

QDSP-6000 Series

Standard / Extended Temperature Fanless Box PC
with 4th Generation Intel® Haswell / 5th Generation
Intel® Broadwell ULT Processor



- 4th Gen. Intel® Haswell / 5th Gen. Intel® Broadwell ULT Processor
- 2x DDR3L SO-DIMM up to 16GB
- 2x HDMI for display
- 4x USB3.0, 2x USB2.0, 2x COM & 3x Audio for peripheral connection
- 2x GbE for wired network connection
- 2x mPCIe, 1x SIM for wireless network expansion
- 1x 2.5" SATA HDD/SSD, 1x eSATA, 1x mSATA for storage
- Support TPM / iAMT
- Fanless design
- Extended temperature model available: -20°C ~ 70°C



Product Overview

The QDSP-6000 Series is a fanless Box PC ideal for space critical applications. This embedded hardware platform features the 4th Gen. Intel® Haswell or the latest 5th Gen. Intel® Broadwell ULT Processor and can offer excellent processing and graphical performance to respond to the requirements for the state-of-the-art applications. It comes with 2x HDMI, 2x GbE, 4x USB3.0, 2x USB2.0, 2x COM, 1x mSATA and 2x mPCIe for peripheral connection and storage / functional expansion.

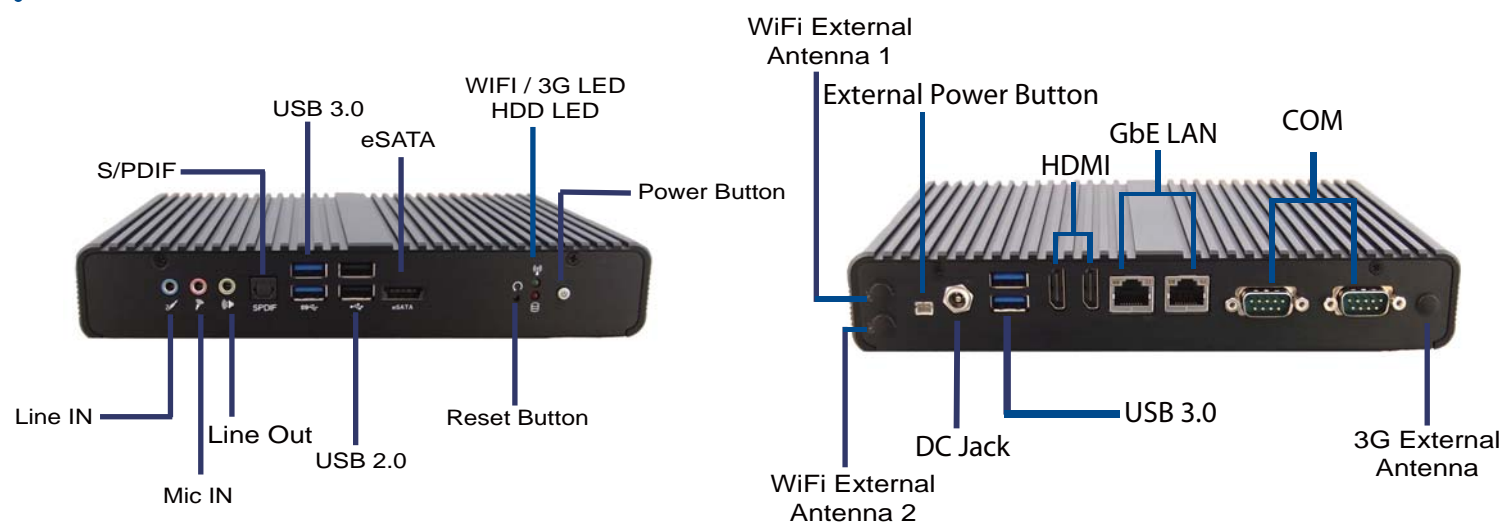
Enclosed in a highly reliable rugged case with passive cooling design, the QDSP-6000 Series is not only resistant to EMI, cold and heat, but also suitable for quiet fanless applications such as Digital Signage.

