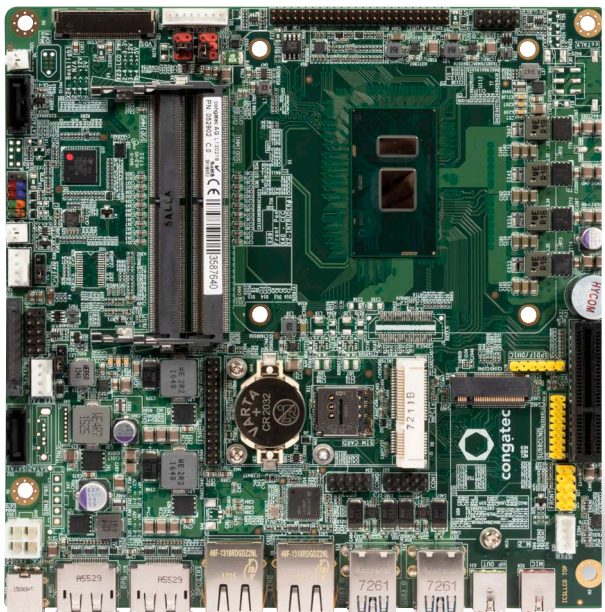


# INDUSTRIAL THIN MINI-ITX

## conga-IC170



- Highest Performance Thin Mini-ITX board
- 6<sup>th</sup> 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 <sup>3</sup>					
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 <sup>2</sup> 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 <sup>3</sup>					

