

conga-QA3

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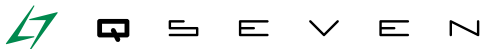
Qseven Module

3rd Generation Intel® Atom™ / Celeron®

Low Power 5 to 10 Watt

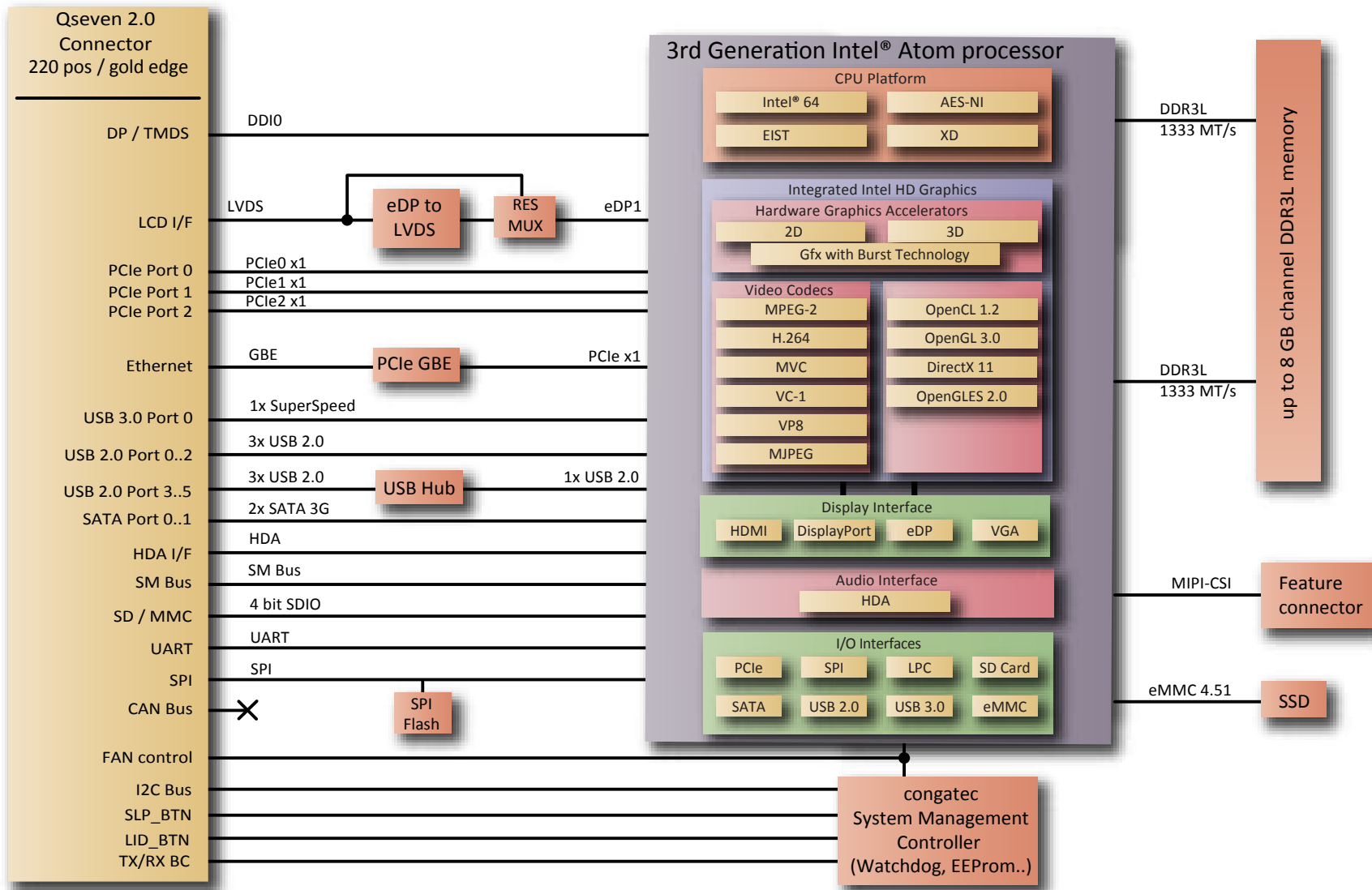
Intel® HD Graphics Generation 7

Industrial Temperature Range



Formfactor	Qseven Form Factor Rev. 2.0 compliant, 70x70 mm
CPU	Intel® Atom™ E3845 quad core processor, 1.91GHz, 2MB L2 cache and 10W TDP Intel® Atom™ E3827 dual core processor, 1.75GHz, 1MB L2 cache and 8W TDP Intel® Atom™ E3826 dual core processor, 1.46GHz, 1MB L2 cache and 7W TDP Intel® Atom™ E3825 dual core processor, 1.33GHz, 1MB L2 cache and 6W TDP Intel® Atom™ E3815 single core processor, 1.46GHz, 512kB L2 cache and 5W TDP Intel® Celeron J1900 quad core processor, 2 GHz, 2MB L2 cache and 10W TDP Intel® Celeron N2920 quad core processor, 1.6 GHz, 2MB L2 cache and 7.5 W 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, 1x UART, LPC bus, 1x SPI
Mass Storage	eMMC 4.51 onboard flash up to 16 GByte (optional only for Intel® Atom™)
Sound	Intel® High Definition Audio (Intel® HD Audio)
Graphics	Intel® HD Graphics, Full hardware acceleration for MPEG2, H.264, DirectX11, OCL 1.2, OGL 3.0, WMV9 and VC1
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 1.2 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	OEM Logo, OEM CMOS Defaults, LCD Control, Display Auto Detection, Backlight Control, Flash Update, based on AMI Aptio UEFI
Power Management	ACPI 5.0 compliant, Smart Battery Management
Operating Systems	Microsoft Windows 8, Microsoft Windows 8 embedded, Microsoft Windows 7, Microsoft Windows 7 embedded compact, Linux
Power Consumption	Typ. application 4.5W...12W
