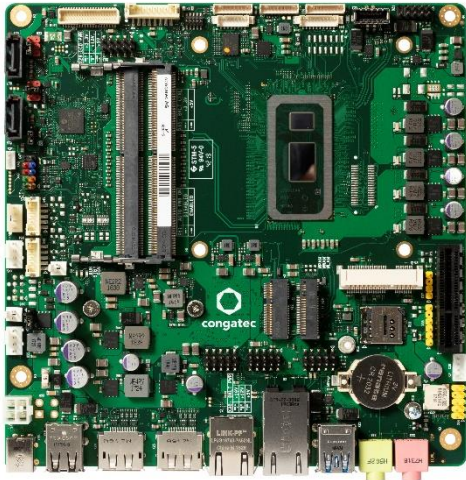


INDUSTRIAL THIN MINI-ITX BOARD

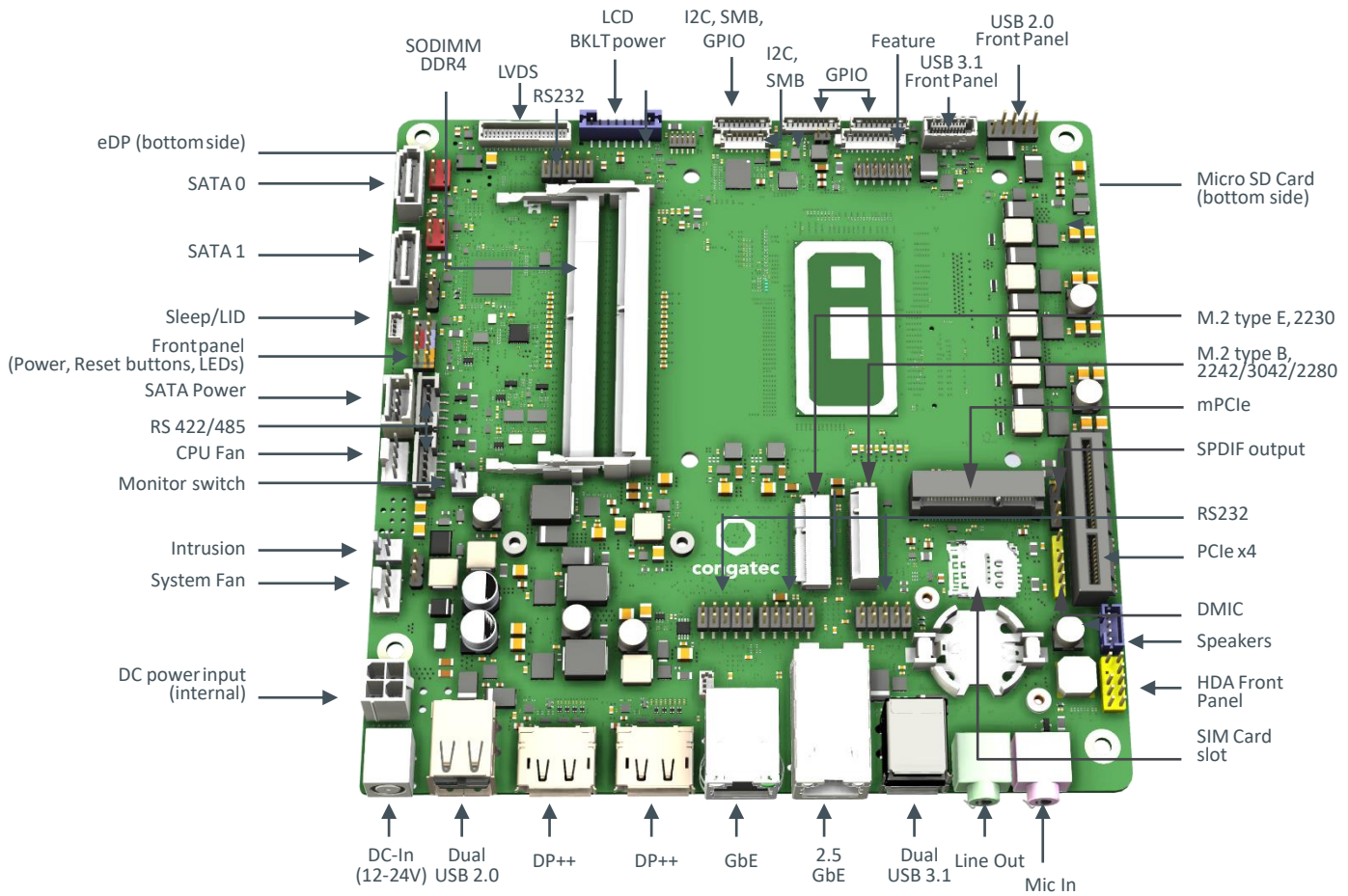
conga-IC370



- Highest Performance Thin Mini-ITX Board
- 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
- Flexible internal and external Video interfaces
- Wide Range Power Input 12 – 24V
- congatec embedded Board Controller Features

Formfactor	Industrial Thin Mini-ITX 170 x 170 x 20 mm ³																				
CPU	<table border="0"> <tr> <td>Intel® Core™ i7-8665UE</td> <td>4 Cores 8 Threads</td> <td>1.7 GHz 4.4 GHz (turbo)</td> <td>8 MB Cache</td> <td>15 W TDP (12.5-25W cTDP)</td> </tr> <tr> <td>Intel® Core™ i5-8365UE</td> <td>4 Cores 8 Threads</td> <td>1.6 GHz 4.1 GHz (turbo)</td> <td>6 MB Cache</td> <td>15 W TDP (12.5-25W cTDP)</td> </tr> <tr> <td>Intel® Core™ i3-8145UE</td> <td>2 Cores 4 Threads</td> <td>2.2 GHz 3.9 GHz (turbo)</td> <td>4 MB Cache</td> <td>15 W TDP (12.5-25W cTDP)</td> </tr> <tr> <td>Intel® Celeron® 4305UE</td> <td>2 Cores 2 Threads</td> <td>2.0 GHz</td> <td>2 MB Cache</td> <td>15 W TDP</td> </tr> </table>	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
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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)																				
Sound	High Definition Audio Interface Realtek ALC888S-VD Audio Codec																				
