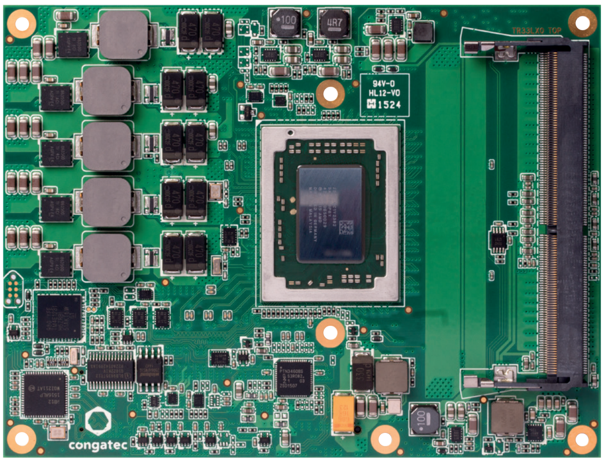
HIGH SPEED GRAPHICS

conga-TR3

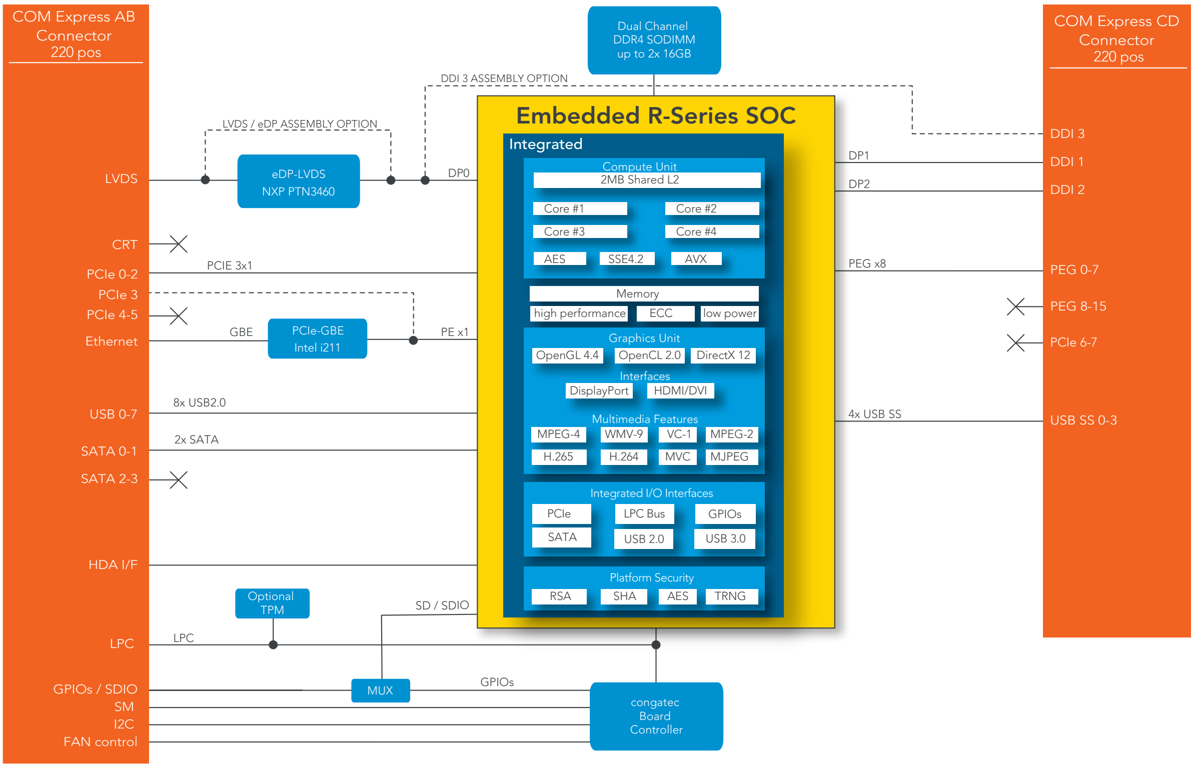


- AMD Embedded R-Series SOC
- Up to 4 "Excavator" Cores
- High performance integrated 3rd Gen. GCN graphics with up to 512 stream processors
- Unified Video Decoder (UVD 6) supporting HEVC/H.265 4K@60Hz
- ECC protected DDR4 memory up to 32 GByte
- Full HSA 2.0 compliant (Heterogenous System Architecture)
- TDP scalable down to 12W

