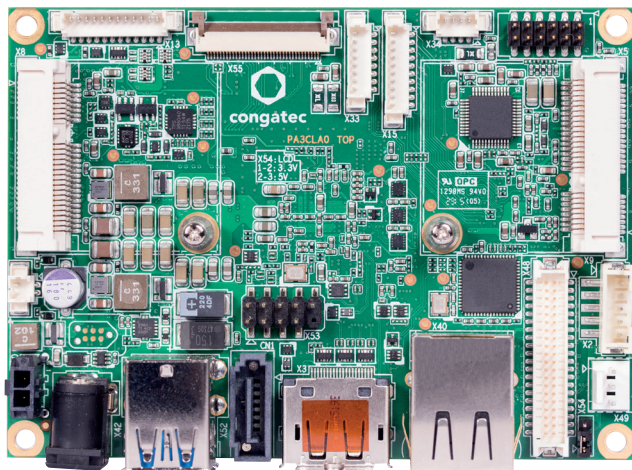


# INDUSTRIAL PICO-ITX

## conga-PA3

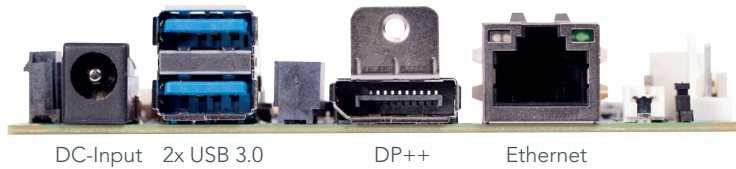
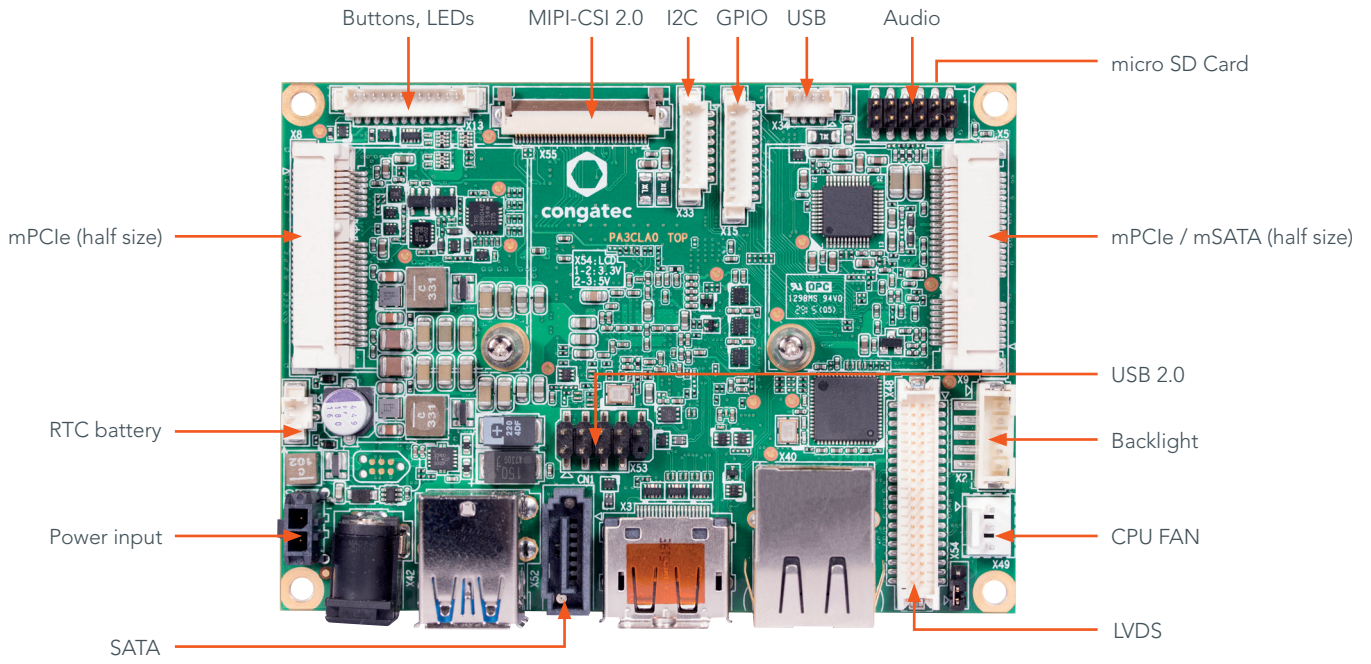


