

COM Express® Basic Type 6 Module

conga-TM67

COM Express Type 6

up to Intel® Core™ i7 Processors 2.16 GHz

Quadcore

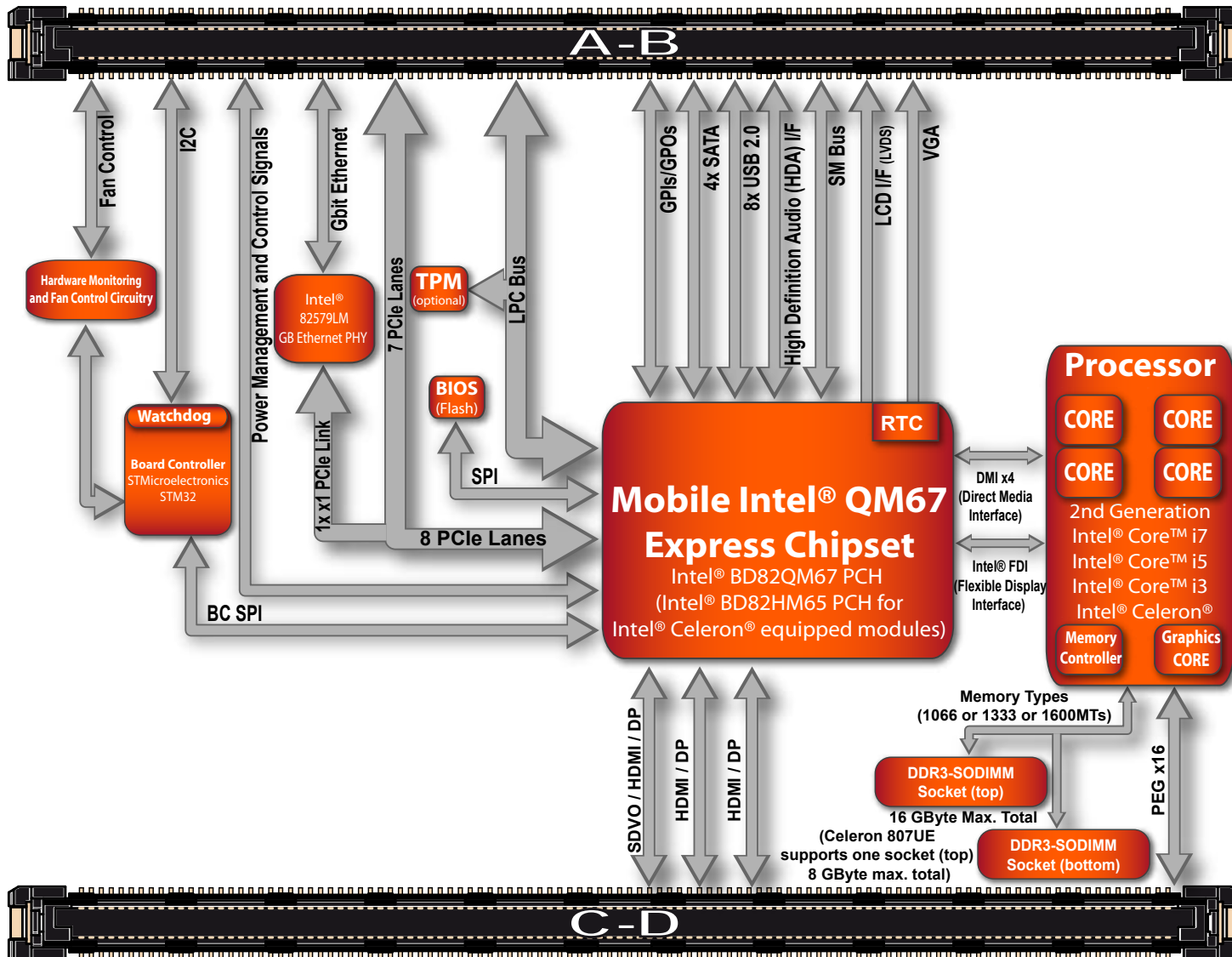
High end graphics performance

Intel® Turbo Boost Technology 2.0



Formfactor	Formfactor COM Express™ Basic, (95 x 125 mm), Type 6 Connector Layout
CPU	Intel® Core™ i7-2710QE, (4 x 2.1GHz, 8 Threads, 6 MB cache, 1600 MT/s, TDP 45 W, PGA package) Intel® Core™ i5-2510E (2 x 2.5GHz, 4 Threads, 3 MB cache, 1333 MT/s, TDP 35 W, PGA package) Intel® Core™ i3-2330E (2 x 2.2GHz, 4 Threads, 3 MB cache, 1333 MT/s, TDP 35 W, PGA package) Intel® Celeron™ B810 (2 x 1.6GHz, 2 Threads, 2 MB cache, 1333 MT/s, TDP35 W, PGA package) Intel® Turbo Boost Technology 2.0, Intel® Hyper-Threading Technology Integrated dual channel memory controller, up to 25.6 GByte/sec. memory bandwidth Integrated Intel® HD Graphics 3000 with dynamic frequency up to 1.2GHz, Intel® Clear Video HD Technology
DRAM	2 Sockets, SO-DIMM DDR3 up to 1600MT/s and 16 GByte
Chipset	Mobile Intel® 6 Series Chipset: Intel® QM67 / Intel® HM65 (Intel® Celeron™ version)
Ethernet	Intel® 82579 GbE LAN Controller with AMT 7.0 support
I/O Interfaces	7x PCI Express™ GEN. 2.0 lanes, 1x PEG, 2x Serial ATA® with 6 Gb/s, 2x Serial ATA® with 3 Gb/s (AHCI) RAID 0/1/5/10 support, 2x ExpressCard®, 8x USB 2.0 (EHCI), LPC bus, I²C bus (fast mode, 400 kHz, multi-master)
Sound	Digital High Definition Audio Interface with support for multiple audio codecs
Graphics	Intel® Flexible Display Interface (FDI), OpenGL 3.0 and DirectX10.1 support, Two independent pipelines for full dual view support optional High performance hardware MPEG-2 decoding, WMV9 (VC-1) and H.264 (AVC) support Blu-ray support @ 40 MBit/s, hardware motion compensation
