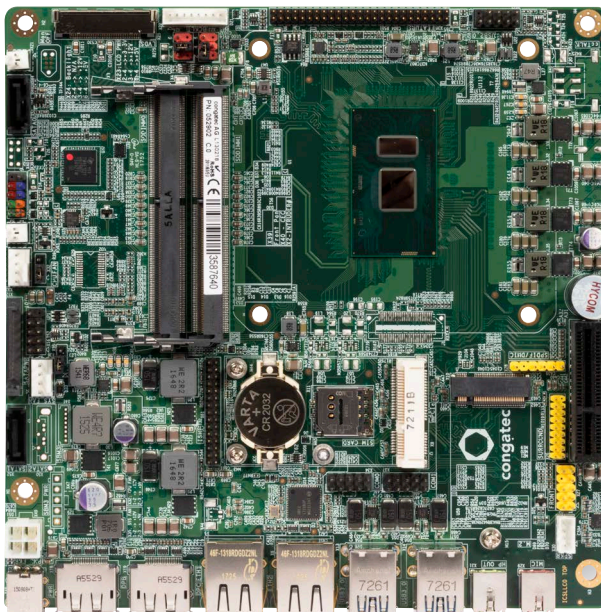


INDUSTRIAL THIN MINI-ITX

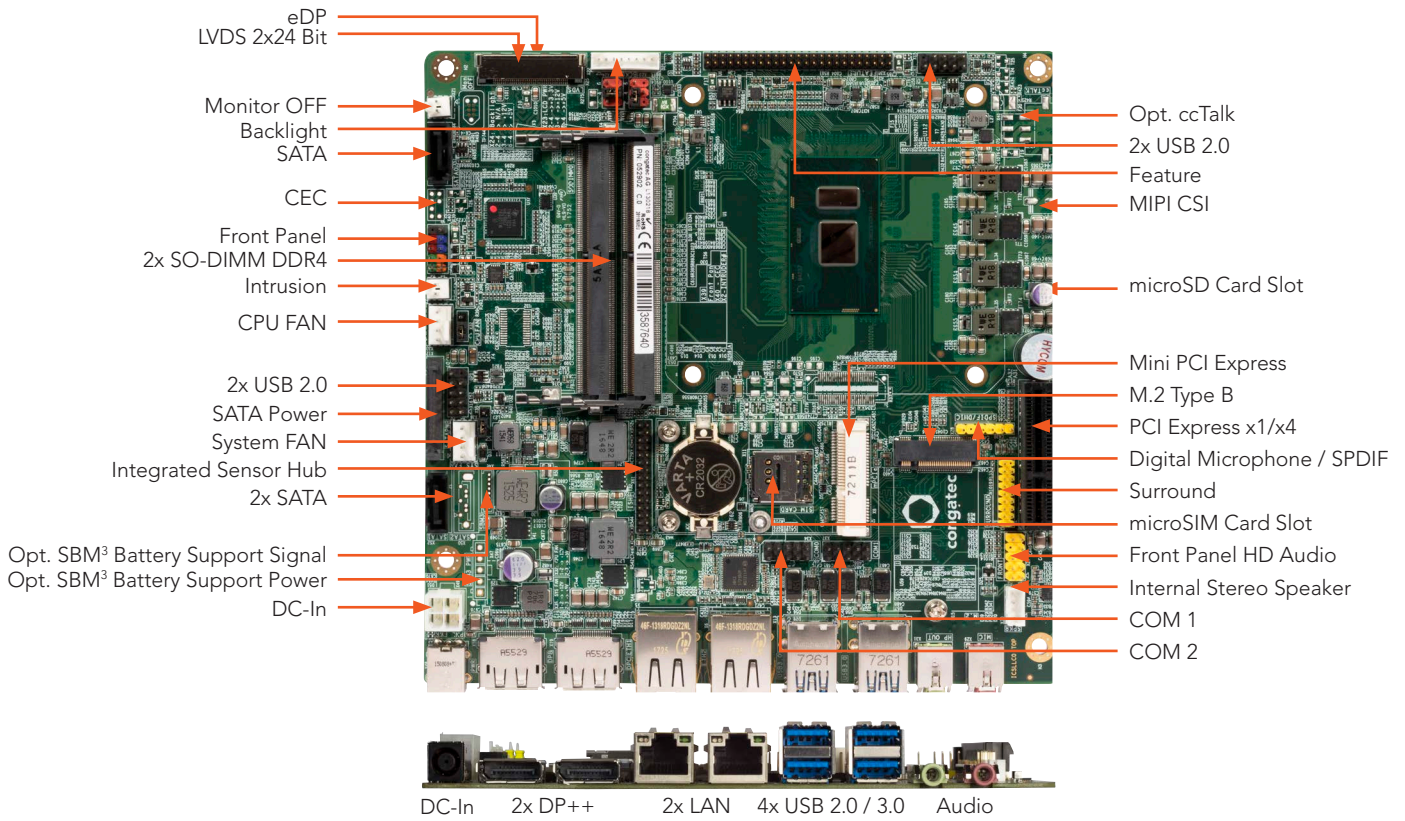
conga-IC170



- Highest Performance Thin Mini-ITX board
- 6th Generation Intel® Core™ Mobile SoC U-Processors
- Improved Graphics Performance with HD500 Series
- Wide Range Power Input 12-24 Volt
- congatec embedded Bios and Board Controller Features