In addition, extended temperature models are provided and allow users to deploy the systems at extreme cold or hot environments.







Technical Information

CPU Support	Storage & Expansion
QDSP-6000/T: Intel® Core™ i3-4010U (Dual Core, 3M Cache, 1.70 GHz, FCBGA1168 socket, 15W TDP)	1x 2.5" SATA HDD / SSD
QDSP-6001/T: Intel® Core™ i5-4300U (Dual Core, 3M Cache, up to 2.90 GHz, FCBGA1168 socket, 15W TDP)	1x eSATA (w/ power supply, on front)
QDSP-6004/T: Intel® Core™ i5-5350U (Dual Core, 3M Cache, up to 2.90 GHz, FCBGA1168 socket, 15W TDP)	1x mSATA
QDSP-6006/T: Intel® Celeron® 3765U (Dual Core, 2M Cache, 1.90 GHz, FCBGA1168 socket, 15W TDP)	2x mPCIe
QDSP-6007/T: Intel® Core™ i7-4650U (Dual Core, 4M Cache, up to 3.30 GHz, FCBGA1168 socket, 15W TDP)	1x SIM Card Cage
QDSP-6008/T: Intel® Core™ i7-5650U (Dual Core, 4M Cache, up to 3.20 GHz, FCBGA1168 socket, 15W TDP)	Power Supply
Memory	Connector: Lockable DC Jack
2x DDR3L 1333/1600 SO-DIMM up to 16GB	Input Voltage: DC 19V
Graphic Controller	Power Adapter: AC to DC, 100V ~ 240V
Intel® HD Graphics (QDSP-6006/T)	Firmware
Intel® HD Graphics 4400 (QDSP-6000/T, 6001/T)	BIOS: AMI uEFI BIOS w/ 128Mb SPI Flash
Intel® HD Graphics 5000 (QDSP-6007/T)	Watchdog: Programmable WDT to generate system reset event
Intel® HD Graphics 6000 (QDSP-6004/T, 6008/T)	H/W Monitor: Voltages, Temperatures
Display Interfaces	Real Time Clock: Processor integrated RTC
2x HDMI (on rear, 3840 x 2160 @ 60Hz)	TPM: only for QDSP-6001/T, -6004/T, -6007/T, -6008/T (Intersil SLB9635)
Multiple Display	iAMT: only for QDSP-6001/T, -6004/T, -6007/T, -6008/T
Dual Display	System Control & Monitoring
Audio Chipset	1x Power Button w/ LED (on front)
Realtek ALC662-VD	1x Reset Button (on front)
Audio Interfaces	1x HDD LED (on front)
1x Line-in (on front)	1x Wireless LED (on front)
1x Line-out (on front)	1x External Power Button (on rear)
1x Mic-in (on front)	Cooling
1x S/PDIF (on front)	Fanless
Ethernet	OS Support
2x LAN (RJ-45 on rear, 1x Intel® I217-LM, 1x Realtek RTL8111G-CG)	Windows 7, Windows 8, Linux
USB	Construction
4x USB3.0 (2x Type A on front, 2x Type A on rear)	Aluminium Chassis
2x USB2.0 (Type A on rear)	Dimensions (W x D x H)
Serial Ports	220 x 153.3 x 38 mm / 8.66" x 6.04" x 1.50"
2x RS-232/422/485 (DB9 on rear)	Weight
	1600 g / 3.53 lb
	Environmental Characteristics
	Operation Temp.: 0°C ~ 50°C / 32°F ~ 122°F (Standard)
	-20°C ~ 70°C / -4°F ~ 158°F (Extended)
	Storage Temp.: -20°C ~ 80°C / -4°F ~ 176°F
	Humidity: 0% ~ 90%
	Mounting
	VESA Mount
	Certification
	CE, FCC Class A

