor
Mounting	Standard system bracket
Dimensions	215.8mm(W) x 164mm(D) x 45mm(H) 8.49"(W) x 6.45"(D) x 1.77"(H)
Operating Temperature	0°C ~ 45°C (32°F~113°F)
Storage Temperature	-20°C ~ 80°C (-4°F~176°F)
Relative Humidity	10%~90% (non-condensing)
Vibration	M.2: 5 grms / 5~500Hz / random operation
Certification	CE, FCC Class-B, cULus
Operating System	Win10 IoT Enterprise(64-bit) Linux Ubuntu(64-bit)

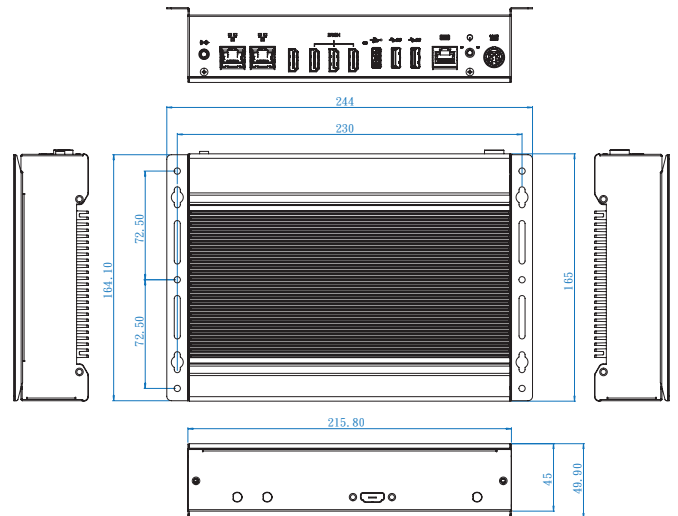
### Features

- iSMART intelligent energy-saving & Observer remote monitoring technologies
- AMD Ryzen™ Embedded R2000 / V1000 Series Processors (TDP<=25W)
- Vega GPU with up to 8 compute units
- 4x HDMI 2.0 with independent Audio output support
- Built-in hardware EDID emulation function with software setting mode
- 2x DDR4-2400 SO-DIMM, Dual channel, Max. 32GB
- 1x Mini PCI-E (full-size) for Wi-Fi, Bluetooth, 4G LTE and capture card options
- 1x M.2 E-Key (2230) for Wi-Fi and Bluetooth options
- 1x M.2 M-Key (2280) for storage
- Compact and fanless design

### Ordering Information

SI-324-N	Signage Player with MBD324 w/ AMD Ryzen™ Embedded V1605B 2.0GHz/3.6GHz; 2x 4GB DDR4-2400 SO-DIMM memory, M.2 128GB, 84W power adaptor
SI-324-NR8	Signage Player with MBD324-R8 w/ AMD Ryzen™ Embedded V1605B 2.0GHz/3.6GHz; 2x 4GB DDR4-2400 SO-DIMM memory, M.2 128GB, 84W power adaptor
SI-324-N2314	Signage Player with MBD324-R8 w/ AMD Ryzen™ Embedded R2314 2.1GHz/3.5GHz; 2x 4GB DDR4 SO-DIMM memory, M.2 128GB, 84W power adaptor

### Dimensions



# SI-323-N

## Mid-Range Signage Player

AMD Ryzen™ Embedded R2000 / R1000 Series Processor Fanless Signage Player with AMD Vega GPU and 3x HDMI



SI-323-N VIDEO

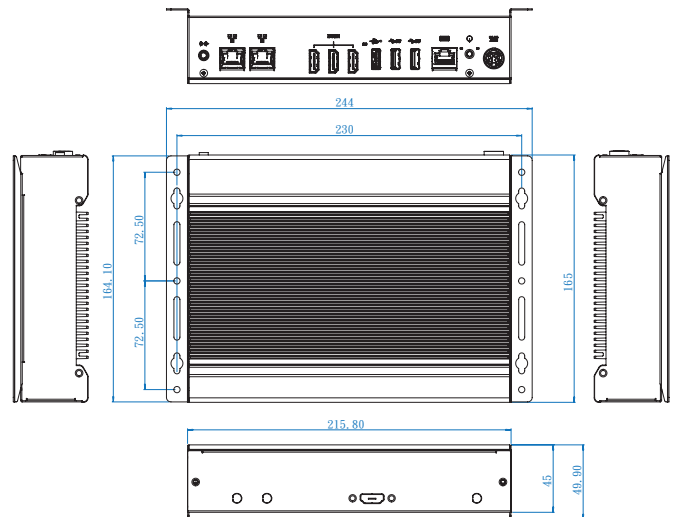
## Features

- iSMART intelligent energy-saving & Observer remote monitoring technologies
- AMD Ryzen™ Embedded R2000 / R1000 Series Processors (TDP<=25W)
- Vega GPU with up to 3 compute units
- 3x HDMI 2.0 with independent Audio output support
- Built-in hardware EDID emulation function with software setting mode
- 2x DDR4-2400 SO-DIMM, Dual channel, Max. 32GB
- 1x Mini PCI-E (full-size) for Wi-Fi, Bluetooth, 4G LTE or capture card options
- 1x M.2 E-Key (2230) for Wi-Fi, Bluetooth, capture card options
- 1x M.2 M-Key (2280) for storage
- Compact and fanless design

## Ordering Information

SI-323-N	Signage Player with MBD323 w/ AMD Ryzen™ Embedded R1606G 2.6GHz/3.5GHz; 2x 4GB DDR4-2400 SO-DIMM memory, M.2 128GB, 84W power adaptor
SI-323-NR8	Signage Player with MBD323-R8 w/ AMD Ryzen™ Embedded R1606G 2.6GHz/3.5GHz; 2x 4GB DDR4-2400 SO-DIMM memory, M.2 128GB, 84W power adaptor
SI-323-N2312	Signage Player with MBD323-R8 w/AMD Ryzen™ Embedded R2312 2.7GHz/3.5GHz; 2x 4GB DDR4 SO-DIMM memory, M.2 128GB, 84W power adaptor

## Dimensions



## Specifications

System Mainboard	MBD323
CPU	AMD Ryzen™ Embedded R1000 2.6GHz/3.5GHz or R2000 2.7GHz/3.5GHz Processors (TDP <=25W)
CPU Socket	FP5 BGA package, 35mm x 25mm, 0.8mm pitch
Chipset	SoC integrated
Memory	2x DDR4-2400 SO-DIMM, Dual channel, Max. 32GB
Graphics	Next-Gen AMD Radeon™ HD GPU integrated
LAN	2x Realtek RTL8111H-CG Gigabit LAN controller
Expansion Slots	1x Mini PCI-E (full-size) 1x M.2 E-Key (2230) 1x SIM card slot
I/O Interface	3x HDMI 2.0 with hardware EDID emulation 2x USB 3.0, 1x USB 2.0 2x RJ45 for Gigabit LAN 1x RJ45 for RS-232 serial port 1x Audio connectors for Line-out 1x Power / HDD LED 1x Power button 1x Power jack connector
Auto Control and Monitoring	Watchdog Timer: 256 segments, 0, 1, 2...255 (sec/min)
Power Requirement	+12V DC-in
Construction	Aluminum + SGCC
Weight	1.5kg (3.31lbs)
Chassis Color	Black & white
Storage	1x M.2 M-Key (2280) (SATA signal only)
Power Supply	84W power adaptor
Mounting	Standard system bracket
Dimensions	215.8mm(W) x 164mm(D) x 45mm(H) 8.49"(W) x 6.45"(D) x 1.77"(H)
Operating Temperature	0°C ~ 45°C (32°F~113°F)
Storage Temperature	-20°C ~ 80°C (-4°F~176°F)
Relative Humidity	10%~90% (non-condensing)
Vibration	M.2: 5 grms / 5~500Hz / random operation
Certification	CE, FCC Class-B, cULus
Operating System	Win10 IoT Enterprise(64-bit) Linux Ubuntu(64-bit)

