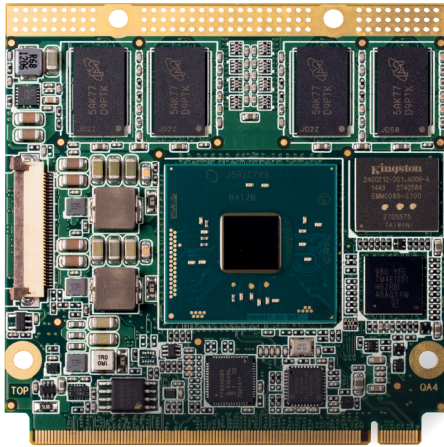


# HIGHEST QSEVEN PERFORMANCE

## conga-QA4

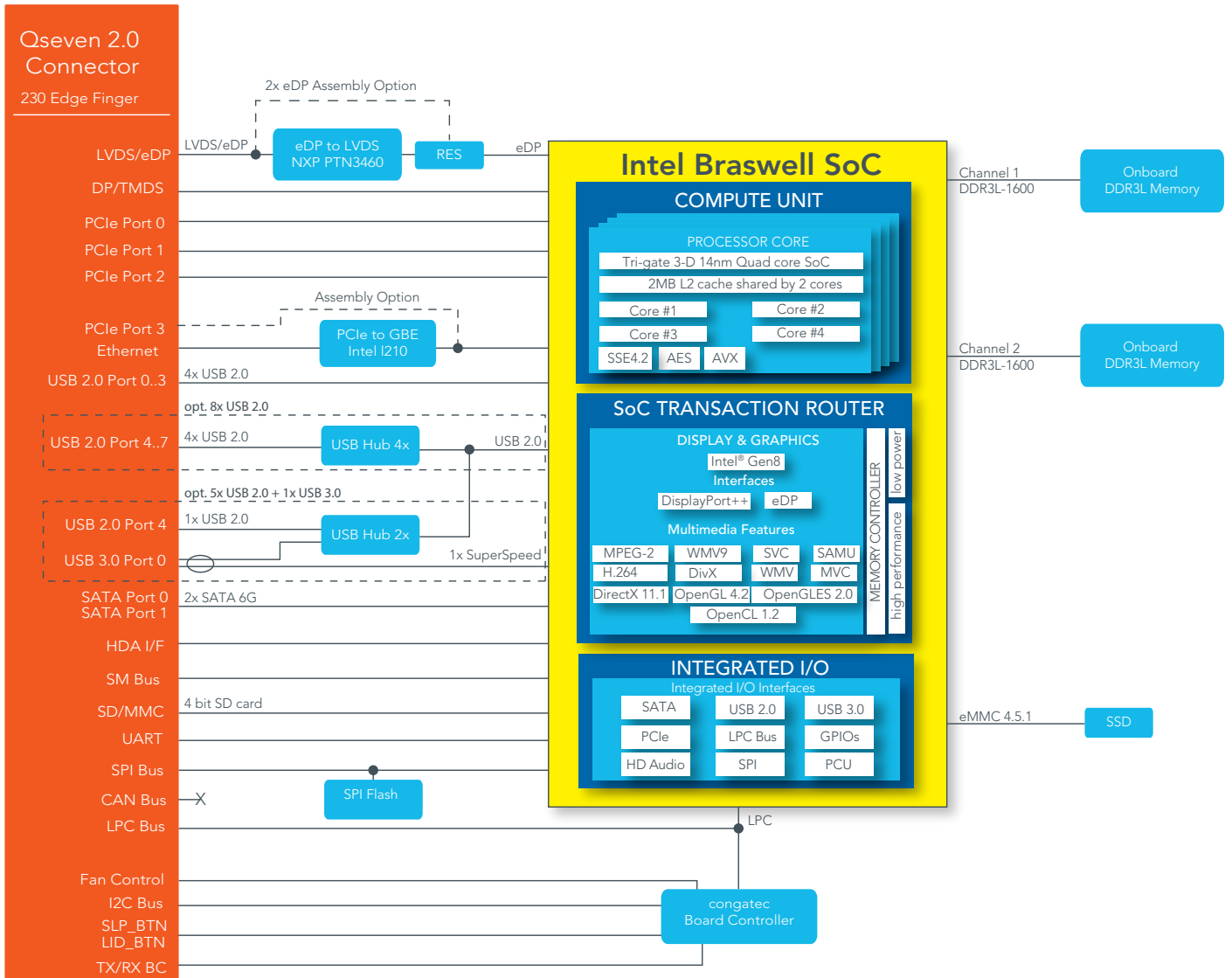


- First Intel® Pentium® QuadCore on Qseven
- High performance Intel® Gen. 8 graphics
- Up to 4k resolution (3840x2160px)
- 3x independent display support optional
- HW accelerating Video decoding with H.265/HEVC
- Fast I/Os SATA3, USB 3.0 and PCIe 2.0



