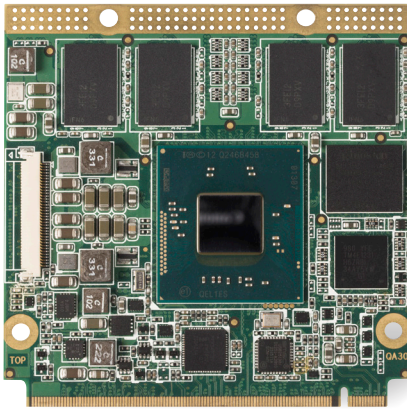


HIGH PERFORMANCE

conga-QA3

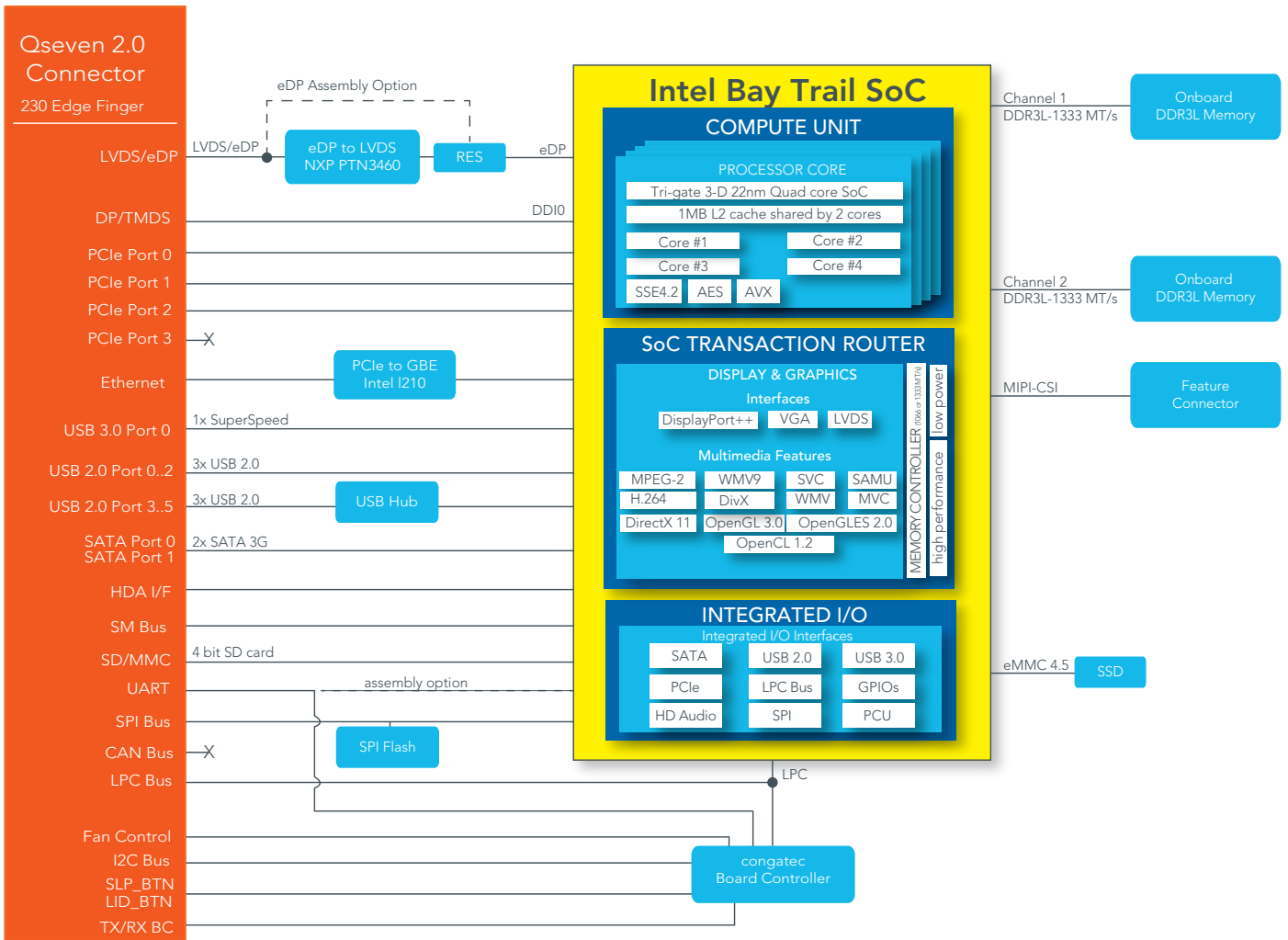


- 3rd Gen. Intel® Atom™ / Celeron® processors
- High resolution Intel® Gen. 7 graphics
- Temperature range up to -40°C .. +85°



