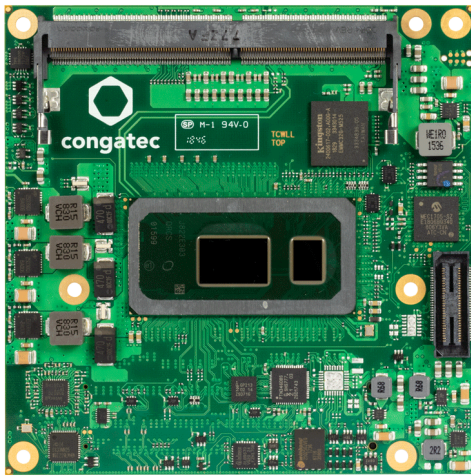


# QUAD CORE COMPACT

# conga-TC370



- 8th Generation Intel® Core™ SOC processor up to 4 cores
- Configuration of display mode by software (LVDS/eDP)
- Low power consumption (TDP 15W, cTDP 10W)
- Up to 64 GByte dual channel DDR4 2400 MT/s
- Optional eMMC 5.1 on board mass storage
- Trusted Platform Module (TPM 2.0)
- COM Express Compact Type 6 module 95x95 mm<sup>2</sup>

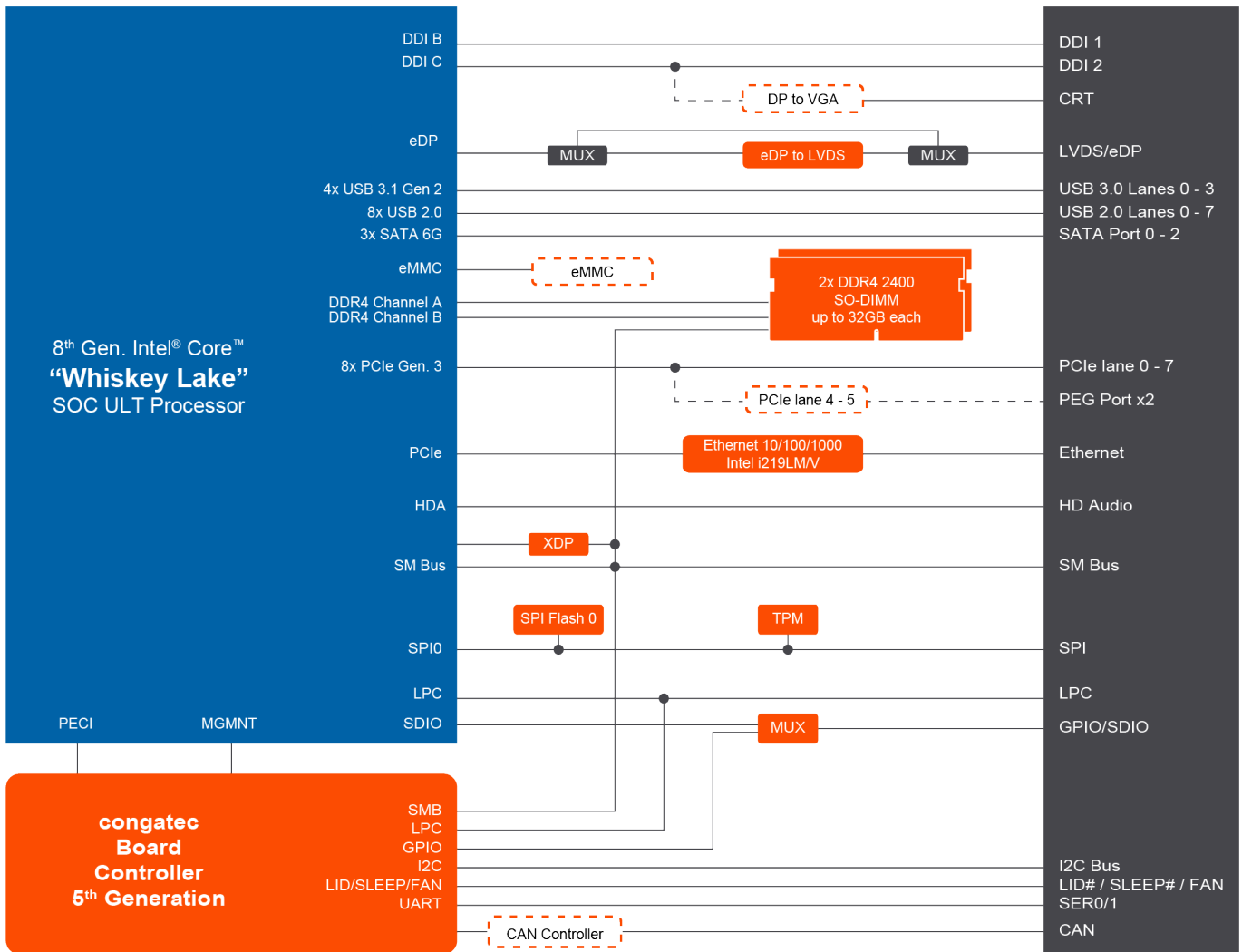



<b>Formfactor</b>	COM Express® Rev. 3.0, Compact Formfactor (95 x 95 mm), Type 6 Connector Pinout				
<b>CPU</b>	Intel® Core™ i7-8665UE	4 Cores   8 Threads	1.7 GHz   4.4 GHz (boost)	8 MB cache	15-25 W cTDP
	Intel® Core™ i5-8365UE	4 Cores   8 Threads	1.6 GHz   4.1 GHz (boost)	6 MB cache	15-25 W cTDP
	Intel® Core™ i3-8145UE	2 Cores   4 Threads	2.2 GHz   3.9 GHz (boost)	4 MB cache	15-25 W cTDP
	Intel® Celeron™ 4305UE	2 Cores   2 Threads	2.0 GHz	2 MB cache	15 W TDP
<b>DRAM</b>	Dual channel DDR4 up to 2400 MT/s   2x SO-DIMM   up to 2x 32 GByte				
<b>Chipset</b>	Integrated in SoC				
<b>Ethernet</b>	Intel® i219-LM/V GbE LAN controller with AMT 12.0 support				
<b>I/O Interfaces</b>	8x PCI Express™ Gen 3.0 lanes   3x SATA Gen 3   4x USB 3.1 Gen 2 @ 10 Gbit/s   8x USB 2.0   LPC bus   I <sup>2</sup> C bus (fast mode, 400 kHz, multi-master)   2x UART				
<b>Sound</b>	Digital High Definition Audio Interface with support for multiple audio codecs				