# SI-212-N

## Entry-level Signage Player

Intel® Atom® x7000E & x7000RE Series/ N-series/ Core™ i3-N305 Processor (formerly Alder Lake-N) Fanless Signage Player with 2x HDMI 2.0



### Features

- iSMART intelligent energy-saving technology - enables power on/off scheduling and power resume functions
- Intel® Atom® x7000E & x7000RE Series / N-series / Core™ i3-N305 processors (formerly Alder Lake-N)
- 1x DDR5-5600 SO-DIMM, dual channel, Max. 16GB (Max data rate DDR5-4800)
- 2x HDMI 2.0 with independent audio output
- Built-in CEC and hardware EDID emulation functions with software setting mode
- Supports PDP (Peripheral Device Power Control) function
- Supports OOB function via I210IT LAN port (optional)
- 1x M.2 E-Key (2230) for WiFi, Bluetooth options
- 1x M.2 M-Key (2280) for storage
- TPM 2.0 and watchdog timer
- Industrial-grade robust and compact fanless design

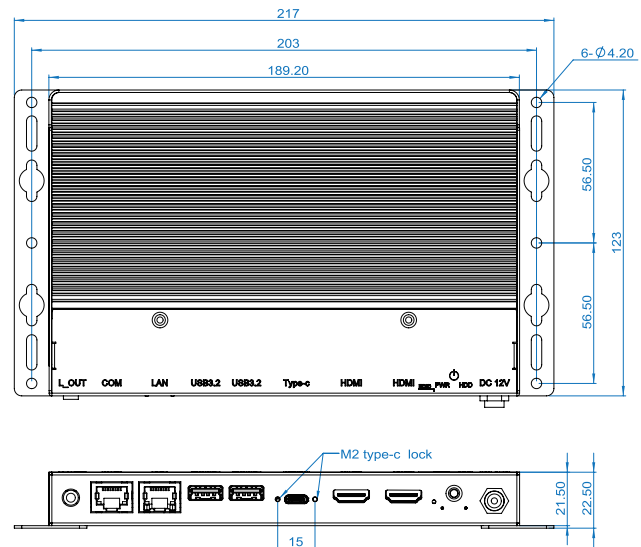
### Specifications

System Mainboard	MBD212
CPU	Intel® Atom® x7000E & x7000RE Series/ N-series/ Core™ i3-N305 processor (formerly Alder Lake N)
CPU Socket	FCBGA1264
Chipset	Integrated
Memory	1x DDR5 5600 SODIMM / Max. 16GB (Maximum data rate DDR5-4800) (w/o ECC supported)
Graphics	Gen 12 UHD Gfx, up to 32EU
LAN	1x Gigabit LAN
Expansion Slots	1x M.2 2280 socket (M-key, supports NVMe with PCI-E (2x) or SATA) 1x M.2 2230 socket (E-key, supports CNVi) w/ PCI-E(1x) & USB 2.0)
I/O Interface	2x HDMI 2.0b 2x USB 3.2 (USB Type-A) 1x USB (type-C) 1x RJ45 for Gigabit LAN 1x RJ45 for RS232 serial port 1x Audio connectors for Line out 1x Power button 1x Power jack (+12V DC) 2x LED for power & storage
Auto Control and Monitoring	Watchdog Timer: 256 segments, 0, 1, 2...255 (sec/min)
Power Requirement	+12V DC
Construction	Aluminum + SGCC
Weight	1.0 kg (2.2 lbs)
Chassis Color	Black & White
Storage	1x M.2 M-key (2280)
Power Supply	50W power adapter
Mounting	Standard system bracket
Dimensions	217mm(W) x 123mm(D) x 22.5mm(H) 8.54"(W) x 4.84"(D) x 0.88"(H)
Operating Temperature	0°C~45°C (32°F~113°F) for SI-212-N -20°C~60°C (-4°F~140°F) for SI-212-N33RE
Storage Temperature	-40°C ~ 85°C (-40°F ~ 185°F)
Relative Humidity	10%~90% (non-condensing)
Vibration	M.2: 5 grms / 5~500Hz / random operation
Certification	CE, FCC Class-B, cULus, LVD and VCCI
Operating System	Windows 10 IoT Enterprise, Linux Ubuntu 64-bit

### Ordering Information

SI-212-N	Intel® Atom® x7000E Series/ N-series/ Core™ i3-N305 processor, 1x 8GB DDR5-5600 SO-DIMM memory, M.2 256GB and 50W power adapter
SI-212-N33RE	Intel® Atom® x7433RE processor, 1x 8GB DDR5 5600 SO-DIMM memory, M.2 256GB and 50W power adapter

### Dimensions



# SI-111-N

## Entry-level Signage Player

Intel® Atom® x6000 / Pentium® / Celeron® Processor  
Fanless Signage Player with 1x HDMI



## Features

- Intel® Atom® X6000/ Pentium® / Celeron® Processors
- iSMART intelligent energy-saving & Observer remote monitoring technologies
- 2x DDR4-3200 SO-DIMM, Dual channel
- 1x HDMI 2.0b
- 3x USB 3.1
- 1x 2.5GbE LAN port
- 1x COM (RS-232)
- 1x M.2 M-Key (2280) for storage
- 1x M.2 E-Key (2230) for Wi-Fi, Bluetooth or capture card options
- TPM 2.0 and watchdog timer
- Industrial-grade robust, fanless and compact design

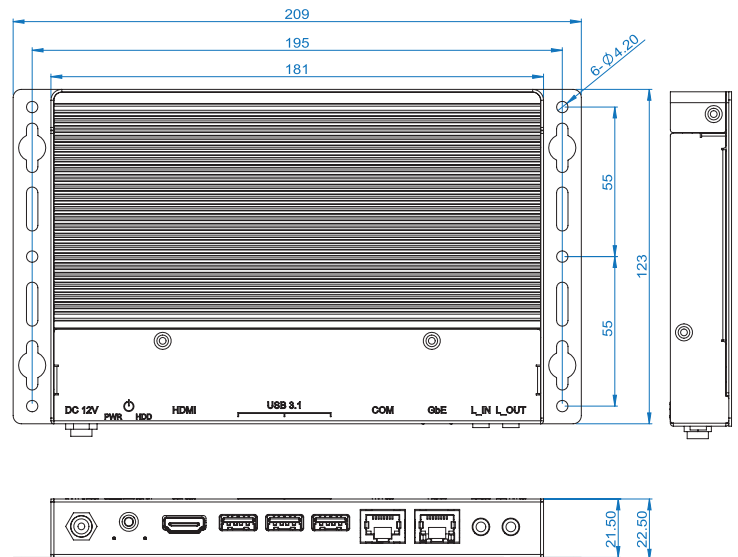
## Specifications

System Mainboard	MBD111
CPU	Intel® Atom® x6211E (1.3~3.0GHz) Intel® Celeron® N6210 (1.2~2.6GHz)
CPU Socket	FCBGA1493
Chipset	SoC Integrated
Memory	2x DDR4-3200 SO-DIMM, Max. 32GB (support IB ECC)
Graphics	Intel® UHD Graphics for 10th Gen Intel® Processors
LAN	1x Intel® I226IT 2.5GbE LAN for Atom® x6000 series 1x Intel® I226V 2.5GbE LAN for Celeron®
Expansion Slots	1x M.2 M-Key (2280) for storage 1x M.2 E-Key (2230) for Wi-Fi, Bluetooth or capture card options
I/O Interface	1x HDMI 2.0b 3x USB 3.1 1x RJ45 for 2.5GbE LAN 1x RJ45 for RS232 serial port 2x Audio connectors for Line-in / Line-out 1x Power button 1x Lockable power connector 1x Power / HDD LED
Auto Control and Monitoring	Watchdog Timer: 256 segments, 0, 1, 2...255 (sec/min)
Power Requirement	+12V DC
Construction	Aluminum + SGCC
Weight	1kg (2.2lbs)
Chassis Color	Black & White
Storage	1x M.2 M-Key (2280)
Power Supply	50W power adaptor
Mounting	Standard system bracket
Dimensions	181mm(W) x 123mm(D) x 21.5mm(H)
Operating Temperature	-10°C ~ 50°C (14°F~122°F) for SI-111-N -20°C ~ 70°C (-4°F~158°F) for SI-111-N11E
Storage Temperature	-40°C~80°C (-40°F~176°F)
Relative Humidity	10%~90% (non-condensing)
Vibration	SSD: 5 grms / 5~500Hz / random operation
Certification	CE, FCC class-B, UKCA, cULus, LVD
Operating System	Win10 IoT Enterprise (64-bit) Linux Ubuntu (64-bit)

