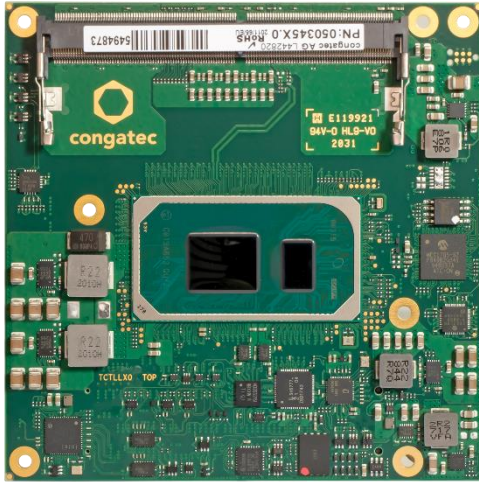


QUAD CORE COMPACT

conga-TC570



- COM Express Compact Type 6
- Intel® Tiger Lake-UP3 high performing and low power Intel® Core™ processor
- Embedded/Industrial use condition
- Extended temperature options available
- PCI Express Gen 4
- Integrated high performance Xe (Gen 12) graphics with 96 EU
- AI/DL Instruction Sets including VNNI



Formfactor

COM Express® Compact, (95 x 95 mm) | Type 6 connector pinout

CPU

General Embedded Versions

Intel® Core™ i7-1185G7E Processor	4 Cores / 8 Threads	12 MB cache	Int. Graphics with 96 EU	12-28W TDP
Intel® Core™ i5-1145G7E Processor	4 Cores / 8 Threads	8 MB cache	Int. Graphics with 80 EU	12-28W TDP
Intel® Core™ i3-1115G4E Processor	2 Cores / 4 Threads	6 MB cache	Int. Graphics with 48 EU	12-28W TDP

Industrial Versions

Intel® Core™ i7-1185GRE Processor	4 Cores / 8 Threads	12 MB cache	Int. Graphics with 96 EU	12-28W TDP
Intel® Core™ i5-1145GRE Processor	4 Cores / 8 Threads	8 MB cache	Int. Graphics with 80 EU	12-28W TDP
Intel® Core™ i3-1115GRE Processor	2 Cores / 4 Threads	6 MB cache	Int. Graphics with 48 EU	12-28W TDP

DRAM

Up to 2 SO-DIMM sockets for DDR4 memory modules up to 32 GByte each (64 GByte total) with 3200 MT/s ECC and non-ECC supported

Graphics

Integrated Xe (Gen 12) graphics engine with up to 96 EU (Execution Units) | Supporting 4 independent display units (4x 4k/2x 8k) | Enhanced media (AV1/12b) with up to 2 Vdbox | Next Gen IPU6 with DPHY2.1 | HDMI 2.0/2.1 | DP 1.4

Display

3x DP/HDMI/DP++ | eDP/LVDS | VGA (optional)

Ethernet

1x GbE TSN Ethernet via Intel® i225

I/O Interfaces

8x PCIe Gen3 | PEG support x4 (PCIe Gen4)
4x USB 3.1 Gen 2 | 8x USB 2.0
2x SATA III (6Gb/s) | SPI | 2x UART | 8x GPIO

Audio

HDA interface

congatec Board Controller

Multi Stage Watchdog | non-volatile User Data Storage | Manufacturing and Board Information | Board Statistics
I²C bus (fast mode, 400 kHz, multi-master) | Power Loss Control | Hardware Health Monitoring | POST Code redirection

Embedded BIOS Features

OEM Customization | Flash Update | based on AMI Aptio UEFI

Security

Trusted Platform Module (TPM 2.0)

Power Management

ACPI 5.0 with battery support

Operating Systems

tbd

Power Consumption

See user's guide for full details

Temperature

Industrial:	Operating: -40 to +85°C	Storage: -40 to +85°C
Commercial:	Operating: 0 to +60°C	Storage: -40 to +85°C

Humidity

Operating: 10 - 90% r. H. non cond.	Storage: 5 - 95% r. H. non cond.
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Size