COM Express®

Formfactor	COM Express® Basic | (95 x 125 mm) | Type 6 Connector Layout
CPU	AMD Embedded R-Series SOC AMD Embedded RX-421BD 4x 2.1 .. 3.4 GHz L2 cache 2MB shared Radeon™ R7 Graphics TDP 15 W, conf. to 12/25/35 W AMD Embedded RX-418GD 4x 1.8 .. 3.2 GHz L2 cache 2MB shared Radeon™ R6 Graphics TDP 15 W, conf. to 12/25/35 W AMD Embedded RX-216GD 2x 1.6 .. 3.0 GHz L2 cache 1MB shared Radeon™ R5 Graphics TDP 15 W, conf. to 12 W
DRAM	2 Sockets, SO-DIMM DDR4 up to 32 GByte with ECC
Chipset	Integrated in SOC (single-chip)
Ethernet	Gigabit Ethernet
I/O Interfaces	3x PCI Express™ 2.0 lanes | 1x PEG 3.0 x8 | 2x SATA® 6 Gb/s | 4x USB 3.0/2.0 | 4x USB 2.0 | I^{2}C bus (fast mode, 400 kHz, multi-master) | SD | LPC Bus | SPI | SM-Bus | 2x UART
Sound	High Definition Audio Interface | TrueAudio 2.1
Graphics	Integrated AMD Radeon™ Graphics supports DirectX 12 | OpenGL 4.4 and OpenCL™ 2.0 | up to 3 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)
LVDS	18/24-bit Single/Dual Channel LVDS Interface | Resolutions up to 1920X1200@60Hz | VESA standard or JEIDA data mapping | Automatic Panel Detection via EDID/EPI
Digital Display Interface	2x DisplayPort 1.2/ HDMI 2.0 supporting 4K @60Hz
congatec Board Controller	Multi Stage Watchdog | non-volatile User Data Storage | Manufacturing and Board Information | Board Statistics | BIOS Setup Data Backup I^{2}C bus (fast mode, 400 kHz, multi-master) | Power Loss Control | Backlight
Embedded BIOS Features	AMI AptioV® UEFI 2.x firmware | 8 MByte serial SPI firmware flash
Security	The conga-TR3 can be optionally equipped with a discrete "Trusted Platform Module" (TPM). It is capable of calculating efficient hash and RSA algorithms with key lengths up to 2,048 bits and includes a real random number generator. Security sensitive applications such as gaming and e-commerce will benefit also with improved authentication, integrity and confidence levels.
Power Management	ACPI 5.0 with battery support
Operating Systems	Microsoft® Windows 10 | Microsoft® Windows 8.1 | Microsoft® Windows® 8 Embedded Standard | Linux | optional Microsoft® Windows 7
Temperature	Commercial : Operating: 0 to +60°C | Storage: -20 to +80°C
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-TR3 | Block diagram



conga-TR3 | Order Information

Article	PN	Description
conga-TR3/RX421BD	041300	COM Express Basic Type 6 module | AMD Embedded RX-421BD SOC | AMD Radeon™ R7 Graphics | TDP 15/12-35W | Quad-core | CPU freq. 2.1/3.4 GHz | 8 GPU-CU | GPU freq. 800 MHz
conga-TR3/RX418GD	041301	COM Express Basic Type 6 module | AMD Embedded RX-418GD SOC | AMD Radeon™ R6 Graphics | TDP 15/12-35W | Quad-core | CPU freq. 1.8/3.2 GHz | 6 GPU-CU | GPU freq. 800 MHz
conga-TR3/RX216GD	041302	COM Express Basic Type 6 module | AMD Embedded RX-216GD SOC | AMD Radeon™ R5 Graphics | TDP 15/12-15W | Dual-core | CPU freq. 1.6/3.0 GHz | 4 GPU-CU | GPU freq. 800 MHz
conga-TR3/HSP-HP-B	041351	Standard heatspreader for high performance COM Express module conga-TR3 with integrated heat pipes. All standoffs are with 2.7mm bore hole.
conga-TR3/HSP-HP-T	041352	Standard heatspreader for high performance COM Express module conga-TR3 with integrated heat pipes. All standoffs are M2.5mm thread.
conga-TR3/CSP-HP-B	041355	Standard passive cooling solution for high performance COM Express module conga-TR3 with integrated heat pipes, 15mm fins and 20mm overall heat sink height. All standoffs are with 2.7mm bore hole.
conga-TR3/CSP-HP-T	041356	Standard passive cooling solution for high performance COM Express module conga-TR3 with integrated heat pipes, 15mm fins and 20mm overall heat sink height. All standoffs are M2.5mm thread.
conga-TR3/CSA-HP-B	041357	Standard active cooling solution for high performance COM Express module conga-TR3 with integrated heat pipes, 15mm fins, 20mm overall heat sink height and integrated 12V fan. All standoffs are with 2.7mm bore hole.
conga-TR3/CSA-HP-T	041358	Standard active cooling solution for high performance COM Express module conga-TR3 with integrated heat pipes, 15mm fins, 20mm overall heat sink height and integrated 12V fan. All standoffs are M2.5mm thread.
DDR4-SODIMM-2400 (4GB)	068790	4 GByte DDR4 SODIMM memory module | 2400 MT/s
DDR4-SODIMM-2400 (8GB)	068791	8 GByte DDR4 SODIMM memory module | 2400 MT/s
DDR4-SODIMM-2400 (16GB)	068792	16 GByte DDR4 SODIMM memory module | 2400 MT/s
DDR4-SODIMM-2400 ECC (4GB)	068795	4 GByte ECC DDR4 SODIMM memory module | 2400 MT/s (PC4-2400) | 260 pin | supply voltage 1,2V
DDR4-SODIMM-2400 ECC (8GB)	068796	8 GByte ECC DDR4 SODIMM memory module | 2400 MT/s (PC4-2400) | 260 pin | supply voltage 1,2V
DDR4-SODIMM-2400 ECC (16GB)	068797	16 GByte ECC DDR4 SODIMM memory module | 2400 MT/s (PC4-2400) | 260 pin | supply voltage 1,2V

Accessories		
conga-TEVAL	065800	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
COM-Express-Carrier-Socket-5	400007	Connector for COM-Express carrier boards | height 5mm | packing unit 4 pieces
COM-Express-Carrier-Socket-8	400004	Connector for COM-Express carrier boards | height 8mm | packing unit 4 pieces

Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits,General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.

Как с нами связаться

Телефон: 8 (812) 309 58 32 (многоканальный)
Факс: 8 (812) 320-02-42
Электронная почта: org@eplast1.ru
Адрес: 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.