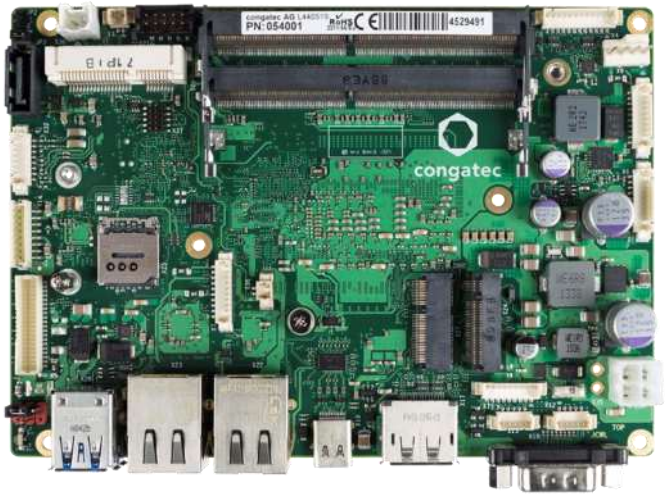
INDUSTRIAL 3.5“QUAD CORE SBC

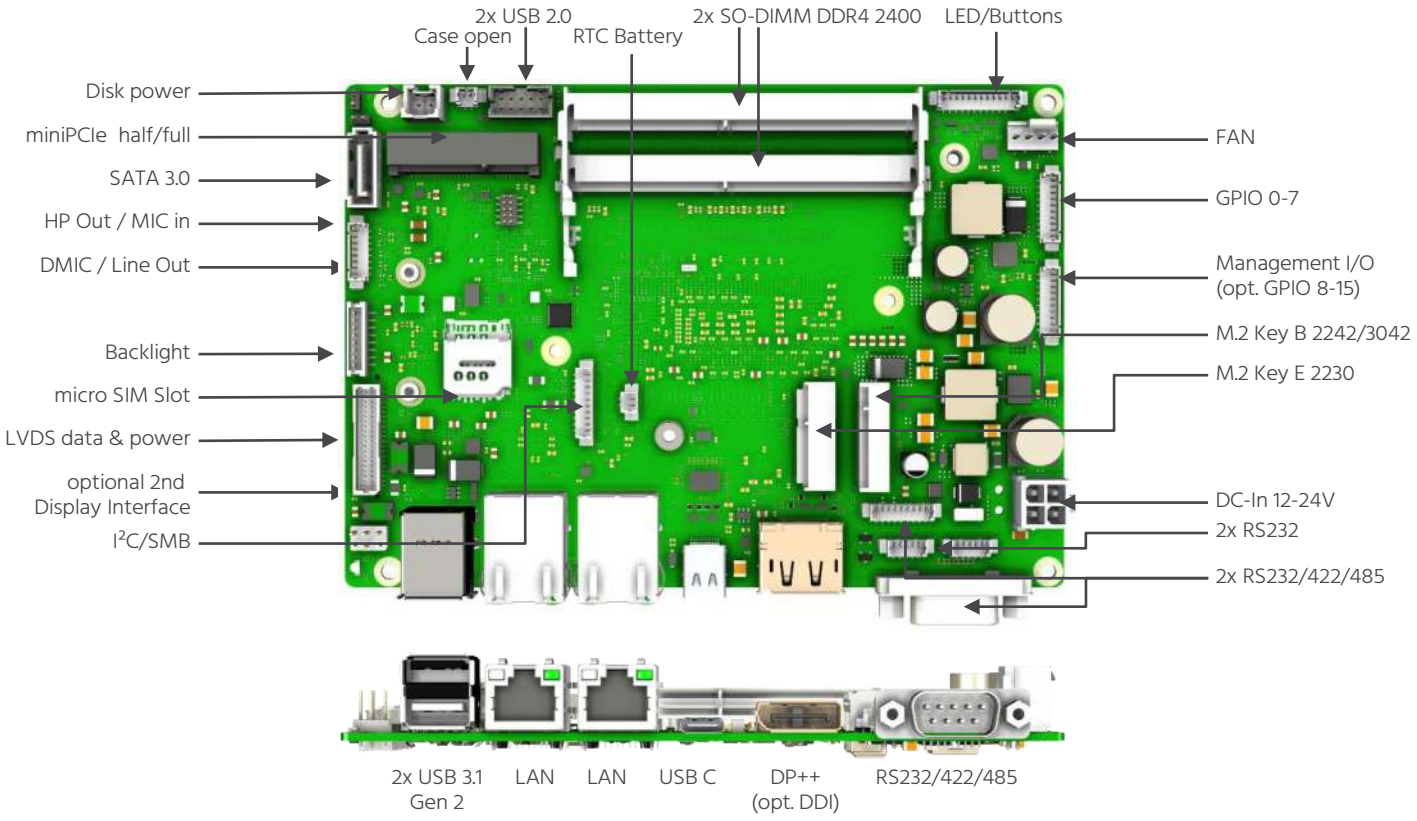
conga-JC370



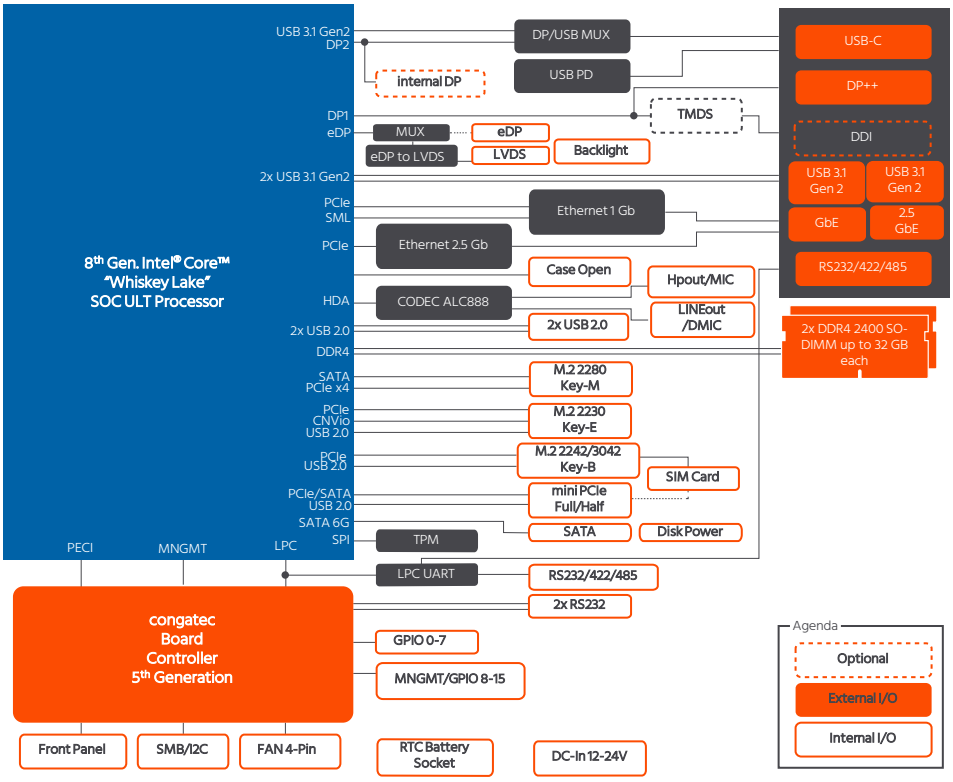
- Highest Performance 3.5” Single Board Computer
- 8th Generation Intel® Core™ SOC processors with up to 4 cores
- Intel® UHD-Graphics 610/620, up to 24 Execution Units
- Up to 64 GByte dual channel DDR4 2400 MT/s
- Multiple Expansion card sockets
- Flexible internal and external Video interfaces
- Wide Range Power Input 12 – 24V
- congatec embedded Board Controller Features

Formfactor	Industrial 3.5" Juke Board | 146 x 102 mm (~ 5.75" x 4.02")				
CPU	Intel® Core™ i7-8665UE	4 Cores | 8 Threads	1.7 GHz | 4.4 GHz (turbo)	8 MB Cache	15 W TDP (12.5-25W cTDP)
	Intel® Core™ i5-8365UE	4 Cores | 8 Threads	1.6 GHz | 4.1 GHz (turbo)	6 MB Cache	15 W TDP (12.5-25W cTDP)
	Intel® Core™ i3-8145UE	2 Cores | 4 Threads	2.2 GHz | 3.9 GHz (turbo)	4 MB Cache	15 W TDP (12.5-25W cTDP)
	Intel® Celeron® 4305UE	2 Cores | 2 Threads	2.0 GHz	2 MB Cache	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® 2.5GbE with TSN support under Linux / Intel® 1GbE with AMT support (AMT with i7 or i5 only)				
Audio	High Definition Audio | Realtek ALC888S-VD Audio Codec				
Graphics	Intel® UHD-Graphics 610/620 Graphics, up to 24 Execution Units				
Expansion Sockets	M.2 key M size 2280 (PCIe x4/SATA) | M.2 key B size 2242/3042 (PCIe/USB/SIM) | M.2 key E size 2230 (PCIe/CNVio/USB) | miniPCIe card slot full/half-size (PCIe/SATA/USB/opt. SIM) | microSIM card slot				