95 x 95 mm

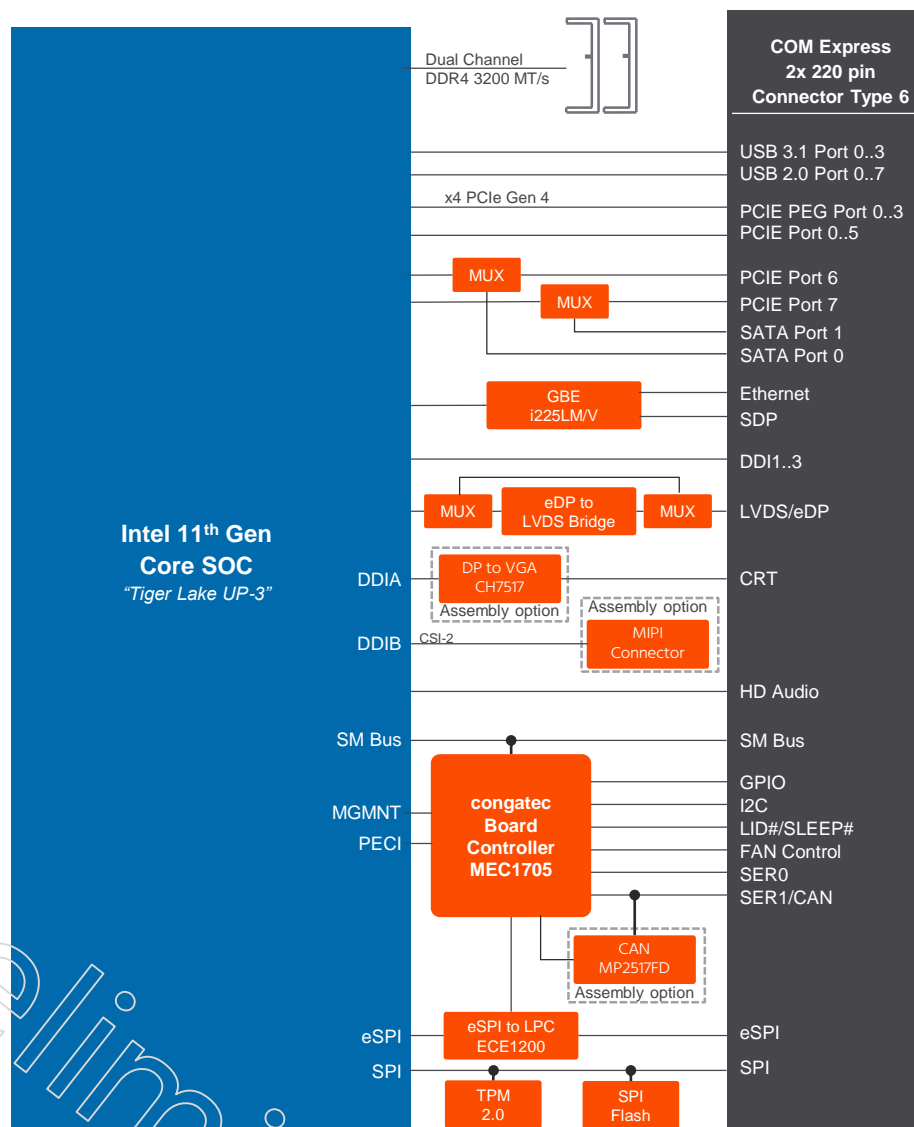


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conga-TC570 | Block Diagram



Note: Assembly options on request only

conga-TC570 | Order Information

Article	PN	Description
conga-TC570/i7-1185G7E	050300	COM Express Type 6 Compact module based on Intel® Core™ i7-1185G7E 4-core processor with 1.8GHz up to 4.4GHz turbo boost, 12MB cache, Intel® Iris® Xe Graphics with 96EU and dual channel DDR4 3200 MT/s memory interface (Intel Tiger Lake). Commercial temperature range.
conga-TC570/i5-1145G7E	050301	COM Express Type 6 Compact module based on Intel® Core™ i5-1145G7E 4-core processor with 1.5GHz up to 4.1GHz turbo boost, 8MB cache, Intel® Iris® Xe Graphics with 80EU and dual channel DDR4 3200 MT/s memory interface (Intel Tiger Lake). Commercial temperature range.
conga-TC570/i3-1115G4E	050302	COM Express Type 6 Compact module based on Intel® Core™ i3-1115G4E 2-core processor with 2.2GHz up to 3.9GHz turbo boost, 6MB cache, Intel® Iris® Xe Graphics with 48EU and dual channel DDR4 3200 MT/s memory interface (Intel Tiger Lake). Commercial temperature range.
conga-TC570/i7-1185GRE	050310	COM Express Type 6 Compact module based on Intel® Core™ i7-1185GRE 4-core processor with 1.8GHz up to 4.4GHz turbo boost, 12MB cache, Intel® Iris® Xe Graphics with 96EU and dual channel DDR4 3200 MT/s memory interface (Intel Tiger Lake). Industrial temperature range.
conga-TC570/i5-1145GRE	050311	COM Express Type 6 Compact module based on Intel® Core™ i5-1145GRE 4-core processor with 1.5GHz up to 4.1GHz turbo boost, 8MB cache, Intel® Iris® Xe Graphics with 80EU and dual channel DDR4 3200 MT/s memory interface (Intel Tiger Lake). Industrial temperature range.
conga-TC570/i3-1115GRE	050312	COM Express Type 6 Compact module based on Intel® Core™ i3-1115GRE 2-core processor with 2.2GHz up to 3.9GHz turbo boost, 6MB cache, Intel® Iris® Xe Graphics with 48EU and dual channel DDR4 3200 MT/s memory interface (Intel Tiger Lake). Industrial temperature range.
conga-TC570/CSA-HP-B	050350	Standard active cooling solution for high performance COM Express module conga-TC570 with integrated heat pipes, 25.5mm overall heat sink height and integrated 12V fan. All standoffs are with 2.7mm bore hole.
conga-TC570/CSA-HP-T	050351	Standard active cooling solution for high performance COM Express module conga-TC570 with integrated heat pipes, 25.5mm overall heat sink height and integrated 12V fan. All standoffs are M2.5mm thread.
conga-TC570/CSP-HP-B	050352	Standard passive cooling solution for high performance COM Express module conga-TC570 with integrated heat pipes, 24.3mm overall heat sink height. All standoffs are with 2.7mm bore hole.
conga-TC570/CSP-HP-T	050353	Standard passive cooling solution for high performance COM Express module conga-TC570 with integrated heat pipes, 24.3mm overall heat sink height. All standoffs are M2.5mm thread.
conga-TC570/HSP-HP-B	050354	Standard heatspreader for high performance COM Express module conga-TC570 with integrated heat pipes, 11mm overall heat sink height. All standoffs are with 2.7mm bore hole.
conga-TC570/HSP-HP-T	050355	Standard heatspreader for high performance COM Express module conga-TC570 with integrated heat pipes, 11mm overall heat sink height. All standoffs are M2.5mm thread.
conga-TEVAL/COMe 3.0	65810	Evaluation Carrier Board for COM Express Type 6 modules.



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