



















Datasheet

congatec

conga-TC370

COM Express Compact Type 6 Module with Intel® Core i Processor



The information contained in this document has been carefully researched and is, to the best of our knowledge, accurate. However, we assume no liability for any product failures or damages, immediate or consequential, resulting from the use of the information provided herein. Our products are not intended for use in systems in which failures of product could result in personal injury. All trademarks mentioned herein are property of their respective owners. All specifications are subject to change without notice.

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 mm²



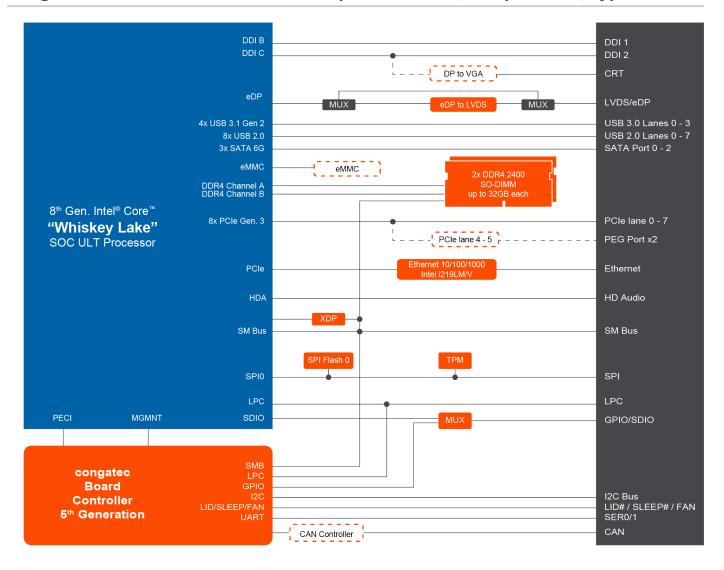
Formfactor	COM Express® Rev. 3.0, Compact Formfactor (95 x 95 mm), Type 6 Connector Pinout					
CPU	Intel® Core™ i7-8665UE Intel® Core™ i5-8365UE Intel® Core™ i3-8145UE Intel® Celeron™ 4305UE	4 Cores 8 Threads 4 Cores 8 Threads 2 Cores 4 Threads 2 Cores 2 Threads	1.7 GHz 4.4 GHz (boost) 1.6 GHz 4.1 GHz (boost) 2.2 GHz 3.9 GHz (boost) 2.0 GHz	8 MB cache 6 MB cache 4 MB cache 2 MB cache	15-25 W cTDP 15-25 W cTDP 15-25 W cTDP 15 W TDP	
DRAM	Dual channel DDR4 up to 2400 MT/s 2x SO-DIMM up to 2x 32 GByte					
Chipset	Integrated in SoC					
Ethernet	Intel® i219-LM/V GbE LAN controller with AMT 12.0 support					
I/O Interfaces	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 ² C 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 2.1, 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					
Storage	optional eMMC 5.1 on board mass storage					
congatec Board Controller	Multi Stage Watchdog non-volatile User Data Storage Manufacturing and Board Information Board Statistics I ² C bus (fast mode, 400 kHz, multi-master) Power Loss Control Hardware Health Monitoring POST Code redirection					
Embedded BIOS Features	AMI Aptio® UEFI 2.x firmware 32 MByte serial SPI firmware flash					
Security	TPM 2.0 Infineon SLB9665					
Power Management	ACPI compliant with battery support Suspend to RAM (S3) support S5 enhanced support Intel AMT 12.0 suppor					
Operating Systems	Microsoft® Windows 10 (64bit only) Microsoft® Windows 10 IoT Enterprise (64bit only) Linux					
Power Consumption	See user's guide for full details					
Temperature	Operating: 0 to +60°C	Storage: -40 to +85°C				
Extended Temperature	Screening service on reques		-25 to +80°C (burn-in & cold-soak) -40 to +85°C (burn-in & cold-soak)			
Humidity	Operating: 10 - 90% r. H. non	cond. Storage	e: 5 - 95% r. H. non cond.			
Size	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		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 2.0GH 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 he 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 he 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 Ø2.7mr		
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		

 $\ensuremath{\text{@}}$ 2019 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. September 05, 2019 AB





Our company network supports you worldwide with offices in Germany, Austria, Switzerland, the UK and the USA. For more information please contact:

Headquarters

Germany





FORTEC Elektronik AG

Augsburger Str. 2b 82110 Germering

Phone: +49 89 894450-0
E-Mail: info@fortecag.de
Internet: www.fortecag.de

Fortec Group Members

Austria





Distec GmbH Office Vienna

Nuschinggasse 12 1230 Wien

Phone: +43 1 8673492-0
E-Mail: info@distec.de
Internet: www.distec.de

Germany





Distec GmbH

Augsburger Str. 2b 82110 Germering

Phone: +49 89 894363-0
E-Mail: info@distec.de
Internet: www.distec.de

Switzerland





ALTRAC AG

Bahnhofstraße 3 5436 Würenlos

Phone: +41 44 7446111
E-Mail: info@altrac.ch
Internet: www.altrac.ch

United Kingdom





Display Technology Ltd.

Osprey House, 1 Osprey Court Hichingbrooke Business Park Huntingdon, Cambridgeshire, PE29 6FN

Phone: +44 1480 411600

E-Mail: info@displaytechnology.co.uk
Internet: www.displaytechnology.co.uk

USA





Apollo Display Technologies, Corp.

87 Raynor Avenue, Unit 1Ronkonkoma, NY 11779

 Phone:
 +1 631 5804360

 E-Mail:
 info@apollodisplays.com

 Internet:
 www.apollodisplays.com