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 | 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 | OpenGLES 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): 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 | managing and board information | board statistics
Embedded BIOS Features: AMI Aptio® UEFI 2 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: 0 to +60°C | 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”)

www.congatec.com
## 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 | 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.

### Accessories

| Article | PN | Description |
--- | --- | ---
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 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 Acers | 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 |

© 2019 congatec AG. All rights reserved. All data is for information purposes only. Although all the information contained within this document is carefully checked, no guarantee of correctness is implied or expressed. Product names, logos, brands, and other trademarks featured or referred are the property of their respective trademark holders. Qseven is a registered trademark of SGET. These trademark holders are not affiliated with congatec AG. Rev. Jan 22, 2019 KF