## Ordering Information

SI-111-N	Signage Player with Intel® Celeron® N6210 (1.2~2.6GHz); 2x 4GB DDR4-3200 SO-DIMM, M.2 128GB storage, 1x HDMI 2.0b, 3x USB 3.1, 1x LAN, 1x COM (RJ45) and 50W power adaptor (Operating temperature -10°C~50°C)
SI-111-N11E	Signage Player with Intel® Atom® x6211E (1.3~3.0GHz); 2x 4GB DDR4-3200 SO-DIMM, M.2 128GB storage, 1x HDMI 2.0b, 3x USB 3.1, 1x LAN, 1x COM (RJ45) and 50W power adaptor (Operating temperature -20°C~70°C)

## Dimensions



# SI-12 SI-12-J19

## Entry-Level Signage Player / Outdoor Signage Player

Intel® Atom® Processor E3845 or Celeron® Processor J1900  
Fanless Signage Player with Intel® Gen7 Graphics and Dual HDMI



### Specifications

System Mainboard	IB812
CPU	SI-12: Intel® Atom® E3845 Quad-Core 1.9 GHz SI-12-J19: Intel® Celeron® J1900 Quad-Core 2.0 GHz
CPU Socket	FCBGA 1170 BGA
Chipset	SoC Integrated
Memory	2x DDR3L-1333 SO-DIMMs, Dual channel, Max. 8GB (Non-ECC)
Graphics	Intel® HD Graphics (Gen 7-LP) 4EU
LAN	1x Realtek RTL8111H-CG Gigabit LAN controller
Expansion Slots	1x Mini PCI-E (full-size) 1x UIM/SIM card slot
I/O Interface	2x HDMI 1.4a 1x USB 3.0 port, 2x USB 2.0 1x RJ45 for Gigabit LAN 1x RJ45 for RS232 serial port 2x Audio connectors for Line-in / Line-out 1x Power / HDD LED 1x Power button 1x DC jack
Auto Control and Monitoring	Watchdog Timer: 256 segments, 0, 1, 2...255 sec/min
Power Requirement	+12V DC-in
Construction	Aluminum + SGCC
Weight	0.8 kg (1.76 lbs)
Chassis Color	Black & white
Storage	1x mSATA
Power Supply	60W power adaptor
Mounting	Standard system bracket
Dimensions	190mm(W) x 130mm(D) x 19.5mm(H) 7.48"(W) x 5.12"(D) x 0.77"(H)
Operating Temperature	-30°C ~ 60°C (-22°F~140°F) for SI-12 0°C ~ 45°C (32°F~113°F) for SI-12-J19
Storage Temperature	-40°C ~ 80°C (-40°F~176°F)
Relative Humidity	5~90% @ 45°C, (non-condensing)
Vibration	mSATA: 5 grms / 5~500Hz / random operation
Certification	CE, FCC class-B, VCCI class-B, cULus, LVD
Operating System	Win7 32/64-bit, Win8, Win8.1, WE8.1, WEC 2013, Win10 32/64-bit Enterprise

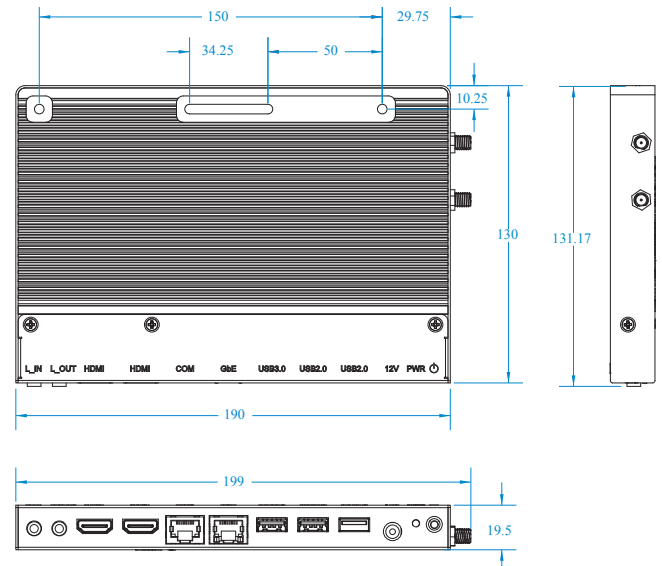
### Features

- iSMART intelligent energy-saving & Observer remote monitoring technologies
- Intel® Atom™ E3845 Quad-Core 1.9 GHz or Celeron® J1900 Quad-Core 2.0 GHz
- Intel® HD Graphics (Gen 7-LP) 4EU
- 2x DDR3L-1333 SO-DIMM, Dual channel, Max. 8GB
- 2x HDMI 1.4a
- 1x Mini PCI-E (full-size) for Wi-Fi, Bluetooth or 4G LTE options
- Fanless, super slim and compact design
- Wide-range operating temperature from -30°C to 60°C

### Ordering Information

SI-12	Signage Player with Intel® Atom® E3845 SoC (22nm); Quad-Core 1.91GHz, 4GB SO-DIMM RAM, 128GB mSATA, and 60W power adaptor (Operating temperature -30°C~60°C)
SI-12-J19	Signage Player with Intel® Celeron® J1900 (22nm); Quad-Core 2GHz, 4GB SO-DIMM, 128GB mSATA, and 60W power adaptor (Operating temperature 0°C~45°C)
SI-MK1	Mounting bracket
SI-1U-AD	1U Rackmount kit
HDMI Cable Holder	SI-12 HDMI bracket kit
Power Cable Holder	Bracket w/o rubber for SI-12 power button

### Dimensions



# SE-603-N

## Outdoor Signage Player

11th Gen Intel® Core™ / Celeron® U-Series Processor Fanless Signage Player with 1x HDMI, DP and DVI



### Features

- iSMART intelligent energy-saving & Observer remote monitoring technologies
- 11th Gen Intel® Core™ / Celeron® U-Series Processors
- 2x DDR4-3200 SO-DIMM, dual channel, Max. 64GB
- Intel® Processor integrated graphics device
- Supports OOB (Out-of-Band) and PDPC (Peripheral Device Power Control) functions
- 1x HDMI 2.0, 1x DVI-D, 1x DP (supports DP++)
- 1x M.2 E-Key (2230) for Wi-Fi, Bluetooth or capture card options
- 1x M.2 B-Key (3052) for 5G options
- TPM 2.0, vPro and watchdog timer
- Wide-range operating temperature: -20°C ~ 70°C
- Ruggedized, fanless and all solid state design

