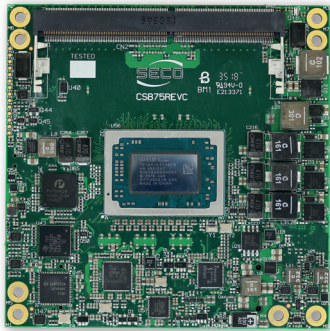




COMe-B75-CT6

COM Express™ Compact 3.0 Type 6 Module with the AMD Ryzen™ Embedded V1000 processors

Next Generation x86 “Zen” Core and elite GPU performance



HIGHLIGHTS

CPU
AMD Ryzen™ Embedded V1000 processors

CONNECTIVITY
4x USB 3.0; 8x USB 2.0; 4x PCI-e x1 Gen 3, PEG x8 Gen3

GRAPHICS
AMD Radeon™ Vega GPU with up to 11 Compute Units DirectX® 12 supported

MEMORY
Up to two DDR4 SO-DIMM Slots supporting DDR4-3200 ECC Memory

Available in Industrial Temperature Range



DEVELOPMENT | SAMPLING | PRODUCTION

MAIN FIELDS OF APPLICATION



Biomedical/
Medical devices



Digital Signage -
Infotainment



Gaming

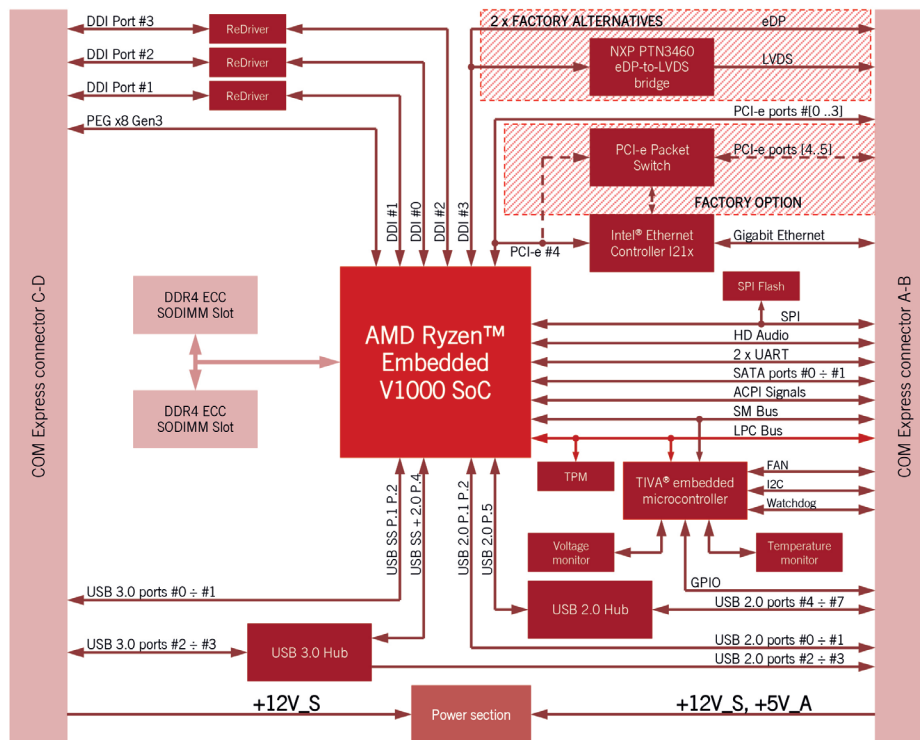
FEATURES

Processor	AMD Ryzen™ Embedded V1807B with AMD Radeon™ Vega 11 Graphics, Quad Core Dual Thread @ 3.35GHz (3.8 Boost), TDP 35-54W	PCI-e	Up to 4x PCI-e x1 Gen3 lanes + 2 x PCI-e x1 Gen2 ports
	AMD Ryzen™ Embedded V1756B with AMD Radeon™ Vega 8 Graphics, Quad Core Dual Thread @ 3.25GHz (3.6 Boost), TDP 35-54W		PCI-express Graphics (PEG) x 8 Gen3
Max Cores	AMD Ryzen™ Embedded V1605B with AMD Radeon™ Vega 8 Graphics, Quad Core Dual Thread @ 2.0GHz (3.6 Boost), TDP 12-25W	Audio	HD Audio interface
	AMD Ryzen™ Embedded V1202B with AMD Radeon™ Vega 3 Graphics, Dual Core Dual Thread @ 2.3 GHz (3.2 Boost), TDP 12-25W	Serial Ports	2 x UARTs
Memory	Up to two DDR4 SO-DIMM Slots supporting DDR4-3200 ECC Memory (DDR4-2400 with V1605B, V1202B and V1404I)	Other Interfaces	SPI, I2C bus, SM Bus, LPC bus, FAN management LID#/SLEEP#/PWRBTN#, Watchdog 4x GPI, 4 x GPO
Graphics	AMD Radeon™ Vega GPU with up to 11 Compute Units DirectX® 12 supported H.265 (10-bit) decode and 8-bit video encode VP9 decode 4 independent displays supported	Power Supply	+12V _{bc} ± 10% and + 5V _{SB} (optional)
Video Interfaces	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	Operating System	Microsoft® Windows 10 Linux Ubuntu
Video Resolution	DDIs, eDP up to 4K LVDS up to 1920 x 1200	Operating Temperature*	0°C ÷ +60°C (Commercial version) -40°C ÷ +85°C (Industrial version)
Mass Storage	2 x S-ATA Gen3 Channels	Dimensions	95 x 95 mm (COM Express™ Compact Form factor, Type 6 pinout)
Networking	Gigabit Ethernet interface Intel® I21x family GbE Controller	*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.	
USB	4 x USB 3.0 Host ports 8 x USB 2.0 Host ports		

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BLOCK DIAGRAM



ORDERING INFORMATION

PN*	DESCRIPTION
MB75-1000-1111-C0	COMe-B75-CT6 w/AMD Ryzen Embedded - Ethernet Contr. I210 - EDP Port - FP5 Type 1 - Comm. Temp
MB75-3001-2111-C0	COMe-B75-CT6 w/AMD Ryzen Embedded V1202B @ 2.5GHz - Ethernet Contr. I211 - EDP Port - HUB - Packet Switch - Comm. Temp
MB75-4001-2111-C0	COMe-B75-CT6 w/AMD Ryzen Embedded V1605B @ 2.0GHz - Ethernet Contr. I211 - EDP Port - HUB - Packet Switch - Comm. Temp
MB75-6001-2111-C0	COMe-B75-CT6 w/AMD Ryzen Embedded V1807B @ 3.35GHz - Ethernet Contr. I211 - EDP Port - HUB - Packet Switch - Comm. Temp

*Additional configurations may be available. Please inquire for more information.

ACCESSORIES

PN	DESCRIPTION
MC30-0000-0000-C0	Carrier board for COM Express Type 6 modules on 3.5" form factor
M965-0000-0000-C0	CCOMe-965 - mini ITX Carrier Board for COM-Express Type 6 modules
M965-CEXDK-0000	COM Express Type 6 Cross Platform Development Kit
MB75-DISS-1-PK	COMe-B75-CT6 Heat Spreader (PASSIVE)
MB75-DISS-3-PK	COM Express Type 6 - COMe-B75-CT6 Heat Sink (ACTIVE)