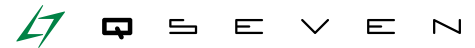


HIGHEST QSEVEN PERFORMANCE

conga-QA4

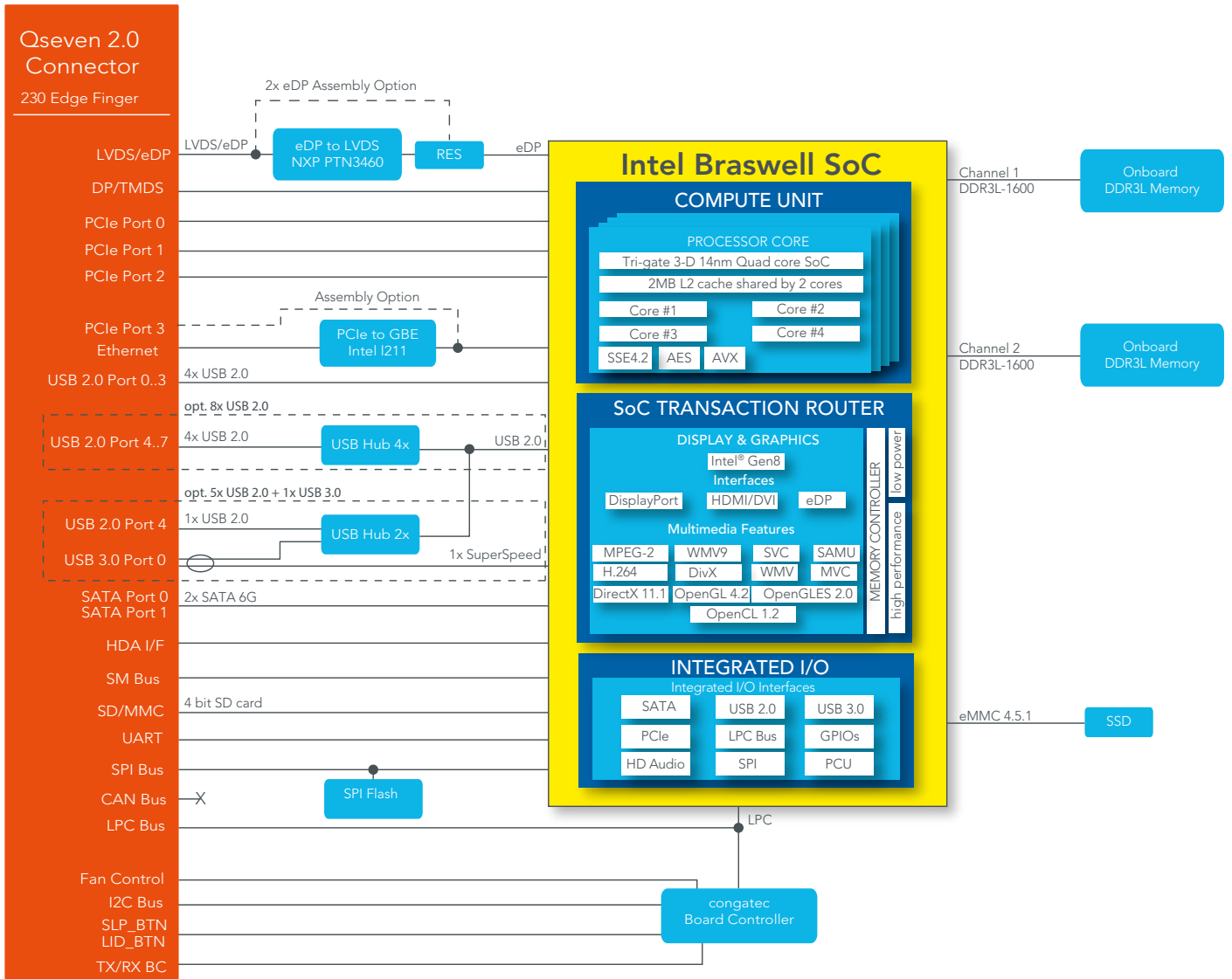


- First Intel® Pentium® QuadCore on Qseven
- High performance Intel® Gen. 8 graphics
- Up to 4k resolution (3840x2160px)
- 3x independent display support optional
- HW accelerating Video decoding with H.265/HEVC
- Fast I/Os SATA3, USB 3.0 and PCIe 2.0



| | | | | | | |
|-----------------------------|--|-----------------------------------|-----------------------|--------------|-----------------|--|
| 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® I211 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 ² 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) | | | | | |
| DisplayPort Interface (DDI) | DisplayPort 1.1a up to 3840x2160px or HDMI 1.4b 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 ² 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 8 Microsoft® Windows 8 embedded Microsoft® Windows 7 Microsoft® Windows 7 embedded compact Linux | | | | | |
| 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 | 015210 | 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 | 015211 | 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 eMMC8 | 015212 | 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, 8GB eMMC onboard flash and 8x USB 2.0. |
| conga-QA4/N3010-2G eMMC8 | 015213 | 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, 8GB eMMC onboard flash and 8x USB 2.0. |
| conga-QA4/E8000-2G eMMC8 | 015214 | 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, 8GB eMMC onboard flash and 8x USB 2.0. |
| conga-QA4/N3710-4G eMMC16 eDP | 015214 | 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. |

Accessories

| | | |
|--------------------------------|----------|--|
| conga-QEVAL 2.0 | 007003 | Evaluation platform for Qseven 2.0 |
| conga-QKIT | 077455 | Starterkit for Qseven including conga-QEVAL, conga-LDVI/EPI, conga-FPA2, Dual DVI-D ADD2 Card, ATX power supply, ... |
| conga-HDMI/DisplayPort adapter | 500014 | The conga-HDMI/DisplayPort adapter is used to convert the graphic ports Port-B, Port-C and Port-D of to the HDMI or DisplayPort interface. |
| conga-Qseven/SBM3 | 025485 | Mobility Starter Kit |
| conga-MCB/Qseven Cable Kit | 14000041 | Complete cable kit for Qseven mini carrier board |
| Qseven MXM Connector Aces | 400018 | Socket for Qseven Carrier Boards. 10pcs package. ACES standard type, SMT, lead free, 230 positions, 0.50mm pitch, 7.8mm height. |
| conga-LDVI/EPI | 011115 | LVDS to DVI converter board for digital flat panels with onboard EEPROM |