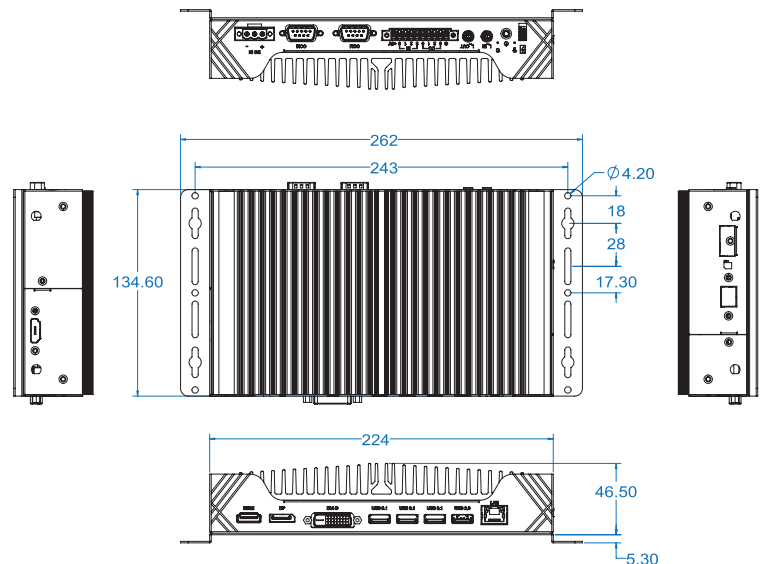
### Specifications

System Mainboard	MBD603
CPU	11th Gen Intel® Core™ / Celeron® U-Series (TGL-U Platform) Processors TDP <= 15W
CPU Socket	SoC Integrated
Memory	2x DDR4-3200 SO-DIMM, dual channel, Max. 64GB
Graphics	Gen12 integrated graphics (up to 96EU)
LAN	1x Intel® 226IT PCI-E Gigabit LAN controller
Expansion Slots	1x M.2 E-Key (2230) 1x M.2 B-Key (3052) 1x UIM/SIM card slot
I/O Interface	1x HDMI 2.0 1x DP (support DP++) 1x DVI-D 3x USB 3.1 @gen 2 1x USB 2.0 1x RJ45 for 2.5 Gigabit LAN 2x Audio connectors for Line-in / Line-out 2x COM ports: 1x RS232/422/485 + 1x RS232 1x DIO (4-in/4-out) 1x Power / HDD LED 1x Power button 1x 4-pin terminal block 1x Power switch connector
Auto Control and Monitoring	Watchdog Timer: 256 segments, 0, 1, 2...255 (sec/min)
Power Requirement	12V~24V DC terminal block
Construction	Aluminum + SGCC
Weight	1.7kg (3.75lbs)
Chassis Color	Black and white
Storage	1x M.2 M-Key (2280)
Power Supply	Optional
Mounting	Standard system bracket
Dimensions	224mm(W) x 134.6mm(D) x 46.5mm(H) 10.3"(W) x 5.29"(D) x 1.83"(H)
Operating Temperature	-20°C ~ 70°C (-4°F ~ 167°F)
Storage Temperature	-20°C ~ 80°C (-4°F ~ 176°F)
Relative Humidity	10% ~ 90% (non-condensing)
Vibration	SSD: 5 grms / 5~500Hz / random operation
Certification	CE, FCC class-B, cULus, UKCA
Operating System	Win10 IoT Enterprise (64-bit) Linux Ubuntu (64-bit)

### Ordering Information

SE-603-N	Fanless Signage Player with MBD603 w/ Intel® 11th Gen Intel® Core™ i7-1185GRE processor TDP <= 15W, 2x 4GB SO-DIMM RAM, M.2 128GB storage, and 60W power adaptor (Operating temperature -20°C~70°C; w/o adaptor)
SE-603-N5	Fanless Signage Player with MBD603 w/ Intel® 11th Gen Intel® Core™ i5-1145G7E processor TDP <= 15W, 2x 4GB SO-DIMM RAM, M.2 128GB storage, and 60W power adaptor (Operating temperature -20°C~70°C; w/o adaptor)

### Dimensions



# SE-103-N

## Outdoor Signage Player

Intel® Atom® x6000 / Pentium® / Celeron® Processor Fanless Signage Player with Intel® Graphics and 3x HDMI



### Specifications

System Mainboard	MBD103
CPU	Intel® Atom® x6425E (2.0~3.0GHz) Intel® Celeron® N6210 (1.2~2.6GHz)
CPU Socket	FCBGA1493
Chipset	SoC Integrated
Memory	2x DDR4-3200 SO-DIMM, Dual channel, Max. 32GB, supports IB ECC for x6000 Series CPU
Graphics	Intel® UHD Graphics for 10th Gen Intel® Processors
LAN	1x Intel® I225IT 2.5GbE LAN for Atom® x6000 series 1x Intel® I225V 2.5GbE LAN for Celeron®/ Pentium®
Expansion Slots	1x M.2 E-Key (2230) 1x M.2 B-Key (3052) 1x UIM/SIM card slot
I/O Interface	3x HDMI 2.0b 3x USB 1x RJ45 for 2.5GbE LAN 1x RJ45 for serial port (RS232/422/485) 2x Audio connectors for Line-in / Line-out 1x Power button 1x Terminal block for power port 1x UIM/SIM card slot 1x Power / HDD LED 4x DI, 4x DO pin header (w/o isolation) (Internal)
Auto Control and Monitoring	Watchdog Timer: 256 segments, 0, 1, 2...255 (sec/min)
Power Requirement	+12V DC
Construction	Aluminum + SGCC
Weight	1.7Kg (3.75lbs)
Chassis Color	Black & White
Storage	1x M.2 M-Key (2280)
Power Supply	60W power adaptor
Mounting	Standard system bracket
Dimensions	260mm(W) x 181.4mm(D) x 25mm(H) 10.24"(W) x 7.14"(D) x 0.98"(H)
Operating Temperature	-20°C~70°C (-29°F~158°F) for SE-103-N 0°C~45°C (0°F~140°F) for SE-103-N10
Storage Temperature	-20°C ~ 80°C (-22°F~176°F)
Relative Humidity	10%~90% (non-condensing)
Vibration	SSD: 5 grms / 5~500Hz / random operation
Certification	CE, FCC class-B, UKCA, cULus
Operating System	Win10 IoT Enterprise (64-bit) Linux Ubuntu (64-bit)

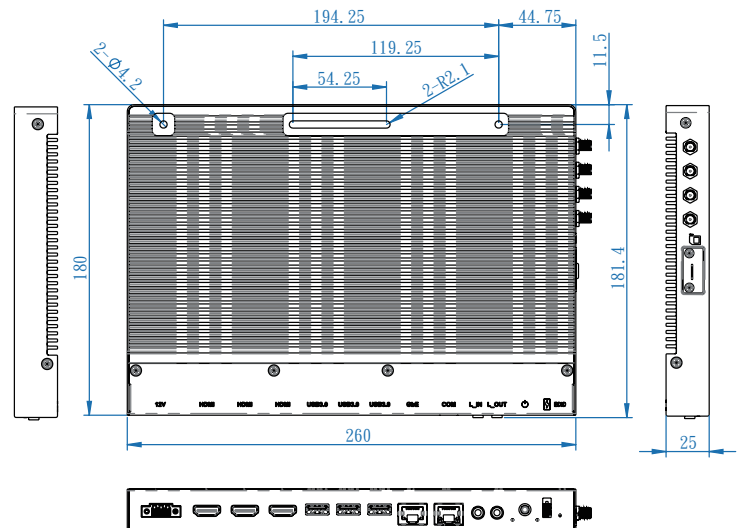
### Features

- iSMART intelligent energy-saving & Observer remote monitoring technologies
- Intel® Atom® x6000/ Pentium® / Celeron® Processors
- 3x HDMI 2.0b with HDMI-CEC display on/off control function
- Built-in hardware EDID emulation with S/W control function
- 2x DDR4-3200 SO-DIMM, Dual channel, Max. 32GB
- 1x Intel® 2.5GbE LAN
- 1x M.2 B-Key (3052) for 5G options
- 1x M.2 E-Key (2230) for Wi-Fi, Bluetooth or capture card options
- TPM 2.0 and watchdog timer
- Industrial-grade robust, fanless and compact Design
- Wide-range operating temperature from -20°C to 70°C

### Ordering Information

SE-103-N	Signage Player with Intel® Atom® x6425E (2.0~3.0GHz); 2x 4GB DDR4-3200 SO-DIMM, M.2 128GB storage, 3x HDMI 2.0b, 3x USB, 1x LAN, 1x COM (RJ45), 60W power adaptor (Operating temperature -20°C~70°C)
SE-103-N10	Signage Player with Intel® Celeron® N6210(1.2~2.6GHz); 2x 4GB DDR4-3200 SO-DIMM, M.2 128GB storage, 3x HDMI 2.0b, 3x USB, 1x LAN, 1x COM (RJ45) and 60W power adaptor (Operating temperature 0°C~45°C)

### Dimensions



# SE-102-N

## Outdoor Signage Player

Intel® Atom® x7/x5 / Pentium® & Celeron® Processor Fanless Signage Player with 2x HDMI



