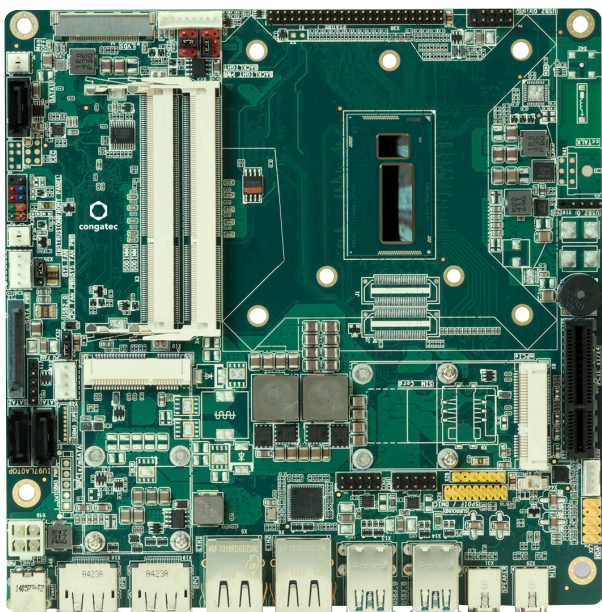


INDUSTRIAL THIN MINI-ITX

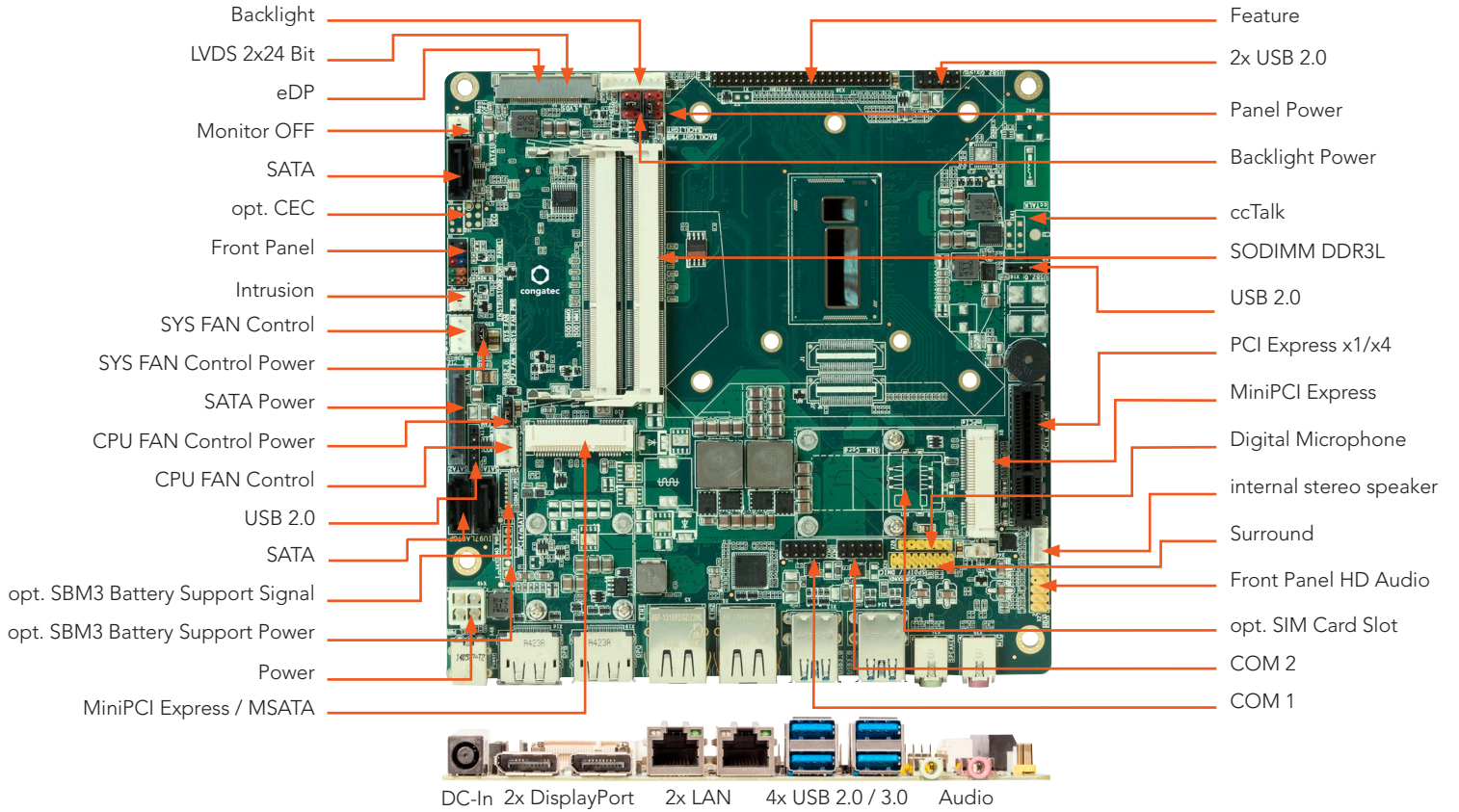
conga-IC97



- Highest Performance Thin Mini-ITX board
- 5th 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 ² 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

