

# Qseven™ Module Industrial Temperature

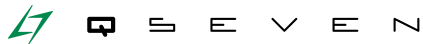
## conga-QA6

Extended Temperature Range

-40° .. +85°C

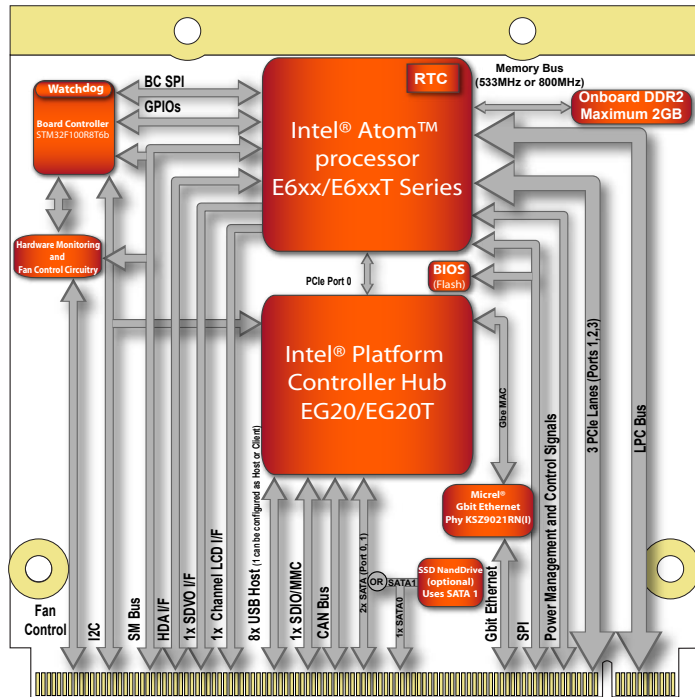
Intel® 3D Graphics

CAN Bus



<b>Formfactor</b>	<b>Qseven Form Factor, 70x70 mm</b>
<b>CPU</b>	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 / E640, 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)
<b>DRAM</b>	Up to 2 GByte onboard DDR2 memory with 667/800 MT/s
<b>Chipset</b>	Intel® Platform Controller Hub EG20
<b>Ethernet</b>	Micrel® Gbit Ethernet Phy KSZ9021RN
<b>I/O Interfaces</b>	6x USB 2.0, 2x SATA (AHCI only), 1x SDIO, 3x PCIe, I²C Bus, 1x USB client, LPC bus, CAN Bus
<b>Mass Storage</b>	Onboard SATA Solid State Drive up to 32 GByte (optional)
<b>Sound</b>	Intel® High Definition Audio (Intel® HD Audio)
<b>Graphics</b>	Intel® Graphics Core with 2D and 3D hardware Accelerator and dual independent display support.
<b>Video Decode Acceleration</b>	Full hardware acceleration for MPEG2, MPEG4, H.264, WMV9 and VC1
<b>Motion Video Support</b>	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
<b>congatec Board Controller</b>	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
<b>Embedded BIOS Features</b>	OEM Logo, OEM CMOS Defaults, LCD Control, Display Auto Detection, Backlight Control, Flash Update, based on AMI Aptio UEFI
<b>Power Management</b>	ACPI 3.0 compliant, Smart Battery Management
<b>Operating Systems</b>	Windows® XP, Windows® XP embedded Standard, Windows® CE 6.0, Linux 2.6, QNX 6.x
<b>Power Consumption</b>	Typ. application ~5 Watt @ 5V
<b>Temperature Range</b>	Operating: 0 to +60°C (opt. -40 to +85°C) Storage: -20 to +80°C (opt. -40 to +85°C)
<b>Humidity</b>	Operating: 10 to 90% r. H. non cond. Storage: 5 to 95% r. H. non cond.
<b>Size</b>	70 x 70 mm (2¾" x 2¾")

# Block Diagram conga-QA6



# Order Information conga-QA6

Article	PN	Description
conga-QA6/E680T-1G	015038	Intel® Atom™ E680T processor with 1.6GHz, 512kB L2 cache. Industrial grade temperature range from -40°C to 85°C
conga-QA6/E660T-1G	015035	Intel® Atom™ E660T processor with 1.3GHz, 512kB L2 cache. Industrial grade temperature range from -40°C to 85°C
conga-QA6/E640T-1G	015036	Intel® Atom™ E640T processor with 1.0GHz, 512kB L2 cache. Industrial grade temperature range from -40°C to 85°C
conga-QA6/E620T-1G	015037	Intel® Atom™ E620T processor with 600MHz, 512kB L2 cache. Industrial grade temperature range from -40°C to 85°C
conga-QA6/E680-1G	015033	Intel® Atom™ E680 processor with 1.6GHz, 512kB L2 cache
conga-QA6/E660-1G	015030	Intel® Atom™ E660 processor with 1.3GHz, 512kB L2 cache
conga-QA6/E640-1G	015031	Intel® Atom™ E640 processor with 1.0GHz, 512kB L2 cache
conga-QA6/E620-1G	015032	Intel® Atom™ E620 processor with 600MHz, 512kB L2 cache

Article	PN	Description
conga-QA6-HSP-B	015060	Heatspreader, Standoff with 2.7mm bore hole
conga-QA6-HSP-T	015061	Heatspreader, Standoff with 2.5mm throat
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-Mini Carrier Board	020710	Qseven mini carrier board for mobile applications.
conga-Mini Carrier cable kit	400015	Cable Kit for Qseven mini carrier board. Consisting of: 4x USB adapter cable, 1x LVDS display cable, 1x Feature connector cable, 1x HDMI to DVI adapter cable.
Qseven MXM carrier board connector	400012	Socket for Qseven Carrier Boards, Foxconn PN:AS0B321-S78N-7F, standard type, SMT, lead free, 230 positions, 0.50mm pitch, 7.8mm height. 1 pcs
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.