Internal Connectors	LVDS 24bit Dual channel (or opt. eDP) | opt. 2nd LVDS via external adapter | Backlight (power/control) | SATA/eSATA/SATADOM | Disk Power 5V | Dual USB 2.0 | Audio Front Panel (HPout/MIC) | LINEout and DMIC | COM port (RS232/422/485) | Two 4 pin COM ports (RS232) | 8 bit general purpose I/O | Management I/O (opt. 8 GPIOs) | I²C/SM Bus | Front panel (power switch, LEDs, reset,...) | Power DC In (12-24 V) | RTC battery | Intrusion (case open) | FAN (4pin)				
External Connector (Front Panel)	DisplayPort++ | USB 3.1 Gen.2 Type C (PD and DP Alt. Mode) | Dual USB 3.1 Gen.2 Type A | Dual LAN RJ45 | COM DE9 RS232/422/485				
congatec embedded 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 | Hardware Health Monitoring | POST Code redirect				
Embedded BIOS	AMI Aptio® 2.X (UEFI) BIOS | SM-BIOS | BIOS Update | Logo Boot | Quiet Boot | HDD Password				
Security	Trusted Platform Module (TPM 2.0) | Secure Root of Trust | Secure Memory Encryption | Secure Encrypted Virtualization				
Power Specification	Power Supply 12-24V | Power Management | ACPI S3/S4/DeepS5 | Wake on time from S5 | FAN monitored & controlled | see user’s guide for full details				
Operating Systems	Microsoft® Windows 10 (64bit only) | Microsoft® Windows 10 IoT Enterprise (64bit only) | Linux				
Temperature	Operating Temperature: 0 to +60°C	Storage Temperature: -20 to +70°C			
Extended Temperature	Screening service on request:	-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: 5 - 95% r. H. non cond.			
Size	146 x 102 mm (~ 5.75" x 4.02")				

