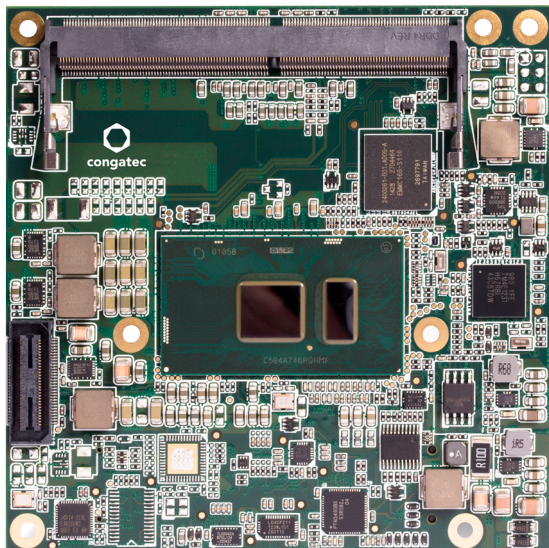


FAST AND COMPACT

conga-TC170

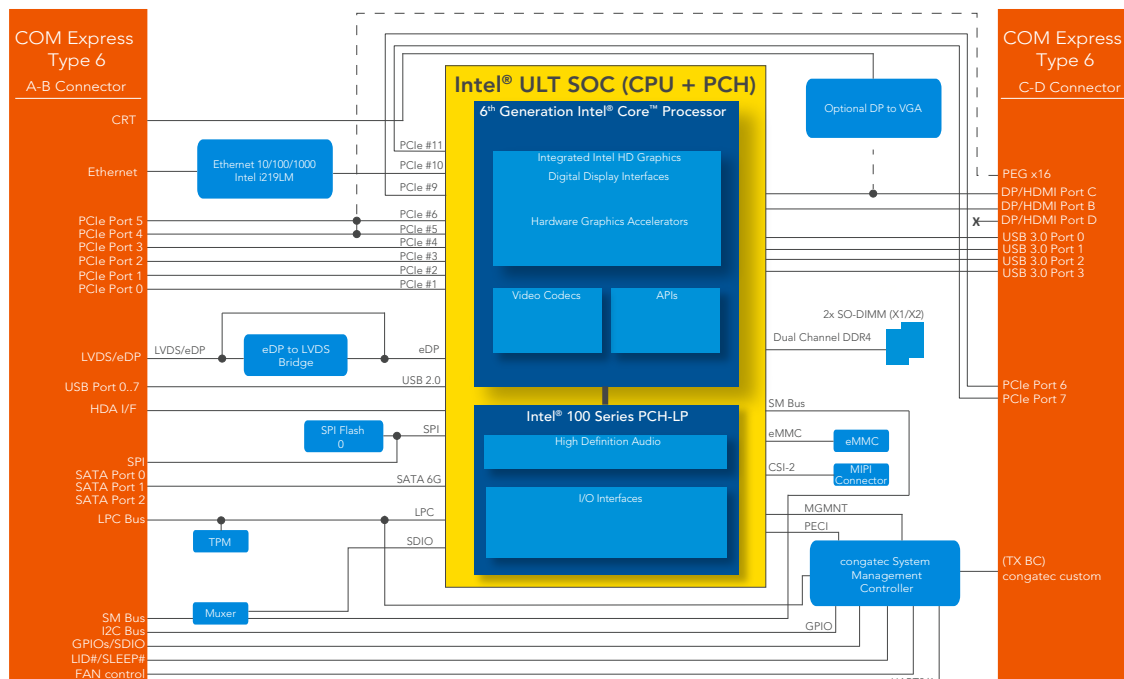


- 6th Generation Intel® Core™ SOC processor (former codename Skylake-U)
- Intel® Gen9 HD Graphics with HEVC (H.265) support
- Low power consumption (TDP 15W, cTDP 8.5W)
- Up to 32GByte dual channel DDR4 memory
- COM Express Compact Type 6 module



