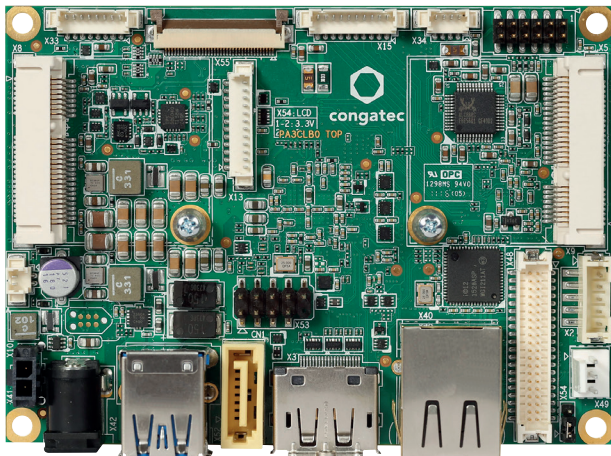


INDUSTRIAL PICO-ITX

conga-PA3

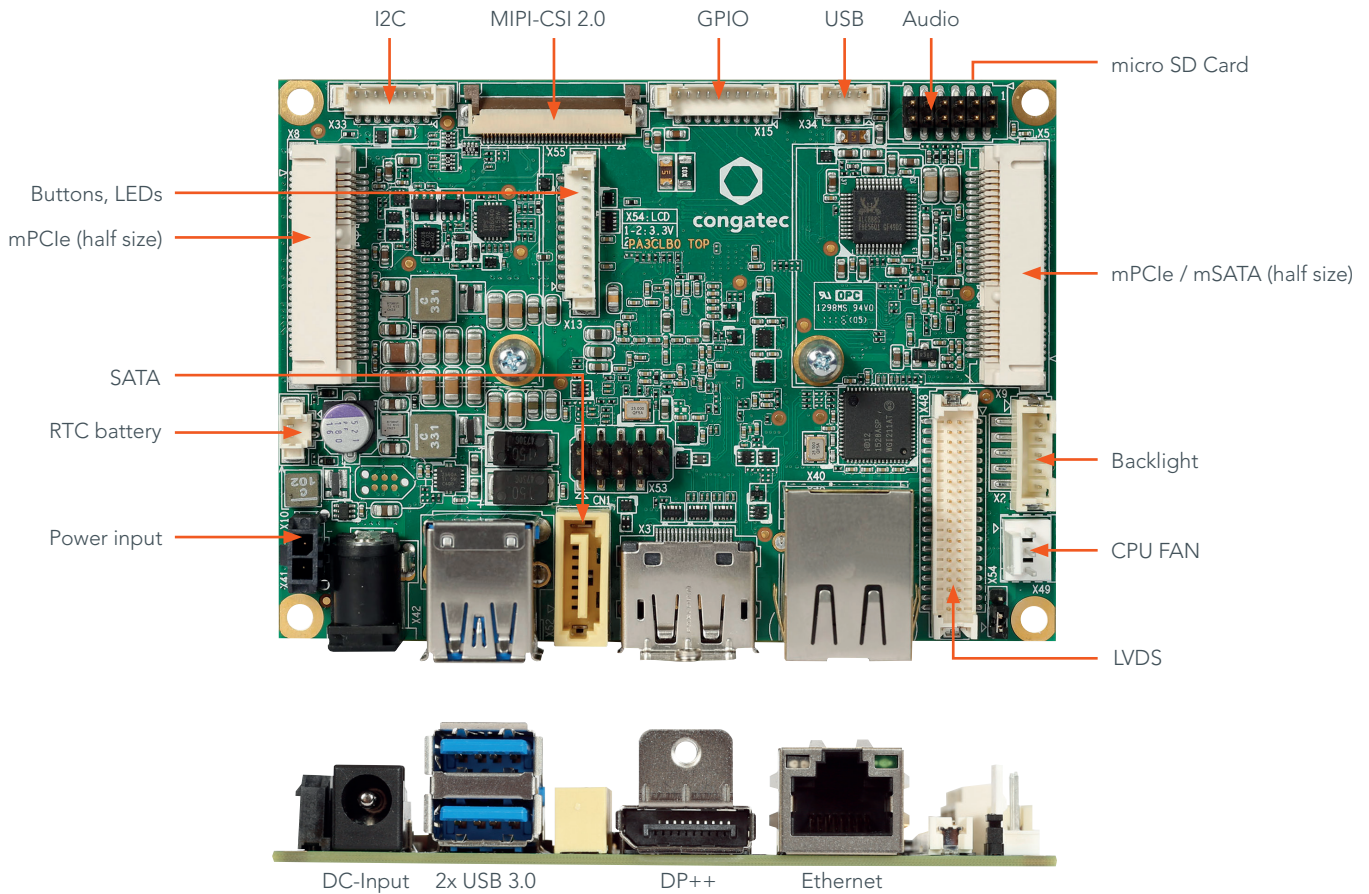


- Compact and complete for small Industry 4.0
- 3rd Generation Intel® Atom™ / Celeron® Processor
- Low Power 5 to 10 Watt TDP
- Enhanced Intel HD Graphics Generation 7
- Long life components for 24/7 embedded use
- Smallest SBC computing and connecting device
- Extended Temperature

