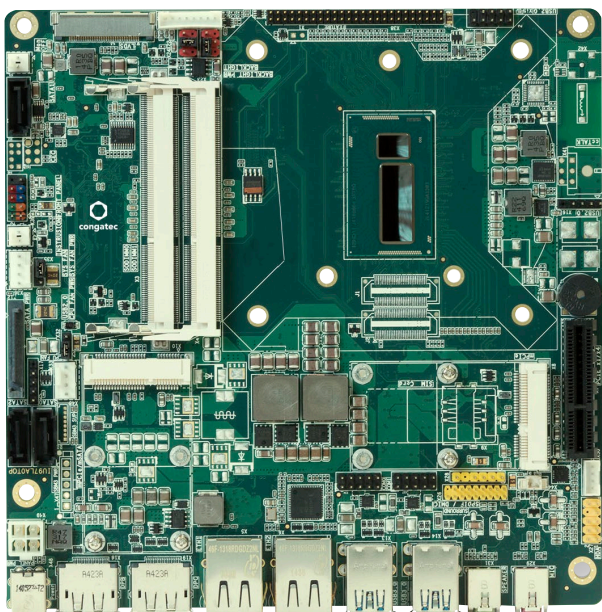


# INDUSTRIAL THIN MINI-ITX

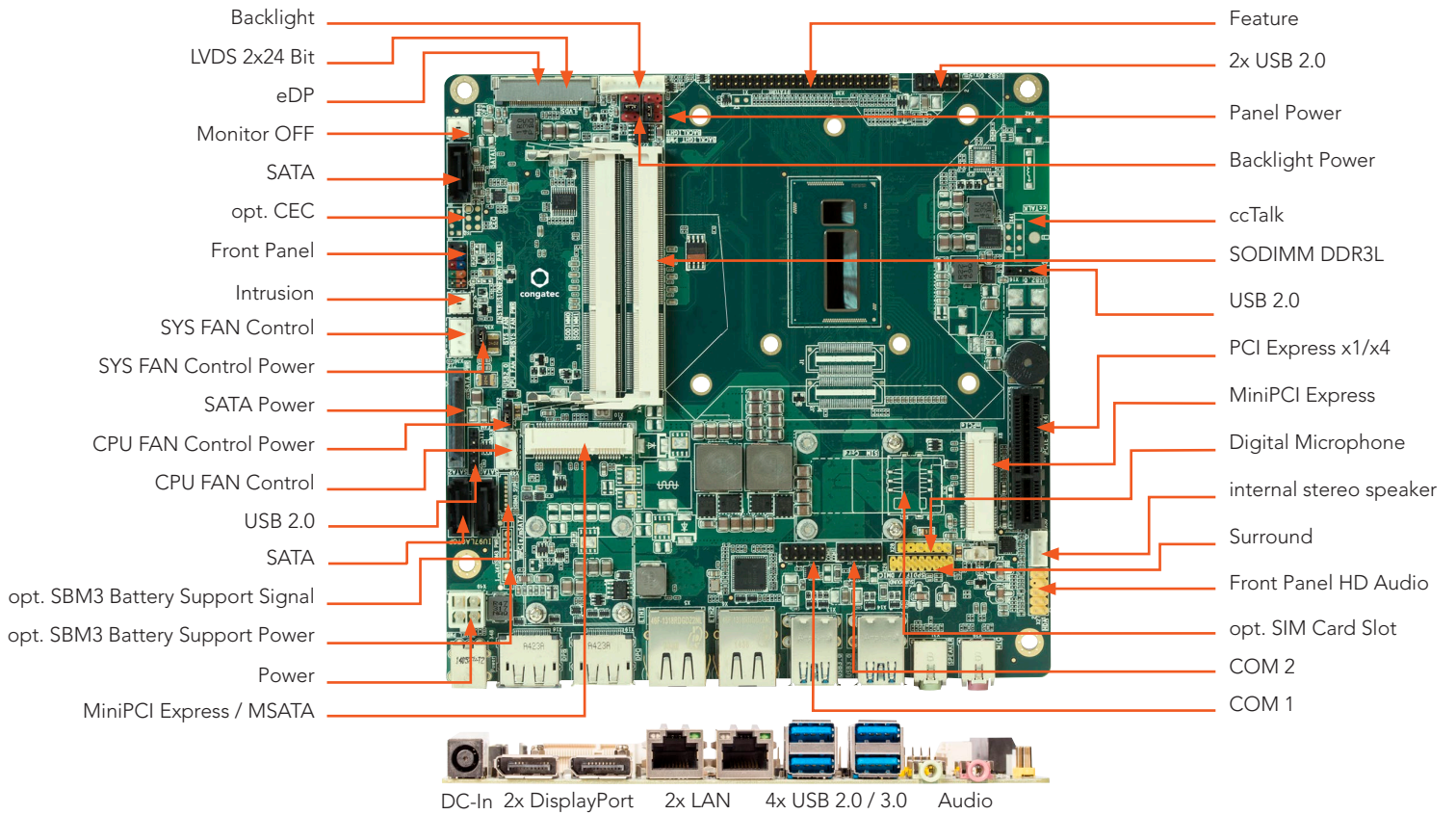
## conga-IC97



- Highest Performance Thin Mini-ITX board
- 5<sup>th</sup> Generation Intel® Core™ Mobile SOC U-Processors
- Improved Graphics Performance up to GT3 HD6000
- Wide Range Power Input 12-24 Volt
- congatec embedded Board Controller Features

Formfactor	Industrial Thin-Mini-ITX   170 x 170 mm					
CPU	Intel® Core™ i7-5650U	2.2 GHz Dual Core	Turbo Boost 3.2 GHz	4 MB Cache	TDP 15W	GT3 HD 6000
	Intel® Core™ i5-5350U	1.8 GHz Dual Core	Turbo Boost 2.9 GHz	3 MB Cache	TDP 15W	GT3 HD 6000
	Intel® Core™ i3-5010U	2.1 GHz Dual Core		3 MB Cache	TDP 15W	HD 6000
	Intel® Celeron® 3765U	1.9 GHz Dual Core		2 MB Cache	TDP 10W	HD Graphics
	Intel® Turbo Boost Technology   Intel® Hyper-Threading Technology (Intel® HT Technology)   Intel® Advanced Vector Extensions 2.0 (Intel® AVX2), Intel® Advanced Encryption Standard New Instructions (Intel® AES-NI)   Integrated dual channel memory controller   up to 25.6 GByte/sec. memory bandwidth   Integrated Intel® HD Graphics 6000 series with dynamic frequency up to 1.1 GHz   Intel® Clear Video HD Technology Intel® Virtualization Technology (Intel® VT)   Intel® Trusted Execution Technology (Intel® TXT)   Intel® Streaming SIMD Extensions 4.2 (Intel® SSE4.2) PCLMULQDQ Instruction   Intel® Secure Key   Intel® Transactional Synchronization Extensions (Intel® TSX)					
DRAM Memory	Support for 2x SO DIMM Socket (dual channel DDR3L up to 1600 MT/s)   max. 16GB					
Ethernet	Dual LAN Gbit / 100 Mbit / 10 Mbit; 1x Intel Gigabit Ethernet PHY i218LM (with AMT support); 1x Intel Gigabit Ethernet Controller i210/i211					
Sound	High Definition Audio Interface   Realtek ALC 888S   7.1-channel					
