

# gKINO-VR1000

Mini-ITX SBC supports AMD® Ryzen™ Embedded V1000/R1000 Series on board SoC, DDR4, quadruple independent displays, dual GbE, SATA 6Gb/s, USB 3.2, M.2, COM, TPM 2.0, HD audio and RoHS



**gKINO-V1000 Series**

## Features

1. Mini ITX form factor with AMD® Ryzen™ Embedded processor supports dual-channel ECC DDR4 SO-DIMMs
2. Maximum up to quadruple DisplayPort output for multi-display support
3. M.2 slot support SATA or PCIe (2242/2280) & PCIe x16 slot support
4. Chassis intrusion detect pin and ECC support in gaming applications
5. COM RS-232 support Cctalk, TTL
6. TPM 2.0 hardware security function supported by TPM module

## Specifications

<b>Form Factor</b>	
Form Factor	Mini-ITX Motherboard
<b>System</b>	
CPU	AMD® Ryzen™ Embedded V1605B, Quad Core, 2MB Cache, 8 CU, 2.0GHz (3.6GHz), 12-25W
	AMD® Ryzen™ Embedded V1202B, Dual Core, 1MB Cache, 3 CU, 2.3GHz (3.2GHz), 12-25W
	AMD® Ryzen™ Embedded R1606G, Dual Core, 1MB Cache, 3 CU, 2.6GHz (3.5GHz), 12-25W
	AMD® Ryzen™ Embedded R1505G, Dual Core, 1MB Cache, 3 CU, 2.4GHz (3.3GHz), 12-25W
Memory	2 x SO-DIMM DDR4 2400MHz up to 64GB (ECC support)
Memory Max.	Up to 64GB
Cooling method / System Fan	1 x CPU fan
<b>Physical Characteristics</b>	
Dimensions (LxWxH) (mm)	170mm x 170mm
Net Weight	GW:900g / NW:400g
<b>Storage</b>	
Storage	1 x M.2(NGFF)
	1 x SATA
<b>I/O Interface</b>	
Display Output	4 x Display Port
Ethernet	2 x LAN: GbE LAN (RTL 8119I)
Audio	1 x Front Audio(2x5-pin)
	HD Audio: Realtek ALC662 HD audio codec
	1 x Line out
	1 x Mic
	1 x S/PDIF
	2 x Speaker: 2 x 6W audio amplifier L+R
I/O Interface	1 x DIO: 8-bit digital I/O (2x5 pin)
	2 x External RS-232

	2 x External USB 2.0
	2 x External USB 3.2 Gen1x1
	1 x External USB 3.2 Gen1x2
	6 x Internal RS-232- Detail: 2 x RS-232 (support Cctalk, TTL)(1x4 pin, P=2.54) 4 x RS-232 (2x5 pin, P=2.00)
	2 x Internal USB 2.0(2x4 pin, P=2.0)
Expansion	1 x M.2(NGFF): 1 x M.2 2242/2280 M key (PCIe x2/SATA)
	1 x PCIe x16(with x8 Gen 3.0 signal)
<b>Other Features</b>	
TPM	1 x TPM 2.0 connector (2x10 pin) (LPC interface)
Speaker	2 x 6W audio amplifier L+R
	1 x onboard SPDIF output
<b>Power</b>	
Input	12V DC input
	1 x External DC jack (4-pin DIN)
	1 x Internal power connector (2x2 pin)
Power Consumption	12V@5.144A (AMD Ryzen V1605B 2.0GHz CPU with 2666 MHz 32GB DDR4 memory)
	12V@5.146A (AMD Ryzen R1606G 2.6GHz CPU with 2666 MHz 32GB DDR4 memory)
<b>Environment</b>	
Operating Temperature	0°C ~ 60°C
Storage Temperature	-10°C ~ 70°C
Humidity	5% ~ 95%, non-condensing
<b>Certifications</b>	
Safety & EMC	CE/FCC compliant

## Ordering Information

gKINO-V1605B-R10	Mini-ITX SBC supports AMD® Ryzen™ Embedded V1605B on board SoC (quad-core 2.0GHz, 15W) , DDR4, quadruple independent displays, quadruple DP, dual GbE, SATA 6Gb/s, USB 3.2, M.2, COM, TPM 2.0, HD audio and RoHS
gKINO-V1202B-R10	Mini-ITX SBC supports AMD® Ryzen™ Embedded V1202B on board SoC (dual-core 2.3GHz, 15W) , DDR4, quadruple independent displays, quadruple DP, dual GbE, SATA 6Gb/s, USB 3.2, M.2, COM, TPM 2.0, HD audio and RoHS
gKINO-R1606G-R10	Mini-ITX SBC supports AMD® Ryzen™ Embedded R1606G on board SoC (dual-core 2.6GHz, 15W) , DDR4, triple independent displays, triple DP, dual GbE, SATA 6Gb/s, USB 3.2, M.2, COM, TPM 2.0, HD audio and RoHS
gKINO-R1505G-R10	Mini-ITX SBC supports AMD® Ryzen™ Embedded R1505G on board SoC (dual-core 2.4GHz, 15W) , DDR4, triple independent displays, triple DP, dual GbE, SATA 6Gb/s, USB 3.2, M.2, COM, TPM 2.0, HD audio and RoHS

## Packing List

1 x gKINO-V1000/R1000 series SBC with CPU cooler	1 x SATA cable
1 x I/O shielding	1 x QIG