conga-JC370 | Connectors



conga-JC370 | Block diagram



conga-JC370 | Order Information

Article	PN	Description
conga-JC370/i7-8665UE	054001	3.5" SBC based on Intel® Core™ i7-8665UE quad core processor with 1.7GHz, 8MB Intel® Smart Cache, Intel® UHD Graphics 620 and 2400MT/s dual channel DDR4 memory interface (Whiskey Lake-UE)
conga-JC370/i5-8365UE	054002	3.5" SBC based on Intel® Core™ i5-8365UE quad core processor with 1.6GHz, 6MB Intel® Smart Cache, Intel® UHD Graphics 620 and 2400MT/s dual channel DDR4 memory interface (Whiskey Lake-UE)
conga-JC370/i3-8145UE	054003	3.5" SBC based on Intel® Core™ i3-8145UE dual core processor with 2.2GHz, 4MB Intel® Smart Cache, Intel® UHD Graphics 620 and 2400MT/s dual channel DDR4 memory interface (Whiskey Lake-UE)
conga-JC370/4305UE	054005	3.5" SBC based on Intel® Celeron® 4305UE dual core processor with 2.0GHz, 2MB Intel® Smart Cache, Intel® UHD Graphics 610 and 2133MT/s dual channel DDR4 memory interface (Whiskey Lake-UE)
conga-JC370/CSA-B	054050	Standard active cooling solution and integrated 12V fan for conga-JC370 (borehole)
conga-JC370/CSA-T	054051	Standard active cooling solution and integrated 12V fan for conga-JC370 (threaded)
conga-JC370/CSP-B	054052	Standard passive cooling solution for conga-JC370 (borehole)
conga-JC370/CSP-T	054053	Standard passive cooling solution for conga-JC370 (threaded)
conga-JC370/HSP-B	054054	Standard heatspreader solution for conga-JC370 (borehole)
conga-JC370/HSP-T	054055	Standard heatspreader solution for conga-JC370 (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
DDR4-SODIMM-2666 (32GB)	068806	DDR4 SODIMM memory module with 2666 MT/s and 32GB RAM
cab-Backlight ZHR-8, Open End	14000253	Cable for Backlight connector and Open End, 50cm, for conga-JC370
cab-LVDS SHDR-40V, Open End	14000254	Cable for LVDS Panel with JST SHDR-40V connector and Open End, 50cm, for conga-JC370
cab-Backlight ZHR-8 51146-0600	14000255	Cable for Backlight with JST ZHR-8 and Molex 51146-0600 connectors, 50cm for Panel 17" LVDS Panel G170EG01 V.1AUO (Article 10000132)
cab-LVDS SHDR-40V FI-X30HL, 50cm	14000256	Cable for LVDS with JST SHDR-40V and JAE FI-X30HL connectors, 50cm for Panel 17" LVDS Panel G170EG01 V.1AUO (Article 10000132)
cab-pico-ITX-USB20-Twin	14000210	USB 2.0 internal cable adapter – Twin for conga-JC370
cab-Pico-ITX-SATA-Power	14000205	SATA power cable, for 2.5" HDD only (+5V only), cable length 15cm, for conga-JC370
SATA III cable 30 cm, straight/straight	48000029	SATA III cable, 30 cm with data transfer rate of up to 6 Gbps; Connector: straight/straight, for conga-JC370
cab-DSUB9M-PB9	14000252	RS232/422/485 internal Male Cable Adapter, 15cm, for conga-JC370
cab-Pico-ITX-RS232	14000152	RS232 internal 5-wire Cable Adapter, DSUB9 Male, 15cm, for conga-JC370
cab-PicoITX-GPIO Cable	14000151	GPIO Cable, open end, 15 cm for conga-JC370
cab-Pico-ITX-Buttons-LED	14000147	Internal Buttons and LEDs Cable, 15cm, for conga-JC370
cab-ThinMini-ITX-eLVDS, 1:1	14000129	LVDS cable, configuration 1:1, micro-coax, length = 300 mm, for conga-JC370

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