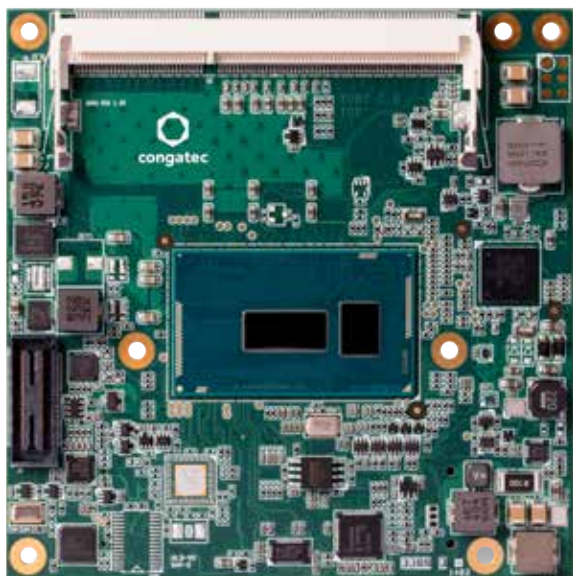


FAST AND COMPACT

conga-TC97

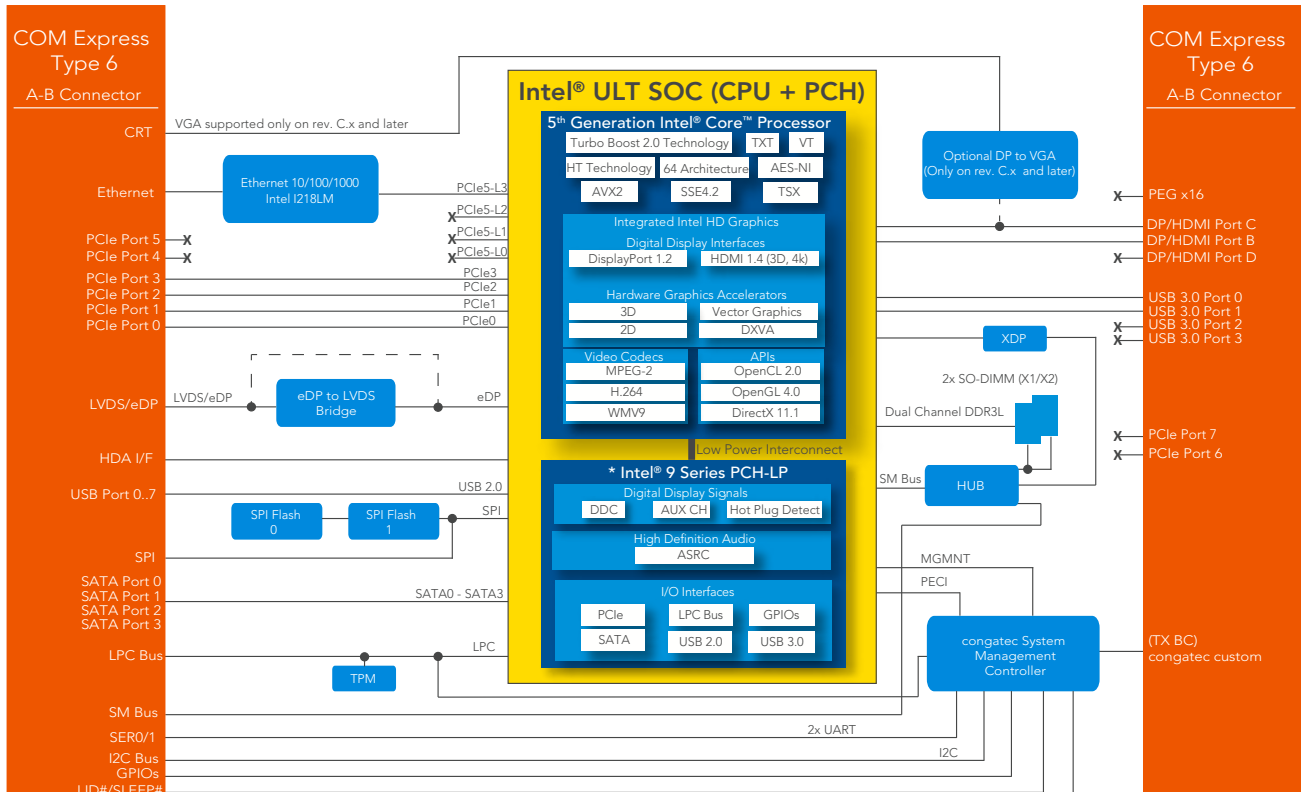


- 5th Gen. Intel® Core™ i7 dual core processor
- 15W nominal TDP
- 3x DisplayPort 1.2, up to 4k resolution
- Intel® AVX 2.0 Vector extension for improved floating point computing
- COM Express Compact Type 6 module