Formfactor	Industrial Thin Mini-ITX 170 x 170 x 20 mm ³					
CPU	Intel® Core™ i7-6600U	2.6 GHz Dual Core	Turbo Boost 3.4 GHz	4 MB Cache	TDP 15W cTDP 7.5W	Intel HD Graphics 520
	Intel® Core™ i5-6300U	2.4 GHz Dual Core	Turbo Boost 3.0 GHz	3 MB Cache	TDP 15W cTDP 7.5W	Intel HD Graphics 520
	Intel® Core™ i3-6100U	2.3 GHz Dual Core		3 MB Cache	TDP 15W	Intel HD Graphics 520
	Intel® Celeron® 3955U	2.0 GHz Dual Core		2 MB Cache	TDP 15W	Intel HD Graphics 510
	Intel® Turbo Boost Technology Intel® Hyper-Threading Technology (HT) Intel® Advanced Vector Extensions 2.0 (AVX2) Intel® Advanced Encryption Standard New Instructions (AES-NI) Integrated dual channel memory controller up to 33,3 GByte/sec. memory bandwidth Integrated Intel® HD Graphics 500 series with dynamic frequency up to 1.05 GHz Intel® Clear Video HD Technology Intel® Virtualization Technology (VT) Intel® Trusted Execution Technology (TXT) Intel® Streaming SIMD Extensions 4.2 (SSE4.2) PCLMULQDQ Instruction Intel® Secure Key Intel® Transactional Synchronization Extensions (TSX)					
DRAM Memory	Support for 2x SO DIMM Socket (dual channel DDR4 up to 2133 MT/s) max. 2x 16 GByte					
Ethernet	1x Intel Gigabit Ethernet PHY i219-LM 1x Intel Gigabit Ethernet Controller i211-AT					
Sound	High Definition Audio Interface Realtek ALC 888S 7.1-channel					
Graphics	Next gen Intel® HD Graphics with OpenCL 2.0 OpenGL 4.X and DirectX12 support up to three independent displays: DDI, DVI, DisplayPort 1.2 High performance hardware MPEG-2 decoding WMV9 (VC-1) and H.264 (AVC) support Blu-ray support @ 40 MBit/s					
Graphic Interfaces	1x 24-bit Dual Channel LVDS Interface or eDP (x4) and 2x DisplayPort					
Internal Connectors	1x PCIe x4 slot (Gen.3) 1x full/half-size Mini PCIe slot M.2 type B 2242 connector 3x SATA (6G) (can be conf. as RAID), one shared with M.2 1x SATA power 4x USB 2.0 1x LVDS (2x24 bit) 1x Embedded DisplayPort (x4) 1x backlight (power & control) 1x monitor off 1x surround 1x front panel HD audio 1x digital microphone (SPDIF) 1x internal stereo speaker 2x serial port (COM2 opt. as ccTALK) 1x feature connector (8 Bit general purpose I/O) connector for Integrated Sensor Hub 1x front panel (power switch, LEDs, reset) 1x intrusion (case open) 1x fan CPU 1x fan system 1x internal power header (12-24 V) 1x CEC 1x microSIM card slot 1x microSD card slot 1x opt. battery header signal + power (SBM3)					
congatec embedded Controller	Multi-Stage watchdog Non-volatile user data storage Manufacturing and board information Board statistics BIOS setup data backup I ² C bus (fast mode, 400 kHz, multi-master) Power loss control					
External Connectors (Rearpanel)	2x DisplayPort++ Audio In Line Out 2x LAN RJ45 4x USB 3.0/2.0 1x DC-In (12-24 V)					
Embedded BIOS	AMI Aptio® 2.X (UEFI) BIOS					
Security	Discrete "Trusted Platform Module" (TPM 2.0) on board					
Power Specification	Power Management ACPI S3/S4/DeepSx Wake on time from S5 Power Supply 12-24 V 2 x fan (CPU / system) monitored & controlled					
Operating Systems	Microsoft® Windows 10 Microsoft® Windows 10 IoT Enterprise Microsoft® Windows 8 Microsoft® Windows 7 Linux Microsoft® Windows® 7/8 embedded Standard					
Power Consumption	See manual for full details					
Temperature	Operating Temperature: 0 to +60°C		Storage Temperature: -20 to +70°C			
Humidity	Operating: 10 to 90% r. H. non cond.		Storage: 5 to 95% r. H. non cond.			
Size	170 x 170 x 20 mm ³					

conga-IC170 | Connectors



conga-IC170 | Block diagram