LVDS	Dual channel LVDS transmitter, Supports flat panels 2x24 Bit interface, VESA mappings, resolutions up to 1920x1200, Automatic Panel Detection via EDID/EPI
Display Port (DP)	3x DisplayPorts 1.1
HDMI or DVI	3x ports shared with DVI, HDMI 1.4 (with 3D)
CRT Interface	350 MHz RAMDAC, resolutions up to QXGA (2048x1536)
congatec Board Controller	Multi Stage Watchdog, non-volatile User Data Storage, Manufacturing and Board Information, Board Statistics, BIOS Setup Data Backup, I²C bus (fast mode, 400 kHz, multi-master), Power Loss Control
Embedded BIOS Features	AMI Aptio® UEFI 2.x firmware, 8 MByte serial SPI firmware flash , High Accessible Program (HAP)
Security	The conga-TS67 can be optionally equipped with a discrete "Trusted Platform Module" (TPM). It is capable of calculating efficient hash and RSA algorithms with key lengths up to 2,048 bits and includes a real random number generator. Security sensitive applications such as gaming and e commerce will benefit also with improved authentication, integrity and confidence levels.
Power Management	ACPI 4.0 with battery support
Operating Systems	Microsoft® Windows 8, Microsoft® Windows 7, Linux, Microsoft® Windows® embedded Standard
Power Consumption	Typ. application: tbd., see manual for full details, CMOS Battery Backup
Temperature:	Operating: 0 .. +60°C Storage: -20 .. +80°C
Humidity Operating:	Operating: 10 - 90% r. H. non cond. Storage: 5 - 95% r. H. non cond.
Size	95 x 125 mm (3.74" x 4.92")

