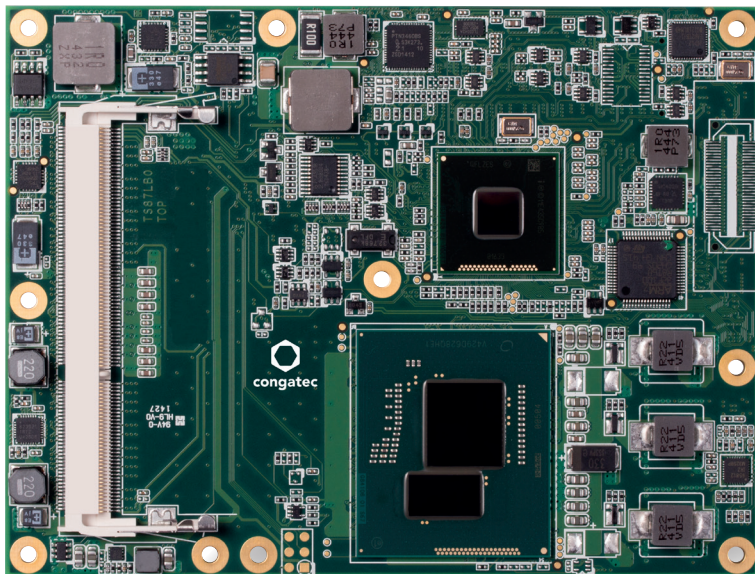


HIGH PERFORMANCE

conga-TS97

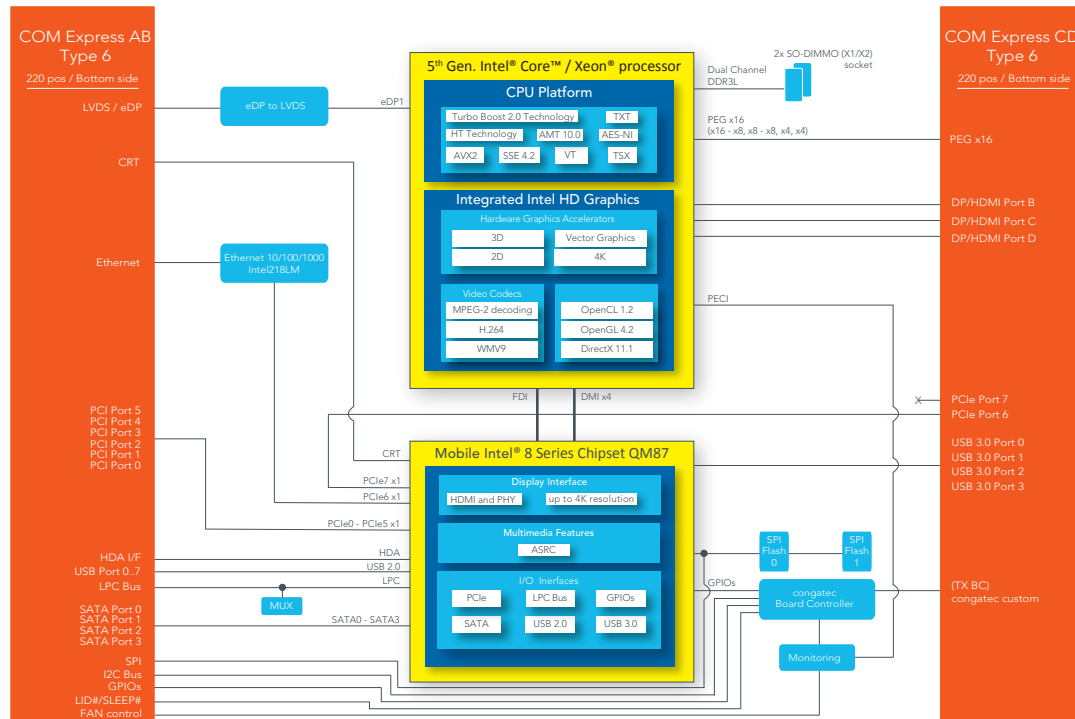


- 5th Gen. Intel® Core™ i7 quad core processor and Intel® Xeon® E3-12xx processors
- Up to Intel® Iris™ Pro Graphics P6300
- 3x DisplayPort 1.2, up to 4k resolution
- Intel® AVX 2.0 Vector extension for improved floating point computing

COM  **Express®**

Formfactor	COM Express® Basic, (95 x 125 mm), Type 6 Connector Layout							
CPU	Intel® Core™ i7-5850EQ	2.7 GHz	Quad Core	Turbo Boost 3.4 GHz	6 MB L2 Cache	TDP 47W 37W	Intel® Iris™ Pro Graphics 6200	
	Intel® Core™ i7-5700EQ	2.6 GHz	Quad Core	Turbo Boost 3.4 GHz	6 MB L2 Cache	TDP 47W 37W	Intel® HD Graphics 5600	
	Intel® Xeon® E3-1278LV4	2.0 GHz	Quad Core	Turbo Boost 3.3 GHz	6 MB L2 Cache	TDP 47W	Intel® Iris™ Pro Graphics P6300	
	Intel® Xeon® E3-1258LV4	1.8 GHz	Quad Core	Turbo Boost 3.2 GHz	6 MB L2 Cache	TDP 47W	Intel® 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	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 8 Microsoft® Windows 7 Linux Microsoft® Windows embedded Standard Embedded POS Ready							
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

* 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

© 2015 congatec AG. All rights reserved.

All data is for information purposes only. Although all the information contained within this document is carefully checked, no guarantee of correctness is implied or expressed. Product names, logos, brands, and other trademarks featured or referred are the property of their respective trademark holders. These trademark holders are not affiliated with congatec AG. Rev. Juli 13, 2015 MR