

# OPS-1000 Series

Open Pluggable Specification (OPS) compliant  
Digital Signage Player  
with 4th Generation Intel® Haswell / 5th Generation  
Intel® Broadwell Processor



- 4th Gen. Intel® Haswell / 5th Gen. Intel® Broadwell Core™ i Processor
- Intel® QM87 / HM87 Express Chipsets
- Support Intel® AMT 9.0
- Support 4K x 2K Resolution
- 2x DDR3/L 1333/1600 MT/S SO-DIMM up to 16GB
- 1x HDMI, 1x DP, 2x LAN, 4x USB3 .0, 1x 2.5" Slim Type HDD / SSD
- Up to 2x mPCIe
- Up to 2x mSATA



## Product Overview

The OPS-1000 Series is an OPS-Compliant media player for digital signage application. This embedded hardware platform features the 4th Generation Intel® Haswell or the latest 5th Generation Intel® Broadwell Core™ i processor as well as Intel® QM87 / HM87 chipset and therefore it can offer excellent processing and graphical performance to respond to the requirements for the state-of-the-art

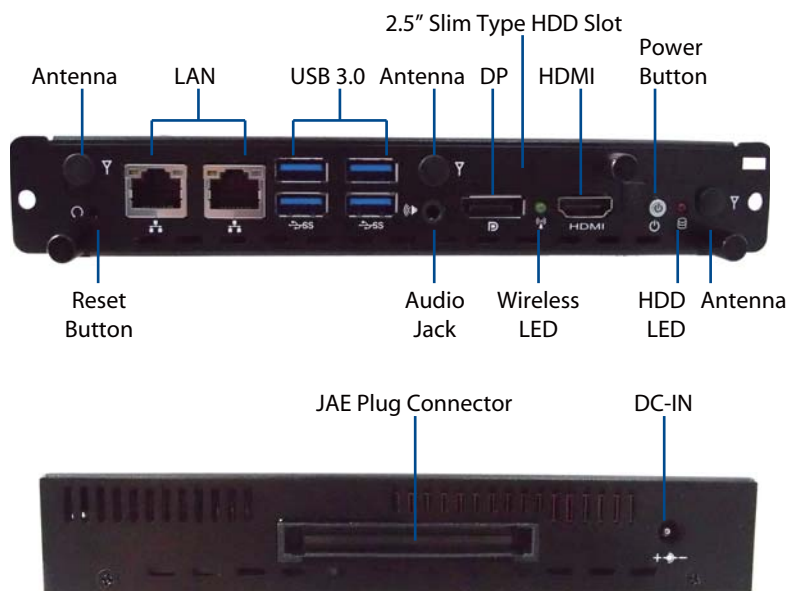
applications.

With 1x HDMI and 1x DP output, the OPS-1000 Series can support 4K x 2K display. In addition, two GbE LAN ports and two mPCIe slots for Wi-Fi or 3G expansion module enable remote content updates through wired or wireless networks.

