



COMe-C89-CT6

Compact COM Express® Rel.3.0 Type 6 module with the AMD Ryzen™ Embedded R1000 family of SoCs

Low-end AMD Ryzen™ on COM Express® Type 6 Compact



HIGHLIGHTS

CPU AMD Ryzen™ Embedded R1000 processors	CONNECTIVITY 4x USB 3.0; 8x USB 2.0; Up to 5x PCI-e x1; PEG x4 Gen3
GRAPHICS AMD Radeon™ Vega GPU with 3 Compute Units	MEMORY Two DDR4 SO-DIMM Slots supporting DDR4-2400 ECC Memory



MAIN FIELDS OF APPLICATION



Digital Signage - Infotainment



Gaming



Biomedical

FEATURES

Processor AMD Ryzen™ Embedded R1606G with GPU AMD Radeon™ Vega 3, Dual Core Four Thread @ 2.6GHz (3.5 Boost), TDP 12-25W AMD Ryzen™ Embedded R1505G with GPU AMD Radeon™ Vega 3, Dual Core Four Thread @ 2.4GHz (3.3 Boost), TDP 12-25W AMD Ryzen™ Embedded R1305G with GPU AMD Radeon™ Vega 3, Dual Core Four Thread @ 1.5GHz (2.8 Boost), TDP 8-10W	USB Up to 4 x USB 3.0 Host ports 8 x USB 2.0 Host ports
Max Cores 2	PCI-e 2 x PCI-e x1 Gen3 lanes Additional 3rd PCI-e x1 Gen3 lane or 3x PCI-e x1 Gen2 lanes (factory alternatives) PCI-express Graphics (PEG) x4
Memory Two DDR4 SO-DIMM Slots supporting DDR4-2400 Memory, up to 32GB	Audio HD Audio interface
Graphics AMD Radeon™ Vega 3 GPU with 3 Compute Units DirectX® 12 supported H.265 (10-bit) decode and 8-bit video encode VP9 decode 3 independent displays supported	Serial Ports 2 x UARTs
Video Interfaces Up to 3 x Digital Display Interfaces (DDIs), supporting DP 1.3, DVI and HDMI 1.4/2.0 eDP or Single/Dual-Channel 18-/24-bit LVDS interface (factory alternatives to third DDI port)	Other Interfaces SPI, I2C, SM Bus, LPC bus, FAN management Optional TPM 2.0 module on-board 4 x GPI, 4 x GPO
Video Resolution DDIs, eDP up to 4K LVDS up to 1920 x 1200 @ 60Hz	Power Supply +12V _{DC} ± 10% and +5V _{SB} (optional)
Mass Storage 2 x S-ATA Gen3 Channels	Operating System Windows 10 64-bit Linux Ubuntu
Networking Gigabit Ethernet interface Intel® I21x family GbE Controller	Operating Temperature* 0°C ÷ +60°C (Commercial version)
	Dimensions 95 x 95 mm (Com Express Compact Form factor, Type 6 pinout)

*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.

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BLOCK DIAGRAM