COM  **Express®**

Formfactor	COM Express® Compact, (95 x 95 mm), Type 6 Connector Layout					
CPU	Intel® Core™ i7-5650U	2.2 GHz Dual Core	Turbo Boost 3.1 GHz	4 MB Cache	15W nominal TDP	GT3 HD 6000
	Intel® Core™ i5-5350U	1.8 GHz Dual Core	Turbo Boost 2.9 GHz	3 MB Cache	15W nominal TDP	GT3 HD 6000
	Intel® Core™ i3-5010U	2.1 GHz Dual Core		3 MB Cache	15W nominal TDP	GT2 HD 5500
	Intel® Celeron® 3765U	1.9 GHz Dual Core		2 MB Cache	15W nominal TDP	GT1 HD
	Intel® Turbo Boost 2.0 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	Integrated PCH-LP					
Ethernet	Intel® I218-LM GbE LAN Controller with AMT 10 support					
I/O Interfaces	4x PCI Express™ Gen. 2.0 lanes 4x Serial ATA® RAID 0/1/5/10 support 2x ExpressCard® 2x USB 3.0 (XHCI) 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	Next Generation Intel® HD Graphics with OpenCL 2.0, OpenGL 4.3 and DirectX11.2 support up to three independent displays: 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					
LVDS (eDP optional)	Dual channel LVDS transmitter Supports flat panels 2x24 Bit interface VESA and OpenLDI color mapping resolutions up to 1920x1200, Automatic Panel Detection via EDID/EPI					
Digital Display Interface (DDI)	2x 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 LVDS backlight control 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-TC97 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					
Operating Systems	Microsoft® Windows 10 Microsoft® Windows IoT Enterprise Microsoft® Windows 8 Microsoft® Windows 7 Linux Microsoft® Windows embedded Standard					
Power Consumption	See User's Guide for full details CMOS Battery Backup 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 95 mm (3.74" x 3.74")					

conga-TC97 | Block diagram



conga-TC97 | Order Information

Article	PN	Description
conga-TC97/i7-5650U	045103	COM Express Type 6 Compact module with Intel® Core™ i7-5650U dual core processor with 2.2GHz, 4MB L2 cache and 1600MT/s dual channel DDR3L memory interface.
conga-TC97/i5-5350U	045104	COM Express Type 6 Compact module with Intel® Core™ i5-5350U dual core processor with 1.8GHz, 3MB L2 cache and 1600MT/s dual channel DDR3L memory interface.
conga-TC97/i3-5010U	045105	COM Express Type 6 Compact module with Intel® Core™ i3-5010U dual core processor with 2.1GHz, 3MB L2 cache and 1600MT/s dual channel DDR3L memory interface.
conga-TC97/3765U	045106	COM Express Type 6 Compact module with Intel® Celeron® 3765U dual core processor with 1.9GHz, 2MB L2 cache and 1600MT/s dual channel DDR3L memory interface.
conga-TC170/HSP-B	045230	Standard heatspreader for COM Express modules conga-TC97, TC170 and TC175. All standoffs are with 2.7mm bore hole.
conga-TC170/HSP-T	045231	Standard heatspreader for COM Express modules conga-TC97, TC170 and TC175. All standoffs are M 2.5 threaded.
conga-TC170/CSP-B	045232	Standard passive cooling solution for COM Express modules conga-TC97, TC170 and TC175. All standoffs are with 2.7mm bore hole.
conga-TC170/CSP-T	045233	Standard passive cooling solution for COM Express modules conga-TC97, TC170 and TC175. All standoffs are M 2.5 threaded
conga-TC170/CSA-B	045234	Standard active cooling solution for COM Express modules conga-TC97, TC170 and TC175. All standoffs are with 2.7mm bore hole, 15mm fins, 18mm overall heat sink height and integrated 12V fan.
conga-TC170/CSA-T	045235	Standard active cooling solution for COM Express modules conga-TC97, TC170 and TC175. All standoffs are M 2.5 threaded, 15mm fins, 18mm overall heat sink height and integrated 12V fan.
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
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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