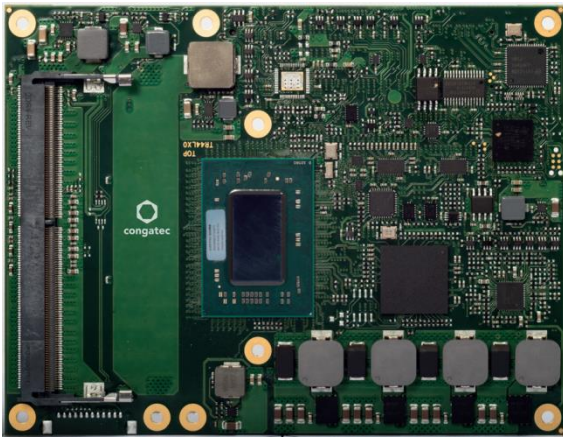


HIGH SPEED GRAPHICS

conga-TR4

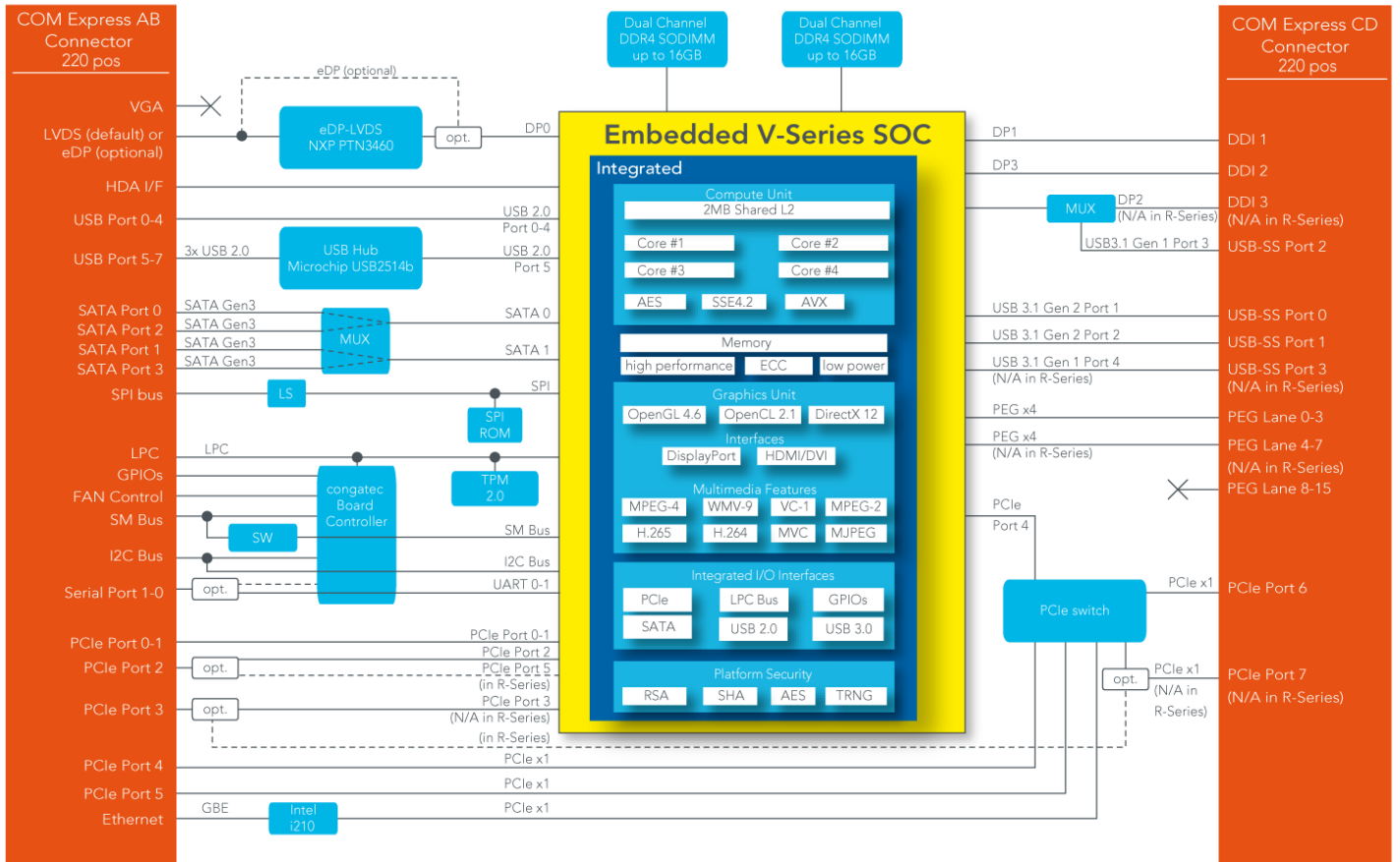


- AMD's Next Gen V1000 processor Series
- "Zen" core architecture with up to 4 cores
- Improved graphic performance with "Vega" GPU
- Up to 32GByte dual channel DDR4 3200MT/s memory
- TDP scalable down to 12W
- up to 4 x 4K DP / eDP