- Compact and complete for small Industry 4.0
- 3<sup>rd</sup> Generation Intel® Atom™ / Celeron® Processor
- Low Power 5 to 10 Watt TDP
- Enhanced Intel HD Graphics Generation 7
- Long life components for 24/7 embedded use
- Smallest SBC computing and connecting device
- Extended Temperature

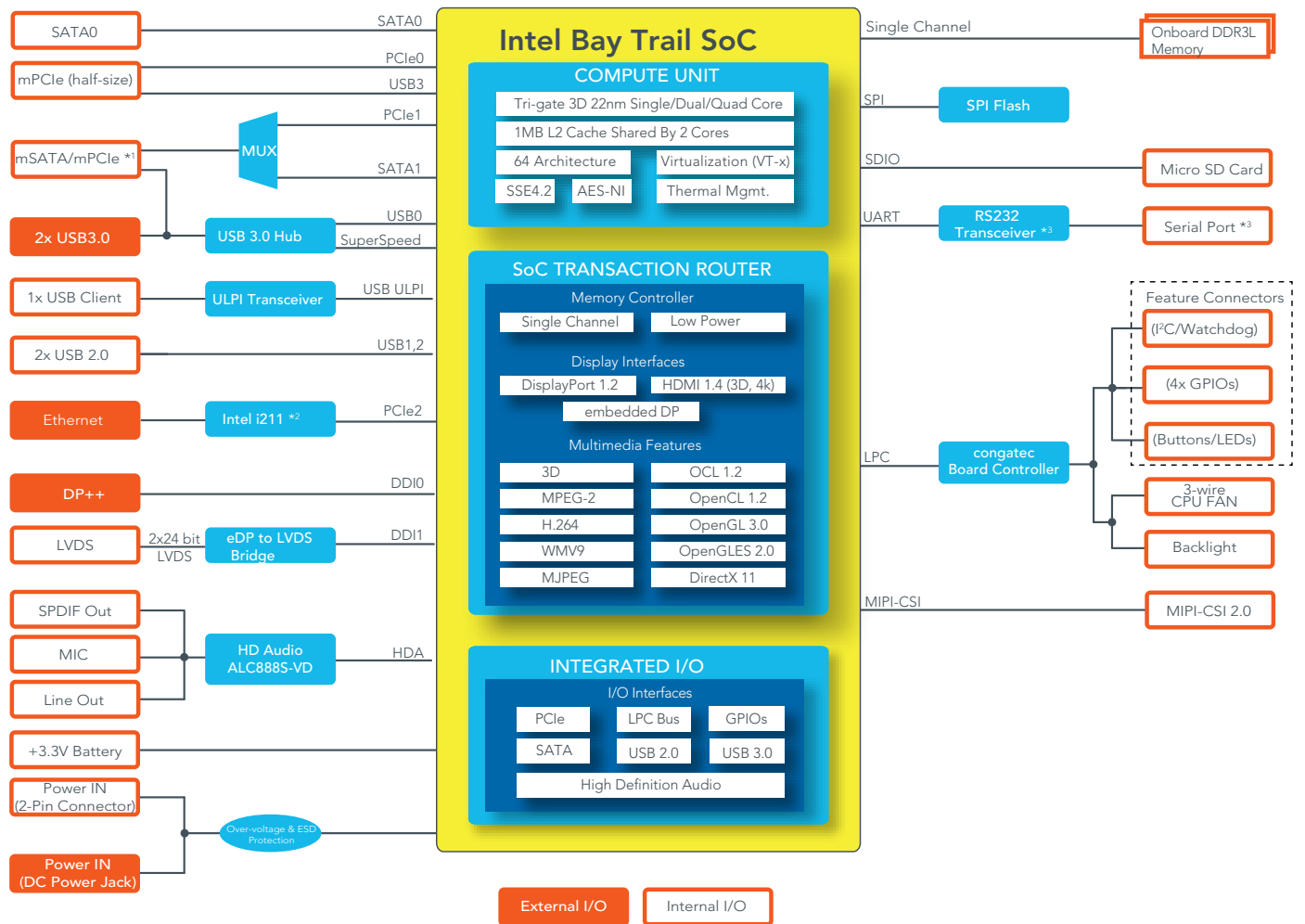
Formfactor	pico-ITX Singleboard Computer   100x72 mm			
CPU	Intel® Atom™ E3845	1.91 GHz Quad Core	2 MB L2 Cache	10W TDP
	Intel® Atom™ E3826	1.46 GHz Dual Core	1 MB L2 Cache	7W TDP
	Other Variants by request			
DRAM Memory	Single Channel up to 4GB onboard DDR3L with 1333 MHz			
Chipset	Integrated in SoC			
Ethernet	LAN Gbit / 100 Mbit / 10 Mbit   Intel Gigabit Ethernet i211 controller (i210 for industrial temperature)			
Sound	High Definition Audio Interface*   Realtek ALC 888S-VD   7.1-channel			
Graphics	Next Generation Intel® HD Graphics			
Graphic Interfaces	1x 24-bit Dual Channel LVDS Interface* (via eDP to LVDS converter PTN3460)   1x DisplayPort DP++   resolution up 1920x1200 with 60Hz			
Internal Connectors	1x mPCIe Half Size   1x mPCIe Half Size shared with mSATA   1x SATA (3G) (no SATA power)   2x USB 2.0   1x USB 2.0 Client support 1x LVDS* 2x24bit   1x Backlight power connector   1x Line Out   1x Mic In   1x S/PDIF Out   1x Power In (+12V) 1x COM (RS-232)   1x Fan Connector   1x Feature Connector   micro SD Card   MIPI-CSI 2.0			
External Connectors (Frontpanel)	1x DisplayPort DP++   1x LAN RJ45   2x USB 3.0   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 I <sup>2</sup> C 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			
Power Specification	Power Supply 12V   1 x FAN   RTC battery*			
Operating Systems	Microsoft® Windows 8   Microsoft® Windows 7   Linux   Microsoft® Windows® 7/8 embedded Standard			
Operating Temperature:	Commercial: 0 .. +60°C Industrial: -40 + 85°C			
Humidity Operating:	Operating: 10 - 90% r. H. non cond.			
Size	100 x 72 mm (3.9" x 2.8")			

