



Fanless Embedded PC Powered by AMD Ryzen Embedded V1000 with 4 Display Ports

Features:

- Ryzen™ Embedded V1605B
- Dual channel SO-DIMM DDR4 (max 32 GB)
- Up to 4 DP displays (LVDS/eDP optional)
- Support dual 1GbE ethernet cards
- SATA3.0, M.2
- 12V DC input
- TPM 2.0 supported (optional)



Introduction:

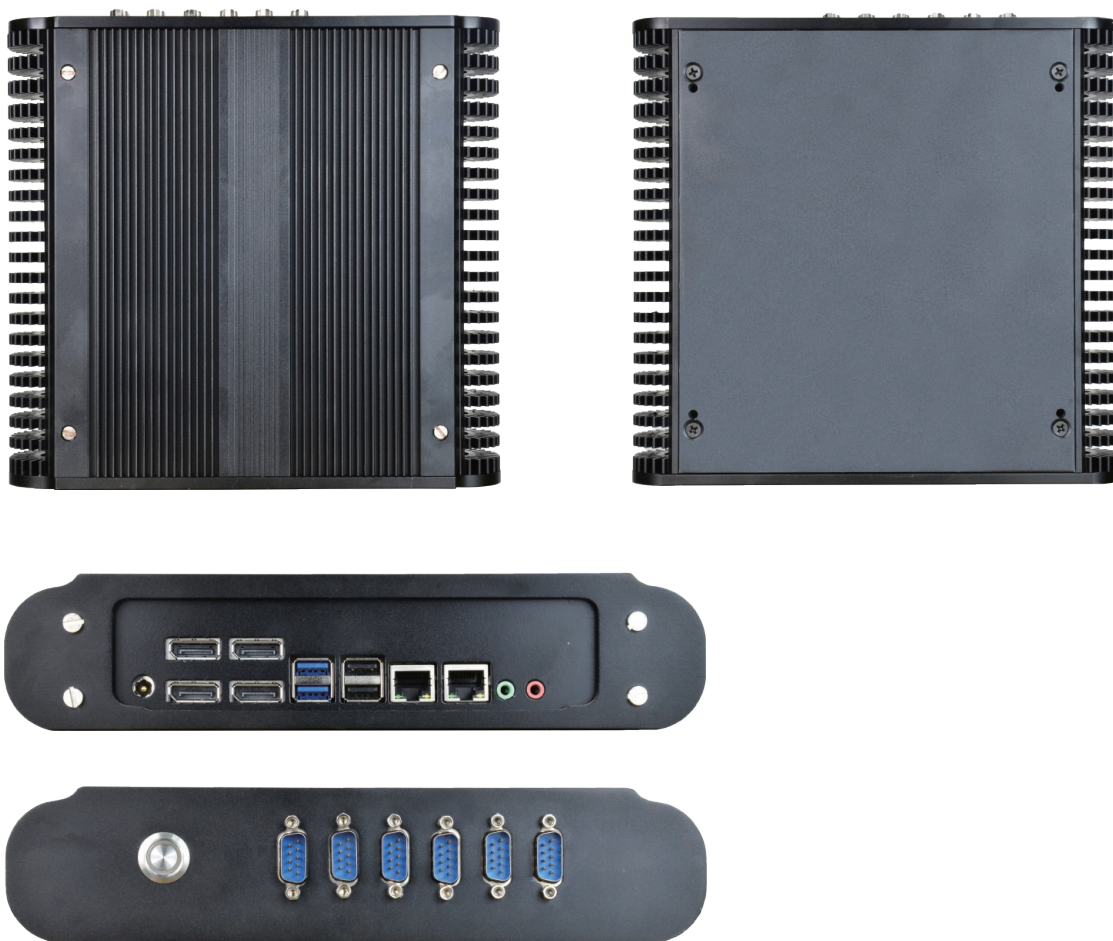
The new Fanless Embedded PC, BPC-AV1605M-2N6B is based on the AMD Ryzen V1605B (quad-core) and provides a complete PC platform with high performance. Coming from the embedded V1000 processor family, these CPUs combine the incredible performance of the pioneering "Zen" architecture and "Vega" GPU in a single chip with thermal design power (TDP) as low as 12W/15W. Four independent 4K+ DP displays are supported in addition to dual-channel DDR4 SO-DIMM memory, dual 1-Gigabit Ethernet controllers, and M.2 expansion for WiFi and SSD modules. The TPM module for added security is also optional. It also has rich interfaces as 2 x USB2.0, 2 x USB3.0, 1 x Mic-in, 1 x Line-out, 2 x LAN, and 6 x Serial Ports, catering to most requirements in the market.

BPC-AV1605M-2N6B is an ideal solution for applications requiring a high speed communications front-end like a mini-server or high-resolution display products like electronic gaming machines, medical imaging, interactive digital signage, thin clients, or PDS terminals.

Specification:

Core System	Processor	AMD Ryzen™ Embedded V1605B with Radeon™ Vega 8 Graphics (2.0GHz/Up to 3.6GHz/4 cores/8 Threads/Max.TDP 25W)
Memory		Dual-channel DDR4 SO-DIMM memory, max to 32GB
Storage	SSD	1 x M.2 2280
	HDD	1 x 2.5" Drive Bay
External Connectors	Ethernet	2 x Realtek RTL8111H GbE RJ45
	USB	2 x USB3.0, 2 x USB2.0
	Serial Ports	6 x RS232 (COM2 can be RS485, optional)
	Display	4 x DP1.3, resolution up to 3840x2160 for single display
Audio		1 x Mic-in, 1 x Line-out
Expansion Slots		1 x M.2 for Wi-Fi
		1 x PCIe X1 slot, 1 x PCIe X4 slot
Mechanical & Mounting		Wall mounting or Desktop (VESA mounting optional)
Environmental	System Control	Power switch
Power Supply		DC 12V/5A power adapter
Operating Temp.		-20°C ~ 60°C
Storage Temp.		-40°C ~ 80°C
Humidity		5 ~ 95, non condensing
Working Vibration		0.5g rms/5~500Hz/random operating
Color		Black
Size		245mm x 194mm x 54.5mm (W x D x H)
Cooling System		Fanless, ICEFIN cooling system
Structure		New generation ICEFIN enclosure
Texture		Aluminum alloy
Operating System		Windows 10 64bit, Linux 64bit

Structure Diagram:



ABOUT POLYHEX

As a board level and system level designer and manufacturer, Polyhex, with 9 years' experience, always delivers best-in-class embedded computing solutions based on both ARM and X86 architecture, including hardware customization and software debugging etc. Partnered with silicon vendors like Intel, NXP, ST, Rockchip, Allwinners and so on, we have earned trust from clients worldwide in over 30 countries. Polyhex is also certified with ISO9001 and ISO13485 for the self-owned manufacture facility.

