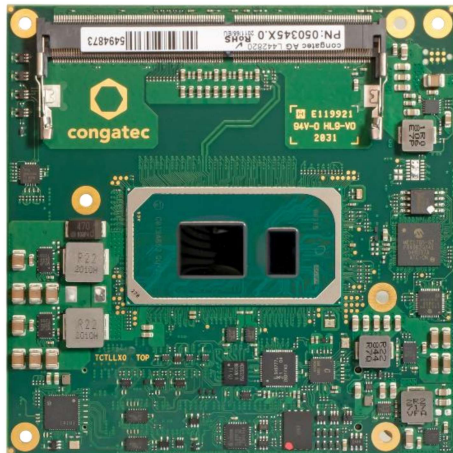


# QUAD CORE COMPACT

# conga-TC570

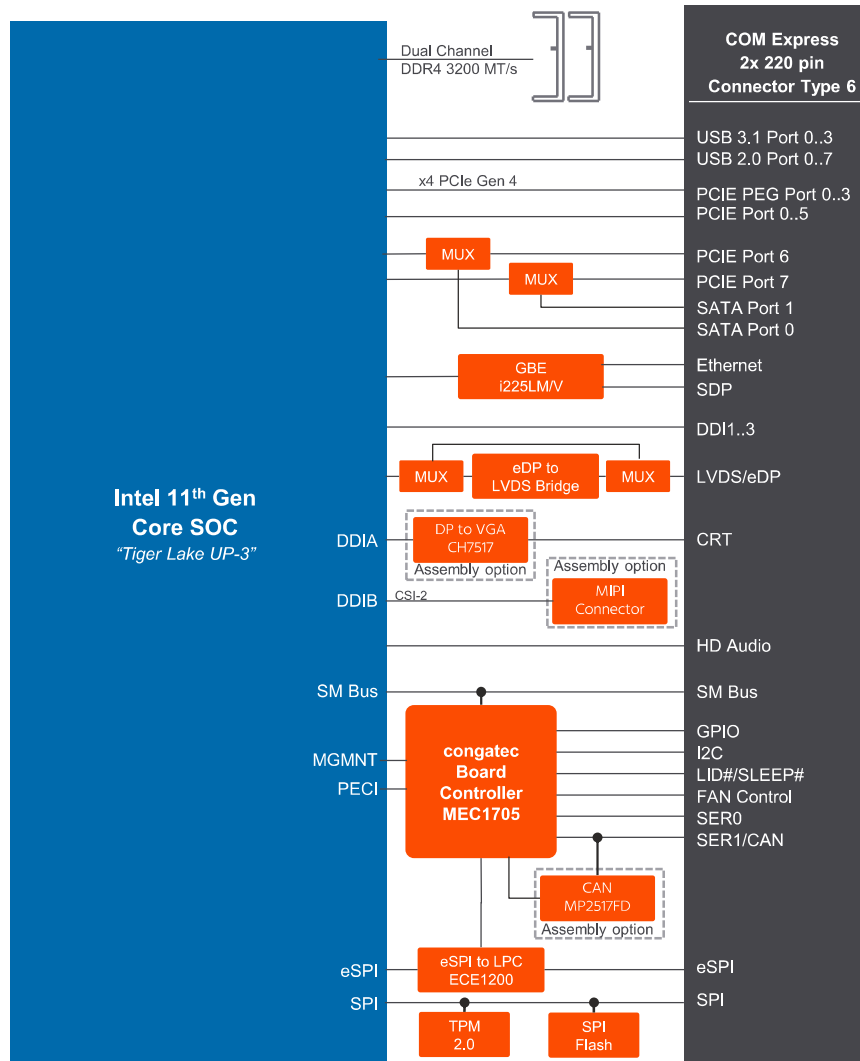


- COM Express Compact Type 6
- Intel® Tiger Lake-UP3 high performing and low power Intel® Core™ processor
- Embedded/Industrial use condition
- Extended temperature options available
- PCI Express Gen 4
- Integrated high performance Xe (Gen 12) graphics with 96 EU
- AI/DL Instruction Sets including VNNI



