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*congatec’s COM Express module with AMD Embedded G-Series SOC delivers up to 30% more graphics performance*

*Text and photo available at:* [*http://www.congatec.com/press*](http://www.congatec.com/press)

**Press release**

**congatec launches COM Express module with new AMD G-Series SOC**

New conga-TR3 module based on AMD G-Series SOC offers up to 30% more graphics performance and fast DDR4 RAM

**Deggendorf, Germany, 23 February 2016 \* \* \*** congatec, a leading technology company for embedded computer modules, single board computers (SBCs) and embedded design and manufacturing (EDM) services, has expanded its COM Express portfolio with the launch of the new AMD G-Series SOC (called Brown Falcon). Compared to modules based on the previous generation of AMD Embedded G-Series SOCs, the new conga-TR3 with dual-core AMD GX-217GI processor provides up to 30% more graphics performance and 15% more overall system performance. Additionally, the AMD G-Series SOC supports faster and more power-efficient DDR4 memory, PCI Express Gen 3.0 for demanding customer-specific extensions as well as very powerful DirectX 12 graphics acceleration. This positions the new module as the first choice for many mainstream embedded applications. With a maximum configurable TDP of 12-15 watts, it is also ideal for fanless designs.

Since these new AMD G-Series processors are pin-compatible with the AMD Embedded R-Series SOCs (called Merlin Falcon) and based on the same processor microarchitecture, OEMs benefit from extremely high scalability that enables them to quickly and efficiently implement solutions from entry level to high-end with just one module design. In the performance intensive-graphics segment, the new conga-TR3 module delivers the optimal price point for high-volume applications.

The spectrum of applications ranges from graphics-intensive gaming and digital signage applications with dual 4K displays, image and video analytics in industrial vision systems, and medical imaging technology to retail, POS and automation. Other use cases include computationally intensive applications such as perceptual computing, network firewalls with deep packet inspection (DPI) and big data analytics. Thanks to HSA 1.0 support such workloads can be distributed to the CPU and the highly parallel graphics cores, offering a very energy-efficient environment.

**Technical details**

The new conga-TR3 COM Express Basic module with Type 6 pinout is equipped with the dual-core AMD Embedded G-Series SOC GX-217GI processor with 1.7GHz to 2.0GHz and supports up to 32GB DDR4 memory, optionally with ECC. The new AMD Graphics Core Next (GCN) Generation 3 architecture controls up to two independent 4K Ultra HD displays @ 60Hz via DisplayPort 1.2 and HDMI 2.0. OpenGL 4.0 and DirectX 12 are also supported for faster, Windows 10-based 3D graphics. The integrated hardware accelerators enable energy-efficient streaming of HEVC video in both directions.

Thanks to HSA 1.0 and OpenCL 2.0 support, workloads are directly assigned to the most effective processing unit. In safety-critical applications, the integrated AMD Secure Processor provides hardware-accelerated encryption and decryption of RSA, SHA and AES.

The new computer module supports COM Express pinout Type 6 with 1x4 PCIe 3.0, 1x PEG, Gigabit Ethernet, 4x USB 3.0 / 2.0, 4x USB 2.0, SPI, LPC and I²C, SDIO and 2x UART. Operating system support is offered for Linux and Microsoft Windows 10, Windows 8.1 and, optionally, Windows 7. Embedded design & manufacturing services for custom carrier boards as well as a wide range of accessories to facilitate the design-in are also offered.

The data sheet and further information about the new conga-TR3 computer module are available at <http://www.congatec.com/en/products/com-express-typ6/conga-tr3.html>

**About congatec AG**Headquartered in Deggendorf, Germany, congatec AG is a leading supplier of industrial computer modules using the standard form factors Qseven, COM Express, XTX and ETX, as well as single board computers and EDM services. congatec’s products can be used in a variety of industries and applications, such as industrial automation, medical, entertainment, transportation, telecommunication, test & measurement and point-of-sale. Core knowledge and technical know-how includes unique extended BIOS features as well as comprehensive driver and board support packages. Following the design-in phase, customers are given support via extensive product lifecycle management. The company’s products are manufactured by specialist service providers in accordance with modern quality standards. Currently congatec has entities in Taiwan, Japan, China, USA, Australia and the Czech Republic. More information is available on our website at [www.congatec.com](http://www.congatec.com) or via [Facebook](http://www.facebook.com/Congatec), [Twitter](https://mobile.twitter.com/congatecAG) and [YouTube](http://www.youtube.com/congatecAE).

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