Formfactor	COM Express® Basic, (95 x 125 mm) Type 6 connector pinout					
CPU	Commercial Versions					
	AMD V1807B	4 Cores 8 Threads	3.35 3.8 GHz (boost)	2 MB cache	11 GPU CU	35-54W TDP
	AMD V1756B	4 Cores 8 Threads	3.25 3.6 GHz (boost)	2 MB cache	8 GPU CU	35-54W TDP
	AMD V1605B	4 Cores 8 Threads	2.0 3.6 GHz (boost)	2 MB cache	8 GPU CU	12-25W TDP
	AMD V1202B	2 Cores 4 Threads	2.3 3.2 GHz (boost)	1 MB cache	3 GPU CU	12-25W TDP
	AMD R1606G	2 Cores 4 Threads	2.6 3.5 GHz (boost)	1 MB cache	3 GPU CU	12-25W TDP
	AMD R1505G	2 Cores 4 Threads	2.4 3.3 GHz (boost)	1 MB cache	3 GPU CU	12-25W TDP
	Industrial Versions					
	AMD V1404I	4 Cores 8 Threads	1.6*/2.0 2.8*/3.6 GHz (boost)	2 MB cache	8 GPU CU	12-25W TDP
			* Performance in the -40 to 0°C temp range			
DRAM	Dual channel DDR4 up to 3200 MT/s 2x SO-DIMM up to 2x 16 GByte (optionally with ECC support)					
Chipset	Integrated in SoC					
Ethernet	1x Gigabit Ethernet					
I/O Interfaces	4x PCI Express™ 3.0 lanes 4x PCI Express™ 2.0 lanes 1x PEG 3.0 x8 2x USB 3.1 Gen2 2x USB 3.1 Gen1 8x USB 2.0 2x SATA® 6 Gb/s I²C bus (fast mode, 400 kHz, multi-master) SD LPC Bus SPI SM-Bus 2x UART					
Sound	High Definition Audio Interface					
Graphics	Integrated AMD Radeon™ Graphics supports DirectX 12 OpenGL 4.6 and OpenCL™ 2.1 up to 4 simultaneous Displays Unified Video Decoder 6 (H.265, H.264, MVC, MPEG4, MPEG2, VC-1, WMV and MJPEG) Video Compression Engine 3.1 (dual, H.264, SVC)					
congatec Board Controller	Multi Stage Watchdog non-volatile User Data Storage Manufacturing and Board Information Board Statistics BIOS Setup Data Backup I²C bus (fast mode, 400 kHz, multi-master) Power Loss Control					
Embedded BIOS Features	AMI AptioV® UEFI 2.x firmware 8 MByte serial SPI firmware flash					
Security	Trusted Platform Module (TPM 2.0) AMD Secure Processor™.					
Power Management	ACPI 5.0 with battery support					
Operating Systems	Microsoft® Windows 10 Microsoft® Windows 10 IoT Enterprise Linux opt. Microsoft® Windows 7					
Power Consumption	See user's guide for full details					
Temperature	Industrial:	Operating: -40 to +85°C	Storage: -40 to +85°C			
	Commercial:	Operating: 0 to +60°C	Storage: -40 to +85°C			
Extended Temperature	Screening service on request:		-25 to +80°C (burn-in & cold-soak) -40 to +85°C (burn-in & cold-soak)			
Humidity	Operating: 10 - 90% r. H. non cond.		Storage: 5 - 95% r. H. non cond.			
Size	95 x 125 mm (3.74" x 4.92")					

conga-TR4 | Block diagram



conga-TR4 | Order Information – COM Express® Module

Article	PN	Description
conga-TR4/V1807B	041600	COM Express Type 6 Basic module based on AMD embedded V-Series V1807B 4-core processor with 3.35 GHz up to 3.8 GHz turbo boost, 2MB L2 Cache and dual channel DDR4 3200MT/s memory interface (formerly Great Horned Owl). Features AMD Radeon™ Vega integrated graphics core with 11 CU.
conga-TR4/V1756B	041601	COM Express Type 6 Basic module based on AMD embedded V-Series V1756B 4-core processor with 3.25 GHz up to 3.6 GHz turbo boost, 2MB L2 Cache and dual channel DDR4 3200MT/s memory interface (formerly Great Horned Owl). Features AMD Radeon™ Vega integrated graphics core with 8 CU.
conga-TR4/V1605B	041602	COM Express Type 6 Basic module based on AMD embedded V-Series V1605B 4-core processor with 2.0 GHz up to 3.6 GHz turbo boost, 2MB L2 Cache and dual channel DDR4 2400MT/s memory interface (formerly Great Horned Owl). Features AMD Radeon™ Vega integrated graphics core with 8 CU.
conga-TR4/V1202B	041603	COM Express Type 6 Basic module based on AMD embedded V-Series V1202B 2-core processor with 2.3 GHz up to 3.2 GHz turbo boost, 1MB L2 Cache and dual channel DDR4 2400MT/s memory interface (formerly Great Horned Owl). Features AMD Radeon™ Vega integrated graphics core with 3 CU.
conga-TR4/i-V1404I	041610	COM Express Type 6 Basic module based on AMD embedded V-Series V1404B 4-core processor with 1.6* 2.0 GHz up to 2.8* 3.6 GHz turbo boost, 2MB L2 Cache and dual channel DDR4 2400MT/s memory interface (formerly Great Horned Owl). Features AMD Radeon™ Vega integrated graphics core with 8 CU.
		* Performance in the -40 to 0° C temperature range
conga-TR4/R1606G	041620	COM Express Type 6 Basic module based on AMD embedded R-Series R1606G 2-core processor with 2.6 GHz up to 3.5 GHz turbo boost, 1MB L2 Cache and dual channel DDR4 2400MT/s memory interface (formerly Great Horned Owl). Features AMD Radeon™ Vega integrated graphics core with 3 CU.
conga-TR4/R1505G	041621	COM Express Type 6 Basic module based on AMD embedded R-Series R1505G 2-core processor with 2.4 GHz up to 3.3 GHz turbo boost, 1MB L2 Cache and dual channel DDR4 2400MT/s memory interface (formerly Great Horned Owl). Features AMD Radeon™ Vega integrated graphics core with 3 CU.

