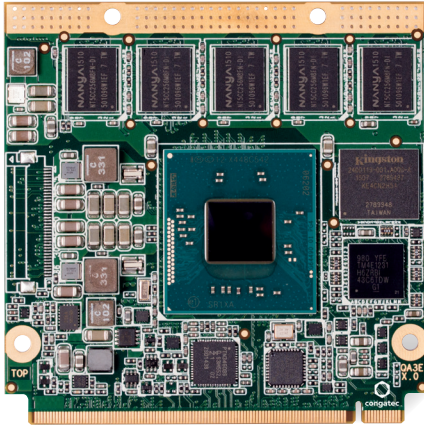


ERROR PROTECTED RAM

conga-QA3E

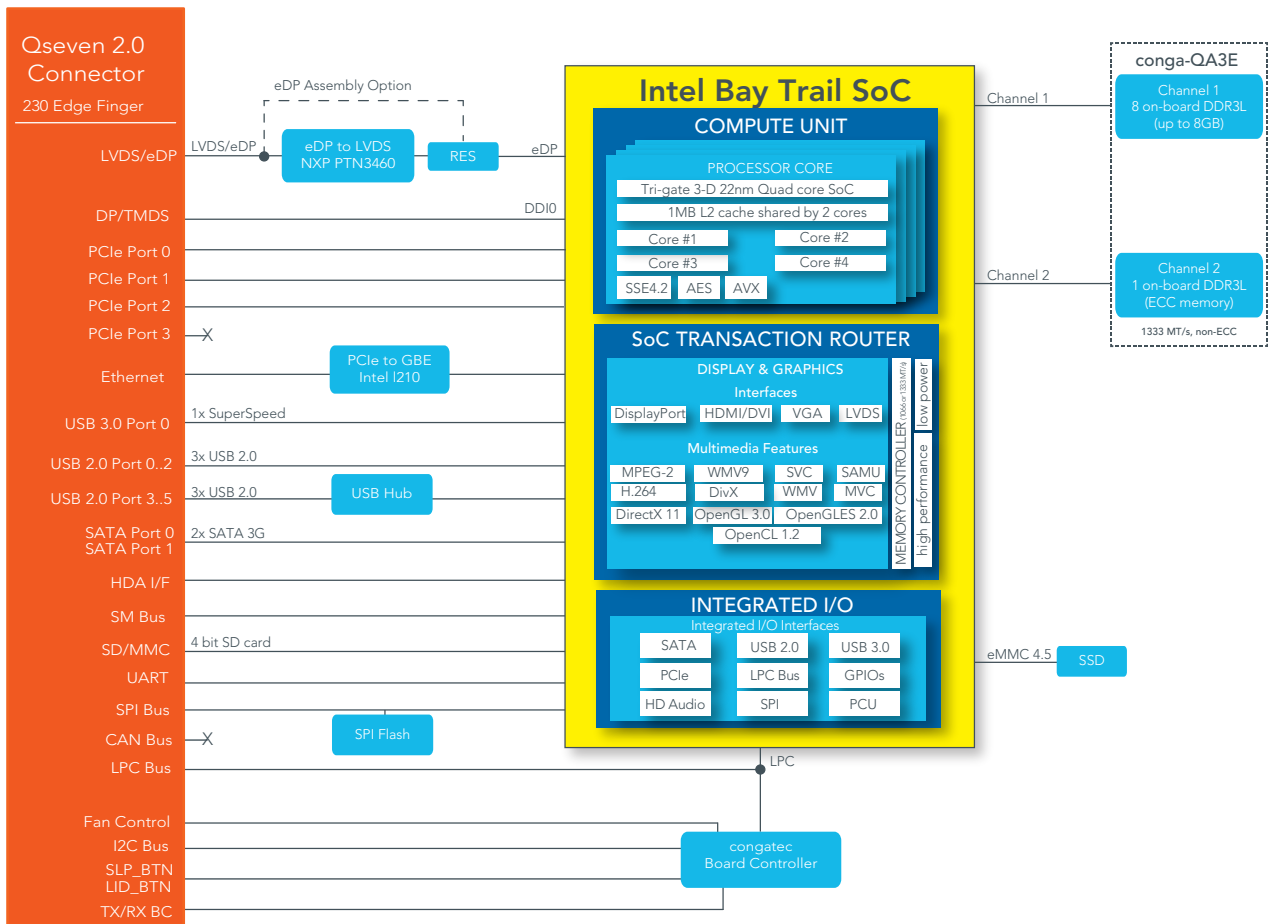


- 3rd Gen. Intel® Atom™
- ECC protected memory up to 8 GByte
- High resolution Intel® Gen. 7 graphics
- Temperature range up to 0°C .. +60°C



| | | | |
|-----------------------------|--|---------------------------|-----------------------|
| Formfactor | Qseven Form Factor Rev. 2.0 compliant 70x70 mm | | |
| CPU | Intel® Atom™ E3815 | 1.46 GHz Single Core | L2 cache 512kB 5W TDP |
| | Intel® Atom™ E3845 | 1.91 GHz QuadCore | L2 cache 2MB 10W TDP |
| DRAM | up to 8GB onboard ECC 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 | | |
| DisplayPort Interface (DDI) | DisplayPort 1.1 up to 2560x1600 or HDMI 1.4a up to 1920x1200 | | |
| 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 |
| 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-QA3E | Block diagram



conga-QA3E | Order Information

| Article | PN | Description |
|---------------------------|--------|--|
| conga-QA3E/E3815-2G eMMC4 | 018104 | Qseven module with Intel® Atom™ E3815 single core processor with 1.46GHz, 512kB L2 cache, 2GB 1066MT/s DDR3L single channel ECC memory and 4GB eMMC MLC SSD onboard. |
| conga-QA3E/E3845-4G eMMC8 | 018105 | Qseven module with Intel® Atom™ E3845 quad core processor with 1.91GHz, 2MB L2 cache, 4GB 1333MT/s DDR3L single channel ECC memory and 8GB eMMC MLC SSD onboard. |
| conga-QA3/HSP-T | 015190 | Standard heatspreader for Qseven module conga-QA3. Standoff with 2.5mm 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-Q3. 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 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 |

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