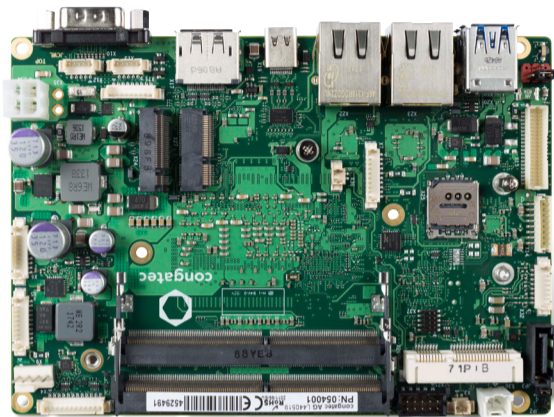


# INDUSTRIAL 3.5" JUKE SBC

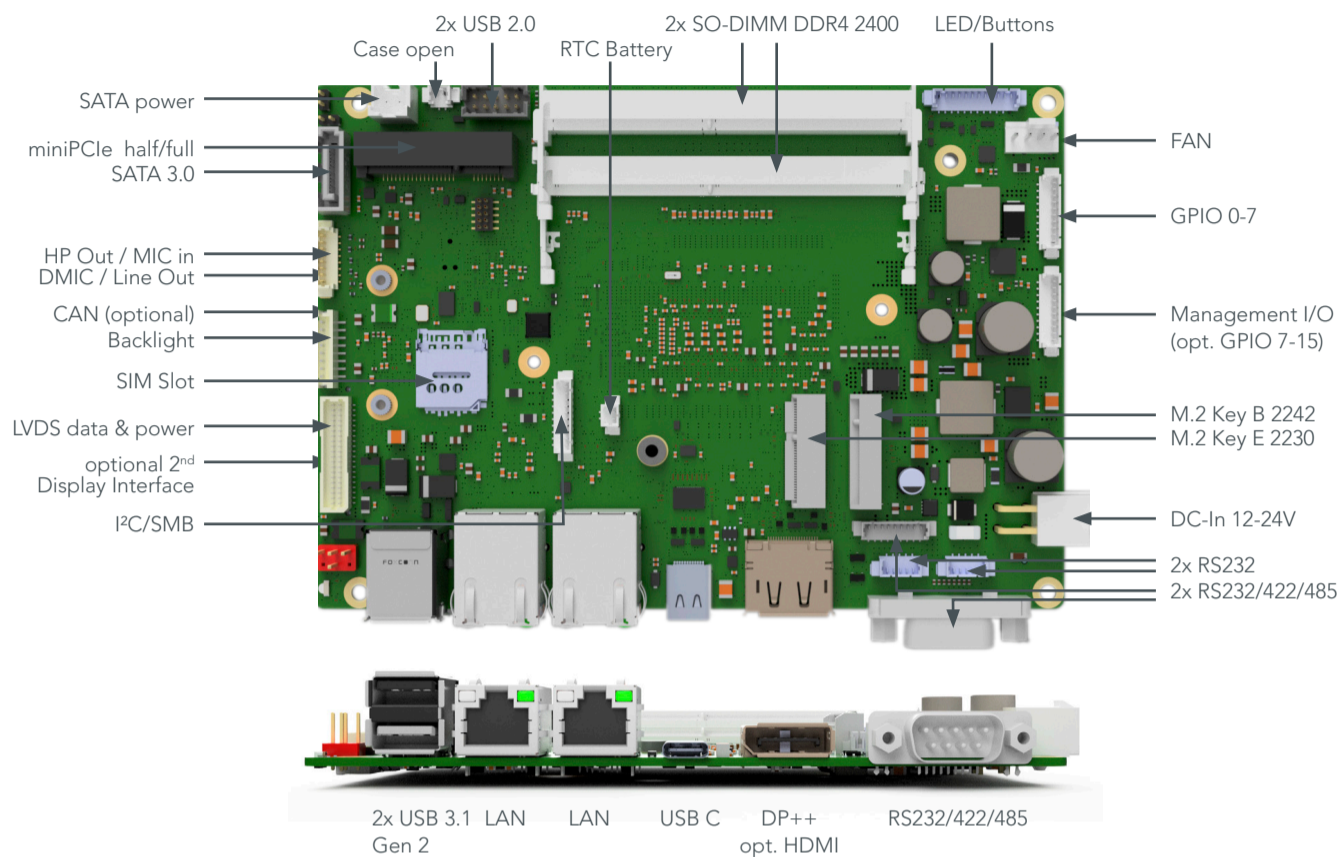
## conga-JC370



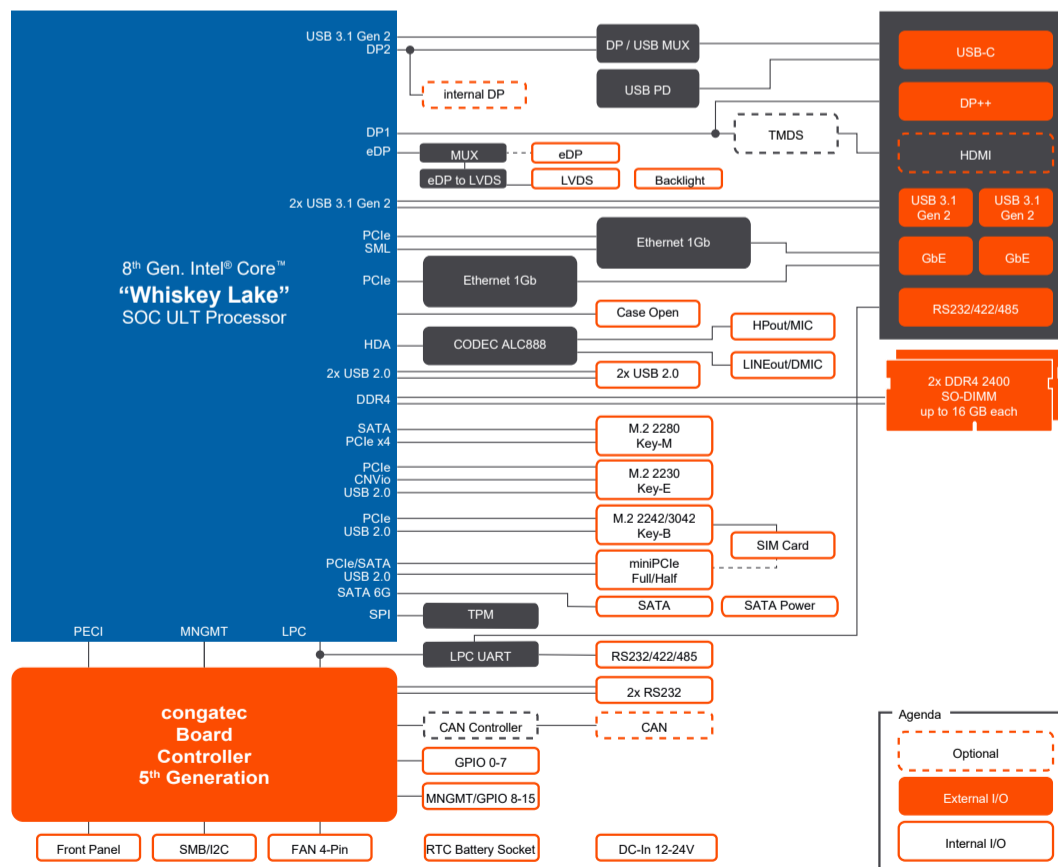
- Highest Performance  
3.5" Single Board Computer
- 8<sup>th</sup> Generation Intel® Core™ Mobile Low Power U-Processors with up to 4 cores
- Gen 9 Intel Graphics, up to 24 Execution Units
- Multiple Expansion card possibilities
- Option for 2<sup>nd</sup> internal video interface
- Wide Range Power Input 12-24 Volt
- congatec embedded Board Controller Features

