

PROFESSIONAL THIN MINI-ITX

conga-IA3

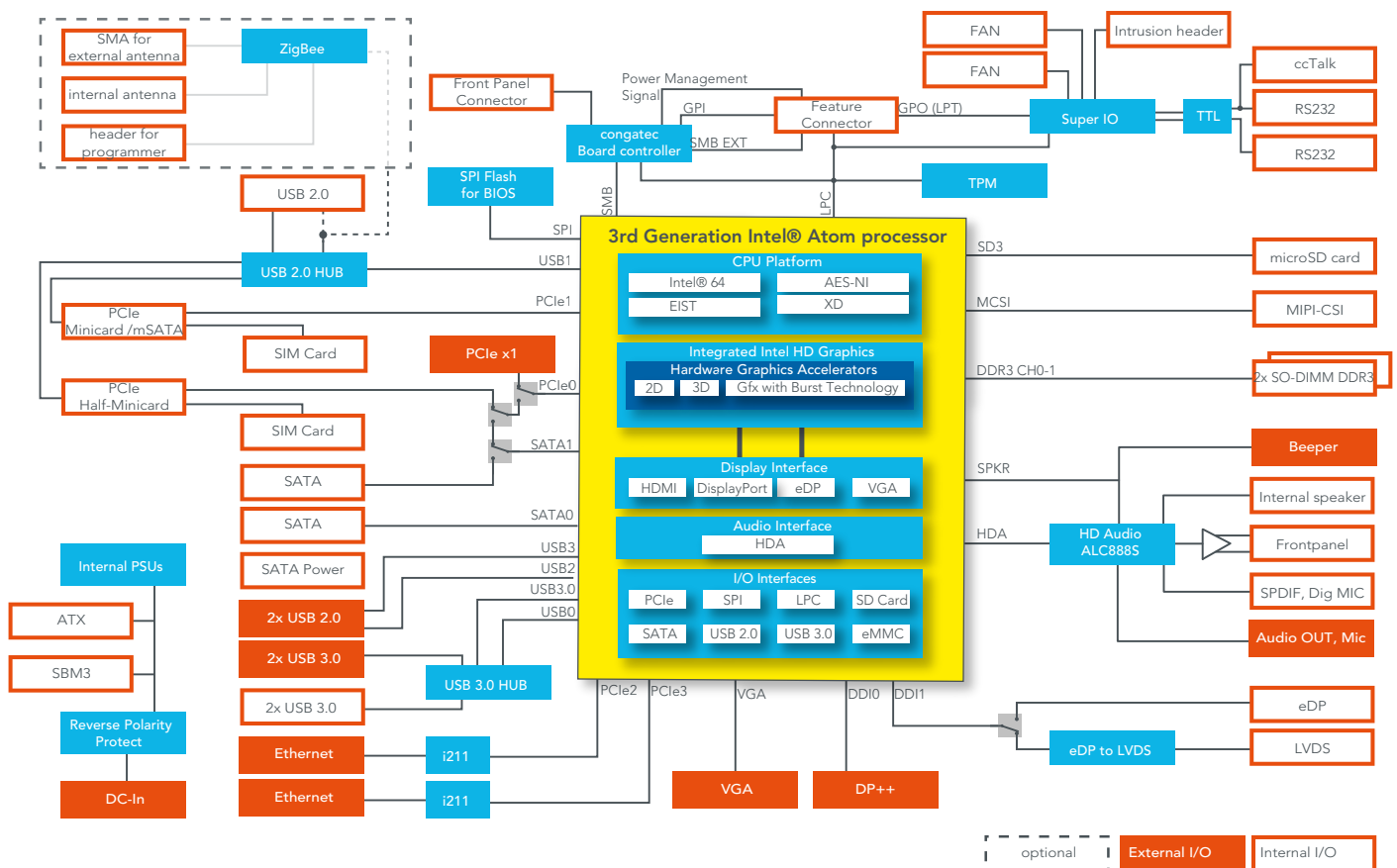


preliminary image

- 3rd Generation Intel® Atom™ / Celeron® Processor
- Burst Technology
- Low Power 5 to 10 Watt TDP
- Enhanced Intel HD Graphics Generation 7
- Long life components for 24/7 embedded use

