

Qseven® Module

Industrial Temperature

conga-QA6

Extended Temperature Range

-40° .. +85°C

Intel® 3D Graphics

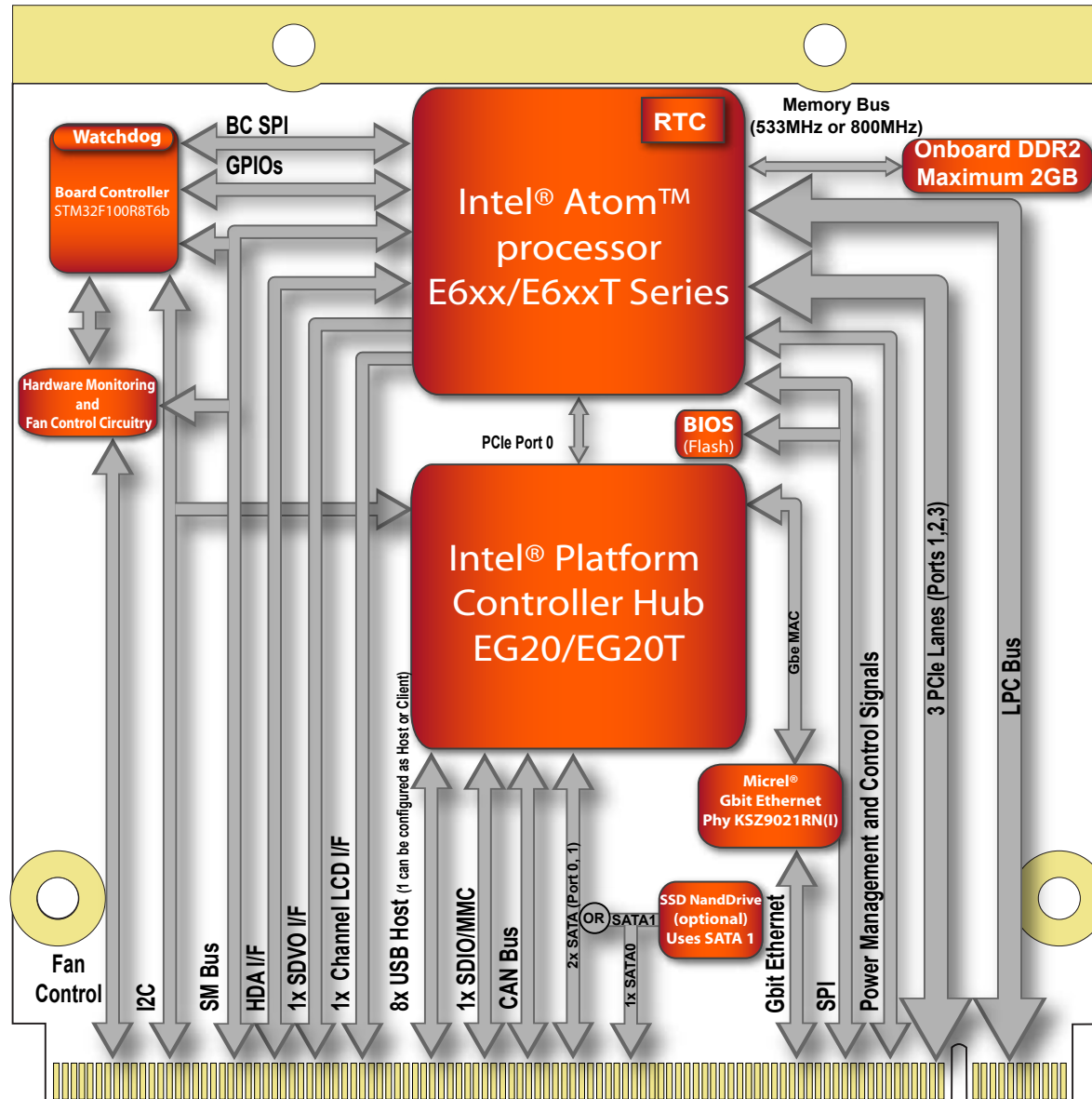
CAN Bus

Q S E V E N



Formfactor	Qseven Form Factor, 70x70 mm
CPU	Intel® Atom™ processor E6xx series with 1,6 GHz, 1.3 GHz, 1.0 GHz and 600 MHz Intel® Atom™ E680T / E680, 1.6 GHz (45 nm process, 512kb L2 cache, TDP 3.9 W) Intel® Atom™ E660T / E660, 1.3 GHz (45 nm process, 512kb L2 cache, TDP 3.3W) Intel® Atom™ E640T , 1.0 GHz (45 nm process, 512kb L2 cache, TDP 3.3W) Intel® Atom™ E620T / E620, 600 MHz (45 nm process, 512kb L2 cache, TDP 2.7W)
DRAM	Up to 2 GByte onboard DDR2 memory with 667/800 MT/s
Chipset	Intel® Platform Controller Hub EG20
Ethernet	Micrel® Gbit Ethernet Phy KSZ9021RN
I/O Interfaces	8x USB 2.0, 2x SATA (AHCI only), 1x SDIO, 3x PCIe, I²C Bus, 1x USB client, LPC bus, CAN Bus
Mass Storage	Onboard SATA Solid State Drive up to 32 GByte (optional)
Sound	Intel® High Definition Audio (Intel® HD Audio)
Graphics	Intel® Graphics Core with 2D and 3D hardware Accelerator and dual independent display support.
Video Decode Acceleration	Full hardware acceleration for MPEG2, MPEG4, H.264, WMV9 and VC1
Motion Video Support	Single channel 80MHz LVDS transmitter, support for flat panels with 1x18 and 1x24 bit data mapping up to a resolution of 1280x768@60Hz. Single channel 160MHz SDVO interface, supports resolutions up to 1920x1080@60Hz and 1280x1024@85Hz. Dual independent display support
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	OEM Logo, OEM CMOS Defaults, LCD Control, Display Auto Detection, Backlight Control, Flash Update, based on AMI Aptio UEFI
Power Management	ACPI 3.0 compliant, Smart Battery Management
Operating Systems	Windows® XP, Windows® XP embedded Standard, Windows® CE 6.0, Linux 2.6, QNX 6.x
Power Consumption	Typ. application ~5 Watt @ 5V
Temperature Range	Operating: 0 to +60°C (opt. -40 to +85°C) Storage: -20 to +80°C (opt. -40 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-QA6 - Block diagram



conga-QA6 - Order information

Article	PN	Description
conga-QA6/E680T-1G	015038	Intel® Atom™ E680T processor with 1.6GHz, 1GByte DDR2 onboard memory. Industrial grade temperature range from -40°C to 85°C
