

# INDUSTRIAL PICO-ITX

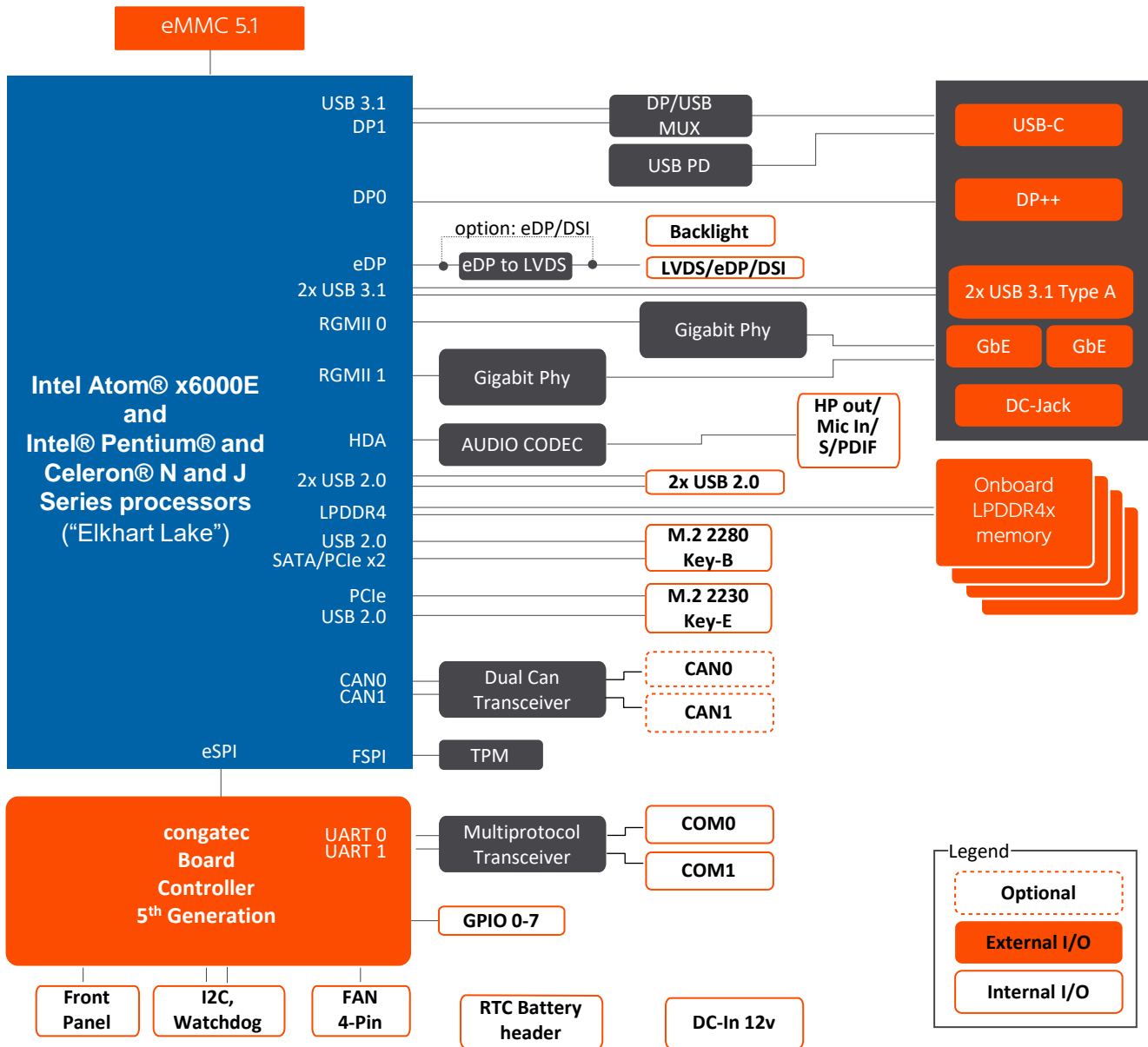
## conga-PA7



- Pico-ITX SBC based on Intel Atom® x6000E Series and Intel® Pentium® and Celeron® J and N Series processors
- High performance Intel® UHD Graphics (Gen11)
- Options for Industrial Temperature Range -40°C to 85°C
- Options for Time Sensitive Networking and Time Coordinated Computing for improved Realtime Capability
- Up to 4.267 MT/s Memory Support

