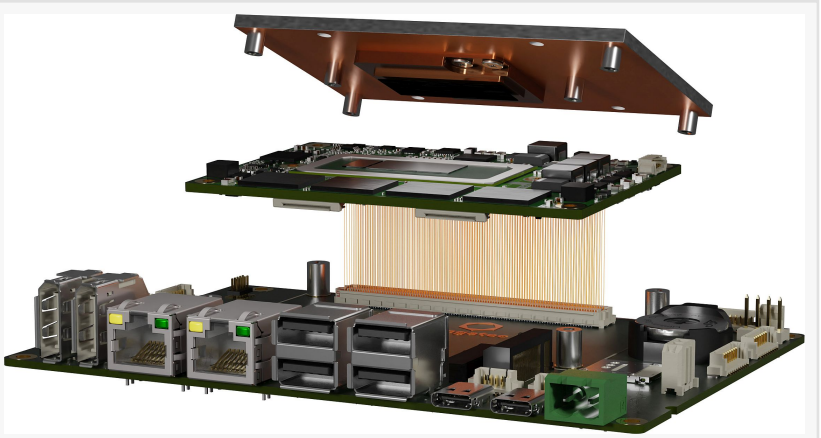
Mini form factor for maximum performance

PICMG COM-HPC committee approves COM-HPC Mini pinout



congatec COM-HPC Mini Computer-on-Module

SAN DIEGO, CA, USA, December 14, 2022 /EINPresswire.com/ -- congatec is pleased to announce that the PICMG COM-HPC technical subcommittee has approved the pinout and footprint of the new credit-card-sized (95x60mm) high-performance Computer-on-Module specification COM-HPC Mini. The new COM-HPC Mini standard is now entering the home stretch towards final ratification, which is scheduled for the first half of 2023. Designed for small yet extremely performance-hungry applications the new COM-HPC Mini specification will open up the prospect of developing ultra-powerful microcomputers the size of a 4- or 8-port Ethernet switch, for example. Such small system sizes are needed in many segments of embedded and edge computing. Target markets include box PCs and control cabinet / DIN-rail PCs, adaptive IoT gateways for the brownfield, cyber-secure edge computers for critical IT/OT infrastructures, rugged tablets, and even ultra-rugged robots and in-vehicle computers wanting to take advantage of the soldered RAM which is a standard feature of these modules. Processors predestined for this new form factor are the 12th Gen Intel Core processor series – for which congatec already offers a ready-to-deploy design study for initial lab tests and customer feedback loops – and its future successors.

“The pinout approval is an essential milestone as carrier board designers and Computer-on-Module manufacturers such as congatec who are active in the COM-HPC working group can now embark on first compliant small form factor sized embedded and edge computer solutions based on this pre-approved data. The goal is to bring modules to market at the same time as Intel and other application processor vendors launch their new high-end processor generations, which is expected to happen next year,” explains Christian Eder, director product marketing congatec, and chairman of the COM-HPC working group.

Providing 400 pins, as compared to COM Express Mini’s 220 pins, the new COM-HPC Mini standard is designed to satisfy the rising interface needs of heterogeneous and multi-functional edge computers. Extensions include up to 4x USB 4.0 with full functionality including

Thunderbolt and DisplayPort alternate mode, PCIe Gen 4/5 with up to 16 lanes, 2x 10 Gbit/s Ethernet port and much more. Add to that the fact that the COM-HPC Mini connector is qualified for bandwidths of more than 32 Gbit/s – enough to support PCIe Gen 5 or even Gen 6 – it is clear that its capabilities go well beyond those of all other credit-card-sized module standards.

For more information on the new COM-HPC Mini Computer-on-Module standard and the congatec COM-HPC Mini design study based on the 12th Gen Intel® Core™ processor series that is pin-compatible to upcoming successors, please https://www.congatec.com/en/technologies/com-hpc-mini/.

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About congatec
congatec is a rapidly growing technology company focusing on embedded and edge computing products and services. The high-performance computer modules are used in a wide range of applications and devices in industrial automation, medical technology, transportation, telecommunications and many other verticals. Backed by controlling shareholder DBAG Fund VIII, a German midmarket fund focusing on growing industrial businesses, congatec has the financing and M&A experience to take advantage of these expanding market opportunities. congatec is the global market leader in the computer-on-modules segment with an excellent customer base from start-ups to international blue chip companies. More information is available on our website at www.congatec.com or via LinkedIn, Twitter and YouTube.

Text and photograph available at: https://www.congatec.com/en/congatec/press-releases.html

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