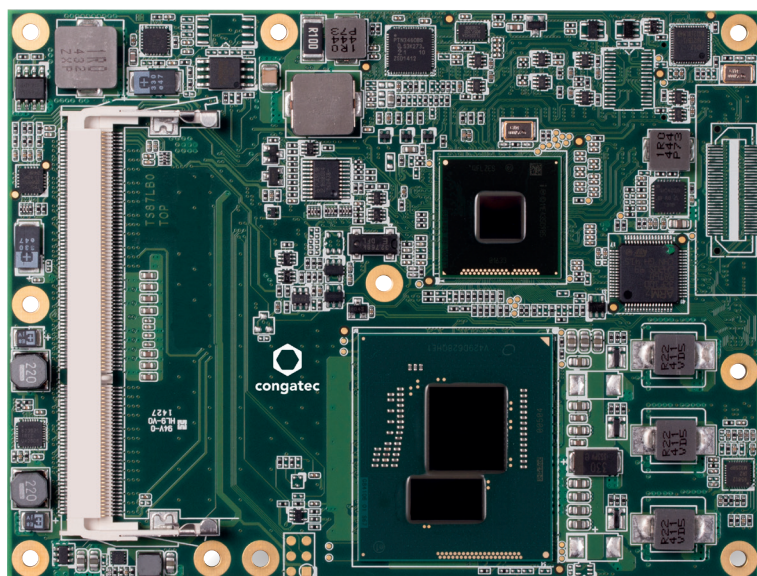


HIGH PERFORMANCE

conga-TS97

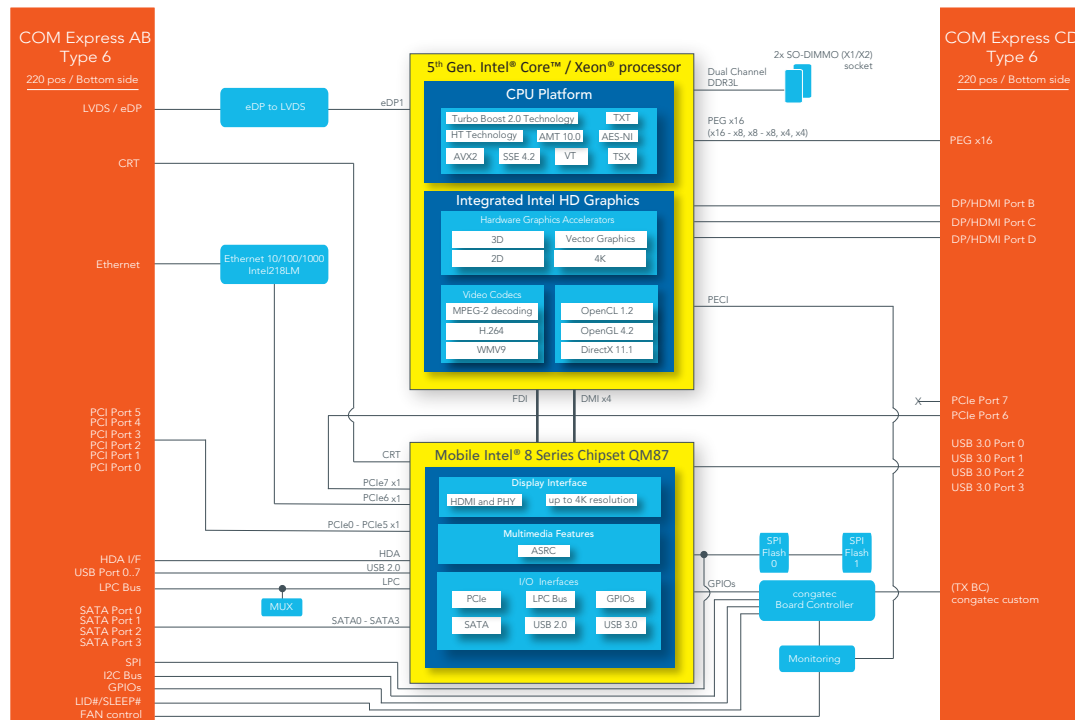


- 5th Gen. Intel® Core™ i7 quad core processor and Intel® Xeon® E3-12xx processors
- Up to Intel® Iris™ Pro Graphics P6300
- 3x DisplayPort 1.2, up to 4k resolution
- Intel® AVX 2.0 Vector extension for improved floating point computing