Formfactor	Professional Thin-Mini-ITX 170 x 170 mm				
CPU	Intel® Atom™ E3845	1.91 GHz Quad Core	2 MB L2 Cache	10W TDP	
	Intel® Atom™ E3827	1.7 GHz Dual Core	1 MB L2 Cache	8W TDP	
	Intel® Atom™ E3826	1.46 GHz Dual Core	1 MB L2 Cache	7W TDP	
	Intel® Atom™ E3825	1.33 GHz Dual Core	1 MB L2 Cache	6W TDP	
	Intel® Atom™ E3815	1.33 GHz Single Core	512 kb L2 Cache	5W TDP*	
	Intel® Celeron® J1900	2.42 GHz Quad Core	2 MB L2 Cache	10W TDP	
	Intel® Celeron® N2930	2.00 GHz Quad Core	2 MB L2 Cache	7.5W TDP	
	* the marked variants will not be produced in the first step				
DRAM Memory	2x SODIMM sockets (dual channel DDR3L up to 1600 MT/s) to support a max. memory size of 16GB				
Ethernet	Dual LAN Gbit / 100 Mbit / 10 Mbit; 2x Intel Gigabit Ethernet i210 controller (with AMT support)				
Sound	High Definition Audio Interface Realtek ALC 888S 7.1-channel				
Graphics	Next Generation Intel® HD Graphics with OpenCL 1.2 OpenGL 4.0 and DirectX11.1 support; up to three independent displays: HDMI 1.4 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 1x DisplayPort DP++				
Internal Connectors	1x PCIe x1 Slot shared with mSATA/mPCIe 1x mPCIe Full Size shared with mSATA 1x mPCIe Half Size 2x SATA (6G) 1x mSATA (shared with SATA) 1x SATA Power 2x USB 3.0/2.0 2x USB 2.0 Header 2x USB 2.0 internally 1x LVDS (2x24 bit) 1x Embedded DisplayPort (x4) 1x Backlight (Power control) 1x Front Panel HD Audio 2x Serial Port COM1 (opt. as ccTALK) 1x Feature connector - congatec custom (8 Bit General Purpose I/O) 1x Frontpanel (Power Switch, LEDs, Reset) 1x FAN CPU 1x FAN System 1x internal power header (12-19V) 1x opt. battery header signal + power (SBM3)				
External Connectors (Frontpanel)	1x DisplayPort DP++ 1x VGA 3.5mm audio jack (stereo out and mono in) 2x LAN RJ45 2x USB 3.0/2.0 2x USB 2.0 1x DC-In (external input)				
congatec embedded Controller	Multi-Stage Watchdog non-volatile User Data Storage Manufacturing and Board Information Board Statistics BIOS Setup Data Backup I²C bus (fast mode 400 kHz multi-master) Power Loss Control				
Embedded BIOS	AMI Aptio® 2.X (UEFI) BIOS; SM-BIOS BIOS Update Logo Boot Quiet Boot HDD Password				
Security	The conga-IA3 can be optionally equipped with a discrete "Trusted Platform Module" (TPM 1.2). 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 - 19V (opt. 6-24V) 2 x FAN (CPU, system) monitored & controlled				
Operating Systems	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-IA3 | Block diagram



conga-IA3 | Order Information

Article	PN	Description
conga-IA3/E3845	052300	Thin Mini-ITX board based on Intel® Atom™ E3845 quad core processor with 1.91GHz, 2MB L2 cache and 1333MT/s dual channel DDR3L SODIMM memory interface.
conga-IA3/E3826	052301	Thin Mini-ITX board based on Intel® Atom™ E3826 dual core processor with 1.46GHz, 1MB L2 cache and 1066MT/s dual channel DDR3L SODIMM memory interface.
conga-IA3/J1900	052310	Thin Mini-ITX board based on Intel® Celeron® J1900 quad core processor with 2.00GHz, 2MB L2 cache and 1333MT/s dual channel DDR3L SODIMM memory interface.
conga-IA3/N2930	052311	Thin Mini-ITX board based on Intel® Celeron® N2930 quad core processor with 1.83GHz up to 2.00GHz, 2MB L2 cache and 1333MT/s dual channel DDR3L SODIMM memory interface. Thermal Design Power 7.5W.

Accessories

conga-IA3/Retention Frame	052355	Retention frame for standard cooling for conga-IA3
conga-IA3/IO Shield - Standard	052356	IO shield for conga-IA3 with Standard Mini-ITX height
conga-IA3/IO Shield - Thin	052357	IO shield for conga-IA3 with Thin Mini-ITX height
conga-IA3/CSP	052351	Passive cooling solution for conga-IA3 with Thin Mini-ITX height
DDR3L-SODIMM-1600 (2GB)	068755	DDR3L SODIMM memory module with 1600 MT/s (PC3L-12800S) and 2GB RAM
DDR3L-SODIMM-1600 (4GB)	068756	DDR3L SODIMM memory module with 1600 MT/s (PC3L-12800S) and 4GB RAM
DDR3L-SODIMM-1600 (8GB)	068757	DDR3L SODIMM memory module with 1600 MT/s (PC3L-12800S) and 8GB RAM