conga-TR4 | Order Information – Accessory

Article	PN	Description
conga-TR4/HSP-HP-B	041651	Standard heatspreader for high performance COM Express module conga-TR4 with integrated heat pipes. All standoffs are with 2.7mm bore hole.
conga-TR4/HSP-HP-T	041652	Standard heatspreader for high performance COM Express module conga-TR4 with integrated heat pipes. All standoffs are M2.5mm thread.
conga-TR4/CSP-HP-B	041653	Standard passive cooling solution for high performance COM Express module conga-TR4 with integrated heat pipes, 15mm fins and 20mm overall heat sink height. All standoffs are with 2.7mm bore hole.
conga-TR4/CSP-HP-T	041654	Standard passive cooling solution for high performance COM Express module conga-TR4 with integrated heat pipes, 15mm fins and 20mm overall heat sink height. All standoffs are M2.5mm thread.
conga-TR4/CSA-HP-B	041655	Standard active cooling solution for high performance COM Express module conga-TR4 with integrated heat pipes, 15mm fins, 20mm overall heat sink height and integrated 12V fan. All standoffs are with 2.7mm bore hole.
conga-TR4/CSA-HP-T	041656	Standard active cooling solution for high performance COM Express module conga-TR4 with integrated heat pipes, 15mm fins, 20mm overall heat sink height and integrated 12V fan. All standoffs are M2.5mm thread.
DDR4-SODIMM-3200 ECC (4GB)	068736	DDR4 ECC SODIMM memory module with 3200 MT/s and 4GB RAM
DDR4-SODIMM-3200 ECC (8GB)	068737	DDR4 ECC SODIMM memory module with 3200 MT/s and 8GB RAM
DDR4-SODIMM-3200 ECC (16GB)	068738	DDR4 ECC SODIMM memory module with 3200 MT/s and 16GB RAM
DDR4-SODIMM-3200 (4GB)	068793	DDR4 SODIMM memory module with 3200 MT/s and 4GB RAM
DDR4-SODIMM-3200 (8GB)	068794	DDR4 SODIMM memory module with 3200 MT/s and 8GB RAM
DDR4-SODIMM-3200 (16GB)	068798	DDR4 SODIMM memory module with 3200 MT/s and 16GB RAM
DDR4-SODIMM-2400 ECC (4GB)	068795	DDR4 ECC SODIMM memory module with 2400 MT/s and 4GB RAM
DDR4-SODIMM-2400 ECC (8GB)	068796	DDR4 ECC SODIMM memory module with 2400 MT/s and 8GB RAM
DDR4-SODIMM-2400 ECC (16GB)	068797	DDR4 ECC SODIMM memory module with 2400 MT/s and 16GB RAM
DDR4-SODIMM-2400 (4GB)	068790	DDR4 SODIMM memory module with 2400 MT/s and 4GB RAM
DDR4-SODIMM-2400 (8GB)	068791	DDR4 SODIMM memory module with 2400 MT/s and 8GB RAM
DDR4-SODIMM-2400 (16GB)	068792	DDR4 SODIMM memory module with 2400 MT/s and 16GB RAM
conga-TEVAL	065810	Evaluation carrier board for Type 6 COM Express modules
conga-LDVI/EPI	011115	LVDS to DVI converter board for digital flat panels with onboard EEPROM



Distributore Italia: Contradata Milano S.r.l.

Via Solferino 12 - 20900 Monza (MB) - Italy
Tel: (+39) 039-230.14.92 Email: info@contradata.it

© 2019 congatec AG. All rights reserved.

All data is for information purposes only. Although all the information contained within this document is carefully checked, no guarantee of correctness is implied or expressed. Product names, logos, brands, and other trademarks featured or referred are the property of their respective trademark holders. These trademark holders are not affiliated with congatec AG.
April 2020 BAN