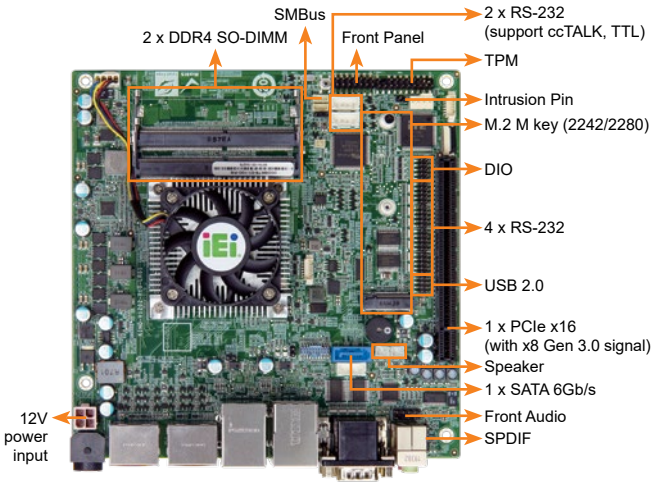
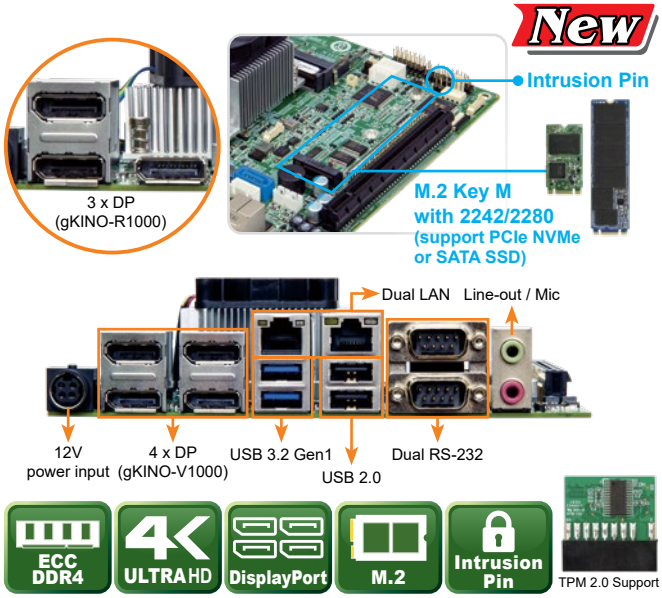
gKINO-V1000 R1000

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





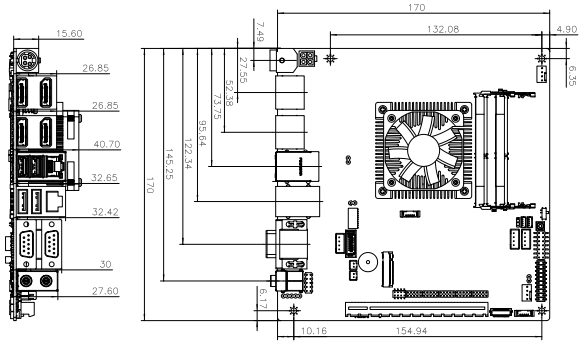
Specifications

- 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
- BIOS: AMI BIOS
- Memory: 2 x SO-DIMM DDR4 2400MHz up to 64GB (ECC support)
- Graphic
  AMD Radeon™ VEGA GPU with up to 8 Compute Units
  H.2651 (10-bit) Decode and (8-bit) Encode support, VP9 (10-bit) Decode integrated
- Display Output
  4 x DP (gKINO-V1000): 4 x 4K UHD 3840x2160
  3 x DP (gKINO-R1000): 3 x 4K UHD 3840x2160
- Ethernet: 2 x GbE LAN (RTL 8119I)
- External I/O Interfaces
  2 x RS-232
  2 x USB 2.0
  2 x USB 3.2 Gen1 (5Gb/s)
- Internal I/O Interfaces
  1 x SATA 3.0 (6Gb/s) with 5/12V SATA power connector
  2 x RS-232 (support Cctalk, TTL)(1x4 pin, P=2.54)
  2 x USB 2.0 (2x4 pin, P=2.0)
  4 x RS-232 (2x5 pin, P=2.00)
- Audio
  Realtek ALC662 HD audio codec
  2 x 6W audio amplifier L+R
  2 x Audio jacks (line-out, mic-in) on rear IO
  1 x Front audio (2x5-pin)
  1 x Onboard SPDIF output
- Front Panel
  1 x Front panel connector (2x7 pin, power LED, HDD LED, speaker, power button, reset button)
- LAN LED: 2 x LAN LED (1x2 pin)
- TPM: 1 x TPM 2.0 connector (2x10 pin) (LPC interface)
- SMBUS: 1 x SMBus (1x4 pin)
- I²C: 1 x I²C (1x4 pin)
- Digital I/O: 8-bit digital I/O (2x5 pin)
- Expansion
  1 x PCIe x16 slot (with x8 Gen 3.0 signal)
  1 x M.2 2242/2280 M key (PCIe x2/SATA)
- Watchdog Timer: Software programmable support 1~255 sec. system reset by super I/O
- Chassis Open: 1 x Intrusion pin (1x2 pin)
- Power Supply
  12V DC input
  1 x External DC jack (4-pin DIN)
  1 x Internal power connector (2x2 pin)
  Support AT/ATX mode
- Fan Connector
  1 x CPU smart (1x4 pin)
  1 x System fan (1x4 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)
- Storage Temperature: -10°C ~ 70°C
- Operating temperature: 0°C ~ 60°C
- Operating Humidity: 5% ~ 95%, non-condensing
- Weight: GW:900g / NW:400g
- Dimensions: 170mm x 170mm
- CE/FCC compliant

Features

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

Dimensions *(Unit: mm)*



Packing List

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

Ordering Information

Part No.	Description
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
19800-000300-100-RS	RS-232 cable with bracket, 300mm, P=2.0
CB-USB02A-RS	Dual-port USB cable with bracket, 300mm, P=2.0
TPM-IN02-R20	20-pin Infineon TPM 2.0 module, software management tool, firmware v5.5