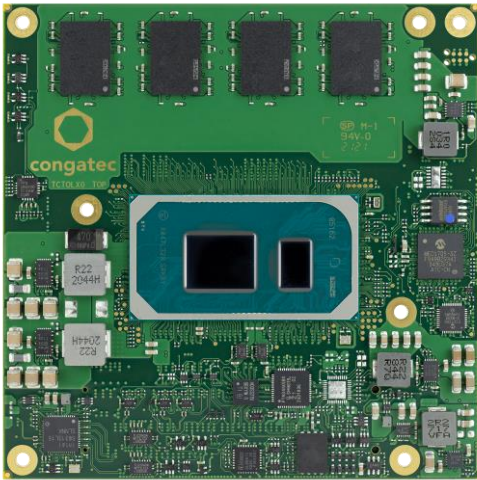


# 11<sup>TH</sup> GEN INTEL® CORE™ PROCESSORS

## conga-TC570r

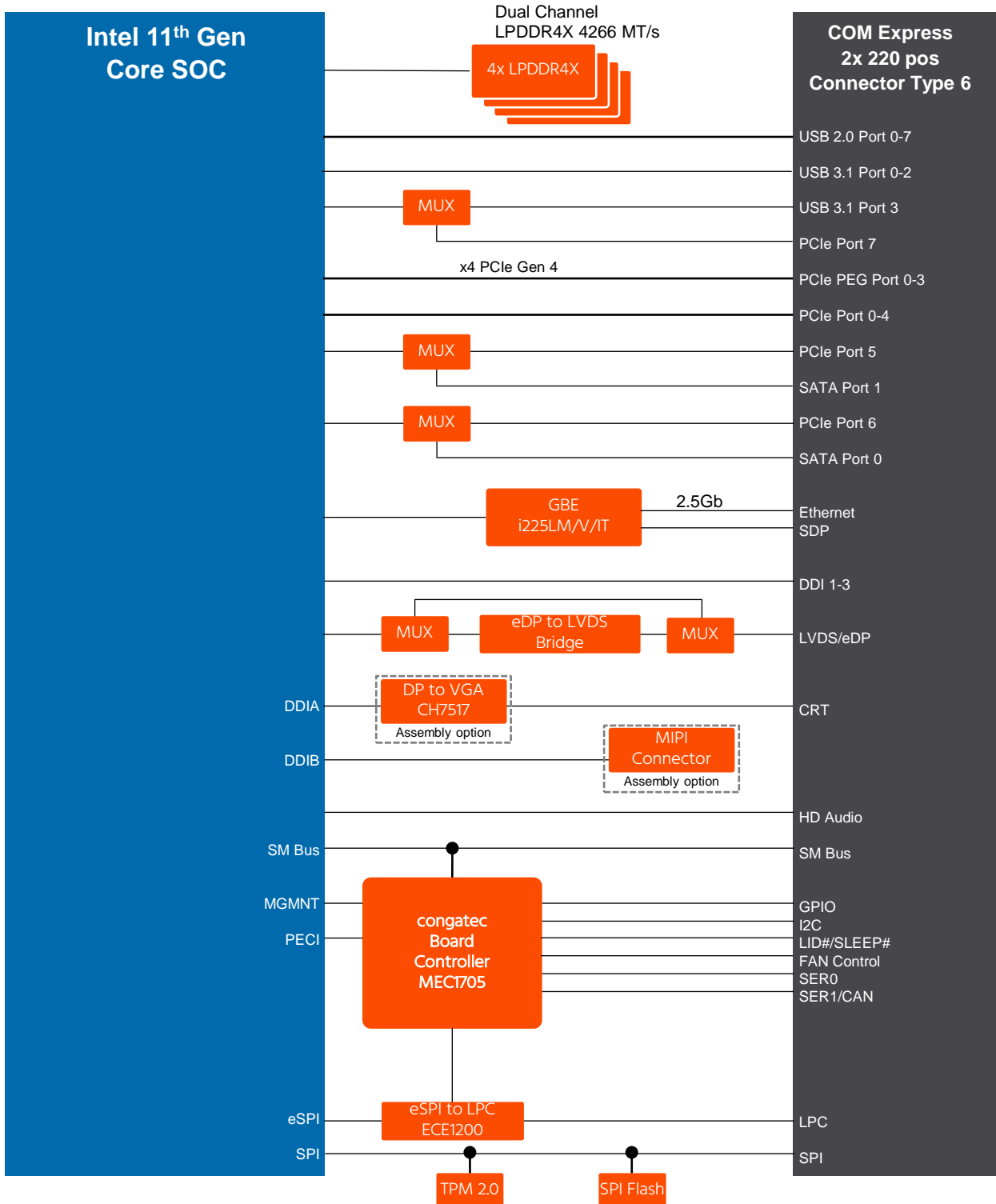


**COM Express®**

- Embedded/Industrial use condition
- Extended temperature options available
- PCI Express Gen 4
- Up to 32 GByte dual channel LPDDR4X soldered down memory with 4266 MT/s IB ECC
- AI/DL Instruction Sets including VNNI

<b>Form Factor</b>	COM Express® Compact, (95 x 95 mm)   Type 6 connector pinout					
<b>CPU</b>	<b>Processor</b>	<b>Cores/Threads</b>	<b>Base Frequency/max. Turbo</b>	<b>TDP</b>	<b>Graphics</b>	<b>Intel Use Condition</b>
	Core™ i7-1185G7E	4C/8T	1.80 GHz / 4.40 GHz	12-28W	96EU	Embedded Broad Market
	Core™ i5-1145G7E	4C/8T	1.50 GHz / 4.40 GHz	12-28W	80EU	Embedded Broad Market
	Core™ i3-1115G4E	2C/4T	2.20 GHz / 3.90 GHz	12-28W	48EU	Embedded Broad Market
	Celeron 6305E	2C/2T	1.80 GHz / --	15W	48EU	Embedded Broad Market
	Core™ i7-1185GRE	4C/8T	1.80 GHz / 4.40 GHz	12-28W	96EU	Industrial
	Core™ i5-1145GRE	4C/8T	1.50 GHz / 4.10 GHz	12-28W	80EU	Industrial
	Core™ i3-1115GRE	2C/4T	2.20 GHz / 3.90 GHz	12-28W	48EU	Industrial
<b>DRAM</b>	Up to 32 GByte LPDDR4X 4266MT/s SDRAM   memory down   dual channel IB ECC					
<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   DP 1.4					
<b>Display</b>	3x DP/DP++   1x eDP					
<b>Ethernet</b>	1x 2.5 GbE 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 Feature</b>	AMI Aptio® UEFI firmware   32 Mbyte serial SPI with congatec Embedded BIOS feature   OEM Logo   OEM CMOS Defaults   LCD Control   Display Auto Detection   Backlight Control   Flash Update					