<b>Formfactor</b>	COM Express® Compact, (95 x 95 mm)   Type 6 connector pinout																																												
<b>CPU</b>	<table border="0"> <tr> <td colspan="5"><b>General Embedded Versions</b></td> </tr> <tr> <td>Intel® Core™ i7-1185G7E Processor</td> <td>4 Cores / 8 Threads</td> <td>12 MB cache</td> <td>Int. Graphics with 96 EU</td> <td>12-28W TDP</td> </tr> <tr> <td>Intel® Core™ i5-1145G7E Processor</td> <td>4 Cores / 8 Threads</td> <td>8 MB cache</td> <td>Int. Graphics with 80 EU</td> <td>12-28W TDP</td> </tr> <tr> <td>Intel® Core™ i3-1115G4E Processor</td> <td>2 Cores / 4 Threads</td> <td>6 MB cache</td> <td>Int. Graphics with 48 EU</td> <td>12-28W TDP</td> </tr> <tr> <td colspan="5"><b>Industrial Versions</b></td> </tr> <tr> <td>Intel® Core™ i7-1185GRE Processor</td> <td>4 Cores / 8 Threads</td> <td>12 MB cache</td> <td>Int. Graphics with 96 EU</td> <td>12-28W TDP</td> </tr> <tr> <td>Intel® Core™ i5-1145GRE Processor</td> <td>4 Cores / 8 Threads</td> <td>8 MB cache</td> <td>Int. Graphics with 80 EU</td> <td>12-28W TDP</td> </tr> <tr> <td>Intel® Core™ i3-1115GRE Processor</td> <td>2 Cores / 4 Threads</td> <td>6 MB cache</td> <td>Int. Graphics with 48 EU</td> <td>12-28W TDP</td> </tr> </table>					<b>General Embedded Versions</b>					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	<b>Industrial Versions</b>					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
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<b>DRAM</b>	Up to 2 SO-DIMM sockets for DDR4 memory modules up to 32 GByte each (64 GByte total) with 3200 MT/s																																												
<b>Graphics</b>	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																																												
<b>Display</b>	3x DP/HDMI/DP++   eDP/LVDS   VGA (optional)																																												
<b>Ethernet</b>	1x 2,5GbE TSN Ethernet via Intel® i225																																												
<b>I/O Interfaces</b>	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																																												
<b>Audio</b>	HDA interface																																												
<b>congatec Board Controller</b>	Multi Stage Watchdog   non-volatile User Data Storage   Manufacturing and Board Information   Board Statistics I <sup>2</sup> C bus (fast mode, 400 kHz, multi-master)   Power Loss Control   Hardware Health Monitoring   POST Code redirection																																												
<b>Embedded BIOS Features</b>	OEM Customization   Flash Update   based on AMI Aptio UEFI																																												
<b>Security</b>	Trusted Platform Module (TPM 2.0)																																												
<b>Power Management</b>	ACPI 5.0 with battery support																																												
<b>Operating Systems</b>	tbd																																												
<b>Power Consumption</b>	See user's guide for full details																																												
<b>Temperature</b>	<table border="0"> <tr> <td>Industrial:</td> <td>Operating: -40 to +85°C</td> <td>Storage: -40 to +85°C</td> </tr> <tr> <td>Commercial:</td> <td>Operating: 0 to +60°C</td> <td>Storage: -40 to +85°C</td> </tr> </table>					Industrial:	Operating: -40 to +85°C	Storage: -40 to +85°C	Commercial:	Operating: 0 to +60°C	Storage: -40 to +85°C																																		
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<b>Humidity</b>	Operating: 10 - 90% r. H. non cond.      Storage: 5 - 95% r. H. non cond.																																												
<b>Size</b>	95 x 95 mm																																												

# 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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