### Features

- iSMART intelligent energy-saving & Observer remote monitoring technologies
- Intel® Atom™ x7/x5 / Pentium® / Celeron® Processors
- Intel® HD Graphics 505
- 2x 2GB DDR3L-L1866, Dual channel, Max. 8GB (Non-ECC, Unbuffered) DDR3L-1600 for N3350 only
- 2x HDMI 1.4b, 1x Mini PCI-E (full-size) for Wi-Fi, Bluetooth or 4G LTE options
- Fanless, super slim and compact design
- Wide-range operating temperature from -40°C to 70°C

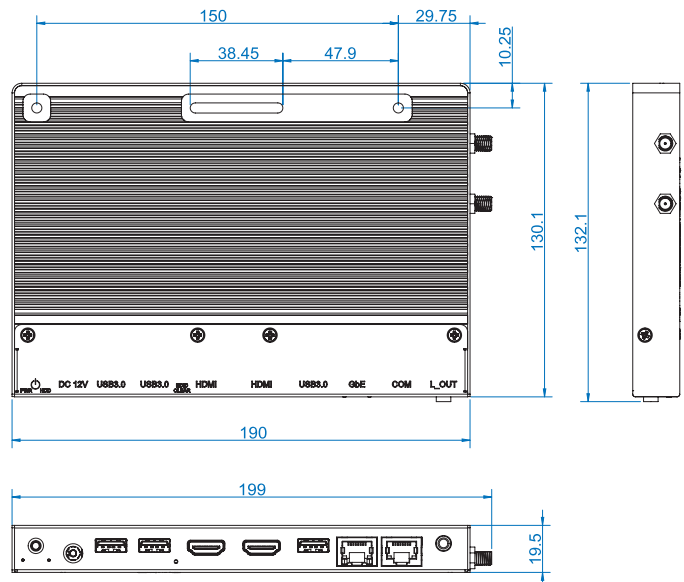
### Specifications

System Mainboard	MBD102
CPU	Intel® Atom® x7/x5 / Pentium® & Celeron® Processors
CPU Socket	FCBGA1296
Chipset	SoC Integrated
Memory	2x 2GB DDR3L-L1866, Dual channel, Max. 8GB (Non-ECC, Unbuffered) DDR3L-1600 for N3350 only
Graphics	Intel® HD Graphics 505
LAN	1x Intel® I210IT Gigabit LAN controller for EXXXX series 1x Intel® I210AT Gigabit LAN controller for NXXXX series
Expansion Slots	1x Mini PCI-E (full-size) for Wi-Fi, Bluetooth or 4G options 1x SIM card slot
I/O Interface	2x HDMI 1.4b with hardware EDID emulation 3x USB 3.0 port 1x RJ45 for Gigabit LAN 1x RJ45 for RS232 serial port 1x Audio connectors for / Line-out 1x Power / HDD LED 1x power on / off button 1x DC jack
Auto Control and Monitoring	Watchdog Timer: 256 segments, 0, 1, 2...255 (sec/min)
Power Requirement	+12V DC
Construction	Aluminum + SGCC
Weight	0.9 kg (1.98 lbs)
Chassis Color	Black and white
Storage	1x mSATA
Power Supply	60W power adaptor
Mounting	Standard system bracket
Dimensions	190mm(W) x 130mm(D) x 19.5mm(H) 7.48"(W) x 5.12"(D) x 0.77"(H)
Operating Temperature	-40°C~70°C (-40°F~158°F) for SE-102-N 0°C~45°C (32°F~113°F) for SE-102-N420
Storage Temperature	-40°C ~ 110°C (-40°F~230°F)
Relative Humidity	5%~90% @45oC (non-condensing)
Vibration	SSD: 5 grms / 5~500Hz / random operation
Certification	CE, FCC class-B, cULus, LVD
Operating System	Windows 10 / Linux

### Ordering Information

SE-102-N	Signage Player with Intel® Atom® x7 / E3950 (1.6~2.0GHz); 2x 2GB DDR3 SO-DIMM RAM, 64GB mSATA, and 60W power adaptor. (Operating temperature: -40°C~70°C is not supported by the adaptor)
SE-102-N420	Signage Player with Intel® Pentium® N4200 (1.1~2.5GHz); 2x 2GB DDR3 SO-DIMM RAM, 64GB mSATA, and 60W power adaptor. (Operating temperature: 0°C~45°C)
SI-MK1	Mounting bracket

### Dimensions



# SW-101-N

## Waterproof Signage Player

Intel® Atom® Processor E3845 Waterproof Fanless Signage Player with 1x HDMI



SW-101-N VIDEO



## Features

- iSMART intelligent energy-saving & Observer remote monitoring technologies
- Intel® Atom® Processor E3845 Quad Core CPU
- 1x DDR3L-1333 SO-DIMM, Dual channel, Max. 8GB
- Intel® Processor integrated Graphics device, supports 1x HDMI port (C3 connector)
- 2x USB 2.0, 1x RS232, 1x Digital I/O (M12 connector)
- 1x Mini PCI-E for 3G, 4G LTE or Wi-Fi module, 1x mSATA for storage
- Wide-range operating temperature from -40°C ~ 75°C
- Waterproof, fanless design with IP68 rating

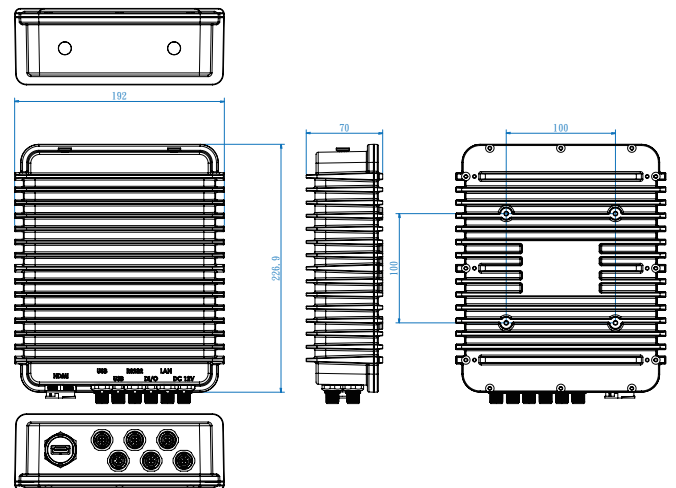
## Specifications

System Mainboard	SGT-MB2
CPU	Intel® Atom® Processor E3845 Quad-Core 1.91GHz
CPU Socket	FCBGA 1170
Chipset	SoC Integrated
Memory	1x DDR3L-1333 SO-DIMMs, Dual channel, Max. 8GB
Graphics	Intel® HD Graphics (Gen 7-LP) 4EU
LAN	1x Realtek RTL8111H-CG Gigabit LAN controller
Expansion Slots	1x mini PCI-E (full-size) 1x mSATA socket for mSATA SSD
I/O Interface	1x HDMI (C3 connector) 2x USB 2.0 (M12 connector) 1x Gigabit LAN (M12 connector) 1x RS232 (M12 connector) 1x DC power (M12 connector) 2x N jack type antenna opening w/ waterproof design 1x DIO (M12 connector)
Auto Control and Monitoring	Watchdog Timer: 256 segments, 0, 1, 2...255 (sec/min)
Power Requirement	12V DC-in
Construction	Aluminum die-casting and heavy-duty steel
Weight	2.8kg (6.17 lbs)
Chassis Color	Black
Storage	1x mSATA
Power Supply	84W power adaptor (optional)
Mounting	Wall mount
Dimensions	227mm(W) x 192mm(D) x 70mm(H) 8.93"(W) x 7.55"(D) x 2.75"(H)
Operating Temperature	-40°C ~ 75°C (-40°F ~ 167°F)
Storage Temperature	-40°C ~ 80°C (-40°F ~ 176°F)
Relative Humidity	10% ~ 90% (non-condensing)
Vibration	mSATA: 5 grms / 5 ~ 500Hz / random operation
Certification	CE, FCC Class-B
Operating System	Win7 32/64-bit, Win8, Win8.1, WE18.1, WEC 2013, Win10 32/64-bit Enterprise

