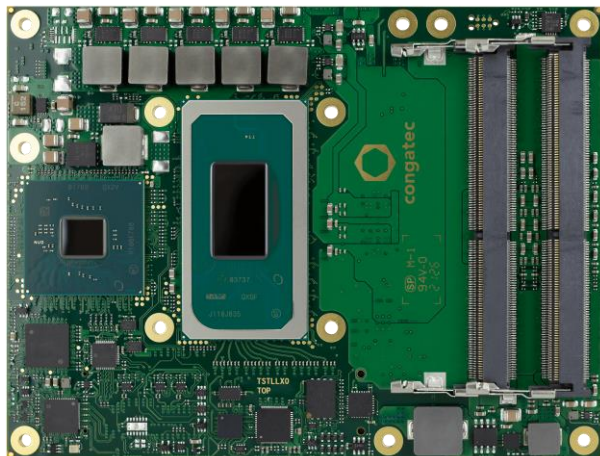


11TH GEN INTEL® CORE™ PROCESSORS

conga-TS570



COM Express®

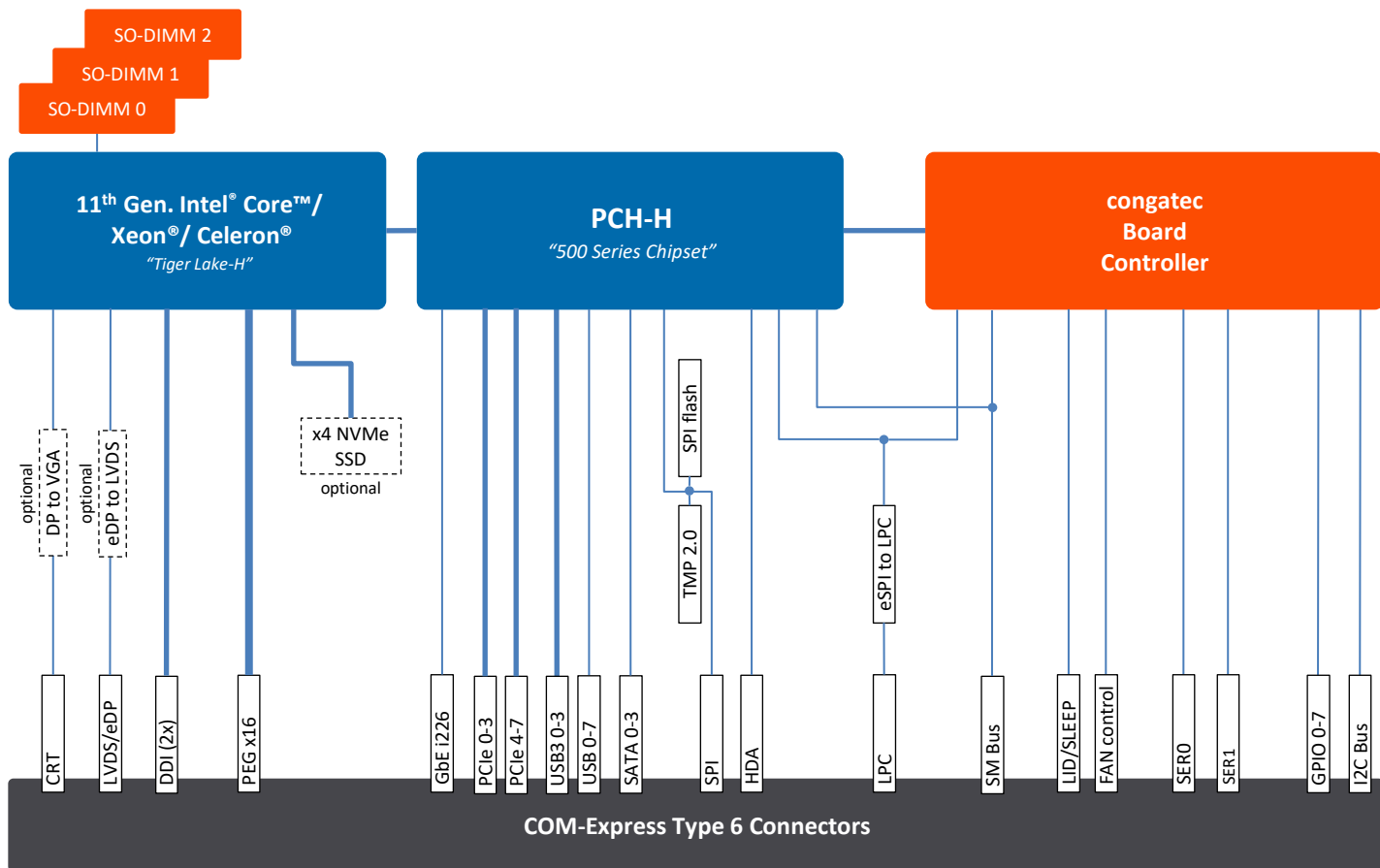
- 11th Gen Intel® Core™ Processors
- Integrated Xe Gen 12 graphics with 32 EU
- AI / DL Instruction Sets including VNNI
- PCI Express Gen 4
- Optional onboard NVMe SSD
- Extended temperature options available