<b>Form Factor</b>	Pico-ITX Single Board Computer   100 x 72 mm					
<b>CPU</b>	Processor	TDP	Cores/Threads	Base Frequency/max. Turbo	Gfx Gen11	Intel Use Condition
	J6413	10W	4 / 4	1.8 GHz / 3.0 GHz	16 EU	PC Client
	J6426	10W	4 / 4	2.0 GHz / 3.0 GHz	32 EU	PC Client
	x6211E	6W	2 / 2	1.3 GHz / 3.0 GHz	16 EU	Embedded
	x6413E	9W	4 / 4	1.5 GHz / 3.0 GHz	16 EU	Embedded
	x6425E	12W	4 / 4	2.0 GHz / 3.0 GHz	32 EU	Embedded
	x6212RE	6W	2 / 2	1.2 GHz / ---	16 EU	Industrial
	x6414RE	9W	4 / 4	1.5 GHz / ---	16 EU	Industrial
	x6425RE	12W	4 / 4	1.9 GHz / ---	32 EU	Industrial
<b>DRAM</b>	up to 4 Channels onboard LPDDR4x with up to 4,267 MT/s   max. system capacity 16 GB					
<b>Chipset</b>	Integrated in SoC					
<b>Ethernet</b>	2x LAN Gbit / 100 Mbit / 10 Mbit with TSN support and Out-Of-Band Management   2x real-time trigger					
<b>Mass Storage</b>	eMMC 5.1 onboard flash up to 64 GB (optional up to 128 GB)					
<b>Audio</b>	Intel® HD Audio					
<b>Graphics</b>	Intel® UHD Graphics (Gen11)					
<b>Internal Connectors</b>	2x USB 2.0   1x LVDS 18/24bit or eDP (opt) or MIPI-DSI (opt)   1x Backlight power connector (5V, 12V)   1x Audio Connector (HP/Line Out, MIC In, S/PDIF, opt. DMIC)   1x Power In (+12V)   2x COM (RS232/422/485)   1x Fan Connector with PWM   3x Feature Connector   1x M.2 key ID B type 2280 (2 PCIe lanes/SATA, USB 2.0)   1x M.2 key ID E (1 PCIe lane, USB 2.0)   2x CAN (opt.)					
<b>External Connectors</b>	1x DisplayPort DP++   2x LAN RJ45   1x USB 3.1 Gen2 Type C (with Power Delivery and DP)   2x USB 3.1 Gen2 Type A   1x DC-In					
<b>congatec Board controller</b>	Multistage watchdog   non-volatile user data storage   manufacturing and board Information   board statistics   fast mode and multi-master I <sup>2</sup> C bus   power loss control					
<b>Embedded BIOS Feature</b>	AMI Aptio® UEFI firmware   32 Mbyte serial SPI with congatec Embedded BIOS features   OEM Logo   OEM CMOS Defaults LCD Control   Display Auto Detection   Backlight Control   Flash Update					
<b>Security</b>	TPM 2.0					
<b>Power Management</b>	ACPI 5.0 compliant   Smart Battery Management					
<b>Operating Systems</b>	Microsoft® Windows 10   Microsoft® Windows 10 IoT Enterprise   Linux   Android   Yocto   RTS Hypervisor					
<b>Power Consumption</b>	tbd.   see manual for full details					
<b>Temperature Range</b>	Commercial:	Operating Temperature: 0 to +60°C		Storage Temperature: -20 to +85°C		
	Industrial:	Operating Temperature: -40 to +85°C		Storage Temperature: -40 to +85°C		
<b>Humidity</b>	Operating:	10 to 90% r. H. non cond.				
	Storage:	5 to 95% r. H. non cond.				
<b>Size</b>	100 x 72 mm (approx. 3.9 x 2.8")					

