

COM Express® Basic Type 6 Module

conga-TS67

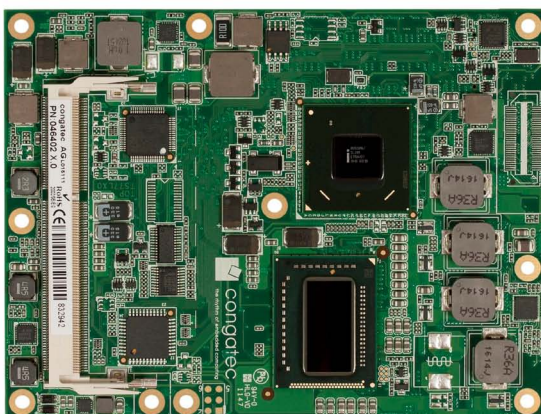
COM Express Type 6

Based on 2nd Generation Intel® Core™ low-power processors

Soldered CPUs for higher shock resistance

High end graphics performance

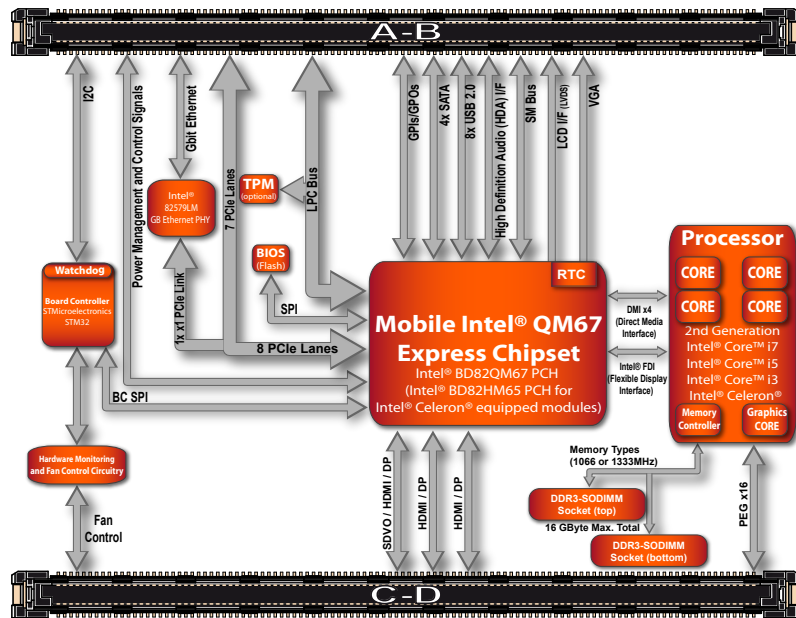
Intel® Turbo Boost Technology 2.0



Formfactor	Formfactor COM Express™ Basic, (95 x 125 mm), Type 6 Connector Layout
CPU	Intel® Celeron™ 807UE (1x 1.0GHz, 1MB L3 cache, 1333MT/s), TDP 10W Intel® Celeron™ 827E (1x 1.4GHz, 1.5MB L3 cache, 1333MT/s), TDP 17W Intel® Celeron™ 847E (2x 1.1GHz, 2MB L2 cache, 1333MT/s), TDP 17W Intel® Core™ i3-2340UE (2x 1.3GHz, 3MB L2 cache, 1333MT/s), TDP 17W Intel® Core™ i7-2610UE (2x 1.5GHz, 3MB L2 cache, 1333MT/s), TDP 17W Intel® Core™ i7-2655LE (2x 2.2GHz, 4MB L2 cache, 1333MT/s), TDP 25W 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 (EHC), 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
Digital Display Interface (DDI)	1x SDVO / DisplayPort 1.1 / TMDS (DVI, HDMI) 2x DisplayPort 1.1 / TMDS (DVI, HDMI)
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
Security	The conga-TM67 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® Windows7, Microsoft® Windows XP, Microsoft® Windows® embedded Standard, Embedded POS Ready (WEPOS), Linux 3.0
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")

Block Diagram conga-TS67

Order Information conga-TS67



Article	PN	Description
conga-TS67/i7-2655LE	046401	COM Express Type 6 Basic modul with Intel® Core™ i7-2655LE dual core processor with 2.2GHz, 4MB L2 cache and 1333MT/s dual channel DDR3 memory interface.
conga-TS67/i7-2610UE	046402	COM Express Type 6 Basic modul with Intel® Core™ i7-2610UE dual core processor with 1.5GHz, 3MB L2 cache and 1333MT/s dual channel DDR3 memory interface.
conga-TS67/i3-2340UE	046403	COM Express Type 6 Basic modul with Intel® Core™ i3-2340UE dual core processor with 1.3GHz, 3MB L2 cache and 1333MT/s dual channel DDR3 memory interface.
conga-TS67/847E	046404	COM Express Type 6 Basic module with Intel® Celeron™ 847E dual core processor with 1.1GHz, 2MB L2 cache and 1333MT/s dual channel DDR3 memory interface.
conga-TS67/827E	046405	COM Express Type 6 Basic module with Intel® Celeron™ 827E single core processor with 1.4GHz, 1.5MB L3 cache and 1333MT/s dual channel DDR3 memory interface.
conga-TS67/807UE	046406	COM Express Type 6 Basic module with Intel® Celeron™ 807UE single core processor with 1.0GHz, 1MB L3 cache, 1333MT/s single channel DDR3 memory interface and no PEG Port.
DDR3-SODIMM (1GB)	068750	DDR3-SODIMM memory module with 1 GB RAM
DDR3-SODIMM (2GB)	068760	DDR3-SODIMM memory module with 2 GB RAM
DDR3-SODIMM (4GB)	068765	DDR3-SODIMM memory module with 4 GB RAM
conga-TS67/CSA-HP-B	046454	Standard active cooling solution with integrated heat pipes, 15mm silver fins and 20mm overall heat sink height and integrated 12V fan. All stand-offs are with 2.7mm bore hole.
conga-TS67/CSA-HP-T	046455	Standard active cooling solution with integrated heat pipes, 15mm silver fins and 20mm overall heat sink height. All stand-offs are with 2.7mm threaded.
conga-TS67/CSP-HP-B	046452	Standard passive cooling solution with integrated heat pipes, 15mm silver fins and 20mm overall heat sink height. All stand-offs are with 2.7mm bore hole.
conga-TS67/CSP-HP-T	046453	Standard passive cooling solution with integrated heat pipes, 15mm silver fins and 20mm overall heat sink height. All stand-offs are M2.5mm threaded.
conga-TS67/HSP-HP-B	046450	Standard heatspreader with integrated heat pipes. All stand-offs are with 2.7mm bore hole.
conga-TS67/HSP-HP-T	046451	Standard heatspreader with integrated heat pipes. All stand-offs are M2.5mm threaded.

Engineering Tools / Accessories for COM Express®

conga-TEVAL	065800	Evaluation carrier board for Type 6 COM-Express-modules
conga-SBM²C-module	014141	SMART Battery Manager Module for COM Express
conga-SBM²C-kit	029874	Starterkit to evaluate SBM-Features for COM Express with SMART-Battery Manager Module and cable set
conga-SBM²C Licence and Design Kit	025478	SMART Battery Manager Module Design Kit for COM including licence agreement for customer integration, Hardware design files (Schematics, Bill of Material), Battery Manager Firmware (incl. commented source code), AVR-Programming Tool AT90 JTAG ICE MKII
conga-LDVI/EPI	011115	LVDS to DVI converter board for digital flat panels with onboard EEPROM
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