Form Factor

COM Express® Basic (125 x 95 mm) | Type 6 connector pinout

CPU	Processor	Cores/ Threads	Base Frequency/max. Turbo	TDP	Graphics	Intel Use Condition
	i7-11850HE	8C / 16T	2.6GHz / 4.7GHz	45W / 35W	Intel® UHD 32	General Embedded
	i5-11500HE	6C / 12T	2.6GHz / 4.5GHz	45W / 35W	Intel® UHD 32	General Embedded
	i3-11100HE	4C / 8T	2.4GHz / 4.4GHz	45W / 35W	Intel® UHD 16	General Embedded
	6600HE	2C / 2T	2.6GHz	35W	Intel® UHD 16	General Embedded
	W-11865MRE	8C / 16T	2.6GHz / 4.7GHz	45W / 35W	Intel® UHD 32	Industrial
	W-11555MRE	6C / 12T	2.6GHz / 4.5GHz	45W / 35W	Intel® UHD 32	Industrial
	W-11155MRE	4C / 8T	2.4GHz / 4.4GHz	45W / 35W	Intel® UHD 16	Industrial
	W-11865MLE	8C / 16T	1.5GHz / 4.5GHz	25W	Intel® UHD 32	Industrial
	W-11555MLE	6C / 12T	1.9GHz / 4.4GHz	25W	Intel® UHD 32	Industrial
	W-11155MLE	4C / 8T	1.8GHz / 3.1GHz	25W	Intel® UHD 16	Industrial
Chipset	RM590E QM580E HM570E					
DRAM	Up to 3 SO-DIMM sockets for DDR4 ECC memory modules up to 32 GByte each (96 GByte total) with 3200 MT/s					
Graphics	Integrated Xe Gen 12 graphics with up to 32 EU (Execution Units) up to 4 independent display units (4x4k / 2x8k resolution) Enhanced media (AV1/12b) with up to 2 VDBox Next Gen IPU6 with DPHY2.1 DP 1.4					
Display	3x DP / DP++ 1x eDP / LVDS					
Ethernet	2.5 GbE with TSN support via Intel® i226 Ethernet controller series					
I/O Interfaces	8x PCIe Gen3 PEG support x16 (PCIe Gen4) 4x USB 3.1 Gen 2 8x USB 2.0 4x SATA III (6Gb/s) SPI 2x UART 8x GPIO LPC I2C					
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 Feature	AMI Aptio® UEFI firmware 32 Mbyte serial SPI with congatec Embedded BIOS feature OEM Logo OEM CMOS default settings LCD Control Display Auto Detection Backlight Control Flash Update					
Security	Trusted Platform Module (TPM 2.0)					
Power Management	ACPI 6.0 with battery support					
Operating Systems	Microsoft® Windows 10 Microsoft® Windows 10 IoT Enterprise Linux Yocto					
Hypervisor	RTS Real-Time Hypervisor					
Temperature Range	Commercial: Industrial:	Operating Temperature: 0 to +60°C Operating Temperature: -40 to +85°C		Storage Temperature: -20 to +80°C Storage Temperature: -40 to +85°C		
Humidity	Operating: Storage:	10 to 90% r. H. non cond. 5 to 95% r. H. non cond.				
Size	125 x 95 mm²					