Graphics	Intel® UHD-Graphics 610/620 Graphics, up to 24 Execution Units																				
Expansion Sockets	PCIe slot (PCIe x4) miniPCIe card slot full/half-size (PCIe/USB/opt. SIM) M.2 key B size 2242/3042/2280 (PCIe x2/USB/SATA/SIM) M.2 key E size 2230 (PCIe/CNVi/USB) microSIM card slot microSD card slot																				
Internal Connectors	LVDS 24bit Dual channel or eDP opt. internal DP (shared with external DP++) Backlight (power/control) 2x SATA/eSATA/SATADOM (6Gbs) with support for VCC pin 7 and 8 SATA power Dual USB 2.0 USB 3.1 Gen. 2 Front panel connector (Key-A) monitor off HDA front panel HD audio internal stereo speaker SPDIF header 2x COM ports (RS232/422/485) 2x COM ports (RS232) 2x 8Bit general purpose I/O opt. Feature connector (Mgmt. pins) I ² C/SM Bus Front panel (power switch, LEDs, reset,...) Intrusion (case open) CPU fan system fan internal power DC-In (12-24 V)																				
External Connectors (Front Panel)	1x DC-In (12-24 V) 2x USB 3.1 Gen.2 (10 Gb/s) 2x DisplayPort DP++ 1x LAN Gbit 1x LAN 2.5 Gbit 2x USB 2.0 Audio In Line Out																				
congatec embedded 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 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/S5/DeepS5/S5e Wake on time from S3/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	170 x 170 x 20 mm ³																				

conga-IC370 | Connectors



conga-IC370 | Block diagram