QDSP-6000 Series I/Os



Ordering Information

Article	Part No.	Description
QDSP-6000	SDSP600000010T00	Intel® Haswell ULT Core™ i3-4010U CPU, 2x DDR3/L SO-DIMM, 2 x GbE, 2x HDMI, 4x USB3.0, 2x USB2.0, 2x mPCIe, w/o TPM / iAMT, op. temp. 0°C ~ 50°C
QDSP-6001	SDSP600100010T00	Intel® Haswell ULT Core™ i5-4300U CPU, 2x DDR3/L SO-DIMM, 2 x GbE, 2x HDMI, 4x USB3.0, 2x USB2.0, 2x mPCIe, w/ TPM / iAMT, op. temp. 0°C ~ 50°C
QDSP-6004	SDSP600400010T00	Intel® Broadwell ULT Core™ i5-5350U CPU, 2x DDR3/L SO-DIMM, 2 x GbE, 2x HDMI, 4x USB3.0, 2x USB2.0, 2x mPCIe, w/ TPM / iAMT, op. temp. 0°C ~ 50°C
QDSP-6006	SDSP600000060T00	Intel® Broadwell ULT Celeron® 3765U CPU, 2x DDR3/L SO-DIMM, 2 x GbE, 2x HDMI, 4x USB3.0, 2x USB2.0, 2x mPCIe, w/o TPM / iAMT, op. temp. 0°C ~ 50°C
QDSP-6007	SDSP600000070T00	Intel® Haswell ULT Core™ i7-4650U CPU, 2x DDR3/L SO-DIMM, 2 x GbE, 2x HDMI, 4x USB3.0, 2x USB2.0, 2x mPCIe, w/ TPM / iAMT, op. temp. 0°C ~ 50°C
QDSP-6008	SDSP600000080T00	Intel® Broadwell ULT Core™ i7-5650U CPU, 2x DDR3/L SO-DIMM, 2 x GbE, 2x HDMI, 4x USB3.0, 2x USB2.0, 2x mPCIe, w/ TPM / iAMT, op. temp. 0°C ~ 50°C
 QDSP-6000T	SDSP600T00010T00	Intel® Haswell ULT Core™ i3-4010U CPU, 2x DDR3/L SO-DIMM, 2 x GbE, 2x HDMI, 4x USB3.0, 2x USB2.0, 2x mPCIe, w/o TPM / iAMT, op. temp. -20°C ~ 70°C
 QDSP-6001T	SDSP601T00010T00	Intel® Haswell ULT Core™ i5-4300U CPU, 2x DDR3/L SO-DIMM, 2 x GbE, 2x HDMI, 4x USB3.0, 2x USB2.0, 2x mPCIe, w/ TPM / iAMT, op. temp. -20°C ~ 70°C
 QDSP-6004T	SDSP604T00010T00	Intel® Broadwell ULT Core™ i5-5350U CPU, 2x DDR3/L SO-DIMM, 2 x GbE, 2x HDMI, 4x USB3.0, 2x USB2.0, 2x mPCIe, w/ TPM / iAMT, op. temp. -20°C ~ 70°C
 QDSP-6006T	SDSP606T00010T00	Intel® Broadwell ULT Celeron® 3765U CPU, 2x DDR3/L SO-DIMM, 2 x GbE, 2x HDMI, 4x USB3.0, 2x USB2.0, 2x mPCIe, w/o TPM / iAMT, op. temp. -20°C ~ 70°C
 QDSP-6007T	SDSP607T00010T00	Intel® Haswell ULT Core™ i7-4650U CPU, 2x DDR3/L SO-DIMM, 2 x GbE, 2x HDMI, 4x USB3.0, 2x USB2.0, 2x mPCIe, w/ TPM / iAMT, op. temp. -20°C ~ 70°C
 QDSP-6008T	SDSP608T00010T00	Intel® Broadwell ULT Core™ i7-5650U CPU, 2x DDR3/L SO-DIMM, 2 x GbE, 2x HDMI, 4x USB3.0, 2x USB2.0, 2x mPCIe, w/ TPM / iAMT, op. temp. -20°C ~ 70°C