<b>Graphics</b>	Intel® Gen9 HD Graphics Engine with OpenCL 2.1, OpenGL 4.5 and DirectX 11/12   up to three independent displays: HDMI 2.0a / DisplayPort 1.2 / eDP 1.4 / (VGA optional)   MPEG-2 , WMV9 (VC-1), H.265 decoding   HEVC, VP9 encoding				
<b>Storage</b>	optional eMMC 5.1 on board mass storage				
<b>congatec Board Controller</b>	Multi Stage Watchdog   non-volatile User Data Storage   Manufacturing and Board Information   Board Statistics   I <sup>2</sup> C bus (fast mode, 400 kHz, multi-master)   Power Loss Control   Hardware Health Monitoring   POST Code redirection				
<b>Embedded BIOS Features</b>	AMI Aptio® UEFI 2.x firmware   32 MByte serial SPI firmware flash				
<b>Security</b>	TPM 2.0 Infineon SLB9665				
<b>Power Management</b>	ACPI compliant with battery support   Suspend to RAM (S3) support   S5 enhanced support   Intel AMT 12.0 support				
<b>Operating Systems</b>	Microsoft® Windows 10 (64bit only)   Microsoft® Windows 10 IoT Enterprise (64bit only)   Linux				
<b>Power Consumption</b>	See user's guide for full details				
<b>Temperature</b>	Operating: 0 to +60°C		Storage: -40 to +85°C		
<b>Extended Temperature</b>	Screening service on request:		-25 to +80°C (burn-in & cold-soak) -40 to +85°C (burn-in & cold-soak)		
<b>Humidity</b>	Operating: 10 - 90% r. H. non cond.		Storage: 5 - 95% r. H. non cond.		
<b>Size</b>	95 x 95 mm (3.74" x 3.74")				

