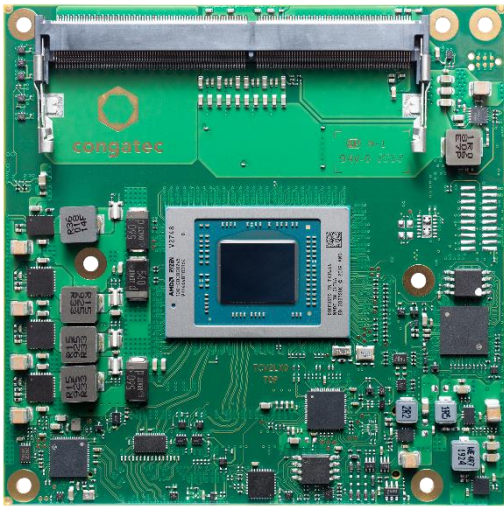


AMD RYZEN™ EMBEDDED V2000

conga-TCV2

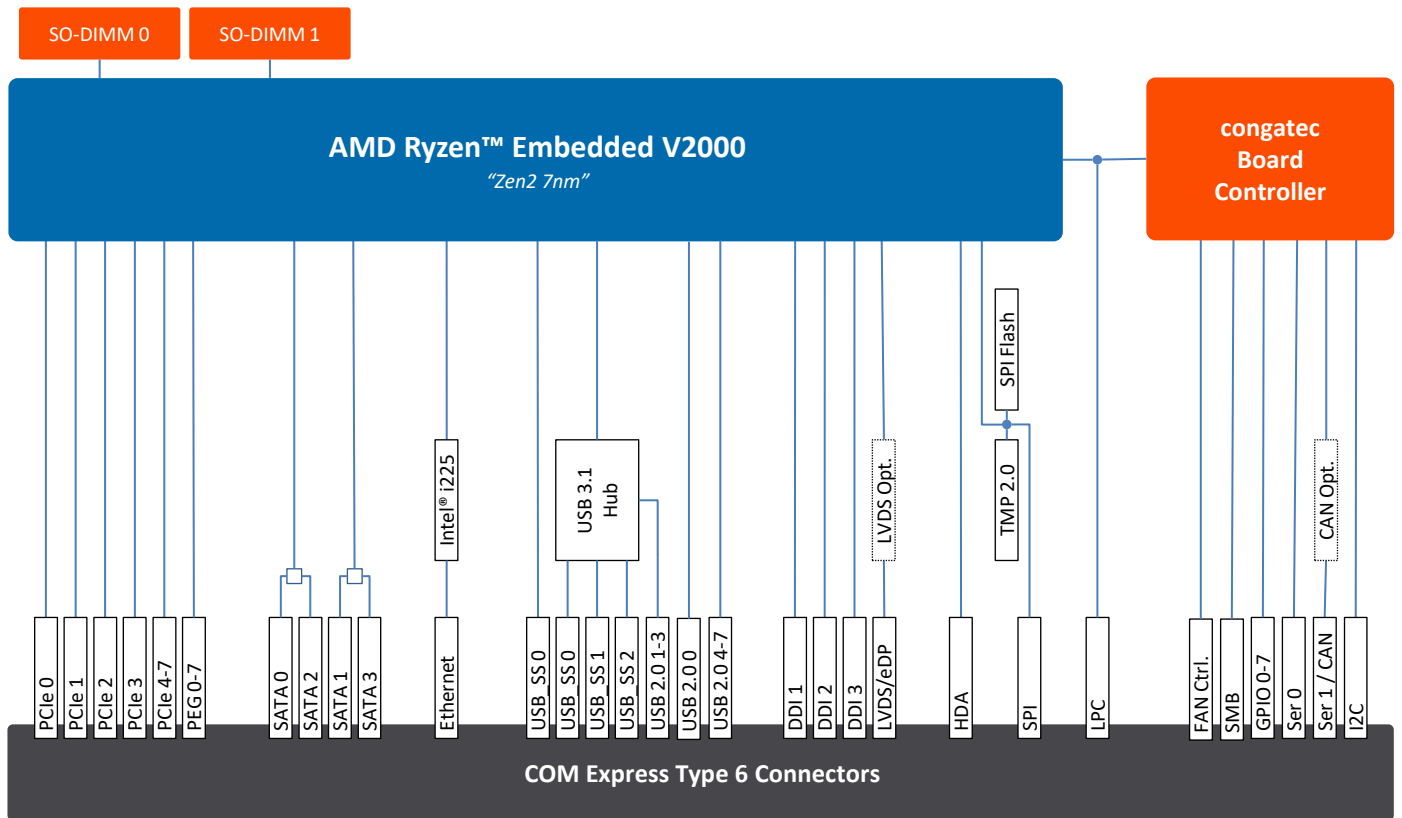


COM  **Express**®

- 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