conga-QA6/E660T-1G	015035	Intel® Atom™ E660T processor with 1.3GHz, 1GByte DDR2 onboard memory. Industrial grade temperature range from -40°C to 85°C
conga-QA6/E640T-1G	015036	Intel® Atom™ E640T processor with 1.0GHz, 1GByte DDR2 onboard memory. Industrial grade temperature range from -40°C to 85°C
conga-QA6/E620T-1G	015037	Intel® Atom™ E620T processor with 600MHz, 1GByte DDR2 onboard memory. Industrial grade temperature range from -40°C to 85°C
conga-QA6/E660-1G	015030	Intel® Atom™ E660 processor with 1.3GHz, 1GByte DDR2 onboard memory
conga-QA6/E640-1G	015031	Intel® Atom™ E640 processor with 1.0GHz, 1GByte DDR2 onboard memory
conga-QA6/E680T-2G	015041	Intel® Atom™ E680T processor 1.6GHz, 2GByte DDR2 onboard memory. Industrial grade temperature range from -40°C to 85°C.
conga-QA6/E640T-1G SSD2	015039	Intel® Atom™ E640T processor 1.0GHz, 1GByte DDR2 onboard memory. Industrial grade temperature range from -40°C to 85°C. Onboard 2GByte SLC SATA Flash drive.
conga-QA6/E680-2G	015042	Intel® Atom™ E680 processor 1.6GHz, 2GByte DDR2 onboard memory
conga-QA6/E680-1G SSD8-MLC	015046	Intel® Atom™ E680 processor 1.6GHz, 1GByte DDR2 onboard memory. Onboard 8GByte MLC SATA Flash drive.
conga-QA6/E640-1G SSD4-MLC	015047	Intel® Atom™ E640 processor 1.0GHz, 1GByte DDR2 onboard memory. Onboard 4 GByte MLC SATA flash drive.
conga-QA6-HSP-B	015060	Heatspreader, Standoff with 2.7mm bore hole
conga-QA6-HSP-T	015061	Heatspreader, Standoff with 2.5mm threat
conga-QA6-CSP-B	015062	Standard passive cooling solution, surface orange anodized with 1.8mm fins, bore hole bracket, threaded standoffs.

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...
Qseven Mobility Kit	077460	Complete ready-to-use starter-kit for mobile applications
conga-MCB/Qseven SDVO	020730	Mini Carrier Board for Qseven with smart battery manager interface for mobile applications and SDVO display interface support for Intel® mobile platforms.
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
Single DVI-D ADD2 Card	058500	ADD2 display adapter card with single DVI-D digital output. Suitable for all Intel based platforms that support Serial Digital Display Outputs (SDVO) on the standard x16 PCI Express Graphics (PEG) port.

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