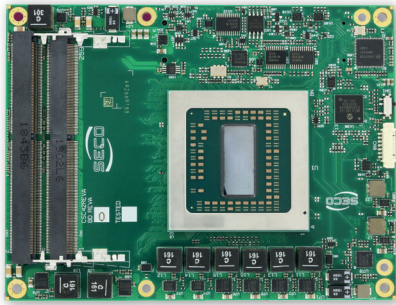




COMe-C42-BT7

COM Express® Rel.3.0 Basic Type 7 module with the AMD EPYC™ Embedded 3000 Series of SoCs

Scalable offerings with outstanding performance and more connectivity



HIGHLIGHTS

CPU AMD EPYC™ Embedded 3000 family of SoCs	CONNECTIVITY 4x USB 3.1, 24x PCI-e Gen3 lanes
NETWORKING 4x 10GBASE-KR interfaces + 1x 1GbE port with NC-SI	MEMORY Four DDR4 SO-DIMM Slots supporting DDR4-2666 Memory with ECC, up to 128GB

Available in Industrial Temperature Range



MAIN FIELDS OF APPLICATION



Industrial Automation and Control



Telco



Server - High Performance Computing

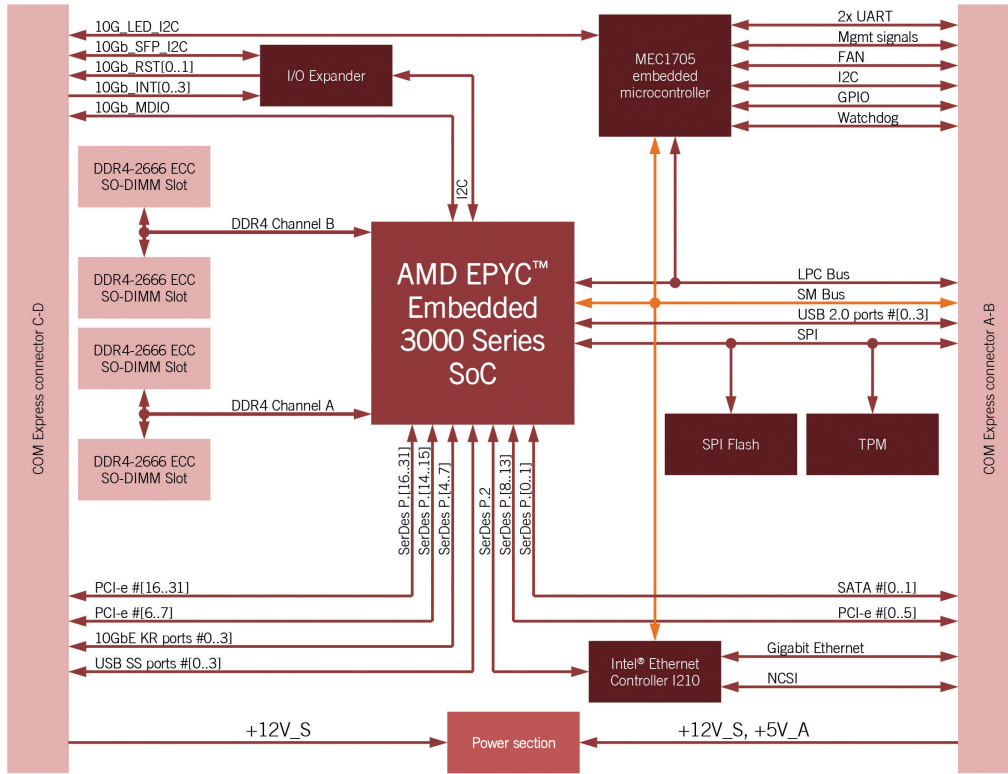
FEATURES

Processor	AMD EPYC™ Embedded 3000 family of SoCs: <ul style="list-style-type: none"> AMD EPYC™ Embedded 3451, Sixteen Core Dual Thread @ 2.14GHz (3.0 Boost), 32MB L3 shared Cache, TDP 80-100W AMD EPYC™ Embedded 3351, Twelve Core Dual Thread @ 1.9GHz (3.0 Boost), 32MB L3 shared Cache, TDP 60-80W AMD EPYC™ Embedded 3251, Eight Core Dual Thread @ 2.5GHz (3.1 Boost), 16MB L3 shared Cache, TDP 55W AMD EPYC™ Embedded 3201, Eight Core Single Thread @ 1.5GHz (3.1 Boost), 16MB L3 shared Cache, TDP 30W AMD EPYC™ Embedded 3151, Quad Core Dual Thread @ 2.7GHz (2.9 Boost), 16MB L3 shared Cache, TDP 45W AMD EPYC™ Embedded 3101, Quad Core Single Thread @ 2.1GHz (2.9 Boost), 8MB L3 shared Cache, TDP 35W AMD EPYC™ Embedded 3255, Eight Core Dual Thread @ 2.5GHz (3.1 Boost), 16MB L3 shared Cache, TDP 55W, industrial grade 	Security <ul style="list-style-type: none"> Optional TPM 2.0 module on-board AMD Secure Processor for Crypto Co-processing Hardware Validated Boot capabilities Secure Memory Encryption Secure Encrypted Virtualization
Memory	Up to 4x DDR4 SO-DIMM Slots supporting DDR4-2666 Memory (both ECC and not-ECC supported), up to 128GB	Embedded Controller Functionalities <ul style="list-style-type: none"> Multi-Stage Watchdog Timer 2x I2C Advanced FAN management 4x GPI, 4 x GPO Power State Management Hardware and temperature monitoring POST Code redirection User Data Storage Board statistics: up-time, boot counter, reset cause log
Mass Storage	2x S-ATA Gen3 Channels	BIOS <ul style="list-style-type: none"> Dedicated embedded BIOS based on AMI Aptio V
Networking	<ul style="list-style-type: none"> 1x Gigabit Ethernet LAN port with NC-SI (Network Controller Sideband Interface) functionality, managed by an Intel® I210 Gigabit Ethernet Controller 4x 10Gigabit Ethernet interfaces (10GBASE-KR), directly managed by the EPYC™ SoCs 	Power Supply <ul style="list-style-type: none"> +12V_{dc} ± 10% and +5V_{sb} (optional)
USB	4 x USB 3.1 Host ports (SS + USB 2.0 interfaces)	Operating System <ul style="list-style-type: none"> Microsoft® Windows 10 Microsoft® Windows Server 2016 Linux OS 64-bit
PCI-e	24x PCI-e Gen3 lanes	Operating Temperature* <ul style="list-style-type: none"> 0°C ÷ +60°C (Commercial version) -40° ÷ +85°C (Industrial Range, when available)
Serial Ports	2x legacy UARTs, 16C550 compatible	Dimensions <ul style="list-style-type: none"> 125mm x 95mm
Other Interfaces	SPI, SM Bus, LPC bus	*Measured at any point of SECO standard heatspreader for this product, during any and all times (including start-up). Actual temperature will widely depend on application, enclosure and/or environment. Upon customer to consider application-specific cooling solutions for the final system to keep the heatspreader temperature in the range indicated.

COMe-C42-BT7

COM Express® Rel.3.0 Basic Type 7 module with the AMD EPYC™ Embedded 3000 Series of SoCs

BLOCK DIAGRAM



Information subject to change. Please visit www.seco.com to find the latest version of this datasheet.

161.21