## Ordering Information

SW-101-N	Signage Player with Intel® Atom® E3845 SoC (22nm); Quad-Core 1.91 GHz, 4GB SO-DIMM RAM, 64GB mSATA w/o power adaptor
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## Dimensions







## Features

- 42" color TFT active matrix, wide LCD with optimum resolution 1920 x 480
- Intel® Pentium® N4200 1.1Ghz~2.5GHz with Intel® SoC integrated Gen 9 18EUs Graphics
- 2x DDR3L-1866 SO-DIMM, Dual channel, Max. 8GB
- 1x M.2 B-Key (3042) for storage or 4G LTE options
- 2x RJ45 for Gigabit LAN
- 1x HDMI 1.4b
- 1x DP 1.2
- Ruggedized, fanless and compact design

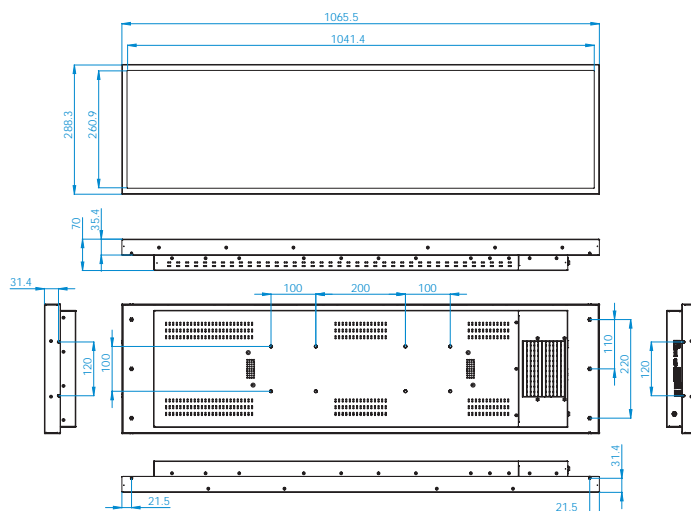
## Specifications

Panel Type	42" color TFT active matrix, wide LCD
Display Area	1039.68 (H) x 259.92(V)
Resolution	1920 x 480
Contrast Ratio	3500:1(typ.)
Viewing Angles	178°(H) / 178°(V)
Response Time	8ms (typ.)
Backlight	LED
Brightness	550 nits
Panel Surface	Anti-glare coating (Haze 44%)
System Mainboard	IB811F-420
CPU	Intel® Pentium® QC N4200 (1.1GHz~2.5GHz, 2MB cache)
CPU Socket	FCBGA1296 (24mm x 31mm)
Chipset	SoC Integrated
Memory	2x DDR3L-1866 SO-DIMM, Dual channel, Max. 8GB
Graphics	Intel® SoC integrated Gen 9 18EUs graphics
LAN	2x Intel® I210AT PCI-E Gigabit LAN
Expansion Slots	1x M.2 B-Key (3042)
I/O Interface	1x HDMI 1.4b 1x DP 1.2 2x RJ45 for Gigabit LAN 4x USB 3.0 1x RS-232/422/485 (jumperless selection)
Auto Control and Monitoring	Watchdog Timer: 256 segments, 0, 1, 2...255 (sec/min)
Power Requirement	+12V DC-in
Construction	Aluminum + SGCC
Weight	14.8 kg (32.63 lbs)
Chassis Color	Black
Storage	1x mSATA
Power Supply	180W power adaptor
Mounting	Side mounting
Dimensions	1065.5mm(W) x 288.3mm(D) x 70mm(H) 41.94"(W) x 11.35"(D) x 2.75"(H)
Operating Temperature	0°C ~ 40°C (32°F~104°F)
Storage Temperature	-20°C ~ 80°C (-4°F~176°F)
Relative Humidity	5%~90% @45oC (non-condensing)
Vibration	IEC61373 (Vibration Class-B)
Certification	CE, FCC Class-B
Operating System	Win10 32/64-bit Enterprise

## Ordering Information

ARD-042-N	42" All-in-one Resizing Panel PC with Intel® Pentium® QC N4200 (1.1GHz~2.5GHz, 2MB cache), 2GB DDR3L-1866 SO-DIMM, 64GB mSATA w/ RJ45 LAN, AC/DC power adaptor 180W 24V output, DC Plug with screw lock
Speaker set	2x 4W speakers with the amplifier board

## Dimensions





## Features

- 37" color TFT active matrix, wide LCD with optimum resolution of 1920 x 540 & 1000 nits brightness
- Intel® Pentium® N4200 1.1~1.25GHz with Intel® SoC integrated Gen9 Gfx with 18EUs
- 2x DDR3L-1866 SO-DIMM, Dual channel, Max. 8GB
- 1x M.2 B-Key (3042) for storage or 4G LTE options
- 2x RJ45 for Gigabit LAN
- 1x HDMI 1.4b
- 1x DP 1.2
- Ruggedized, fanless and compact design

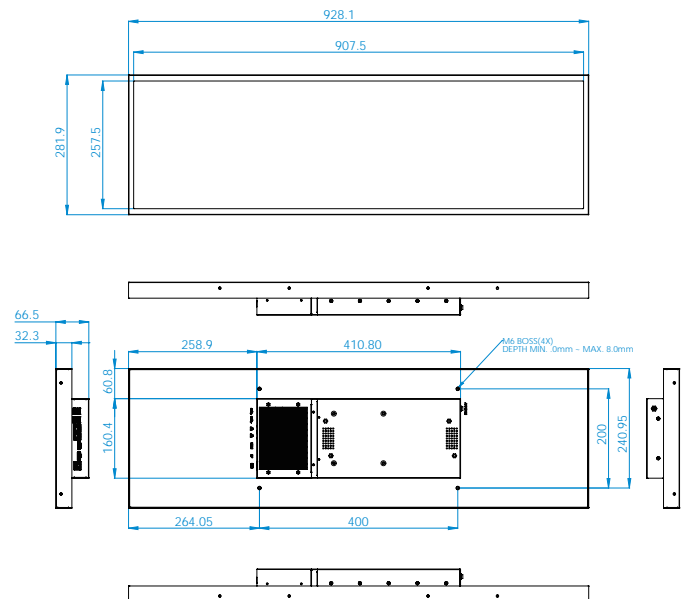
## Specifications

Panel Type	37" color TFT active matrix, wide LCD
Display Area	904.32(H) x 254.34(V)
Resolution	1920 x 540
Contrast Ratio	4000:1 (typ.)
Viewing Angles	178°(H) / 178°(V)
Response Time	6.5ms (typ.)
Backlight	LED 50,000H
Brightness	1000 nits
Panel Surface	Anti-glare, hard coating (3H)
System Mainboard	IB811F-420
CPU	Intel® Pentium® QC N4200 (1.1GHz~2.5GHz, 2MB cache)
CPU Socket	FCBGA1296 (24mm x 31mm)
Chipset	SoC Integrated
Memory	2x DDR3L-1866 SO-DIMM, Dual channel, Max. 8GB
Graphics	Intel® SoC integrated Gen9 18EUs Gfx
LAN	2x Intel® I210AT PCI-E Gigabit LAN
Expansion Slots	1x M.2 B-Key (3042)
I/O Interface	1x HDMI 1.4b, 1x DP 1.2 2x RJ45 for Gigabit LAN 4x USB 3.0 1x RS-232/422/485 (jumperless selection)
Auto Control and Monitoring	Watchdog Timer: 256 segments, 0, 1, 2...255 (sec/min)
Power Requirement	+24V DC-in
Construction	Aluminum + SGCC
Weight	9.0 kg (20.0 lbs)
Chassis Color	Black
Storage	1x mSATA
Power Supply	180W power adaptor
Mounting	Side mounting
Dimensions	928.1mm(W) x 66.5mm(D) x 281.9mm(H) 36.54"(W) x 2.62"(D) x 11.10"(H)
Operating Temperature	0°C ~ 40°C (32°F ~ 104°F)
Storage Temperature	-20°C ~ 80°C (-4°F ~ 176°F)
Relative Humidity	5%~90% @45oC (non-condensing)
Vibration	IEC61373 (Vibration Class-B)
Certification	CE, FCC Class-B, cULus
Operating System	Win10 32/64-bit Enterprise