Formfactor	Industrial 3.5" Juke Board   146 x 102 mm <sup>2</sup>
CPU	Intel® Core™ i3-8145U 3.90 GHz (Burst)   2.1 GHz Clock Dual Core, 4 Threads L2 cache 4MB 15W TDP (configurable to 10/25W) Intel® Core™ i7-8565U 4.60 GHz (Burst)   1.8 GHz Clock Quad Core, 8 Threads L2 cache 8MB 15W TDP (configurable to 10/25W)
DRAM	Dual channel DDR4 up to 2400 MT/s   2x SO-DIMM   up to 2x 32 Gbyte
Chipset	Integrated Intel® 300 Series
Ethernet	Intel® Gigabit Ethernet (with AMT support)   Intel® Gigabit Ethernet (with opt. TSN support)
Sound	High Definition Audio Interface   Realtek ALC888S-VD Audio Codec
Graphics	Intel Gen. 9 Graphics   24 EU
Expansion Sockets	M.2 key M size 2280 (PCIe x4/SATA/Intel® Optane™)   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)   opt. CAN   8 bit general purpose I/O   Management I/O (opt. 8 GPIOs)   I <sup>2</sup> C/SM Bus   Front panel (power switch, LEDs, reset,...)   Power DC In (12-24 V)   RTC battery   Intrusion (case open)   FAN (4pin)
External Connectors (Frontpanel)	DisplayPort++ (or opt. HDMI)   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 Controller	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
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
Operating Temperature:	Operating: 0 .. 60°C   Storage: -20 .. +70°C
Humidity Operating:	Operating: 10 .. 90% r. H.   Storage: 5 .. 95% r.H.
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/i7-8565U	054001	3.5" board based on 8th Gen Intel® Core™ i7-8565U quad core processor with 1.8GHz up to 4.6GHz, 8 MB Intel® Smart Cache, 2400 MT/s dual channel DDR4 SODIMM memory interface
conga-JC370/i3-8145U	054003	3.5" board based on 8th Gen Intel® Core™ i3-8145U dual core processor with 2.1 GHz up to 3.9GHz, 4 MB Intel® Smart Cache, 2400 MT/s dual channel DDR4 SODIMM memory interface

Accessories		Description
conga-JC370/HSP-B	tbd	Standard heatspreader for conga-JC370 (borehole)
conga-JC370/HSP-T	tbd	Standard heatspreader for conga-JC370 (threaded)
conga-JC370/CSP-B	tbd	Standard passive cooling solution for conga-JC370 (borehole)
conga-JC370/CSP-T	tbd	Standard passive cooling solution for conga-JC370 (threaded)
conga-JC370/CSA-B	tbd	Standard active cooling solution and integrated 12V fan for conga-JC370 (borehole)
conga-JC370/CSA-T	tbd	Standard active cooling solution and integrated 12V fan 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
cab-3.5"-UART RS232	tbd	UART cable with 9pin DSUB RS232 connector for conga-IC370
cab-3.5"-UART RS422	tbd	UART cable with 9pin DSUB RS422 connector for conga-IC370
cab-3.5"-UART RS485	tbd	UART cable with 9pin DSUB RS485 connector for conga-IC370
cab-3.5"-SATA-Power	tbd	Sata power cable for conga-JC370
SATA III cable 30cm straight/straight	000029	SATA III cable with 30cm length, shielded, end connectors straight/straight
SATA III cable 30cm down/straight	000030	SATA III cable with 30cm length, shielded, end connectors down/straight
eDP to DP Adapter	052231	eDP to standard DisplayPort evaluation adapter for congatec Thin Mini-ITX, 3.5" and SMARC 2.0.
eDP to HDMI Adapter	052232	eDP to standard HDMI evaluation adapter for congatec Thin Mini-ITX boards and 3.5"
cab-3.5"-USB20-Twin	tbd	Dual USB 2.0 cable for congatec 3.5" family
cab-3.5"-BKLT	tbd	Backlight cable for conga-IC370
Power Supply Unit 90W 19V / 4.74A	000146	PSU, 90W; 19V / 4.74A, Plug 7.4x5.1 / 12.5mm length (PSU for all congatec Thin-Mini ITX)
InternPower-adapter	tbd	Internal Power cable (4 pinMini-Fit to standard PSU #10000145)

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