## Technical Information

<b>CPU Support</b> <b>OPS-1070:</b> Intel® Core™ i7-5700EQ (Quad Core, 6M Cache, up to 3.40 GHz, FCBGA1364, 47W TDP) <b>OPS-1080:</b> Intel® Core™ i7-5850EQ (Quad Core, 6M Cache, up to 3.40 GHz, FCBGA1364, 47W TDP) <b>OPS-1040:</b> Intel® Core™ i7-4700HQ (Quad Core, 6M Cache, up to 3.40 GHz, FCBGA1364, 47W TDP) <b>OPS-1050:</b> Intel® Core™ i7-4700EQ (Quad Core, 6M Cache, up to 3.40 GHz, FCBGA1364, 47W TDP) <b>OPS-1060:</b> Intel® Core™ i5-4400E (Dual Core, 3M Cache, up to 3.30 GHz, FCBGA1364, 37W TDP)	<b>Storage &amp; Expansion</b> 1x 2.5" SATA HDD / SSD (Slim type slot on front) 2x mSATA / mPCIe 1x SIM card holder (onboard)
<b>Chipset</b> Intel® HM87 (OPS-1040) Intel® QM87 (OPS-1050/1060/1070/1080)	<b>Power Supply</b> Connector: JAE Plug Connector (on rear) DC Jack (on rear, optional adapter required) Input Voltage: DC 12V / DC 19V
<b>Memory</b> 2x DDR3/L 1333/1600 SO-DIMM up to 16GB	<b>Firmware</b> BIOS: AMI uEFI BIOS w/ 128Mb SPI Flash Watchdog: Programmable WDT to generate system reset event H/W Monitor: Voltages, Temperatures Real Time Clock: Chipset integrated RTC TPM: TPM support iAMT: iAMT support
<b>Graphic Controller</b> Intel® HD Graphics 4600 (OPS-1040/1050/1060) Intel® HD Graphics 5600 (OPS-1070) Intel® Iris™ Pro Graphics 6200 (OPS-1080)	<b>System Control &amp; Monitoring</b> 1x Power Button w/ LED (on front) 1x Reset Button (on front) 1x Storage LED (on front) 1x Wireless LED (on front)
<b>Display Interfaces</b> 2x HDMI (1x on front, 1x by JAE, 4096 x 2304 @24Hz / 2560 x 1600 @60Hz) 2x DP (1x on front, 1x by JAE, 3840 x 2160 @ 60Hz)	<b>Cooling</b> 1x CPU Smart Fan 1x System Smart Fan (by JAE)
<b>Multiple Display</b> Triple (on-front HDMI + on-front DP + by-JAE HDMI / DP)	<b>OS Support</b> Windows 7, Windows 8, Linux
<b>Audio Chipset</b> Realtek ALC662	<b>Construction</b> Metal Chassis
<b>Audio Interfaces</b> 1x Line-in/Line-out/Mic-in (on front) 1x Line-out (by JAE)	<b>Dimensions (W x D x H)</b> 200 x 119 x 30 mm / 7.87" x 4.69" x 1.18"
<b>Ethernet</b> 2x LAN (RJ-45 on front, 1x Intel® I217-LM, 1x Realtek RTL8111G)	<b>Weight</b> 1000 g / 2.20 lb
<b>USB</b> 6x USB3.0 (4x Type A on front, 2x by JAE) 2x USB2.0 (by JAE)	<b>Environmental Characteristics</b> Operation Temp.: 0°C ~ 45°C / 32°F ~ 113°F Storage Temp.: -20°C ~ 80°C / -4°F ~ 176°F Humidity: 0% ~ 90%
<b>Other I/Os</b> 1x UART (by JAE)	<b>Mounting</b> Insertion
	<b>Certification</b> CE, FCC Class A

## OPS-1000 Series I/Os



## Ordering Information

Article	Part No.	Description
OPS-1040	SOPS104000010T00	4th Gen. Intel® Haswell Core™ i7-4700HQ Processor, Intel® HM87 Chipset, Intel® HD Graphics 4600, 1x DP, 1x HDMI, 4x USB 3.0, 2x GbE, 2x mPCIe/mSATA, 1x Line-in/Line-out/MIC-in
OPS-1050	SOPS105000010T00	4th Gen. Intel® Haswell Core™ i7-4700EQ Processor, Intel® QM87 Chipset, Intel® HD Graphics 4600, 1x DP, 1x HDMI, 4x USB 3.0, 2x GbE, 2x mPCIe/mSATA, 1x Line-in/Line-out/MIC-in
OPS-1060	SOPS106000010T00	4th Gen. Intel® Haswell Core™ i5-4400E Processor, Intel® QM87 Chipset, Intel® HD Graphics 4600, 1x DP, 1x HDMI, 4x USB 3.0, 2x GbE, 2x mPCIe/mSATA, 1x Line-in/Line-out/MIC-in
OPS-1070	SOPS107000010T00	5th Gen. Intel® Broadwell Core™ i7-5700EQ Processor, Intel® QM87 Chipset, Intel® HD Graphics 5600, 1x DP, 1x HDMI, 4x USB 3.0, 2x GbE, 2x mPCIe/mSATA, 1x Line-in/Line-out/MIC-in
OPS-1080	SOPS108000010T00	5th Gen. Intel® Broadwell Core™ i7-5850EQ Processor, Intel® QM87 Chipset, Intel® Iris Pro Graphics 6200, 1x DP, 1x HDMI, 4x USB 3.0, 2x GbE, 2x mPCIe/mSATA, 1x Line-in/Line-out/MIC-in