## Ordering Information

ARD-037-N	37" All-in-one Resizing Panel PC with Intel® Pentium® QC N4200 (1.1GHz~2.5GHz, 2MB cache), 2x 2GB DDR3L-1866 SO-DIMM, 64GB mSATA w/ RJ45 LAN, AC/DC power adaptor 180W 24V output, DC plug with screw lock, Win10 32/64-bit Enterprise
Speaker set	2x 5W speakers with the amplifier board

## Dimensions





## Features

- 27.6" color TFT active matrix, wide LCD with optimum resolution of 1920 x 360 and 1000 nits brightness
- With Intel® Atom™ Processor E3825 Dual-Core 1.33GHz SoC
- Integrated Intel® HD Graphics (Gen 7-LP) with 4 EUs
- 1x Mini PCI-E (full-size) for storage
- 1x Mini PCI-E (full-size) for Wi-Fi, Bluetooth or 4G LTE option
- 1x Mini PCI-E (half-size) for Wi-Fi, Bluetooth or 4G LTE option
- 2x M12 for Gigabit LAN in & LAN out
- Ruggedized, fanless and compact design

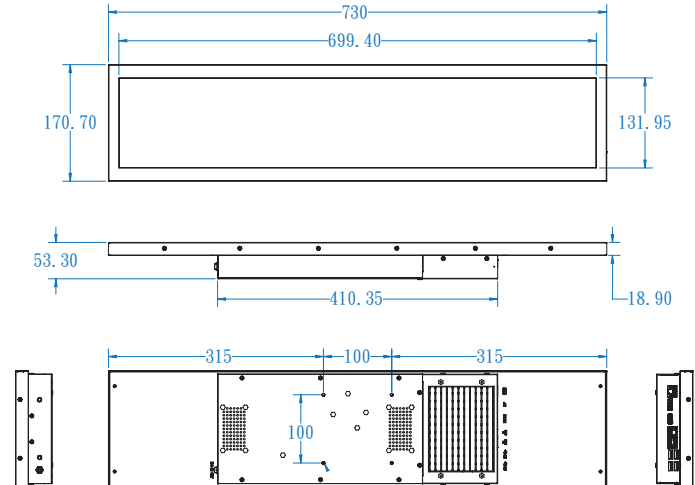
## Specifications

Panel Type	27.6" color TFT active matrix, wide LCD
Display Area	698.40(H) x 130.95(V)
Resolution	1920 x 360
Contrast Ratio	4000:1 (typ.)
Viewing Angles	178°(H) / 178°(V)
Response Time	8ms (typ.)
Backlight	100,000 hours (MTBF)
Brightness	1,000 nits (typ.)
Panel Surface	Anti-glare, hard coating (3H)
System Mainboard	IB898
CPU	Intel® Atom™ E3825 DC, 1.33GHz
CPU Socket	FCBGA1170 (25mm x 27mm)
Chipset	Integrated in Intel® Atom™ SoC
Memory	1x DDR3L-1067 SO-DIMM, Max. 4GB
Graphics	Intel® HD graphics (Generation 7-LP) with 4EUs
LAN	1x Realtek RTL8367N Gigabit LAN controller
Expansion Slots	1x Mini PCI-E (full-size) for Wi-Fi, Bluetooth or 4G LTE 1x Mini PCI-E (half-size) for Wi-Fi, Bluetooth or 4G LTE
I/O Interface	1x RS232/422/485 (jumperless selection) 1x VGA 2x M12 for Gigabit LAN in & LAN out 2x USB 2.0 (pin header)
Auto Control and Monitoring	Watchdog timer: 256 segments, 0, 1, 2...255 sec/min
Power Requirement	+12V DC-in
Construction	Aluminum + SGCC
Weight	5.4 kgs (11.9 lbs)
Chassis Color	Black
Storage	1x mSATA
Power Supply	Optional
Mounting	Side mounting
Dimensions	730 mm(W) x 53.4mm(D) x 170.7 mm(H)
Operating Temperature	-25°C ~ 55°C (-13°F ~ 131°F)
Storage Temperature	-20°C~80°C (-4°F~176°F)
Relative Humidity	5~90% @ 45°C, (non-condensing)
Vibration	IEC61373 (Vibration class-B)
Certification	CE, FCC Class-B
Operating System	Win10 32/64-bit Enterprise

## Ordering Information

ARD-028-NA	27.6" All-in-one Resizing Display with Intel® Atom™ E3825 Dual-Core @ 1.33 GHz, 2GB SO-DIMM, 64GB mSATA w/ M12 LA
Power adaptor	AC 100V~240V input, 12V DC output, 60W power adaptor IBASE P/N: A005PS060WFSP01C0P

## Dimensions





### Features

- MediaTek Genio 700 (MT8390) 2.2GHz or MediaTek Genio 510 (MT8370) 2.0GHz processor
- 1x HDMI (4K60) + 1x HDMI (FHD60)
- LPDDR4 4000MT/s on-board 4GB
- Embedded I/O for COM, GPIO, USB, HDMI, Ethernet
- Supports M.2 E-Key (2230) for WiFi6 2T2R + BT 5.2 connectivity
- Ruggedized and Fanless Design

### Specifications

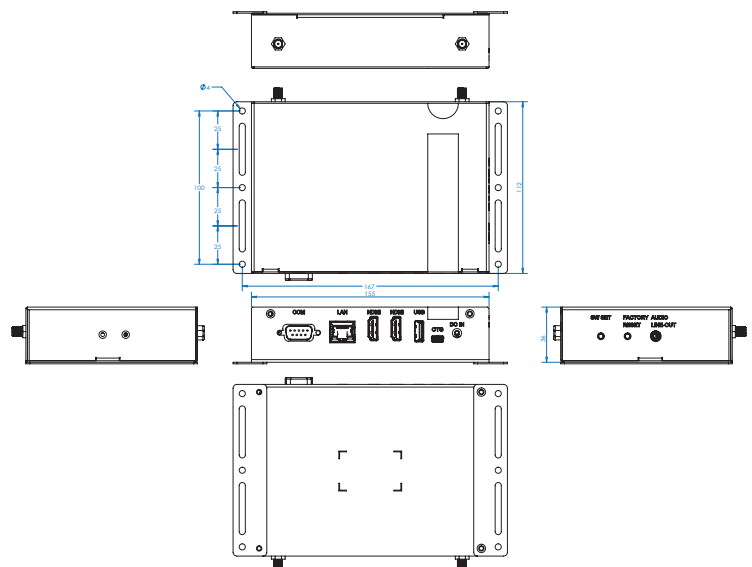
System Mainboard	IBR500 SBC
Processor	MediaTek Genio 700 (MT8390) : 2x A78 2.2GHz L2 256KB, 6x A55 2.0GHz L2 128KB, shared 2MB L3 cache MediaTek Genio 510 (MT8370) : 2x A78 2.0GHz L2 256KB, 4x A55 2.0GHz L2 128KB, shared 2MB L3 cache
Chipset	Integrated
System Memory	4GB LPDDR4 on board
Graphics	ARM Mali-G57 MC3, OpenGL ES 1.1/2.0/3.2, Vulkan 1.0/1.1 ARM Mali-G57 MC2, Vulkan 1.1, OpenGL ES 3.2, and OpenCLTM 2.2
LAN	1x RJ45 GbE LAN
Expansion Slots	1x M.2 E-Key (2230) w/ SDIO, UART (for Wireless)
I/O	1x HDMI (4K60) + 1x HDMI (FHD60) 1x USB2.0 Type-A (with OTG support) + 1x USB 3.1 Type-A 1x 3.5mm Audio Stereo Mini Jack 1x 12-pin header (GPIO switch and LED) 1x Audio Line-in and Line-out (6-pin header) 1x RS232 DB9 connector
Auto Control and Monitoring	Watchdog Timer: 256 Levels, 0~128 Secs
Power Requirement	12V DC-in
Construction	SGCC
Weight	0.5kg (1.1lbs)
Chassis Color	Black
Storage	64GB eMMC on board (default)
Power Supply	60W
Mounting	DIN rail, wall mount
Dimensions	TBD
Operating Temperature	-10°C ~ 50°C
Storage Temperature	-20°C ~ 80°C (-4°F ~ 176°F)