Temperature Range	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	Qseven module with Intel® Atom™ E3845 quad core processor with 1.91GHz, 2MB L2 cache, 2GB 1333MT/s DDR3L onboard memory and 4GB eMMC onboard flash.
conga-QA3/E3827-2G eMMC4	015101	Qseven module with Intel® Atom™ E3827 dual core processor with 1.75GHz, 1MB L2 cache, 2GB 1333MT/s DDR3L onboard memory and 4GB eMMC onboard flash.
conga-QA3/E3826-2G eMMC4	015102	Qseven module with Intel® Atom™ E3826 dual core processor with 1.46GHz, 1MB L2 cache, 2GB 1066MT/s DDR3L onboard memory and 4GB eMMC onboard flash.
conga-QA3/E3825-2G eMMC4	015103	Qseven module with Intel® Atom™ E3825 dual core processor with 1.33GHz, 1MB L2 cache, 2GB 1066MT/s DDR3L onboard memory and 4GB eMMC onboard flash.
conga-QA3/E3815-2G eMMC4	015104	Qseven module with Intel® Atom™ E3815 single core processor with 1.46GHz, 512kB L2 cache, 2GB 1066MT/s DDR3L onboard memory and 4GB eMMC onboard flash.
conga-QA3/N2920 -2G	015110	Qseven module with Intel® Celeron N2920 quad core processor with 1.6 GHz, 2MB L2 cache, 2GB 1066MT/s DDR3L onboard memory.
conga-QA3/J1900-2G	015111	Qseven module with Intel® Celeron J1900 quad core processor with 2.0 GHz, 2MB L2 cache, 2GB 1333MT/s DDR3L onboard memory.
conga-QA3/HSP-B	015190	Standrd heatspreader for Qseven module conga-QA3. All standoffs are with 2.7mm bore hole.

Engineering Tools / Accessories for Qseven		
conga-QEVAL	007001	Evaluation platform for Qseven
conga-QKIT	077455	Starterkit for Qseven including conga-QEVAL, conga-LDVI/EPI, conga-FPA1, Dual DVI-D ADD2 Card, ATX power supply...
conga-MCB/Qseven DP	020731	Qseven mini carrier board for mobile applications with DisplayPort
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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Rev. October 18, 2013 KS