# conga-TC370 | Block diagram

conga-TC370

COM Express Rev. 3.0, Compact Size, Type 6 Pinout



 Optional - Not available by default

# conga-TC370 | Order Information

Article	PN	Description
conga-TC370/i7-8665UE	048800	COM Express Type 6 Compact module based on Intel® Core™ i7-8665UE 4-core processor with 1.7GHz up to 4.4GHz turbo boost, 8MB L2 cache, Intel® UHD Graphics 620 and dual channel DDR4 2400 MT/s memory interface (formerly Whiskey Lake).
conga-TC370/i5-8365UE	048801	COM Express Type 6 Compact module based on Intel® Core™ i5-8365UE 4-core processor with 1.6GHz up to 4.1GHz turbo boost, 6MB L2 cache, Intel® UHD Graphics 620 and dual channel DDR4 2400 MT/s memory interface (formerly Whiskey Lake).
conga-TC370/i3-8145UE	048802	COM Express Type 6 Compact module based on Intel® Core™ i3-8145UE 2-core processor with 2.2GHz up to 3.9GHz turbo boost, 4MB L2 cache, Intel® UHD Graphics 620 and dual channel DDR4 2400 MT/s memory interface (formerly Whiskey Lake).
conga-TC370/4305UE	048804	COM Express Type 6 Compact module based on Intel® Celeron™ 4305UE 2-core processor with 2.0GHz, 2MB L2 cache, Intel® UHD Graphics 610 and dual channel DDR4 2133 MT/s memory interface (formerly Whiskey Lake).
conga-TC370/CSA-HP-B	048850	Standard active cooling solution for COM Express Compact modules conga-TC370 with integrated heat pipes, 25.5mm overall cooling height and integrated 12V fan. Through hole mounting with bore hole standoffs Ø2.7mm.
conga-TC370/CSA-HP-T	048851	Standard active cooling solution for COM Express Compact modules conga-TC370 with integrated heat pipes, 25.5mm overall cooling height and integrated 12V fan. Threaded mounting with threaded standoffs M2.5.
conga-TC370/CSP-HP-B	048852	Standard passive cooling solution for COM Express Compact modules conga-TC370 with integrated heat pipes and 24.3mm overall cooling height. Through hole mounting with bore hole standoffs Ø2.7mm.
conga-TC370/CSP-HP-T	048853	Standard passive cooling solution for COM Express Compact modules conga-TC370 with integrated heat pipes and 24.3mm overall cooling height. Threaded mounting with threaded standoffs M2.5.
conga-TC370/HSP-HP-B	048854	Standard heatspreader for COM Express Compact modules conga-TC370 with integrated heat pipes and 11mm overall cooling height. Through hole mounting with bore hole standoffs Ø2.7mm.
conga-TC370/HSP-HP-T	048855	Standard heatspreader for COM Express Compact modules conga-TC370 with integrated heat pipes and 11mm overall cooling height. Threaded mounting with threaded standoffs M2.5.
DDR4-SODIMM-2666 (4GB)	067780	DDR4 SODIMM memory module with 2666 MT/s and 4GB RAM
DDR4-SODIMM-2666 (8GB)	067781	DDR4 SODIMM memory module with 2666 MT/s and 8GB RAM
DDR4-SODIMM-2666 (16GB)	067782	DDR4 SODIMM memory module with 2666 MT/s and 16GB RAM
DDR4-SODIMM-2666 (32GB)	068806	DDR4 SODIMM memory module with 2666 MT/s and 32GB RAM
conga-TEVAL	065810	Evaluation carrier board for Type 6 COM-Express-modules