conga-TS570 | Block Diagram



conga-TS570 | Modules Order Information

Article	PN	Description
conga-TS570/i7-11850HE	050700	COM Express Type 6 Basic module based on Intel® Core™ i7-11850HE 8-core processor with 2.6GHz up to 4.7GHz turbo boost, 24MB Intel® Smart Cache, Intel® UHD Graphics with 32EU and dual channel DDR4 3200 MT/s memory interface. Chipset QM580E Intel® Tiger Lake-H Embedded temperature range 0°C to 60°C.
conga-TS570/i5-11500HE	050701	COM Express Type 6 Basic module based on Intel® Core™ i5-11500HE 6-core processor with 2.6GHz up to 4.5GHz turbo boost, 12MB Intel® Smart Cache, Intel® UHD Graphics with 32EU and dual channel DDR4 3200 MT/s memory interface. Chipset QM580E Intel® Tiger Lake-H Embedded temperature range 0°C to 60°C.
conga-TS570/i3-11100HE	050702	COM Express Type 6 Basic module based on Intel® Core™ i3-11100HE 4-core processor with 2.4GHz up to 4.4GHz turbo boost, 8MB Intel® Smart Cache, Intel® UHD Graphics with 16EU and dual channel DDR4 3200 MT/s memory interface. Chipset HM570E Intel® Tiger Lake-H Embedded temperature range 0°C to 60°C.
conga-TS570/6600HE	050703	COM Express Type 6 Basic module based on Intel® Celeron 6600HE 2-core processor with 2.6GHz base frequency, 8MB Intel® Smart Cache, Intel® UHD Graphics with 16EU and dual channel DDR4 3200 MT/s memory interface. Chipset HM570E Intel® Tiger Lake-H Embedded temperature range 0°C to 60°C.
conga-TS570/W-11865MRE	050710	COM Express Type 6 Basic module based on Intel® Xeon® W-11865MRE 8-core processor with 2.6GHz up to 4.7GHz turbo boost, 24MB Intel® Smart Cache, Intel® UHD Graphics with 32EU and dual channel DDR4 3200 MT/s memory interface. Chipset RM590E Intel® Tiger Lake-H Industrial temperature range -40°C to 85°C.
conga-TS570/W-11555MRE	050711	COM Express Type 6 Basic module based on Intel® Xeon® W-11555MRE 6-core processor with 2.6GHz up to 4.5GHz turbo boost, 12MB Intel® Smart Cache, Intel® UHD Graphics with 32EU and dual channel DDR4 3200 MT/s memory interface. Chipset RM590E Intel® Tiger Lake-H Industrial temperature range -40°C to 85°C.
conga-TS570/W-11155MRE	050712	COM Express Type 6 Basic module based on Intel® Xeon® W-11155MRE 4-core processor with 2.4GHz up to 4.4GHz turbo boost, 8MB Intel® Smart Cache, Intel® UHD Graphics with 16EU and dual channel DDR4 3200 MT/s memory interface. Chipset RM590E Intel® Tiger Lake-H Industrial temperature range -40°C to 85°C.
conga-TS570/W-11865MLE	050713	COM Express Type 6 Basic module based on Intel® Xeon® W-11865MLE 8-core processor with 1.5GHz up to 4.5GHz turbo boost, 24MB Intel® Smart Cache, Intel® UHD Graphics with 32EU and dual channel DDR4 3200 MT/s memory interface. Chipset RM590E Intel® Tiger Lake-H Embedded temperature range 0°C to 60°C.
conga-TS570/W-11555MLE	050714	COM Express Type 6 Basic module based on Intel® Xeon® W-11555MLE 6-core processor with 1.9GHz up to 4.4GHz turbo boost, 12MB Intel® Smart Cache, Intel® UHD Graphics with 32EU and dual channel DDR4 3200 MT/s memory interface. Chipset RM590E Intel® Tiger Lake-H Embedded temperature range 0°C to 60°C.
conga-TS570/W-11155MLE	050715	COM Express Type 6 Basic module based on Intel® Xeon® W-11155MLE 4-core processor with 1.8GHz up to 3.1GHz turbo boost, 8MB Intel® Smart Cache, Intel® UHD Graphics with 16EU and dual channel DDR4 3200 MT/s memory interface. Chipset RM590E Intel® Tiger Lake-H Embedded temperature range 0°C to 60°C.

conga-TS570

| Accessories Order Information

Article	PN	Description
conga-TS570/CSA-HP-B	050750	Standard active cooling solution for high performance COM Express module conga-TS570 with integrated heat pipes, 29mm overall heat sink height and integrated 12V fan. All standoffs are with 2.7mm bore hole.
conga-TS570/CSA-HP-T	050751	Standard active cooling solution for high performance COM Express module conga-TS570 with integrated heat pipes, 29mm overall heat sink height and integrated 12V fan. All standoffs are M2.5mm thread.
conga-TS570/CSP-HP-B	050752	Standard passive cooling solution for high performance COM Express module conga-TS570 with integrated heat pipes, 28mm overall heat sink height. All standoffs are with 2.7mm bore hole.
conga-TS570/CSP-HP-T	050753	Standard passive cooling solution for high performance COM Express module conga-TS570 with integrated heat pipes, 28mm overall heat sink height. All standoffs are M2.5mm thread.
conga-TS570/HSP-HP-B	050754	Standard heatspreader for high performance COM Express module conga-TS570 with integrated heat pipes, 11mm overall heat sink height. All standoffs are with 2.7mm bore hole.
conga-TS570/HSP-HP-T	050755	Standard heatspreader for high performance COM Express module conga-TS570 with integrated heat pipes, 11mm overall heat sink height. All standoffs are M2.5mm thread.
conga-TS570/HPA	050756	Standard heat pipe adapter for high performance COM Express module conga-TS570.
conga-TEVAL/COMe 3.0	065810	Evaluation Carrier Board for COM Express Type 6 modules.