OPS-2050 Series

Open Pluggable Specification (OPS) Compliant
Digital Signage Player
with 6th Generation Intel® Skylake-H Processor

- 6th Generation Intel® Skylake-H Processor
- Intel® QM170 / HM170 Express Chipset
- 2 x DDR4 SO-DIMM
- 2x HDMI2.0 (1x on front), 2 x DP (1x on front) for video output
- 6x USB3.0 (4x on front), 2x USB2.0 for peripheral connection
- 2x LAN on front for wired network connection
- 1x M.2 Key A, 1x M.2 Key B for storge & wireless expansion
- 1x slim type 2.5" SATA HDD / SSD slot on front for storage
- Wide voltage range power input: 12V ~ 19V

Product Overview

OPS-2050 Series is an OPS-Compliant media player for digital signage application. This embedded hardware platform boasts the 6th Generation Intel® Skylake-H processor, integrated with Intel® HD Graphics 530 GPU and therefore it is stunning by greatly enhanced graphics performance and energy efficiency to respond to the requirements for the state-of-the-art applications.
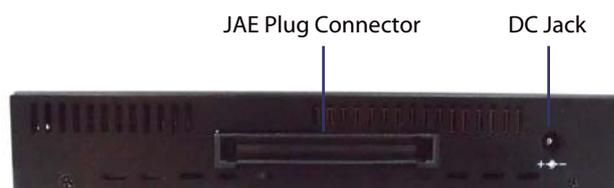
Another distinguishing feature is that OPS-2050 Series is equipped with the latest-version HDMI 2.0 port with 4K resolution, higher data rate, wider bandwidth, ultra-wide display support and can satisfy increasing requirements for high definition and large screen size.
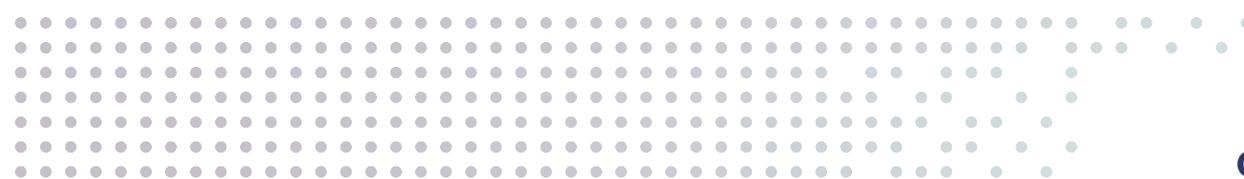
Technical Information

CPU Support	
OPS-2051: Intel® Core™ i7-6820HQ (Quad Core, 8M Cache, up to 3.60 GHz, FCBGA1440, 45W TDP)	
OPS-2052: Intel® Core™ i7-6700HQ (Quad Core, 6M Cache, up to 3.50 GHz, FCBGA1440, 45W TDP)	
OPS-2053: Intel® Core™ i5-6440HQ (Quad Core, 6M Cache, up to 3.50 GHz, FCBGA1440, 45W TDP)	

Chipset
Intel® QM170 (OPS-2051/2053)
Intel® HM170 (OPS-2052)

Memory
2x DDR4 2133 SO-DIMM up to 32GB

Graphic Controller
Intel® HD Graphics 530

Display Interfaces
2x HDMI2.0 (1x on front, 1x by JAE, 3840 x 2160 @ 60Hz)
2x DP (1x on front, 1x by JAE, 4096 x 2304 @ 60Hz)

Multiple Display
Triple (only one output supported between 2 on-front ports)

Audio Chipset
Realtek ALC662

Audio Interfaces
1x Line-in/Line-out/Mic-in (on front)
1x Line-out (by JAE)

Ethernet
2x LAN (RJ-45 on front, 1x Intel® I219, 1x Intel® I210)

USB
6x USB3.0 (4x Type A on front, 2x by JAE)
2x USB2.0 (by JAE)

Other I/Os
1x UART (by JAE)

Storage & Expansion
1x 2.5" SATA HDD / SSD (Slim type slot on front)
1x M.2 Key A slot (default Wi-Fi module)
1x M.2 Key B slot (default for Storage / 3G / 4G module)
1x microSIM card holder

Power Supply
Connector: JAE Plug Connector (on rear) / DC Jack (on rear, optional adapter required)
Input Voltage: DC 12V ~ 19V

Firmware
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: Only for OPS-2051/2053 (Infineon SLB 9660 TT1.2)
iAMT: Only for OPS-2051/2053

System Control & Monitoring
1x Power Button w/ LED (on front)
1x Reset Button (on front)
1x Storage LED (on front)
1x Wireless LED (on front)

Cooling
1x CPU Smart Fan
1x System Smart Fan (by JAE)

OS Support
Windows 7, Windows 8, Windows 10, Linux

Construction
Metal Chassis

Dimensions (W x D x H)
200 x 119 x 30 mm / 7.87" x 4.69" x 1.18"

Weight
1000 g / 2.20 lb

Environmental Characteristics
Operation Temp.: 0°C ~ 45°C / 32°F ~ 113°F
Storage Temp.: -20°C ~ 80°C / -4°F ~ 176°F
Humidity: 0% ~ 90%

Mounting
OPS-slot Mount

Certification
CE, FCC Class A

OPS-2050 Series I/Os

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Ordering Information

Article	Part No.	Description
OPS-2051	SOPS205100010T00	Intel® Core™ i7-6820HQ, Intel® QM170, 2x DDR4 SO-DIMM, 2x HDMI2.0, 2x DP, 2x LAN, 6x USB3.0, 2x USB2.0, 1x M.2 Key A, 1x M.2 Key B, w/ TPM & iAMT
OPS-2052	SOPS205200010T00	Intel® Core™ i7-6700HQ, Intel® HM170, 2x DDR4 SO-DIMM, 2x HDMI2.0, 2x DP, 2x LAN, 6x USB3.0, 2x USB2.0, 1x M.2 Key A, 1x M.2 Key B, w/o TPM & iAMT
OPS-2053	SOPS205300010T00	Intel® Core™ i5-6440HQ, Intel® QM170, 2x DDR4 SO-DIMM, 2x HDMI2.0, 2x DP, 2x LAN, 6x USB3.0, 2x USB2.0, 1x M.2 Key A, 1x M.2 Key B, w/ TPM & iAMT

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