Formfactor	Qseven Form Factor Rev. 2.0 compliant   70x70 mm				
CPU	Intel® Pentium® N3710	2.56 GHz (Burst)   1.6 GHz Clock	Quad Core	L2 cache 2MB	4W SDP   6W TDP
	Intel® Celeron® N3160	2.24 GHz (Burst)   1.6 GHz Clock	Quad Core	L2 cache 2MB	4W SDP   6W TDP
	Intel® Celeron® N3060	2.48 GHz (Burst)   1.6 GHz Clock	Dual Core	L2 cache 2MB	4W SDP   6W TDP
	Intel® Celeron® N3010	2.24 GHz (Burst)   1.04 GHz Clock	Dual Core	L2 cache 2MB	3W SDP   4W TDP
	Intel® Atom™ X5-E8000	2.00 GHz (Burst)   1.04 GHz Clock	Quad Core	L2 cache 2MB	4W SDP   5W TDP
DRAM	Dual Channel   up to 8GB onboard DDR3L with 1600 MT/s				
Chipset	Integrated in SoC				
Ethernet	Intel® I210 Gigabit Ethernet controller				
I/O Interfaces	8x USB 2.0 or 1x USB 3.0 and 5x USB 2.0   2x SATA3   1x SDIO   3x PCIe Gen2   I <sup>2</sup> C Bus   LPC bus   1x SPI				
Mass Storage	eMMC 4.5.1 onboard flash up to 64 GByte optional				
Sound	Intel® High Definition Audio (Intel® HD Audio)				
Graphics	Intel® Gen 8 HD Graphics with support for DirectX11.1   OpenGL 4.2   OpenCL 1.2   OpenGL ES 2.0   MPEG2 full HW acceleration with H.265/HEVC decoding and H.264 encoding   MVC and 2x independent display support in 4K (3840 x 2160 px) @30 Hz or WQXGA (2560 x 1600 px) @60 Hz				
LVDS	Dual channel LVDS transmitter   support for flat panels with 2x24 bit data mapping up to a resolution of 1920x1200 @60Hz   shared with 2x eDP (option)				
Digital Display Interface (DDI)	DP++ up to 3840x2160px   additional 2x eDP (option shared with LVDS)				
congatec Board controller	Multistage watchdog   non-volatile user data storage   manufacturing and board Information   board statistics I <sup>2</sup> C bus (fast mode   400 kHz   multi master)   power loss control				
Embedded BIOS Features	AMI Aptio® UEFI 2.x firmware   8 MByte serial SPI with congatec Embedded BIOS features OEM Logo   OEM CMOS Defaults   LCD Control Display Auto Detection   Backlight Control   Flash Update				
Power Management	ACPI 5.0 compliant   Smart Battery Management				
Operating Systems	Microsoft® Windows 10   Microsoft® Windows 10 IoT Enterprise..  Microsoft® Windows 8   Microsoft® Windows 7   Linux   Yocto				
Power Consumption	Typ. application 3...4W (Processor SDP Scenario Design Power)				
Temperature	Commercial :	Operating: 0 to +60°C	Storage: -20 to +80°C		
Humidity	Operating:	10 to 90% r. H. non cond.			
	Storage:	5 to 95% r. H. non cond.			
Size	70 x 70 mm (2¾" x 2¾")				

# conga-QA4 | Block diagram



# conga-QA4 | Order Information

Article	PN	Description
conga-QA4/N3710-4G eMMC16	015210A-A.4	Qseven module with Intel® Pentium® N3710 quad core processor with 1.60GHz core frequency up to 2.56GHz burst, 2MB L2 cache, 4GB 1600MT/s DDR3L onboard memory, 16GB eMMC onboard flash and 1x USB 3.0 + 5x USB 2.0.
conga-QA4/N3160-2G eMMC16	015211A-A.4	Qseven module with Intel® Celeron® N3160 quad core processor with 1.60GHz core frequency up to 2.24GHz burst, 2MB L2 cache, 2GB 1600MT/s DDR3L onboard memory, 16GB eMMC onboard flash and 1x USB 3.0 + 5x USB 2.0.
conga-QA4/N3060-2G eMMC16	015212A-A.4	Qseven module with Intel® Celeron® N3060 dual core processor with 1.60GHz core frequency up to 2.48GHz burst, 2MB L2 cache, 2GB 1600MT/s DDR3L onboard memory, 16GB eMMC onboard flash and 8x USB 2.0.
conga-QA4/N3010-2G eMMC16	015213A-A.4	Qseven module with Intel® Celeron® N3010 dual core processor with 1.04GHz core frequency up to 2.24GHz burst, 2MB L2 cache, 2GB 1600MT/s DDR3L onboard memory, 16GB eMMC onboard flash and 8x USB 2.0.
conga-QA4/E8000-2G eMMC16	015214A-A.4	Qseven module with Intel® Atom™ X5-E8000 quad core processor with 1.04GHz core frequency up to 2.00GHz burst, 2MB L2 cache, 2GB 1600MT/s DDR3L onboard memory, 16GB eMMC onboard flash and 8x USB 2.0.
conga-QA4/N3710-4G eMMC16 eDP	015215	Qseven module with Intel® Pentium® N3710 quad core processor with 1.60GHz core frequency up to 2.56GHz burst, 2MB L2 cache, 4GB 1600MT/s DDR3L onboard memory and 16GB eMMC onboard flash. Support eDP interface for displays.
conga-QA3/HSP-T	015190	Standard heatspreader for Qseven module conga-QA3. All standoffs are M2.5mm thread.
conga-QA3/HSP-B	015191	Standard heatspreader for Qseven module conga-QA3. All standoffs are with 2.7mm bore hole.
conga-QA3/CSP-T	015192	Passive cooling solution for Qseven module conga-QA3. All standoffs are M2.5mm thread.
conga-QA3/CSP-B	015193	Passive cooling solution for Qseven module conga-QA3. All standoffs are with 2.7mm bore hole.
<b>Accessories</b>		
conga-QEVAL 2.0	007003	Evaluation platform for Qseven 2.0
conga-LDVI/EPI	011115	LVDS to DVI converter board for digital flat panels with onboard EEPROM