| | | | | |
|---------------------------------|--|---------------------------|-----------------------|----------|
| Formfactor | Qseven Form Factor Rev. 2.0 compliant 70x70 mm | | | |
| CPU | Intel® Atom™ E3845 | 1.91 GHz QuadCore | L2 cache 2MB | 10W TDP |
| | Intel® Atom™ E3827 | 1.75 GHz Dual Core | L2 cache 1MB | 8W TDP |
| | Intel® Atom™ E3826 | 1.46 GHz Dual Core | L2 cache 1MB | 7W TDP |
| | Intel® Atom™ E3825 | 1.33 GHz Dual Core | L2 cache 1MB | 6W TDP |
| | Intel® Atom™ E3815 | 1.46 GHz Single Core | L2 cache 512kB | 5W TDP |
| | Intel® Atom™ E3805 | 1.33 GHz Dual Core | L2 cache 1MB | 3W TDP |
| | Intel® Celeron J1900 | 2.0 GHz Quad Core | L2 cache 2MB | 10W TDP |
| | Intel® Celeron N2930 | 1.83 GHz Quad Core | L2 cache 2MB | 7.5W TDP |
| | Intel® Celeron N2807 | 1.58 GHz Dual Core | L2 cache 1MB | 4.5W TDP |
| DRAM | Dual Channel up to 8GB onboard DDR3L with 1333 MT/s | | | |
| Chipset | Integrated in SoC | | | |
| Ethernet | Intel® I210 Gigabit Ethernet controller | | | |
| I/O Interfaces | 6x USB 2.0 or 1x USB 3.0 and 5x USB 2.0 2x SATA 1x SDIO 3x PCIe I ² C Bus LPC bus 1x SPI | | | |
| Mass Storage | eMMC 5.0 onboard flash up to 64 GByte (optional only for Intel® Atom™) | | | |
| Sound | Intel® High Definition Audio (Intel® HD Audio) | | | |
| Graphics | Intel® HD Graphics with support for DirectX11 OpenGL 3.0 OpenCL 1.2 OpenGLES 2.0 full HW acceleration for decode/encode of MPEG2, H.264 MVC and dual simultaneous display support | | | |
| LVDS | Dual channel LVDS transmitter support for flat panels with 2x24 bit data mapping up to a resolution of 1920x1200@60Hz | | | |
| Digital Display Interface (DDI) | DisplayPort++ up to 2560x1600 | | | |
| Features | MIPI-CSI | | | |
| congatec Board controller | Multi Stage 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 LD 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 10 IoT Core Microsoft® Windows 8 Microsoft® Windows 8 embedded Microsoft® Windows 7 Microsoft® Windows 7 embedded compact Linux Android Yocto MoonIsland / WindRiver IDP | | | |
| Power Consumption | Typ. application 4.5W...12W | | | |
| Temperature | Commercial : | Operating: 0 to +60°C | Storage: -20 to +80°C | |
| | Industrial : | Operating: -40 to +85°C | Storage: -45 to +85°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-QA3 | Block diagram



