

INDUSTRIAL PICO-ITX

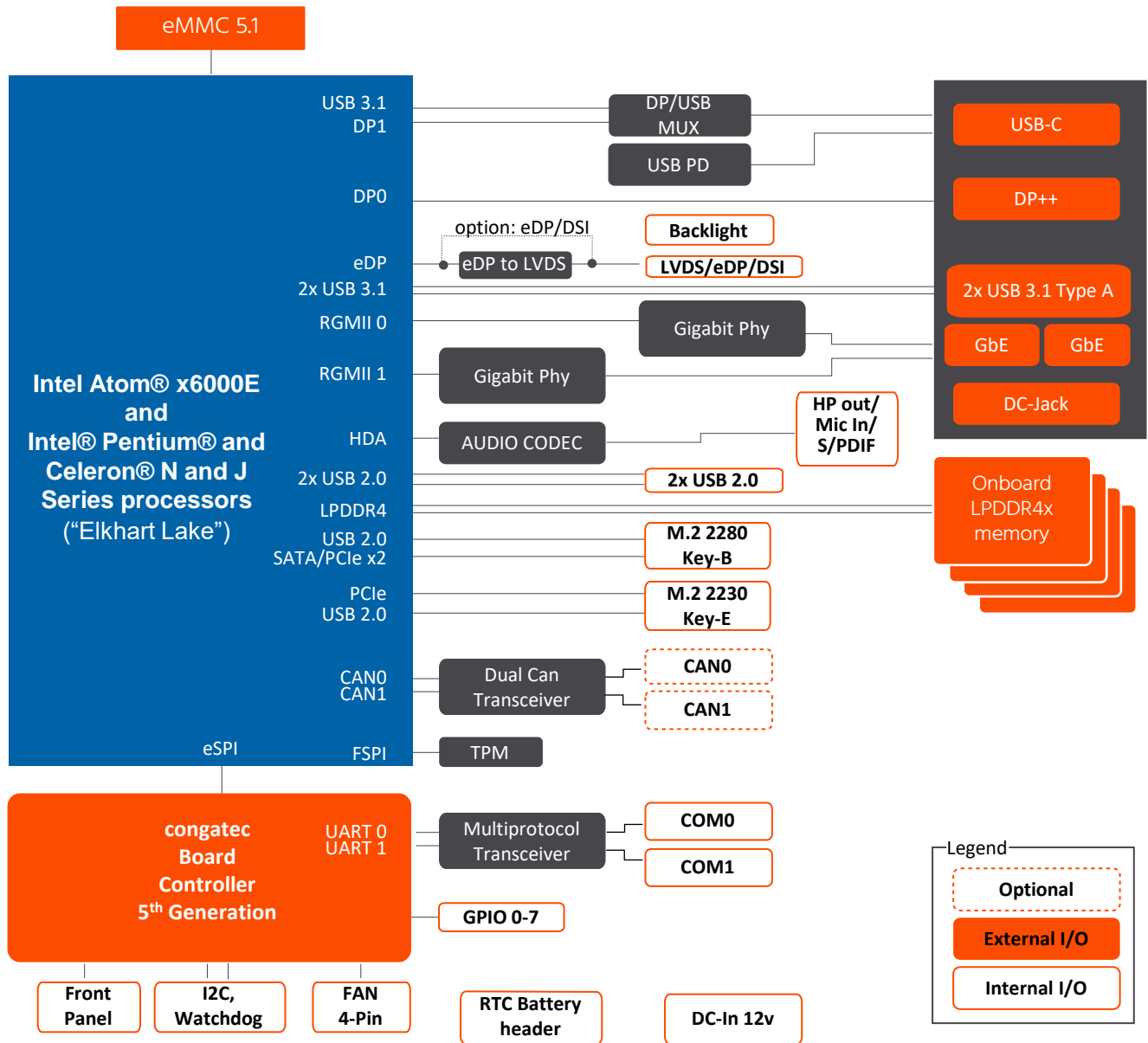
conga-PA7



- 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

| | | | | | | |
|----------------------------------|--|-------------------------------------|---------------|-----------------------------------|-----------|---------------------|
| Form Factor | Pico-ITX Single Board Computer 100 x 72 mm | | | | | |
| CPU | 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 |
| DRAM | up to 4 Channels onboard LPDDR4x with up to 4,267 MT/s max. system capacity 16 GB | | | | | |
| Chipset | Integrated in SoC | | | | | |
| Ethernet | 2x LAN Gbit / 100 Mbit / 10 Mbit with TSN support and Out-Of-Band Management 2x real-time trigger | | | | | |
| Mass Storage | eMMC 5.1 onboard flash up to 64 GB (optional up to 128 GB) | | | | | |
| Audio | Intel® HD Audio | | | | | |
| Graphics | Intel® UHD Graphics (Gen11) | | | | | |
| Internal Connectors | 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.) | | | | | |
| External Connectors | 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 | | | | | |
| congatec Board controller | Multistage watchdog non-volatile user data storage manufacturing and board Information board statistics fast mode and multi-master I ² C bus power loss control | | | | | |
| Embedded BIOS Feature | 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 | | | | | |
| Security | TPM 2.0 | | | | | |
| Power Management | ACPI 5.0 compliant Smart Battery Management | | | | | |
| Operating Systems | Microsoft® Windows 10 Microsoft® Windows 10 IoT Enterprise Linux Android Yocto RTS Hypervisor | | | | | |
| Power Consumption | tbd. see manual for full details | | | | | |
| Temperature Range | 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 | | |
| Humidity | Operating: | 10 to 90% r. H. non cond. | | | | |
| | Storage: | 5 to 95% r. H. non cond. | | | | |
| Size | 100 x 72 mm (approx. 3.9 x 2.8") | | | | | |

conga-PA7 | Block Diagram



Note: * Assembly options on request only