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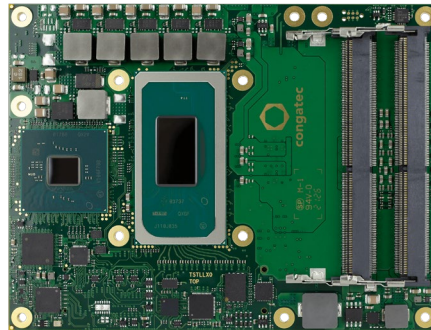


Datasheet

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conga-TS570

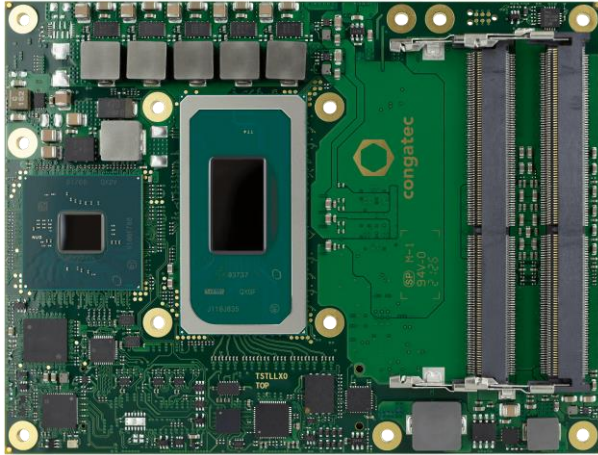
COM Express Basic Type 6 Module with 11th Gen. Tiger Lake-H Intel® Core™ i Processor



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11TH GEN INTEL® CORE™ PROCESSORS

conga-TS570

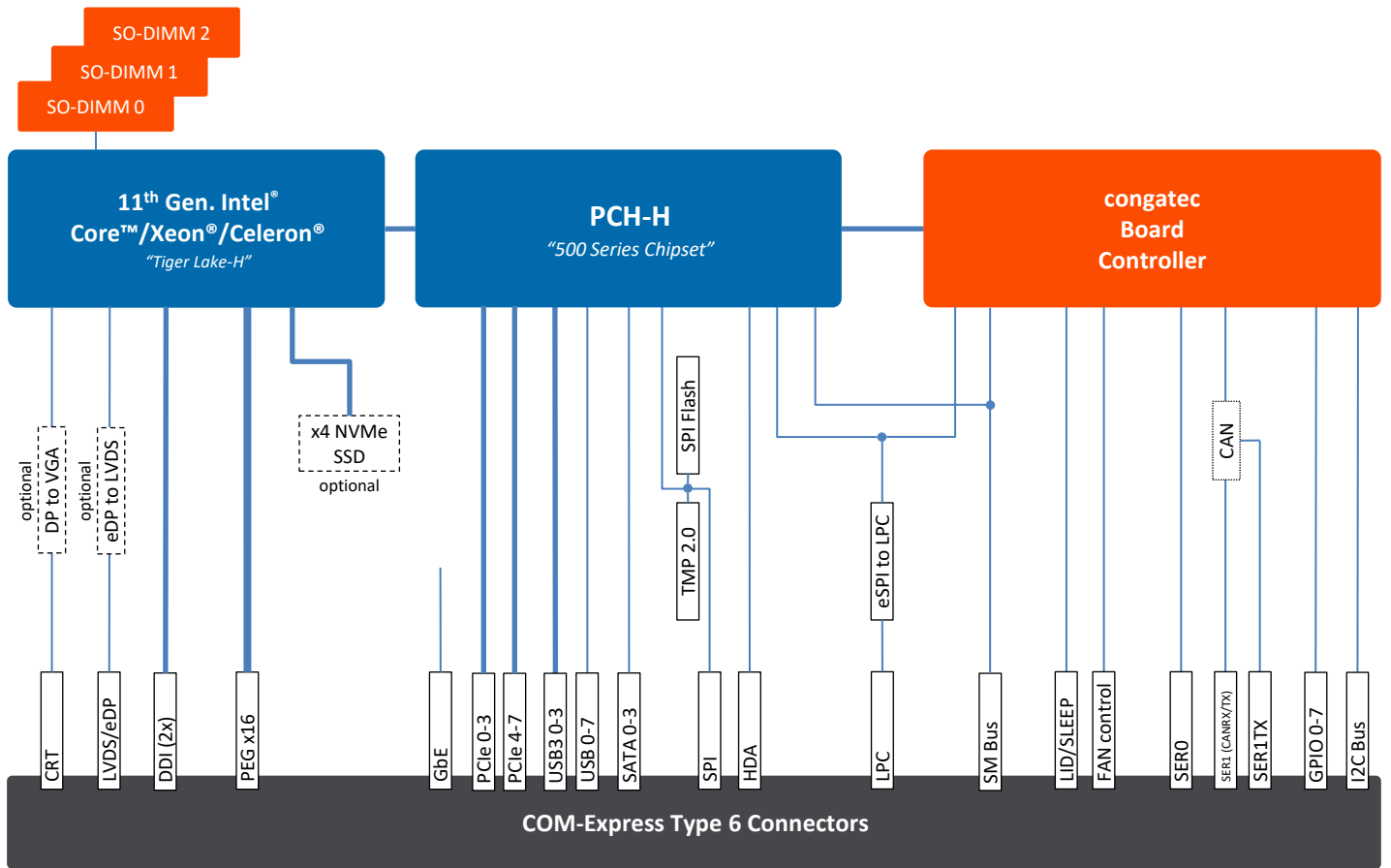


COM Express®

- Embedded/Industrial use condition
- Extended temperature options available
- PCI Express Gen 4
- AI/DL Instruction Sets including VNNI
- Optional onboard NVMe SSD
- Integrated Xe (Gen 12) graphics with 32 EU

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 engine with up to 32 EU (Execution Units) Supporting 4 independent display units (4x 4k/2x 8K) Enhanced media (AV1/12b) with up to 2 VDBox Next Gen IPU6 (Image Processing Unit) with DPHY2.1 DP 1.4						
Display	3x DP/DP++ 1x eDP/LVDS						
Ethernet	1x 2.5 GbE TSN Ethernet						
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 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 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 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	125 x 95 mm ²						

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 Commercial temperature range
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 Commercial temperature range
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 Commercial temperature range
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 Commercial temperature range
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
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
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
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 Commercial temperature range
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 Commercial temperature range
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 Commercial temperature range

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 heatpipe adapter for high performance COM Express module conga-TS570.
conga-TEVAL/COMe 3.0	065810	Evaluation Carrier Board for COM Express Type 6 modules.

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