conga-TM67 - Block diagram



conga-TM67 - Order information

Article	PN	Description
conga-TM67/I7-2710QE	046301	COM Express Type 6 Basic modul with Intel® Core™ i7-2710QE Quad Core Processor with 2.1GHz, 6MB L2 cache and 1600MT/s dual channel DDR3 memory interface.
conga-TM67/I5-2510E	046302	COM Express Type 6 Basic modul with Intel® Core™ i5-2510E dual core processor with 2.5GHz, 3MB L2 cache and 1333MT/s dual channel DDR3 memory interface.
conga-TM67/I3-2330E	046303	COM Express Type 6 Basic modul with Intel® Core™ i3-2330E dual core processor with 2.2GHz, 3MB L2 cache and 1333MT/s dual channel DDR3 memory interface.
conga-TM67/B810	046304	COM Express Type 6 Basic modul with Intel® Celeron™ B810 dual core processor with 1.6GHz, 2MB L2 cache and 1333MT/s dual channel DDR3 memory interface.
conga-TM67/CSA-HP-B	046054	Standard active cooling solution with integrated heat pipes, 15mm fins and 20mm overall heat sink height and integrated 12V fan. All stand-offs are with 2.7mm bore hole
conga-TM67/CSA-HP-T	046055	Standard active cooling solution with integrated heat pipes, 15mm fins and 20mm overall heat sink height and integrated 12V fan. All stand-offs are M2.5mm threaded
conga-TM67/CSP-HP-B	046052	Standard passive cooling solution with integrated heat pipes, 15mm fins and 20mm overall heat sink height. All stand-offs are with 2.7mm bore hole
conga-TM67/CSP-HP-T	046053	Standard passive cooling solution with integrated heat pipes, 15mm fins and 20mm overall heat sink height. All stand-offs are M2.5mm threaded
conga-TM67/HSP-HP-B	046050	Standard heatspreader with integrated heat pipes. All stand-offs are with 2.7mm bore hole
conga-TM67/HSP-HP-T	046051	Standard heatspreader with integrated heat pipes. All stand-offs are M2.5mm threaded
DDR3L-SODIMM-1600 (2GB)	068755	DDR3L SODIMM memory module with 1600 MT/s (PC3L-12800S) and 2GB RAM
DDR3L-SODIMM-1600 (4GB)	068756	DDR3L SODIMM memory module with 1600 MT/s (PC3L-12800S) and 4GB RAM
DDR3L-SODIMM-1600 (8GB)	068757	DDR3L SODIMM memory module with 1600 MT/s (PC3L-12800S) and 8GB RAM

Engineering Tools / Accessories for COM Express®		
conga-TEVAL	065800	Evaluation carrier board for Type 6 COM-Express-modules
conga-Cdebug	047854	COM-Express debugging platform. Including cable for COM, PS/2 and VGA.
conga-LDVI/EPI	011115	LVDS to DVI converter board for digital flat panels with onboard EEPROM
conga-HDMI/Display Port adapter	500014	The conga-HDMI/DisplayPort adapter is used fo convert the chipset graphic ports Port-B, Port-C and Port-D to the HDMI or DisplayPort Interface
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.
Dual DVI-D ADD2 Card	013226	ADD2 display adapter card with dual independent DVI-D output. Suitable for all Intel based platforms that support Serial Digital Display Outputs (SDVO) on the standard, x16 PCI Express Graphics (PEG) port.
COM-Express-carrierboard-Socket-5	400007	Connector for COM-Express carrier boards, height 5mm, packing unit 4 pieces
COM-Express-carrierboard-Socket-8	400004	Connector for COM-Express carrier boards, height 8mm, packing unit 4 pieces

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