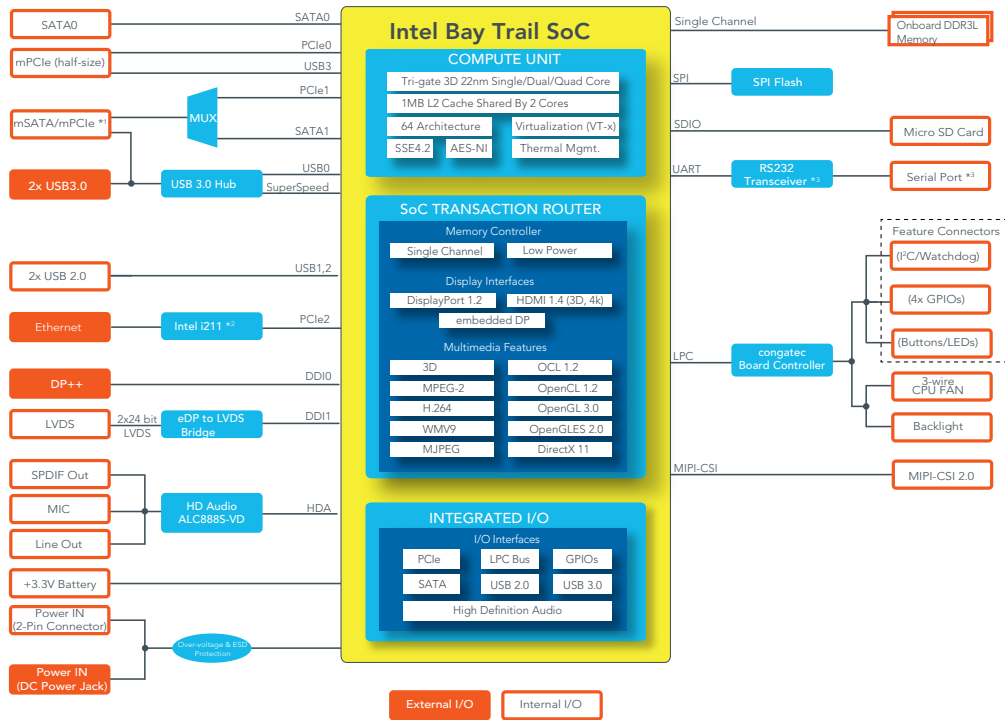
Formfactor	pico-ITX Singleboard Computer 100x72 mm			
CPU	Intel® Atom™ E3845	1.91 GHz Quad Core	2 MB L2 Cache	10W TDP
	Intel® Atom™ E3826	1.46 GHz Dual Core	1 MB L2 Cache	7W TDP
	Other Variants by request			
DRAM Memory	Single Channel up to 4GB onboard DDR3L with 1333 MHz			
Chipset	Integrated in SoC			
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 LVDS* 2x24bit 1x Backlight power connector 1x Line Out 1xMic 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 ² 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 10 Microsoft® Windows 10 IoT Enterprise Microsoft® Windows 10 IoT Core Microsoft® Windows 8 Microsoft® Windows 7 Linux Microsoft® Windows® 7/8 embedded Standard Android Yocto MoonIsland / WindRiver IDP			
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")			

* see User-Manual for detailed informations

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.

Accessories	PN	Description
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.
17" LVDS Panel G170EG01 V1	10000132	1280 x 1024 px Dual channel LVDS LED Back-light 24bits interface -30° up to 85° C 12VLED LCD +5V Logic
kab-LCD-Backlight-PA3	14000130	Backlight Cable from PA3 baseboard to LCD panel (+12V LCD) with harddrive Molex outbound connection for +12V/+5V volt devices.
PA3 - LVDS data cable	14000167	LVDS data cable only conga-PA3.
Lithium Coin Battery	46500015	Coin type Lithium battery for high temperature Includes wires and connector, 3M VHB tape, battery is covered by PVC heat shrink tube nominal capacity: 255 mAh temperature range: -40 to +85 °C

Cables	PN	Description
conga-PA3 Cable Kit	14000162	Cable Kit for conga-PA3 containing cab-Pico-ITX-USB2.0-Twin cab-Pico-ITX-Audio Cable Adapter cab-Pico-ITX-Buttons-LED cab-Pico-ITX-GPIO cab-Pico-ITX-RS232 cab-Pico-ITX-External-Power cab-Pico-ITX-Feature cab-Pico-ITX-SATA-Power
cab-Pico-ITX-RS422	14000153	RS422 cable adapter for Pico-ITX, DSUB9 Male, 15 cm
cab-Pico-ITX-RS485	14000154	RS485 cable adapter for Pico-ITX, DSUB9 Male, 15 cm
cab-Pico-ITX-LVDS	14000167	LVDS data cable for Pico-ITX to connect LCD panel AUO G170EG01 V.1 (Item# 10000132; Item name 17" LVDS Panel G170EG01 V.1)
cab-Pico-ITX-Power	14000172	Internal power cable for industrial versions of Pico-ITX, 15 cm
cab-Pico-ITX-Backlight	14000130	Backlight power cable for Pico-ITX to connect LCD panel AUO G170EG01 V.1 (Item# 10000132; Item name 17" LVDS Panel G170EG01 V.1)