\* not supported in industrial version

# conga-PA3 | Connectors



# conga-PA3 | Block diagram



- \*1 The mSATA/mPCIe connector supports both mPCIe and mSATA devices. The devices are detected automatically.
- \*2 Industrial variants are equipped with Intel i210 controller.
- \*3 Revision B.x and later are equipped with a multiprotocol transceiver.

# conga-PA3 | Order Information

Article	PN	Description
conga-PA3/E3845-4G	047700	pico-ITX board based on Intel® Atom™ E3845 quad core processor with 1.91GHz, 2MB L2 cache and 4GB 1333MT/s onboard memory.
conga-PA3/E3826-2G	047701	pico-ITX board based on Intel® Atom™ E3826 dual core processor with 1.46GHz, 1MB L2 cache and 2GB 1066MT/s onboard memory.
conga-PA3/i-E3845-4G	047720	pico-ITX board based on Intel® Atom™ E3845 quad core processor with 1.91GHz, 2MB L2 cache and 4GB 1333MT/s onboard memory. Extended temperature version -40°C to 85°C without audio functionality.
conga-PA3/i-E3826-2G	047721	pico-ITX board based on Intel® Atom™ E3826 dual core processor with 1.46GHz, 1MB L2 cache and 2GB 1066MT/s onboard memory. Extended temperature version -40°C to 85°C without audio functionality.
conga-PA3/HSP	047750	Heatspreader solution conga-PA3. All standoffs are with 2.7 bore hole.
conga-PA3/CSP	047753	Passive cooling solution for conga-PA3. Includes conga-PA3/HSP heatspreader and heat sink with 12mm fins. All standoffs are with 2.7mm bore hole.