COM  **Express®**

Formfactor	COM Express® Basic, (95 x 125 mm), Type 6 Connector Layout							
CPU	Intel® Core™ i7-5850EQ2.7 GHzQuad CoreTurbo Boost 3.4 GHz6 MB L2 CacheTDP 47W 37WIntel® Iris™ Pro Graphics 6200 Intel® Core™ i7-5700EQ2.6 GHzQuad CoreTurbo Boost 3.4 GHz6 MB L2 CacheTDP 47W 37WIntel® HD Graphics 5600 Intel® Xeon® E3-1278LV42.0 GHzQuad CoreTurbo Boost 3.3 GHz6 MB L2 CacheTDP 47WIntel® Iris™ Pro Graphics P6300 Intel® Xeon® E3-1258LV41.8 GHzQuad CoreTurbo Boost 3.2 GHz6 MB L2 CacheTDP 47WIntel® HD Graphics P5700 Intel® Turbo Boost Technology Intel® Hyper-Threading Technology (Intel® HT Technology) Intel® Advanced Vector Extensions 2.0 (Intel® AVX2) Intel® Advanced Encryption Standard New Instructions (Intel® AES-NI) Integrated dual channel memory controller up to 25.6 GByte/sec. memory bandwidth Integrated Intel® HD Graphics 6000 series with dynamic frequency up to 1.0 GHz Intel® Clear Video HD Technology Intel® Virtualization Technology (Intel® VT), Intel® Trusted Execution Technology (Intel® TXT) Intel® Streaming SIMD Extensions 4.2 (Intel® SSE4.2) PCLMULQDQ Instruction Intel® Secure Key, Intel® Transactional Synchronization Extensions (Intel® TSX)							
DRAM	2 Sockets, SO-DIMM DDR3L@1.35V up to 1600MT/s and 32GByte							
Chipset	Mobile Intel® 8 Series Chipset: Intel® QM87 for Intel® Core™ processors / HM86 @ planned Celeron variants							
Ethernet	Intel® I218-LM GbE LAN Controller with AMT 10 support							
I/O Interfaces	7x PCI Express™ GEN. 2.0 lanes 4x Serial ATA® RAID 0/1/5/10 support PEG support x16 GEN 3.0 2x ExpressCard® 4x USB 3.0 (XHCI) 8x USB 2.0 (EHCI) LPC bus I²C bus (fast mode, 400 kHz, multi-master) TPM 1.2							
Sound	Digital High Definition Audio Interface with support for multiple audio codecs							
Graphics	Next Generation Intel® HD Graphics with OpenCL 2.0, OpenGL 4.3 and DirectX11.2 support; up to three independent displays with up to 4k resolution: HDMI 1.4, DVI, DisplayPort 1.2; High performance hardware MPEG-2 decoding, WMV9 (VC-1) and H.264 (AVC) support Blu-ray support @ 40 MBit/s, PEG support x16 with PCI Express Gen 3.0							
LVDS (eDP optional)	Dual channel 18/24bit LVDS transmitter Supports flat panels 2x24 Bit interface VESA and OpenLDI color mappings, resolutions up to 1920x1200 Automatic Panel Detection via EDID/EPI							
Digital Display Interface (DDI)	3x TMDS (HDMI) / DisplayPort 1.2a with support for Multi-Stream Transport (MST), resolutions up to 4k							
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	AMI Aptio® UEFI 2.x firmware 8/16 MByte serial SPI firmware flash							
Security	The conga-TS97 can be optionally equipped with a discrete “Trusted Platform Module” (TPM 1.2 / 2.0). 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, Intel AMT 9.1 Support							
Operating Systems	Microsoft® Windows 10 Microsoft® Windows 10 IoT Enterprise Microsoft® Windows 8 Microsoft® Windows 7 Linux Microsoft® Windows embedded Standard							
Power Consumption	see User's Guide for full details, CMOS Backup Battery Ultra low standby power, support for CPU power states up to C10							
Temperature	Operating: 0 .. +60°C Storage: -20 .. +80°C							
Humidity	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-TS97 | Block diagram



conga-TS97 | Order Information

Article	PN	Description
conga-TS97/i7-5850EQ	046830	COM Express Type 6 Basic module with Intel® Core™ i7-5850EQ Processor Quad Core CPU with 2.7GHz, 47W
conga-TS97/i7-5700EQ	046831	COM Express Type 6 Basic module with Intel® Core™ i7-5700EQ Processor Quad Core CPU with 2.6GHz, 47W
conga-TS97/E3-1278LV4	046832	COM Express Type 6 Basic module with Intel® Xeon® Processor E3-1278L v4 Quad Core CPU with 2.0GHz, 47W
conga-TS97/E3-1258LV4	046833	COM Express Type 6 Basic module with Intel® Xeon® Processor E3-1258L v4 Quad Core CPU with 1.8GHz, 47W
conga-TS87/HSP-FP-B*	046851	Standard heatspreader for high performance COM Express module conga-TS87 with flat heat pipes. All standoffs are with 2.7mm bore hole
conga-TS87/HSP-FP-T*	046852	Standard heatspreader for high performance COM Express module conga-TS87 with flat heat pipes. All standoffs are M2.5mm threaded
conga-TS87/CSA-FP-B*	046853	Standard active cooling solution for high performance COM Express module conga-TS87 with flat heat pipes 15mm fins 20mm overall heat sink height and integrated 12V fan. All standoffs are with 2.7mm bore hole
conga-TS87/CSA-FP-T*	046854	Standard active cooling solution for high performance COM Express module conga-TS87 with flat heat pipes 15mm fins 20mm overall heat sink height and integrated 12V fan. All standoffs are M2.5mm threaded
conga-TS87/CSP-FP-B*	046855	Standard passive cooling solution for high performance COM Express module conga-TS87 with flat heat pipes 15mm fins and 20mm overall heat sink height. All standoffs are with 2.7 mm bore hole
conga-TS87/CSP-FP-T*	046856	Standard passive cooling solution for high performance COM Express module conga-TS87 with flat heat pipes 15mm fins and 20mm overall heat sink height. All standoffs 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
DDR3L-SODIMM-1600 (16GB)	068758	DDR3L SODIMM memory module with 1600 MT/s (PC3L-12800S) and 16GB RAM

* cooling solutions also for conga-TS97

Accessories		
conga-TEVAL	065800	Evaluation carrier board for Type 6 COM-Express-modules
conga-LDVI/EPI	011115	LVDS to DVI converter board for digital flat panels with onboard EEPROM
COM-Express-carrier-board-Socket-5	400007	Connector for COM-Express carrier boards height 5mm packing unit 4 pieces
COM-Express-carrier-board-Socket-8	400004	Connector for COM-Express carrier boards height 8mm packing unit 4 pieces

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