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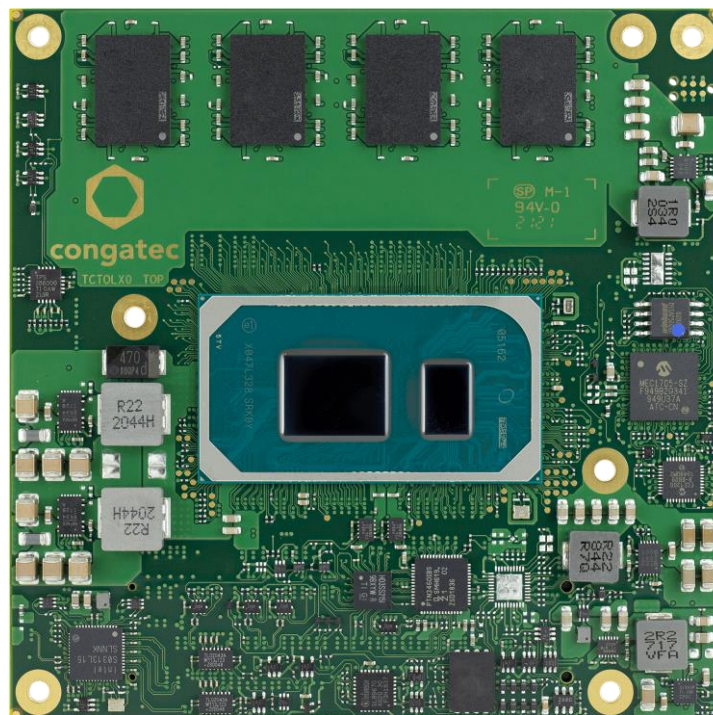


Datasheet

Congatec

conga-TC570r

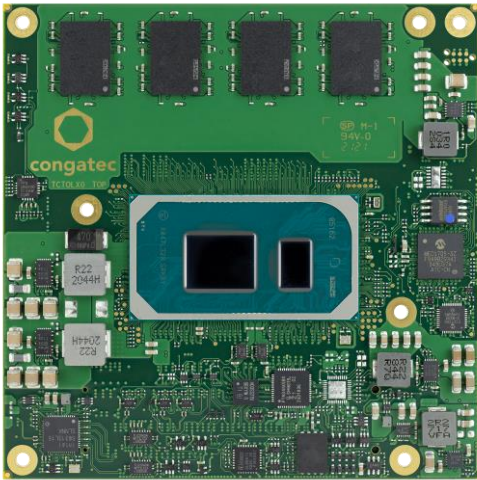
COM Express Compact Module with 11th Gen. Intel Core i Processor



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11TH GEN INTEL® CORE™ PROCESSORS

