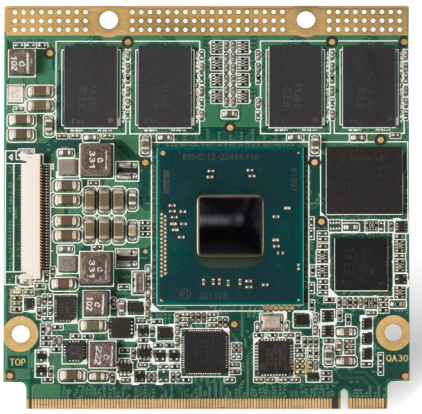
HIGH PERFORMANCE
conga-QA3

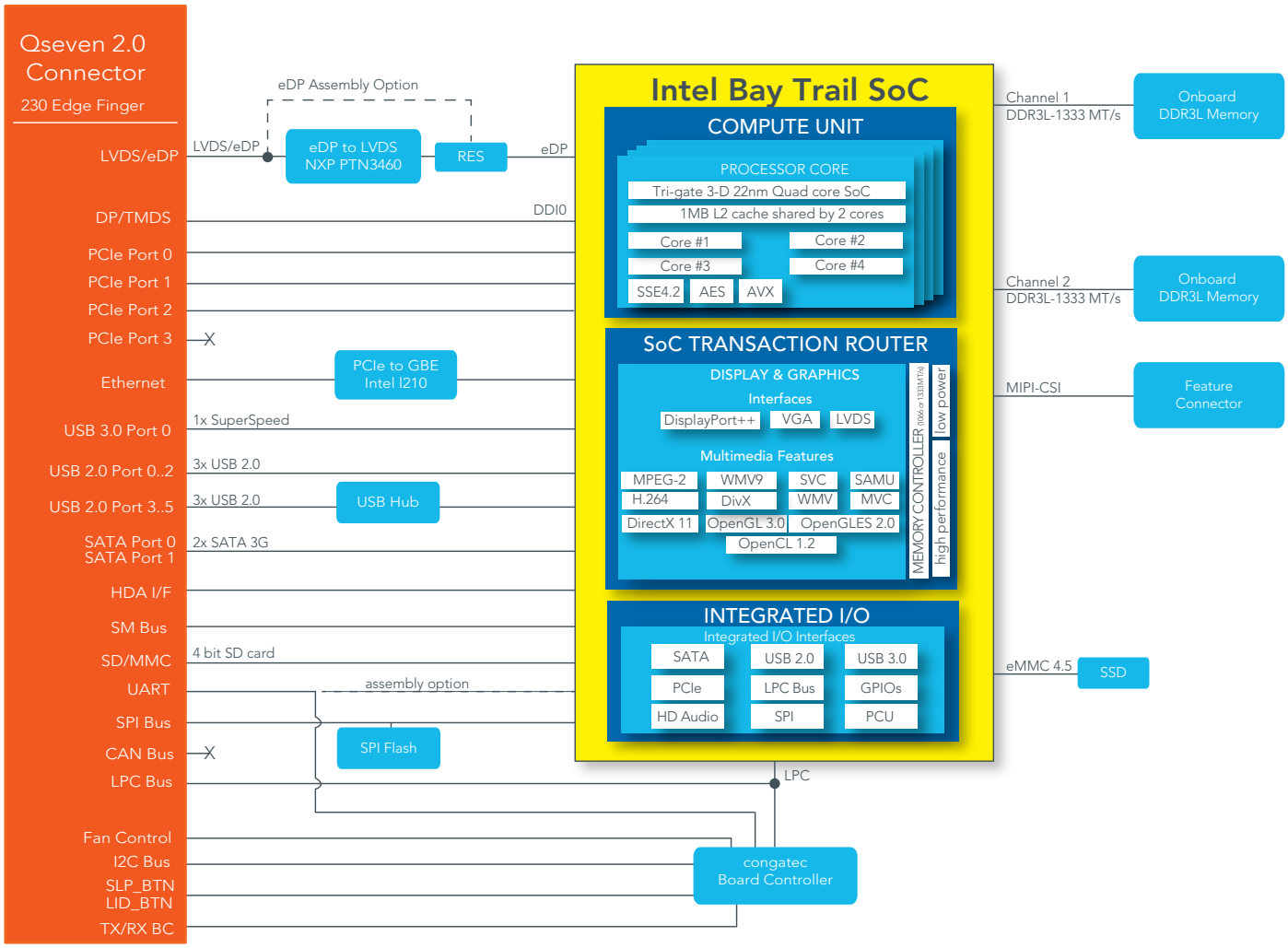


- 3rd Gen. Intel® Atom™ / Celeron® processors
- High resolution Intel® Gen. 7 graphics
- Temperature range up to -40°C .. +85°

QSEVEN

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 | I²C 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 I²C 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

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