# conga-PA7 | Block Diagram



Note: \* Assembly options on request only

# conga-PA7 | Order Information

Article	PN	Description
conga-PA7/x6425E-8G eMMC64	048900	Pico-ITX board with Intel Atom® x6425E quad core processor with 2.0GHz core frequency up to 3.0GHz, 1.5MB cache, 8GB 3733MT/s LPDDR4x onboard memory and 64GB eMMC 5.1 onboard flash.
conga-PA7/x6413E-4G eMMC32	048901	Pico-ITX board with Intel Atom® x6413E quad core processor with 1.5GHz core frequency up to 3.0GHz, 1.5MB cache, 4GB 3200MT/s LPDDR4x onboard memory and 32GB eMMC 5.1 onboard flash.
conga-PA7/x6211E-4G eMMC32	048902	Pico-ITX board with Intel Atom® x6211E dual core processor with 1.3GHz core frequency up to 3.0GHz, 1.5MB cache, 4GB 3200MT/s LPDDR4x onboard memory and 32GB eMMC 5.1 onboard flash.
conga-PA7/i-x6425RE-8G eMMC64	048910	Pico-ITX board with Intel Atom® x6425RE quad core processor with 1.9GHz core frequency, 1.5MB cache, 8GB 4267MT/s LPDDR4x onboard memory and 64GB eMMC 5.1 onboard flash. Industrial grade temperature range from -40°C to 85°C.
conga-PA7/i-x6414RE-4G eMMC32	048911	Pico-ITX board with Intel Atom® x6414RE quad core processor with 1.5GHz core frequency, 1.5MB cache, 4GB 3200MT/s LPDDR4x onboard memory and 32GB eMMC 5.1 onboard flash. Industrial grade temperature range from -40°C to 85°C.
conga-PA7/i-x6212RE-4G eMMC32	048912	Pico-ITX board with Intel Atom® x6212RE dual core processor with 1.2GHz core frequency, 1.5MB cache, 4GB 3200MT/s LPDDR4x onboard memory and 32GB eMMC 5.1 onboard flash. Industrial grade temperature range from -40°C to 85°C.
conga-PA7/J6426-8G eMMC64	048920	Pico-ITX board with Intel® Pentium® J6426 quad core processor with 2.0GHz core frequency up to 3.0GHz, 1.5MB cache, 8GB 3733MT/s LPDDR4x onboard memory and 64GB eMMC 5.1 onboard flash.
conga-PA7/J6413-4G eMMC32	048921	Pico-ITX board with Intel® Celeron® J6413 quad core processor with 1.8GHz core frequency up to 3.0GHz, 1.5MB cache, 4GB 3733MT/s LPDDR4x onboard memory and 32GB eMMC 5.1 onboard flash.
conga-PA7/HSP-T	048950	Heatspreader solution for conga-PA7 based on open silicon Intel Pentium and Celeron J and N processors . All standoffs are M2.5 threaded.
conga-PA7/i-HSP-T	048951	Heatspreader solution for conga-PA7 based on lidded silicon Intel Atom x6000E processors. All standoffs are M2.5 threaded.
conga-PA7/CSP-T	048952	Passive cooling solution for conga-PA7 based on open silicon Pentium and Celeron J and N processors. All standoffs are M2.5 threaded.
conga-PA7/i-CSP-T	048953	Passive cooling solution for conga-PA7 based on lidded silicon Atom X6000E processors. All standoffs are M2.5 threaded.
conga-PA7/HSP-B	048954	Heatspreader solution for conga-PA7 based on open silicon Intel Pentium and Celeron J and N processors. All standoffs are with 2.7mm borehole.
conga-PA7/i-HSP-B	048955	Heatspreader solution for conga-PA7 based on lidded silicon Intel Atom x6000E processors. All standoffs are with 2.7mm borehole.

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Heat Sinks](#) category:*

*Click to view products by [Congatec](#) manufacturer:*

Other Similar products are found below :

[657-20ABPNE](#) [73452PPBA](#) [A22-4026](#) [120-1873-007](#) [218-40CTE3](#) [231-69PAB-15V](#) [231-75PAB-13V](#) [231-75PAB-15V](#) [253-122ABE-22](#)  
[PSC22CB](#) [295-2](#) [CLP212SG](#) [D10100-28](#) [BDN183CBA01](#) [3-21053-4](#) [TX0506-1B](#) [LAE66A3CB](#) [511-3U](#) [73381PPBA](#) [73403PPBA](#) [8191-](#)  
[E40](#) [510-12M](#) [529802B00000](#) [D10650-40T5](#) [6225B-MT6G](#) [ATS-54310K-C2-R0](#) [648-51AB](#) [657-20ABPESC](#) [679-25AG](#) [FK 212 CB SA](#)  
[FK225 SA L1](#) [241404B91203G](#) [6801G](#) [680-5K](#) [7106DG/TR](#) [SK145 37 5STSTO220](#) [7109DG/TR](#) [TS-11042-CY](#) [S14K35G3S5](#) [8924G](#)  
[7717-133DAP](#) [7717-26DAP](#) [4509](#) [SW25-4G](#) [CLP-215](#) [CLP-207](#) [D20850-40-T2](#) [APF30-30-10CB/A01](#) [V8508E](#) [268-85CTE](#)