Relative Humidity	10%~90% (non-condensing)
Vibration	IBASE standard test
Certification	CE/ FCC Class-B
OS Support	Linux Yocto 5.15 ready Android 13 ready Support for other OS available upon request

### Ordering Information

ISR500	ARM-based Media player, MediaTek Genio 510 / MT8370: 2x A78 2.0GHz L2 256KB, 4x A55 2.0GHz L2 128KB, shared 2MB L3 cache, shared, 4GB LPDDR4 on board, 64GB eMMC on board & 40W power adaptor
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### Dimensions





## Features

- NXP i.MX 8M Plus - ARM Cortex-A53 Quad processor
- 3GB LPDDR4, 16GB eMMC & SD socket for expansion
- Embedded I/O, USB, HDMI, Ethernet
- Supports M.2 B-Key (3052), 5G connectivity
- Ruggedized and fanless design

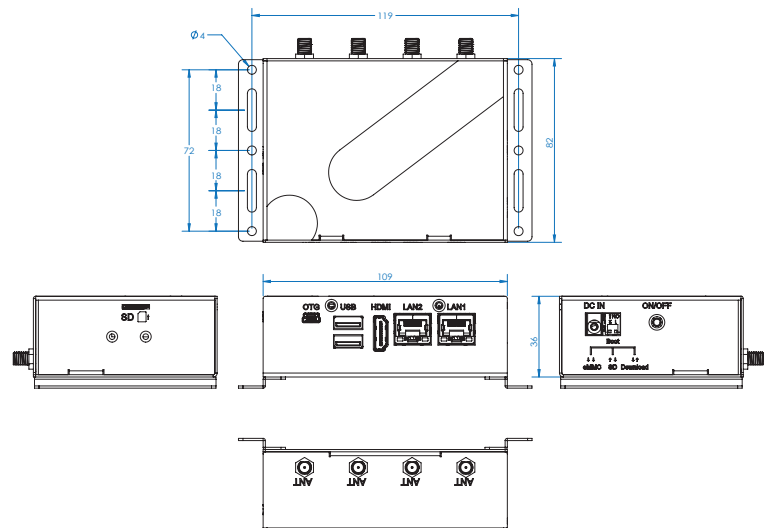
## Specifications

System Mainboard	IBR215-Q316I 2.5-inch SBC
Processor	NXP i.MX 8M Plus - ARM Cortex-A53 Quad 1.6GHz
Chipset	Integrated
System Memory	3GB LPDDR4 on board (optional 1/2/4/8GB)
Graphics	GC7000UL OpenGL ES 3.1, Vulkan Open CL™ 1.2 FP Vivante GC520L (2D)
LAN	2x RJ45 GbE LAN
Expansion Slots	1x M.2 B-Key (3052) w/ SIM socket (for 5G)
I/O	1x HDMI 2.0a, 1080p60 2x USB 3.0 Type-A 1x Mini-USB OTG 1x On/Off button 1x SD socket (UHS-I SDR-104, 104MB/s max) 1x Boot select switches (boot from eMMC or SD)
Auto Control and Monitoring	Watchdog Timer:256 Levels, 0~128 Secs
Power Requirement	12V~24V DC-in
Construction	SGCC
Weight	0.5kg (1.1lbs)
Chassis Color	Black
Storage	16GB eMMC on board (up to 128GB)
Power Supply	60W
Mounting	DIN rail, wall mount
Dimensions	119mm (W) x 82mm (D) x 36mm (H)
Operating Temperature	-40°C~ 70°C (-40°F ~ 158°F)
Storage Temperature	-40°C~ 70°C (-40°F ~ 158°F)
Relative Humidity	0%~90% (non-condensing)
Vibration	Non-operating: 3 Hz to 500 Hz, 15 mins
Certification	CE/ FCC Class B/ LVD
OS Support	Yocto 5.0 Android 11 Debian 10 Support for other OS available upon request

## Ordering Information

ISR215-Q316I	ARM-based, NXP i.MX 8M Plus - ARM Cortex-A53 Quad 1.6GHz, 3GB LPDDR4, 16GB eMMC, 60W Power Adapter
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## Dimensions





## Features

- NXP i.MX 8M - ARM Cortex-A53 Quad processor
- 3GB LPDDR4, 16GB eMMC & SD socket for expansion
- Embedded I/O for COM, GPIO, USB, HDMI, Ethernet
- Supports M.2 E-Key (2230) and Mini PCI-E with SIM socket for Wireless/4G/LTE connectivity
- Ruggedized and fanless design

## Specifications

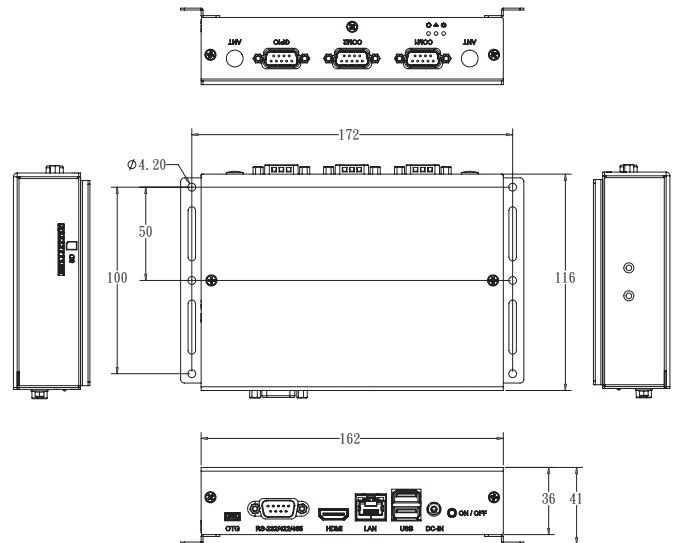
System Mainboard	IBR210-Q316I 3.5-inch SBC
Processor	NXP i.MX 8M - ARM Cortex-A53 Quad 1.3GHz
Chipset	Integrated
System Memory	3GB LPDDR4 on board
Graphics	GC7000Lite OpenGL ES 1.1, 2.0, 3.0, 3.1, Open CL 1.2, and Vulkan
LAN	1x RJ45 GbE LAN
Expansion Slots	1x M.2 E-Key (2230) w/ USB, SDIO, UART, PCI-E 1x Mini PCI-E (PCI-E and USB) w/ SIM socket
I/O	1x HDMI 2.0a, 4Kp60 2x USB 3.0 Type-A 1x RS232 /422/485 (DB9 connector) 1x Mini-USB OTG 1x On/Off button 2x RS232 (DB9 connector) 8x GPIO 2x Antenna hole (reserved) 3x LED indicators
Auto Control and Monitoring	Watchdog Timer:256 Levels, 0~128 Secs
Power Requirement	12V~24V DC-in
Construction	SGCC
Weight	0.5kg (1.1lbs)
Chassis Color	Black
Storage	16GB eMMC on board (Default)
Power Supply	60W
Mounting	VESA 75 / 100, DIN rail, wall mount
Dimensions	172mm x 162mm x 36 mm ( 6.78" x 6.38" x 1.42")
Operating Temperature	-10°C~ 60°C (14°F ~ 140°F)
Storage Temperature	-40°C~ 80°C (-40°F~176°F)
Relative Humidity	10%~90% (non-condensing)
Vibration	N/A
Certification	CE/ FCC Class-B
OS Support	Yocto v2.5 Android 9 UBUNTU 18.04 evaluation Support for other OS available upon request

## Ordering Information

ISR301-Q316I

ARM-based IOT Gateway, NXP i.MX 8M - ARM Cortex-A53 Quad 1.3GHz processor, 3GB LPDDR4, 16GB eMMC, HDMI, RS-232/422/285, USB3.0, M.2 E-Key (2230) & Mini PCI-E w/ SIM socket

## Dimensions





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## DOWNLOAD

DIGITAL SIGNAGE CATALOG



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