conga-TC570r

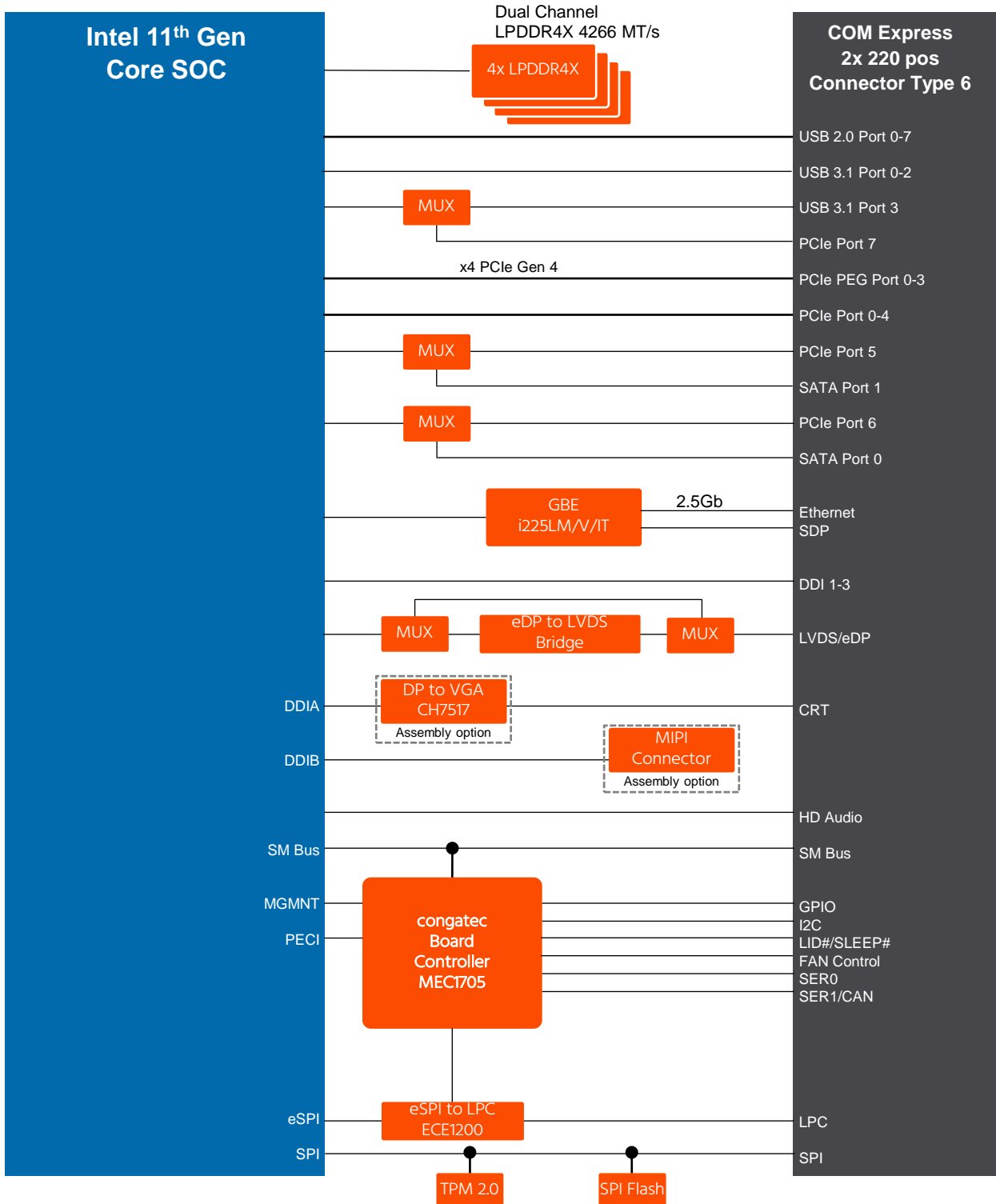


COM Express®

- 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

Form Factor	COM Express® Compact, (95 x 95 mm) Type 6 connector pinout					
CPU	Processor	Cores/Threads	Base Frequency/max. Turbo	TDP	Graphics	Intel Use Condition
	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
DRAM	Up to 32 GByte LPDDR4X 4266MT/s SDRAM memory down dual channel IB ECC					
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 DP 1.4					
Display	3x DP/DP++ 1x eDP					
Ethernet	1x 2.5 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 I ² C bus (fast mode, 400 kHz, multi-master) Power Loss Control Hardware Health Monitoring POST Code redirection					
Embedded BIOS Feature	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					
Security	Trusted Platform Module (TPM 2.0)					
Power Management	ACPI 5.0 with battery support					
Operating Systems	Microsoft® Windows 10 Microsoft® Windows 10 IoT Enterprise Microsoft® Windows IoT 10 Core Linux Android Yocto RTS Hypervisor					
Temperature Range	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			
Humidity	Operating: 10 to 90% r. H. non cond.					
	Storage: 5 to 95% r. H. non cond.					
Size	95 x 95 mm ²					

conga-TC570r | Order Information



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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.

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