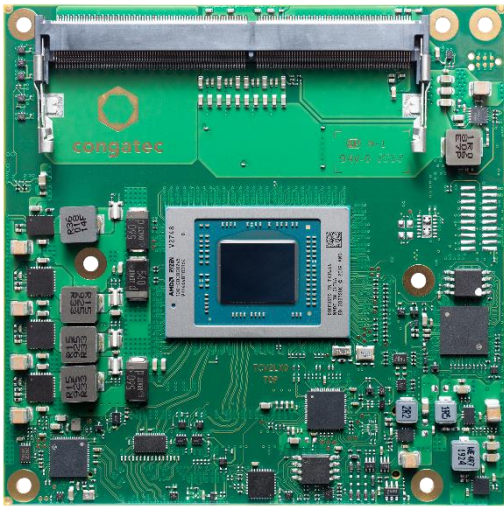


AMD RYZEN™ EMBEDDED V2000

conga-TCV2

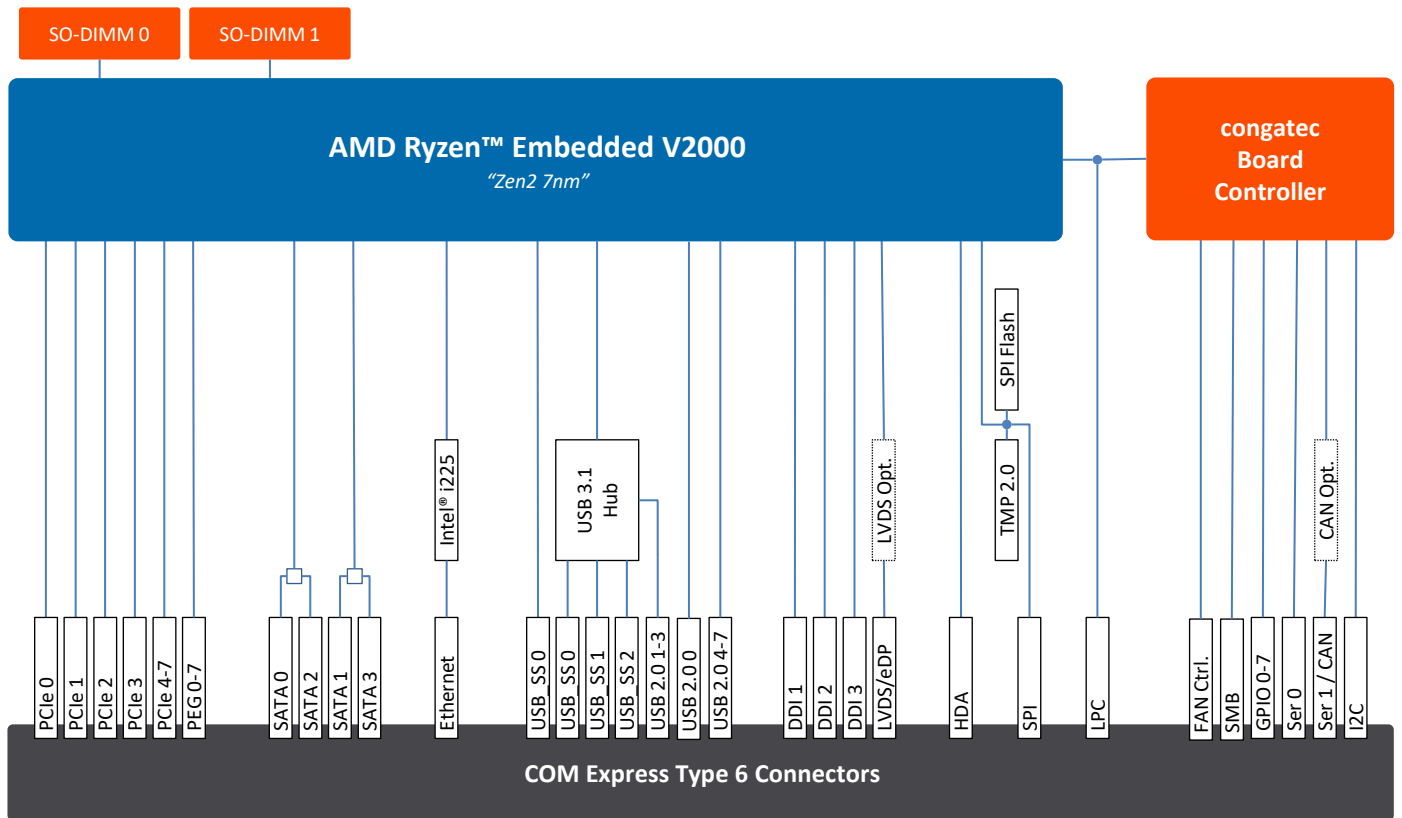


COM  **Express**®

- High-performance Zen 2 CPU & VEGA GPU
- TDP Range 10-54W
- Supporting 4 simultaneous 4K displays
- Up to 64GByte dual channel DDR4 3200MT/s
- AMD Secure Processor with AMD Memory Guard

Formfactor	COM Express® Compact, (95 x 95 mm) Type 6 connector pinout			
CPU	General Embedded Versions AMD Ryzen™ Embedded V2748 8 Cores 16 Threads 4 MB L2 8 MB L3 cache 7 GPU CU 35-54 W TDP AMD Ryzen™ Embedded V2718 8 Cores 16 Threads 4 MB L2 8 MB L3 cache 7 GPU CU 10-25 W TDP AMD Ryzen™ Embedded V2546 6 Cores 12 Threads 3 MB L2 8 MB L3 cache 6 GPU CU 35-54 W TDP AMD Ryzen™ Embedded V2516 6 Cores 12 Threads 3 MB L2 8 MB L3 cache 6 GPU CU 10-25 W TDP			
DRAM	Up to 2 SO-DIMM sockets for DDR4 memory modules up to 32 GByte each (64 GByte total) with 3200 MT/s and ECC support			
Graphics	Integrated Radeon™ graphics engine with up to 7 Compute Units Supporting 4 independent display units (4x 4K) DirectX 12 support VCN2.2 (H.264/AVC HW 8b H.265/HEVC HW 8/10b VP9 HW 8/10b) DP 1.4			
Display	3x DP/DP++ eDP/LVDS			
Ethernet	1x Gigabit Ethernet via Intel® i225			
I/O Interfaces	5x PCIe Gen3 (8 lanes) PEG support x8 4x USB 3.1 Gen 2 8/4x USB 2.0 2x SATA III (6Gb/s) 2x UART 8x GPIO LPC			
Audio	HD-Audio over DP++ ports 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 Features	AMI Aptio® UEFI firmware 16 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) AMD Secure Processor AMD Memory Guard			
Power Management	ACPI 5.0 with battery support			
Operating Systems	Microsoft® Windows 10 Microsoft® Windows 10 IoT Enterprise Ubuntu Linux LTS RTS Hypervisor			
Temperature Range	Commercial:	Operating: 0 to +60°C	Storage: -40 to +85°C	
Humidity	Operating:	10 - 90% r. H. non cond.		
	Storage:	5 - 95% r. H. non cond.		
Size	95 x 95 mm			

conga-TCV2 | Block Diagram



conga-TCV2 | Bottom Side View