Formfactor	COM Express® Compact, (95 x 95 mm), Type 6 Connector Pinout					
CPU	Intel® Core™ i7-6600U	2.6 GHz Dual Core	Turbo Boost 3.4 GHz	4 MB Cache	TDP 15W	GT2 Graphics
	Intel® Core™ i5-6300U	2.4 GHz Dual Core	Turbo Boost 3.0 GHz	3 MB Cache	TDP 15W	GT2 Graphics
	Intel® Core™ i3-6100U	2.3 GHz Dual Core		3 MB Cache	TDP 15W	GT2 Graphics
DRAM	2 Sockets, SO-DIMM DDR4 up to 32GByte dual channel					
Chipset	Integrated PCH-LP					
Ethernet	Intel® i219-LM GbE LAN Controller					
I/O Interfaces	6x PCI Express™ GEN. 3.0 lanes 3x Serial ATA® Gen 3 4x USB 3.0 (XHCI) 8x USB 2.0 (XHCI) LPC bus (no DMA) I²C bus (fast mode, 400 kHz, multi-master) 2x UART					
Sound	Digital High Definition Audio Interface with support for multiple audio codecs					
Graphics	Intel® Gen9 HD Graphics Engine with OpenCL 2.0, OpenGL 4.3 and DirectX12 (for Windows 10) support up to three independent displays: HDMI 1.4a / DisplayPort 1.2 / eDP 1.3 High performance hardware MPEG-2 decoding WMV9 (VC-1) and H.265 (HEVC) support Blu-ray support @ 40 MBit/s HEVC, VP8, VP9 and VDENC encoding					
LVDS	Dual channel LVDS transmitter, Supports flat panels 2x24 Bit interface VESA and openLDI colour mappings resolutions up to 1920x1200 Automatic Panel Detection via EDID/EPI					
Digital Display Interface (DDI)	2x TMDS (HDMI) / DisplayPort 1.2 with support for Multi-Stream Transport (MST) resolutions up to 4k 1x eDP 1.3 VGA (optional)					
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 8/16 MByte serial SPI firmware flash					
Security	The conga-TC170 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 8.1 Microsoft® Windows 7 Linux Microsoft® Windows embedded Standard					
Power Consumption	See User's Guide for full details					
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-TC170 | Block diagram



conga-TC170 | Order Information

Article	PN	Description
conga-TC170/i7-6600U	045200	COM Express Type 6 Compact module with Intel® Core™ i7-6600U dual core processor with 2.6GHz, 4MB L2 cache and 2133MT/s dual channel DDR4 memory interface
conga-TC170/i5-6300U	045201	COM Express Type 6 Compact module with Intel® Core™ i5-6300U dual core processor with 2.4GHz, 3MB L2 cache and 2133MT/s dual channel DDR4 memory interface
conga-TC170/i3-6100U	045202	COM Express Type 6 Compact module with Intel® Core™ i3-6100U dual core processor with 2.3GHz, 3MB L2 cache and 2133MT/s dual channel DDR4 memory interface
conga-TC87/HSP-B*	046953	Standard heatspreader for COM Express module conga-TC170. All standoffs are with 2.7mm bore hole.
conga-TC87/HSP-T*	046954	Standard heatspreader for COM Express module conga-TC170. All standoffs are M 2.5 threaded.
conga-TC87/CSP-B*	046951	Standard passive cooling solution for COM Express module conga-TC170. All standoffs are with 2.7mm bore hole.
conga-TC87/CSP-T*	046952	Standard passive cooling solution for COM Express module conga-TC170. All standoffs are M 2.5 threaded
DDR4-SODIMM-2400 (4GB)	068790	DDR4 SODIMM memory module with 2400 MT/s and 4GB RAM
DDR4-SODIMM-2400 (8GB)	068791	DDR4 SODIMM memory module with 2400 MT/s and 8GB RAM
DDR4-SODIMM-2400 (16GB)	068792	DDR4 SODIMM memory module with 2400 MT/s and 16GB RAM

* cooling solutions also for conga-TC170

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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