<b>Security</b>	Trusted Platform Module (TPM 2.0)					
<b>Power Management</b>	ACPI 5.0 with battery support					
<b>Operating Systems</b>	Microsoft® Windows 10   Microsoft® Windows 10 IoT Enterprise   Microsoft® Windows IoT 10 Core   Linux   Android   Yocto   RTS Hypervisor					
<b>Temperature Range</b>	Commercial: Operating Temperature: 0 to +60°C		Storage Temperature: -20 to +80°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>	95 x 95 mm <sup>2</sup>					

# conga-TC570r | Order Information



# conga-TC570r | Order Information

Article	PN	Description
conga-TC570r/i7-1185GRE-32G	050330	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 32 GByte dual channel LPDDR4X 4266 MT/s memory down (Intel Tiger Lake). Industrial temperature range.
conga-TC570r/i5-1145GRE-16G	050331	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 16GByte dual channel LPDDR4X 4266 MT/s memory down (Intel Tiger Lake). Industrial temperature range.
conga-TC570r/i3-1115GRE-8G	050332	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® UHD Graphics with 48EU and 8 GByte dual channel LPDDR4X 4266 MT/s memory down (Intel Tiger Lake). Industrial temperature range.
conga-TC570r/6305E-4G	050320	COM Express Type 6 Compact module based on Intel® Celeron® 6305E 2-core processor with 1.8GHz, 4MB cache, Intel® UHD Graphics with 48EU and 4 GByte dual channel LPDDR4X 4266 MT/s memory down (Intel Tiger Lake). Commercial 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.