Graphics	Next Generation Intel® HD Graphics with OpenCL 2.0   OpenGL 4.X and DirectX11.1 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.2)   1x Full/Half-size Mini PCIe Slot shared with PCIe x1 slot   1x Full/Half-size Mini PCIe Slot (shared with mSATA)   3x SATA (6G)   1x mSATA (SATA-III; 600)   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   1x Serial Port COM1 (opt. as ccTALK)   1x Serial Port COM2   1x Feature connector - congatec custom (8 Bit General Purpose I/O)   1x Frontpanel (Power Switch, LEDs, Reset)   1x Intrusion (Case Open)   1x FAN CPU   1x FAN System   1x internal power header (12-24V)   1x opt. battery header signal + power (SBM3)   1x opt. CEC   1x opt. SIM Card Slot					
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 (Frontpanel)	2x DisplayPort dp++   Audio In   Line Out   2x LAN RJ45   4x USB 3.0/2.0   1x PCIe x4 (via extension card)   1x DC-In (external input)					
Embedded BIOS	AMI Aptio® 2.X (UEFI) BIOS; SM-BIOS   BIOS Update   Logo Boot   Quiet Boot   HDD Password					
Security	The conga-IC97 can be optionally equipped with a discrete "Trusted Platform Module" (TPM 1.2 / 2.0). It is capable of calculating efficient hash and RSA algorithms with key lengths up to 2,048 bits and includes a real random number generator. Security sensitive applications such as gaming and e-commerce will benefit also with improved authentication, integrity and confidence levels.					
Power Specification	Power Management   ACPI S3/S4/DeepSx   Wake on time from S5   Power Supply 12V - 24V   2x 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	Typ. application: tbd.   see manual for full details					
Temperature:	Operating: 0 .. +60°C					
Humidity Operating:	Operating: 10 - 90% r. H. non cond.					
Size	170 x 170 mm (6.7" x 6.7")					

# conga-IC97 | Connectors



# conga-IC97 | Block diagram