conga-QA3 | Order Information

| Article | PN | Description |
|----------------------------|--------|---|
| conga-QA3/E3845-2G eMMC4 | 015100 | Intel® Atom™ E3845 quad core processor, 1.91 GHz, 2MB L2 cache, 2GB 1333MT/s DDR3L onboard dual channel memory and 4GB eMMC onboard flash |
| conga-QA3/E3827-2G eMMC4 | 015101 | Intel® Atom™ E3827 dual core processor, 1.75 GHz, 1MB L2 cache, 2GB 1333MT/s DDR3L onboard dual channel memory and 4GB eMMC onboard flash |
| conga-QA3/E3826-2G eMMC4 | 015102 | Intel® Atom™ E3826 dual core processor, 1.46 GHz, 1MB L2 cache, 2GB 1066MT/s DDR3L onboard dual channel memory and 4GB eMMC onboard flash |
| conga-QA3/E3825-2G eMMC4 | 015103 | Intel® Atom™ E3825 dual core processor, 1.33 GHz, 1MB L2 cache, 2GB 1066MT/s DDR3L onboard single channel memory and 4GB eMMC onboard flash |
| conga-QA3/E3815-2G eMMC4 | 015104 | Intel® Atom™ E3815 single core processor, 1.46GHz, 512kB L2 cache, 2GB 1066MT/s DDR3L onboard single channel memory and 4GB eMMC onboard flash |
| conga-QA3/E3845-4G eMMC8 | 015105 | Intel® Atom™ E3845 quad core processor, 1.91GHz, 2MB L2 cache, 4GB 1333MT/s DDR3L onboard dual channel memory and 8GB eMMC onboard flash |
| conga-QA3/E3815-1G | 015106 | Intel® Atom™ E3815 single core processor, 1.46GHz, 512kB L2 cache, 1GB 1066MT/s DDR3L onboard single channel memory |
| conga-QA3/E3845-4G | 015107 | Intel® Atom™ E3845 quad core processor with 1.91GHz, 2MB L2 cache, 4GB 1333MT/s DDR3L onboard dual channel memory. No onboard eMMC |
| conga-QA3/E3827-4G | 015108 | Intel® Atom™ E3827 dual core processor with 1.75GHz, 1MB L2 cache, 4GB 1333MT/s DDR3L onboard dual channel memory. No onboard eMMC |
| conga-QA3/E3845-2G | 015109 | Intel® Atom™ E3845 quad core processor with 1.91GHz, 2MB L2 cache, 2GB 1333MT/s DDR3L onboard memory. No onboard eMMC. |
| conga-QA3/E3805-2G eMMC4 | 015130 | Intel® Atom™ E3805 dual core processor with 1.33GHz, 1MB L2 cache, 2GB 1066MT/s DDR3L onboard memory and 4GB eMMC onboard flash. |
| conga-QA3/E3845-8G eMMC16 | 015131 | Intel® Atom™ E3845 quad core processor, 1.91GHz, 2MB L2 cache, 8GB 1333MT/s DDR3L onboard single channel memory and 16GB eMMC onboard flash |
| conga-QA3/i-E3845-2G eMMC4 | 015120 | Intel® Atom™ E3845 quad core processor, 1.91GHz, 2MB L2 cache, 2GB 1333MT/s DDR3L onboard dual channel memory and 4GB eMMC onboard flash Industrial grade temperature range from -40°C to 85°C |
| conga-QA3/i-E3827-2G eMMC4 | 015121 | Intel® Atom™ E3827 dual core processor, 1.75GHz, 1MB L2 cache, 2GB 1333MT/s DDR3L onboard dual channel memory and 4GB eMMC onboard flash Industrial grade temperature range from -40°C to 85°C |
| conga-QA3/i-E3825-2G eMMC4 | 015123 | Intel® Atom™ E3825 dual core processor, 1.33GHz, 1MB L2 cache, 2GB 1066MT/s DDR3L onboard single channel memory and 4GB eMMC onboard flash Industrial grade temperature range from -40°C to 85°C |
| conga-QA3/i-E3815-2G eMMC4 | 015124 | Intel® Atom™ E3815 single core processor, 1.46GHz, 512kB L2 cache, 2GB 1066MT/s DDR3L onboard single channel memory and 4GB eMMC onboard flash Industrial grade temperature range from -40°C to 85°C |
| conga-QA3/i-E3845-4G eMMC8 | 015125 | Intel® Atom™ E3845 quad core processor, 1.91GHz, 2MB L2 cache, 4GB 1333MT/s DDR3L onboard dual channel memory and 8GB eMMC onboard flash Industrial grade temperature range from -40°C to 85°C |
| conga-QA3/i-E3805-2G eMMC4 | 015126 | headless Intel® Atom™ E3805 dual core processor, 1.33GHz, 1MB L2 cache, 2GB 1067MT/s DDR3L onboard single channel memory and 4GB eMMC onboard flash Industrial grade temperature range from -40°C to 85°C |
| conga-QA3/J1900-2G | 015111 | Intel® Celeron J1900 quad core processor, 2.0 GHz, 2MB L2 cache, 2GB 1333MT/s DDR3L onboard dual channel memory. |
| conga-QA3/N2930-2G | 015112 | Intel® Celeron® N2930 quad core processor, 1.83GHz up to 2.16GHz, 2MB L2 cache and 2GB 1333MT/s DDR3L onboard dual channel memory. Low power consumption with 7.5W TD |
| conga-QA3/N2807-2G | 015113 | Intel® Celeron® N2807 dual core processor, 1.58GHz up to 2.16GHz, 2MB L2 cache and 2GB 1333MT/s DDR3L onboard single channel memory. Ultra-low power consumption with 4.5W TDP |
| conga-QA3/HSP-T | 015190 | Standard heatspreader for Qseven module conga-QA3. Standoff with 2.5mm threat |
| 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-QG. 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-Qseven/SBM3 | 025485 | Mobility Starter Kit |
| conga-MCB/Qseven Cable Kit | 14000041 | Complete cable kit for Qseven mini carrier board |
| Qseven MXM connector Foxconn | 400017 | Socket for Qseven Carrier Boards. 10pcs package. Foxconn standard type, SMT, lead free, 230 positions, 0.50mm pitch, 7.8mm height. |
| 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 |